

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Kieliszek, Anastasia

Article

A Signaling Theory Perspective on Building Supportive Responses to Organizational Change: An Experimental Study

Junior Management Science (JUMS)

Provided in Cooperation with:

Junior Management Science e. V.

Suggested Citation: Kieliszek, Anastasia (2021) : A Signaling Theory Perspective on Building Supportive Responses to Organizational Change: An Experimental Study, Junior Management Science (JUMS), ISSN 2942-1861, Junior Management Science e. V., Planegg, Vol. 6, Iss. 4, pp. 700-744,

https://doi.org/10.5282/jums/v6i4pp700-744

This Version is available at: https://hdl.handle.net/10419/294973

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



WWW.ECONSTOR.EU

https://creativecommons.org/licenses/by/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





Junior Management Science

journal homepage: www.jums.academy



A Signaling Theory Perspective on Building Supportive Responses to Organizational Change: An Experimental Study

Anastasia Kieliszek

Ludwig-Maximilians-Universität München

Abstract

Organizations are frequently unsuccessful in creating employee support for change. Research has asserted that one important reason for change resistance is employee uncertainty. Yet despite wide consensus that leadership and communication are key vehicles to influence employees' change reactions, employee uncertainty concerning the leader of the change, and how this uncertainty can be addressed have been largely disregarded. Drawing on signaling theory, I propose that leaders who signal their charisma and change commitment when announcing change can alleviate uncertainty by assuring employees about the leader's characteristics and intentions, and thereby foster supportive responses to change. Specifically, I test the main and interactive influence of leader charisma and change commitment signals in determining employees' affective and normative commitment to, and behavioral support for, organizational change. In line with the proposition that charismatic signaling is inherently values-based and needs to be morally validated by followers, I investigate its effect on follower change commitment as a function of followers' openness to change and self-transcendence values. My findings from an experimental vignette study in a sample of 284 US employees reveal that in particular leader charisma signaling, and weakly leader change commitment signaling, have positive main, but non-interactive effects on follower behavioral support for change, which do not operate indirectly through follower affective and normative change commitment. Further, I report that followers' behavioral support for change elicited by leader charisma and change commitment signaling varies as a function of followers' openness to change and self-transcendence values. Above and beyond effects concerning behavioral change support, leader charisma signaling is revealed to increase followers' expression of openness to change, conservation, and self-transcendence values when advocating organizational change. I discuss implications for theory and practice in managing employee responses to organizational change.

Keywords: Organizational change; leadership; charisma; signaling; commitment.

1. Introduction

A well-known line states: "The only thing constant within organizations is continual change." (Elving, 2005: 129). However, a staggering two thirds of change projects fail (Beer & Nohria, 2000; W. Burke & Biggart, 1997). The causes are often considered to be rooted in change implementation (Klein & Sorra, 1996; Kotter, 1995, 1996): because organizational change can only succeed through individual behavior modification, employee support for change is increasingly emphasized as critical (R. Evans, 1994; Jones, Jimmieson, & Griffiths, 2005; O'Connor, 1993; Porras & Robertson, 1992; Tetenbaum, 1998). One of the most important antecedents of support for change is change commitment (Beer, Eisenstat, & Spector, 1990; Conner & Patterson, 1982; Herscovitch & Meyer, 2002), "a mind-set that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative" (Herscovitch & Meyer, 2002: 475). Yet employees are often reluctant to commit to and support change. The challenge of managing change, and thus also employee reactions to change, is one of the most fundamental and enduring roles of leaders (Ahn, Adamson, & Dornbusch, 2004). One important means of leading change and creating supportive employee responses is communication (Herold, Fedor, Caldwell, & Liu, 2008; Parish, Cadwallader, & Busch, 2008; Shum, Bove, & Auh, 2008), as "change is created, sustained, and managed in and by communication" (Ford & Ford, 1995: 560).

Research on effective change communication is grounded upon the notion of managing employee uncertainty in times of change (DiFonzo & Bordia, 1998). Uncertainty, defined as "an individual's inability to predict something accurately" (Milliken, 1987: 136), is experienced by employees as a result of anticipated challenges to the status quo, and is thus inherent in organizational change (Rousseau, 1995; Wheatley, 1992; Wrzesniewski & Dutton, 2001). Importantly, employee uncertainty fundamentally impedes supportive reactions to change (J. Allen, Jimmieson, Bordia, & Irmer, 2007; Ashford, 1988; Schweiger & Denisi, 1991). Specifically, sources of subjectively experienced employee uncertainty during change have been classified into three levels: strategic (e.g. reasons for change), structural (e.g. changes to reporting structures), and job-related (e.g. changes to job roles) (Bordia, Hobman, Jones, Gallois, & Callan, 2004; Buono & Bowditch, 1989; Jackson, Schuler, & Vredenburgh, 1987).

Existing research on management communication has mainly focused on two mechanisms to reduce employee uncertainty (Bordia et al., 2004): first, by effectively providing information about the change and its process (Lewis & Seibold, 1998; Schweiger & Denisi, 1991), and second, by allowing employees to participate in the decision-making process during change (Locke & Schweiger, 1979; K. I. Miller, Ellis, Zook, & Lyles, 1990; Sagie, Elizur, & Koslowsky, 1995). Although researchers have conducted a wide range of studies on communication during organizational change over the past decades, several critical questions thus remain inconclusively answered. One of these questions is: How can leaders foster supportive employee responses when change is announced, by addressing employee uncertainty regarding the leadership of change?

Hence, I first propose a shift of focus to early phases of change communication. When employees first learn that a change will be implemented, their uncertainty can be expected to be especially pronounced (DiFonzo & Bordia, 1998). Change announcements, as the ground-laying step to inform employees and alleviate uncertainty, have been underlined in their relevance, but have received scarce research attention so far (DiFonzo & Bordia, 1998; Gioia, Nag, & Corley, 2012; Lewis, Laster, & Kulkarni, 2013). Employee change commitment in an early phase of change implementation has been demonstrated to determine change responses in later implementation phases, rendering early change support critical (Meyer, Hecht, Gill, & Toplonytsky, 2010; Meyer, Srinivas, Lal, & Topolnytsky, 2007; Neubert & Cady, 2001; Seo et al., 2012; Shin, Seo, Shapiro, & Taylor, 2015). Hence, leaders should seek to generate supportive employee reactions to change from the very announcement of change.

Second, I suggest expanding the notion of employee uncertainty during organizational change to include attributes of the change leader. Existing research on change communication implicitly revolves around reducing employee uncertainty concerning the change itself and therefore is mainly concerned with the content or process of communicating information relating to the change (Bordia et al., 2004). However, employees also face uncertainty pertaining to the leadership of those who drive the change, specifically their change-relevant characteristics and intentions (Oreg & Berson, 2011; Stouten, Rousseau, & De Cremer, 2018).

This is reflected in employees' devoted attention to leader actions and messages, and their continuous attempt to deduce a leader's intentions, preferences and qualities therefrom (Awamleh & Gardner, 1999; Huy, Corley, & Kraatz, 2014; Jacquart & Antonakis, 2015; Shamir, House, & Arthur, 1993; D. van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004), which will only become more pronounced when organizational change elevates general employee uncertainty (DiFonzo & Bordia, 1998). In times of uncertainty and change, followers seek a determined and able leader to guide them (Bastardoz & Van Vugt, 2019; Y. Choi & Mai-Dalton, 1998; Schoel, Bluemke, Mueller, & Stahlberg, 2011; van Dierendonck, Stam, Boersma, de Windt, & Alkema, 2014). Thus, employees should react positively to indications that their leader will be effective in managing the change, and will register not only the pure informational content of a change announcement (Lewis, 2006), but also infer the leader's ability and intentions. Therefore, importantly, transmitting information not solely on the change initiative itself, but also about its leadership could be expected to be an important means to foster support for change. When organizational change is announced, leaders can use this communication vehicle to create supportive employee responses to change (Arnestad, Selart, & Lines, 2019; DiFonzo & Bordia, 1998) by signaling their appropriate characteristics and intentions. Consequently, I propose a signaling theory perspective to the study of leader communication during change. Signaling theory is insightful to understand behavior when one party holds private information that is relevant the other party (Connelly, Certo, Ireland, & Reutzel, 2011; Stiglitz, 2002). Resolving this information asymmetry is the fundamental concern of signaling theory (Spence, 2002; Stiglitz, 2002): Signals are measures taken by the party holding the private information (signaler) aimed at conveying the unobservable characteristic or intention to the receiver (Connelly et al., 2011; Spence, 1973).

To deduce which signaled leader attributes may be particularly conducive to generating employee change support, I examine existing leadership research. There are two general, largely non-intersecting approaches, which have been used to understand the influence of leaders in shaping followers' reactions to organizational change (Herold et al., 2008). The first approach, rooted in leadership literature, considers situational contingencies determining the effectiveness of certain leadership styles.

Charismatic or transformational leadership¹ has been posited to be especially effective in situations of change

¹Transformational leadership is defined more broadly and incorporates influence based on an individualized developmental and empowering leadership focus, as well as intellectually stimulating influence, whereas charismatic leadership is centered around symbolic influence (Antonakis, Fenley, & Liechti, 2011).

(Bass & Avolio, 1990; House & Aditya, 1997; Shamir & Howell, 1999; Waldman, Ramirez, House, & Puranam, 2001), and has received significant research attention in the past decades. Numerous studies have demonstrated the positive influence charismatic or transformational leaders exert on follower change responses (e.g. Michaelis, Stegmaier, & Sonntag, 2010; Nohe, Michaelis, Menges, Zhang, & Sonntag, 2013; Oreg & Berson, 2011; Seo et al., 2012; Shin et al., 2015). Therefore, signaled leader charisma may constitute a particularly effective signal of leader attributes in times of organizational change.

The second approach to the role of leaders in generating change support, rooted in organizational change and practitioner literature, identifies and recommends change-specific behaviors leaders should engage in depending on the particular phase of organizational change (e.g. Beer, 1980; Brockner et al., 1994; Kanter, Stein, & Jick, 1992; Kotter, 1996; Lewin, 1947; Schweiger & Denisi, 1991). Thus, these change leadership recommendations refer to the specific change at hand and how the leader can handle it from a tactical point of view (House & Aditya, 1997), e.g. by creating a sense of urgency, providing support, building coalitions, showing commitment, and allowing for employee inputs (Herold et al., 2008; Stouten et al., 2018). For the first phase of organizational change, its introduction by the organization's management (Lewin, 1947), the importance of employees' perception that the leaders are committed to the upcoming change is frequently mentioned in passing, and remains uncontested (e.g. A. A. Armenakis, Bernerth, Pitts, & Walker, 2007; Ford & Ford, 1995; Holt, Armenakis, Feild, & Harris, 2007; Kanter et al., 1992; Kotter, 1995), although perceptions of leader change commitment have not previously been the subject of systematic and theoretically integrated research. Therefore, signaled leader change commitment may prove a specifically effective signal of leader attributes in times of organizational change.

Furthermore, recent evidence suggests that the perception of signals may be a function of personal characteristics (Connelly et al., 2011). Since the inception of social sciences, personal values have been essential in explaining social and personal organization and change (Durkheim, 1912; Schwartz, 2012; Weber, 1905). Values can be defined as cognitive representations of motivational goals, and serve as lifeguiding principles (Schwartz, 1992).

In recent decades, scholars have begun to explore how personal values may impact individual psychological reactions to organizational change (e.g. Blankenship & Wegener, 2008; Ledford, Mohrman, Mohrman, & Lawler, 1989; Neves & Caetano, 2009), but our understanding still remains limited (Groves, 2020). Leader charisma signaling inherently transmits values, and thus requires follower validation of those values to unfold its positive effect on followers (Antonakis, Bastardoz, Jacquart, & Shamir, 2016; Keyes, 2002; Tucker, 1968). Therefore, in this study, I also assess whether the effect of leader charisma signaling on follower change commitment is moderated by followers' openness to change and self-transcendence values (Schwartz, 1992), two value dimensions that can be expected to be conveyed in the charisma signal (Antonakis et al., 2016; Bass, 1985; D. van Knippenberg et al., 2004; Yukl, 1999). Charisma signaling should be more effective in creating supportive responses to change in followers who place importance on these values (Antonakis et al., 2011; Cable & Edwards, 2004; Meglino & Ravlin, 1998).

The purpose of this thesis hence is twofold. First, I use a signaling theory perspective, drawing from both leadership and organizational change literature, to examine how leaders can effectively foster supportive follower change responses when announcing organizational change. In this regard, I suggest that leaders can foster follower affective and normative commitment to change by signaling charisma and change commitment. I also expect a positive interactive effect of both signals in increasing follower affective and normative change commitment. In turn, increased follower commitment to change should translate into stronger intended and expressed behavioral support for change. Second, I explore the role of followers' personal values in the signaling process. Specifically, I examine whether the effect of leader charisma signaling on follower change commitment is moderated followers' openness to change and self-transcendence values. I address these questions conceptually and empirically in an experimental vignette study involving different change announcements in which signaled leader charisma and change commitment are manipulated. In addition to answering a survey, participants are asked to write a change-supportive message.

I report three main sets of findings. First, I do not find significant main or interaction effects of leader charisma and change commitment signaling on follower affective and normative change commitment. However, affective and normative change commitment significantly predict intended, and partly predict expressed behavioral support for change.

Furthermore, I find significant positive direct effects of signaled leader charisma on followers' expressed behavioral support for change, as captured by both quantitative and qualitative effort in producing change-supportive messages. Also, I report a weakly significant positive direct effect of signaled change commitment on qualitative change support effort. Second, followers' self-transcendence and openness to change values are found to moderate expressed and intended behavioral support ensuing from received leader charisma and change commitment signals. Third, my results reveal that leader charisma signaling induces followers to express more openness to change, conservation, and self-transcendence values when explaining why the change initiative should be supported.

The main contributions of this research are threefold. First, by showing that reducing employee uncertainty relating to change leadership by signaling leader charisma and change commitment in change announcements can play an important role in creating employee change support, this research adds to the literature investigating how change communication can create employee change support – a perspective that has predominantly focused on the

content and process of disseminating information concerning the change itself during its implementation (e.g. Bordia et al., 2004; Buono & Bowditch, 1989; Jackson et al., 1987), largely disregarding leadership-related employee uncertainty. It also adds to the literature that has adopted a signaling perspective in exploring the impact of leadership behaviors on followers – a perspective that has only recently emerged and has not been applied in a change context so far (e.g. Amabile, Schatzel, Moneta, & Kramer, 2004; Detert & Burris, 2007; Karakowsky, Podolsky, & Elangovan, 2019; A. Towler, Watson, & Surface, 2014). Second, by demonstrating that followers' personal values play a crucial role in interpreting and validating leader signals of charisma and change commitment, this research advances our underdeveloped understanding of how follower values in general (e.g. Sverdlik & Oreg, 2009, 2015) and specifically value congruence between leader and followers (Antonakis et al., 2016; Burns, 1978; Conger, 1999; Weber, 1947) can shape follower reactions to change and leadership thereof - a perspective in need of corroborating empirical evidence. Third, by revealing that followers express the openness to change, conservation, and self-transcendence values transmitted by the charisma signal when advocating change, my findings help illuminate the phenomenon of the adoption of values displayed by charismatic leaders - a theoretical assertion (Bass, 1985; Shamir et al., 1993; D. van Knippenberg et al., 2004; Yukl, 1999) with so far very limited empirical examination (Groves, 2020; Hannah, Schaubroeck, & Peng, 2016; Hoffman, Bynum, Piccolo, & Sutton, 2011).

I have organized this thesis as follows. First, in section two, I review prior research on signaling theory, charismatic leadership, leader change commitment, and personal values, based on which I develop my hypotheses. Section three discusses the methodology I apply for this study, while section four presents the empirical results. Section five discusses the obtained results, as well as implications for future research and practice. Section six concludes this thesis.

2. Theoretical Background and Hypotheses

2.1. Signaling Theory

Every decision is influenced by available information (Stiglitz, 2002). Signaling theory revolves around reducing information asymmetry, which typically pertains to one party's characteristics (quality or ability) or intents (behavior or behavioral intentions) that are unobservable but relevant for the decision-making of the other party (Bird & Smith, 2005; Elitzur & Gavious, 2003; Spence, 2002; Stiglitz, 2000; Zahavi, 1975). Typically, the sender (signaler) will choose whether and how to convey the information (signal) about characteristics or intents that the recipient (receiver) lacks, who will then choose how to interpret the signal and will react accordingly (Connelly et al., 2011). Simply stated, "signals are things one does that are visible and that are in part designed to communicate" (Spence, 2002: 434). Signaling theory's central tenets can be traced back to Spence (1973) and Ross (1977) work, who are widely credited for laying the foundation for the wider application of signaling theory (Connelly et al., 2011). Spence (1973), for a classic example, illustrated a selection problem employers face: their uncertainty concerning the quality, i.e. individual ability, of potential employees complicates their recruitment efforts. High-quality job applicants can differentiate themselves from low-quality job applicants by pursuing a rigorous higher education, which low-quality candidates are assumed to be unfit for. By engaging in this costly signaling, high-quality prospects can convey their characteristic to potential employers and thereby increase their chances to be hired (Connelly et al., 2011; Spence, 1973).

The main focus of signaling theory is, hence, how the party holding the private information (sender) can act in order to credibly signal its positive but unobservable characteristics or intents to the receiver (Certo, 2003; Connelly et al., 2011; Filatotchev & Bishop, 2002). For signals to be credible, i.e. reliable, there must thus be a guarantee that the communicated information honestly reflects the unobservable attribute of interest (Bird & Smith, 2005; Davila, Foster, & Gupta, 2003; Van Schaik, 2016). Credible signals thus share two main characteristics: observability and cost. First, as a necessary but not sufficient condition, the signal must be observable by the receiver, i.e. the receiver must be able to notice the signal (Ross, 1977; Spence, 1973). Second, signaling theory's central tenet requires the signal to be costly to produce (Bird & Smith, 2005; Connelly et al., 2011; Ndofor & Levitas, 2004): For signals to be credible, the cost of producing them must be sufficiently high so that dishonest signals do not pay, so that the specific signal is only produced by individuals truly having the signaled characteristic or intent (Bird & Smith, 2005; Connelly et al., 2011; Gintis, Smith, & Bowles, 2001; Grafen, 1990). In other words, the marginal cost, or difficulty so to speak, of signaling must be negatively correlated with the signaler's characteristic or intent of interest (Bird & Smith, 2005).

2.2. Leader Signaling and Employee Commitment to Change

The disappointing outcomes of many organizational change implementations (Attaran, 2004; Marks, 2006; Paper & Chang, 2005) are indicative of the fact that organizations frequently fail to achieve the required levels of employee commitment to change. Herscovitch and Meyer (2002) define commitment to change as "a force (mind-set) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative" (Herscovitch & Meyer, 2002: 475). Change commitment goes beyond a positive attitude toward change to include a proactive behavioral intention to work toward a change on behalf of its successful implementation (Fedor, Caldwell, & Herold, 2006; Kotter & Schlesinger, 1979; Piderit, 2000). As such, commitment to change constitutes an individual's willingness and desire to support a change (Herscovitch & Meyer, 2002) and a psychological attachment to change (Bouckenooghe, 2012). For this study, I investigate two distinct dimensions of the commitment to change construct: affective and normative commitment to change.

Both dimensions have been consistently found to predict active discretionary behavioral support for change that goes beyond mere compliance (Bouckenooghe, Schwarz, & Minbashian, 2015; Herscovitch & Meyer, 2002; Meyer et al., 2007; Parish et al., 2008).² Importantly, these two dimensions of change commitment develop through separate psychological mechanisms (N. J. Allen & Meyer, 1990; Herscovitch & Meyer, 2002). On the one hand, affective commitment to change is rooted in a desire to provide support for the change based on a belief in and anticipation of its inherent benefits, and is likely to be developed when employees see value in the change and understand its advantages. Normative commitment to change, on the other hand, derives from a sense of obligation to provide support for the change that results from a sense of needing to reciprocate positive treatment and / or a sense of moral duty (Meyer & Allen, 1997; Meyer & Parfyonova, 2009). Hence, affective commitment reflects a positive emotional attachment and willingness to support a change because of perceived benefits of the change for the organization and its members, whereas normative commitment originates from a belief that it is loyal and / or morally right to support the change (Bouckenooghe et al., 2015).

Note that for this study, I will not distinguish between the terms leader and manager, since these terms are often used interchangeably in literature (Yukl & Van Fleet, 1992). The same applies for the terms follower and employee. Further, for this experimental study, I will examine the role of the chief executive officer (CEO) as the leader in question. A focus on top management is important because organizational change is typically initiated and introduced by the CEO and his or her management team (Kotter, 1995; Nadler & Tushman, 1995). The CEO is a central source of information regarding the change (A. A. Armenakis & Bedeian, 1999; A. A. Armenakis & Harris, 2002; Barrett, 2002) and plays a crucial role as he or she is ultimately responsible for any change initiative (Gilley, McMillan, & Gilley, 2009).

Also, researchers have tended to examine charisma as somewhat more appealing at higher organizational positions (Agle, Nagarajan, Sonnenfeld, & Srinivasan, 2006; House, Spangler, & Woycke, 1990; Tosi, Misangyi, Fanelli, Waldman, & Yammarino, 2004) and have highlighted the importance of CEO change commitment (Kotter, 1995).³

- 2.3. Signaled Leader Charisma and Employee Responses to Change
- 2.3.1. Literature Background on Leader Charisma

The term charisma (from the Greek word for gift, " $\chi \dot{\alpha} \rho \iota \sigma \mu \alpha$ " dates back to antiquity (Antonakis & Bastardoz, 2016; Grabo, Spisak, & van Vugt, 2017; Maclachlan, 1996). Most researchers credit sociologist Max Weber for modern resurgence of interest in charismatic leadership (Antonakis, 2017; Grabo et al., 2017; Weber, 1947). Weber conceived of charismatic leaders as being "endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities" (Weber, 1947: 358), emerging in times of crisis, and bringing about revolutionary change (Weber, 1968). The wave of research that followed formed the basis for more modern studies of charismatic leadership (e.g. Avolio & Bass, 1995; Bass, 1985; Conger & Kanungo, 1987, 1998; W. L. Gardner & Avolio, 1998; House & Howell, 1992; Shamir et al., 1993; Waldman & Yammarino, 1999). For the purposes of this thesis, I will refrain from reflecting on the long history of the scientific study of charisma (see Antonakis et al., 2016; D. van Knippenberg & Sitkin, 2013; Yukl, 1999 for excellent reviews and critiques). Suffice it to say that since the Weberian beginnings of charisma research, neocharismatic scholars have redefined the focus to the study of the more "tame" forms of organizational charisma (House & Shamir, 1993; Shamir, 1999; Shamir, Arthur, & House, 1994), understanding charisma, rather than a larger-thanlife supernaturally granted gift, as a trait related to charm, magnetism or likeability (Beyer, 1999; Grabo et al., 2017), which also does not require crisis to emerge (Conger & Kanungo, 1998; Etzioni, 1961; House, 1999; Jacquart & Antonakis, 2015; Shamir & Howell, 1999).

Yet scholars agree that charismatic leaders are still highly influential (Antonakis et al., 2011): Charismatic leaders are regarded by followers as strong and confident, are typically idealized, highly trusted and respected (Antonakis & House, 2002), and elicit loyal responses from followers to the leader's cause (Bass, 1985). Based on the criticism that charisma is still conceptualized as a gift or charm inaccessible to most leaders, and that charisma is typically defined tautologically by its outcomes or antecedents, a stream of neocharismatic research has sought to address these problems (Antonakis et al., 2016, 2011; MacKenzie, 2003; D. van Knippenberg & Sitkin, 2013; Yukl, 1999), and defines charisma as "values-based, symbolic, and emotionladen leader signaling" (Antonakis et al., 2016: 304). The authors lay out that a charismatic leader is one who communicates and influences followers by means of symbolic power rooted in emotional and ideological foundations, as opposed to reward, coercive, or expert power indicative of transactional or task-focused leadership (Antonakis et al., 2011; Antonakis & House, 2002; Etzioni, 1964; French & Raven, 1968). That is, the effect of charismatic leadership

²Herscovitch and Meyer (2002) proposed a third type of change commitment: continuance change commitment, which is rooted in recognition of perceived costs of failure to support the change. I exclude continuance commitment to change for this study because it was neither conceptually nor empirically related to discretionary behavioral support, which I assess as a primary outcome (Herscovitch & Meyer, 2002; Meyer et al., 2007). As Herscovitch and Meyer (2002) point out, precisely the different implications for behavior are an important reason for distinguishing among the three types of commitment.

³Still, researchers have asserted that charismatic leadership is not a phenomenon that is contingent on any specific organizational position, but a universal process of influence (Antonakis et al., 2016). Change commit-

ment as well, can be expected to be a relevant signal across management levels (Sirkin, Keenan, & Jackson, 2005).

on followers stems from "the leader (a) justifying the mission by appealing to values that distinguish right from wrong; (b) communicating in symbolic ways to make the message clear and vivid, and also symbolizing and embodying the moral unity of the collective per se; and (c) demonstrating conviction and passion for the mission via emotional displays" (Antonakis et al., 2016, 2011: 304). Charismatic leaders are suggested to use specific communication and image-buildings tactics (House, 1977). The use of these tactics, or signals of charisma, has been shown to be strongly predictive of charisma-affected leader outcomes (Antonakis et al., 2011; Awamleh & Gardner, 1999; Frese, Beimel, & Schoenborn, 2003; Howell & Frost, 1989; Jacquart & Antonakis, 2015; A. J. Towler, 2003). Specifically, charismatic leaders use charismatic leadership tactics (CLTs) to a) frame information in a way to center attention on the key issues (framing category: comprising metaphors, stories and anecdotes, rhetorical questions, contrasts, and three-part lists), b) provide substance to justify the message (substance category: displaying moral conviction, sharing the sentiments of the collective, setting high and ambitious goals, and demonstrating confidence these goals can be achieved), and c) convey the message in a lively manner (delivery category: body gestures, facial expressions, and an animated tone of voice) (Antonakis, 2017). See Appendix A for a more detailed description of all CLTs and their effects. Therefore, CLTs can be used to signal charisma as a leader. The concept of CLTs renders the notion of charisma less elusive and allows for more objective measurement of leader charisma that is independent of rater inferences or attributions (Antonakis, 2017).

Importantly, whether the charismatic effect, i.e. the emotional connection between leader and followers, actually occurs then depends on followers' judgment and acceptance of the values the leader' message reflects (Antonakis et al., 2016; Keyes, 2002; Tucker, 1968). Charisma thus needs to be validated by followers' perceptions (Antonakis et al., 2011). If leaders achieve the charismatic effect and succeed in creating an emotional connection with their followers, they will more potently communicate their vision and goals, motivate followers, and thus become more effective leaders (Antonakis, Fenley, & Liechti, 2012; DeGroot, Kiker, & Cross, 2009; House, 1996; House & Shamir, 1993; Shamir et al., 1993).

2.3.2. Signaled Leader Charisma and Affective and Normative Employee Change Commitment

As I have laid out, charisma can be signaled to followers by appropriate use of CLTs. As both cognitive and affective processes are crucial to understanding the charismatic effect on followers (Bass, 1988; House, Woycke, & Fodor, 1988; Pescosolido, 2002), in the following, I illustrate two mechanisms, the first more cognitive, the second affective in nature, via which signaled leader charisma can be expected to influence follower affective and normative change commitment.

Signaled Leader Charisma as a Signal for Leader Ability and Intent

Perceived leadership competence is arguably important in change implementation (Babalola, Stouten, & Euwema, 2016; Battilana, Gilmartin, Sengul, Pache, & Alexander, 2010; Oreg, Vakola, & Armenakis, 2011). Although a charisma signal itself carries no certainty about the leader's ability or moral righteousness (Antonakis et al., 2016; Howell, 1988), the signal will likely still be used to infer these attributes of the leader (Antonakis et al., 2016; Jacquart & Antonakis, 2015). A new stream of research has recently provided an evolutionary psychology perspective on charismatic leadership, proposing that charisma evolved as a signal of a person's leadership ability and intent as an adaptive response to selective pressures arising from various situations of coordination challenges (Bastardoz, n.d.; Grabo et al., 2017; King, Johnson, & Van Vugt, 2009; Van Vugt & Ahuja, 2011; Van Vugt, Hogan, & Kaiser, 2008).

Grabo et al. (2017) suggest that followers are susceptible to charisma signals particularly when faced with novel challenges, as is the case during organizational change. There are two mechanisms through which charisma signals effective leadership (Bastardoz, n.d., forthcoming; Grabo et al., 2017; Van Vugt, 2006).

First, charismatic leaders demonstrate rhetorical and symbolic thinking prowess by using framing CLTs (Antonakis et al., 2016; Grabo et al., 2017). Rhetorical skills are most likely interpreted by followers as a signal of intelligence, since the ability to craft memorable contrasts (e.g. John F. Kennedy's famous "Ask not what your country can do for you-ask what you can do for your country") and creative metaphors are visible representations of a leader's intelligence (Bastardoz, n.d. forthcoming; Silvia & Beaty, 2012). As Aristotle put it: "But the greatest thing by far is to have a command of metaphor [...], it is the mark of genius" (Aristotle & Butcher, 2008: 44). A positive relation between leader intelligence and charisma was also found in a current meta-analysis (Banks, Engemann, Williams, Gooty, & McCauley, 2017). Thus, we can assume that charismatic leaders' rhetoric is a credible signal of leadership ability, since it can be learned at a lesser cost by more able leaders, as learning costs depend directly on largely heritable endowments of intelligence (Antonakis et al., 2016; Bouchard & Loehlin, 2001; Bouchard & McGue, 2003).

Second, charismatic leaders reify their vision by reinforcing norms and moral as they relate to the situation, and by invoking shared values and emotions with their message (Bulbulia & Frean, 2010; Grabo et al., 2017). Substance CLTs reflect the essence of the leader's vision and mirror his or her intention to act on specific values and group emotions, which will affect how much effort followers will consequently exert in the task (Bastardoz, n.d., forthcoming). Communicating values is costly in the sense that leaders risk alienating potential supporters who do not share these values (Grabo et al., 2017). Further, especially in environments with repeated interaction, signals of intent are costly for leaders, since they risk losing their credibility if they fail to act on what they indicated (Bastardoz, n.d., forthcoming). Therefore, the portrayal of shared values, moral and emotions serves as a credible signal of leadership intentions.

I propose that follower perceptions of leader ability and intentions to lead based on group values and emotions will consequently build trust⁴ in the leader.

There are three critical antecedents of trust, which each add a unique perceptual perspective: another's ability, benevolence, and integrity (R. C. Mayer et al., 1995). First, as discussed above, charisma conveys leadership ability. Hence, by definition, perceptions of leader ability induced by a charisma signal should lead to increased follower trust toward the leader. Second, benevolence is "the perception of a positive orientation of the trustee toward the trustor" (R. C. Mayer et al., 1995: 719). Thus, followers' perceptions of their leader's trustworthiness is also grounded upon their level of confidence in the leader's intentions and motives toward them (Bartram & Casimir, 2007). The leader charisma signal demonstrates an intention to lead based on group emotions and values. This should instill trust in the leader's motives toward his or her followers regarding the planned change, as the leader conveys concern for and empathic understanding of follower needs and emotions, for instance by expressing the sentiments of the collective (Bass & Avolio, 1990; J. Choi, 2006; Conger, Kanungo, & Menon, 2000; Jung & Avolio, 2000; Kirkpatrick & Locke, 1991; Pillai, Williams, Lowe, & Jung, 2003; Salovey & Mayer, 1990). Therefore, charisma signaling can be expected to also build trust in the leader based on follower perceptions of benevolence.

Trust in the leader, in turn, is an often cited critical determinant for change reactions (Bouckenooghe, 2012; Eby, Adams, Russell, & Gaby, 2009; Korsgaard, Schweiger, & Sapienza, 1995; Oreg, 2006; Oreg et al., 2011; Rousseau & Tijoriwala, 1999). Trust in the leader is suggested to result in increased follower commitment to the goals set and decisions made by the leader (Dirks & Ferrin, 2002), and therefore enhanced affective and normative commitment to change (Bouckenooghe, 2012). First, the importance of trust in leadership in terms of accepting and believing the reasons offered for change, and the formation of a favorable attitude toward change (Dirks & Ferrin, 2002; Lau & Woodman, 1995; Rousseau & Tijoriwala, 1999; Stouten et al., 2018), is well established in literature. For instance, trust in the leader was found to reduce perceived uncertainty and threat associated with change (McLain & Hackman, 1999; Stouten et al., 2018) and to contribute to followers' belief in leaders' good intentions to create organizational benefits with the change (Harvey, Kelloway, & Duncan-Leiper, 2003; Michaelis, Stegmaier, & Sonntag, 2009). Therefore, trust in leadership can be expected to increase affective commitment to change. Second, since the leader signals the intention to lead based on these shared values and emotions, and followers can be expected to trust the leader in this intent, feelings

of duty to support a change of morally valuable nature should ensue.

When leaders make these normative calls to support a change in appealing to emotions and values, employees have been found to shift their attention to group well-being and feeling obliged to pursue group interests (Colbert, Kristof-Brown, Bradley, & Barrick, 2008). Consequently, trust in leadership should also increase normative commitment to change, as is also supported by literature (Bouckenooghe, 2012).

Cumulatively, I propose that a leader charisma signal elicits follower perceptions of leader ability and intention to lead based on group values, which build trust in the leader, and thereby increase follower affective and normative change commitment.

In addition; I propose that signaled leader charisma, above and beyond its cognitive component, will inherently appeal to followers' emotions and induce positive affect. I develop this argument below.

Signaled Leader Charisma as Inducement of Positive Follower Affect

Emotions are a key determinant for employee responses to organizational change (Bartunek, 1984; Buono & Bowditch, 1989; Fugate, Kinicki, & Prussia, 2008; Seo et al., 2012), and can be categorized on two core dimensions: positive and negative affect (Watson, Clark, & Tellegen, 1988; Watson & Tellegen, 1985).⁵ Researchers have continuously advised change leaders to create high levels of positive emotions, such as employee excitement and enthusiasm (Cooperrider, 1990; Cooperrider & Srivastva, 1987; Huy, 2002; Watkins & Mohr, 2001). "Emotions are deeply intertwined with the process of leading" (Gooty, Connelly, Griffith, & Gupta, 2010: 979). This has been particularly emphasized in the realm of charismatic leadership, as is evident from the very notion of charisma as "values-based, symbolic, and emotion-laden leader signaling" (Antonakis et al., 2016: 304). Charismatic leaders' signaling positively energizes followers around a common goal because the leader's message resonates at a deeper emotional level that goes beyond just comprehension (Emrich, Brower, Feldman, & Garland, 2001). In other words, an important effect of charismatic leadership is eliciting positive follower affect (W. L. Gardner & Avolio, 1998) by transmitting positive emotion (Bono & Ilies, 2006), both in a verbal and a more abstract manner.

First, the specific rhetorical style that constitutes the charismatic signal has been shown to be emotion-inducing. Specifically, employing rich emotional language is especially conducive to transmitting emotion (Buck, Miller, & Caul, 1974). The same has been found for the use of symbolic language, since rhetoric that readily evokes images is more closely associated with emotional stimuli from our own past

⁴Trust has been defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (R. C. Mayer, Davis, & Schoorman, 1995: 712). Nevertheless, there is not one unanimously accepted definition.

⁵Note that I use the terms affect, feelings and emotions interchangeably in this thesis.

(Skinner, 1957), and generally elicits more intense emotional responses (Campos, 1989; D. W. Miller & Marks, 1997). Thus, signal recipients are likely to assume the affective state reflected in the signal's rhetoric.

Second, a charismatic signal induces affective experiences through the mechanism of emotion contagion⁶ (Hatfield et al., 1994). Charismatic signaling entails painting an enthusiastic and optimistic view of the future (Bass, 1985; Conger, 1989). For instance, by setting high goals and expressing confidence that they can be achieved, charismatic leaders display excitement and confidence (Antonakis et al., 2011; Barsade & Gibson, 2007). Through emotion contagion, leader expressions of positive affect, such as optimism, evoke positive affect in followers, as the leader's affect is emulated by followers (Barsade, 2002; Bono & Ilies, 2006; Erez, Misangyi, Johnson, LePine, & Halverson, 2008; Sy, Côté, & Saavedra, 2005). Consequently, a leader's charisma signal can be expected to induce positive emotions in followers.

Emotions, in turn, have been found to be crucial in individuals' appraisal of situations such as organizational change (Frijda, 1996; Huy, 2002; Lazarus, 1991). Specifically, emotion research suggests two mechanisms that illustrate how employees' affective experiences may impact commitment to change by coloring information processing. First, feelings-asinformation theory (Schwarz, 1990; Schwarz & Clore, 2003) proposes a direct infusion effect: In the case of organizational change, employees' positive feelings serve as positive information used to judge the change, for instance how desirable the change outcomes will be. That is, individuals' experienced positive affect is used as immediate information to evaluate the change more positively, thereby increasing affective change (Seo et al., 2012). Likewise, positive affect can be expected to be used as information regarding how the change is managed and how benevolently employees will be treated during the course of it (Seo et al., 2012).

As a result, positive affect should strengthen employees' perceived obligation to support the change because of a desire to reciprocate anticipated positive treatment, increasing normative change commitment (Meyer & Parfyonova, 2009).

Second and complementarily, the mood congruence recall effect (Blaney, 1986; Bower, 1981; J. D. Mayer, 1986; J. D. Mayer, Gayle, Meehan, & Haarman, 1990; Rinck, Glowalla, & Schneider, 1992), denotes the individual tendency to more easily learn and recall materials that match one's affective state in valence. When individuals experience positive affect while being informed about a change initiative, the mood congruence recall effect predicts that they will learn and later recall positively perceived materials more easily. As information recollection from memory forms the basis for evaluative judgment, these individuals can be expected to evaluate the change initiative and their treatment concerning the change more positively, since they disproportionately recall positively perceived aspects from the change communication they received. Therefore, employees experiencing more positive affect likely develop stronger affective and normative change commitment (Seo et al., 2012; Shin, Taylor, & Seo, 2012).⁷

To conclude, I propose that leader charismatic signaling will induce positive affect in followers, which will in turn foster stronger follower affective and normative commitment to change.

Cumulatively, I hypothesize the following:

Hypothesis 1a. A charismatic leadership signal results in stronger follower affective commitment to change.

Hypothesis 1b. A charismatic leadership signal results in stronger follower normative commitment to change.

I now turn to developing hypotheses regarding the relationships between leaders' signaled commitment to a change initiative and follower commitment to change.

- 2.4. Signaled Leader Change Commitment and Employee Responses to Change⁸
- 2.4.1. Literature Background on Leader Change Commitment

A great amount of attention has been dedicated to providing implementation process recommendations to change leaders (e.g. Beer, 1980; Brockner et al., 1994; Kotter, 1996; Lewin, 1947; Schweiger & Denisi, 1991), a role frequently ascribed to top managers, including CEOs (Huy et al., 2014). Yet specific employee perceptions about their CEO during organizational change have been seldomly and less systematically addressed. As I will lay out in the following, an inspection of practitioner publications on the issue of employee perceptions of the CEO during change seems to suggest a particular necessity for change success: perceived CEO change commitment. For the purpose of this study, I use the term leader change commitment in accordance with the definition of Herscovitch and Meyer (2002) to capture the abstract employee perception that a leader is committed to a change, i.e. is in favor of the change and personally backs it. Although the notion of change commitment carries a propensity and willingness to support a change (Herscovitch & Meyer, 2002), change support is not a prerequisite for commitment, but rather a likely consequence.⁹

⁶Emotion contagion denotes processes of transferring of emotions from one individual to another (Hatfield, Cacioppo, & Rapson, 1994). The contagion of emotional states can be triggered by both emotional and cognitive cues (Douglas et al., 2008; Hillebrandt & Barclay, 2017; Kelly & Barsade, 2001) and can include conscious or unconscious processing (Hess & Fischer, 2013; Kahneman, 2003).

⁷Note that both phenomena, the feelings-as-information and the mood congruence recall effects, occur primarily at the moment when positive or negative affect is felt, for instance during the relatively short period an individual experiences an affective response to a leader communication message (Barsade & Gibson, 2007). Nevertheless, the mood congruence recall effect will still impact later recollection and judgment of the change.

⁸For the following section, I will use the terms leader and CEO interchangeably.

⁹The distinction of leader change commitment and support has not been consistent in literature. Some authors have used both terms seemingly in-

Scholars and practitioners seem to agree on the importance of leader commitment to a change for it to succeed (A. A. Armenakis, Harris, & Mossholder, 1993; Caldwell, Herold, & Fedor, 2004; Coyle-Shapiro & Morrow, 2003; Hackman & Wageman, 1995; Kanter, 1999; Kanter et al., 1992; Lewis & Seibold, 1998; Quinn, 1985; Stouten et al., 2018). Practical literature has consistently shown top management's perceived commitment to a change initiative to be one of the most important empirical predictors of change program success across industries (Sirkin et al., 2005) and CEO change commitment has even been suggested to be a sine qua non for change success (Kotter, 1995). Specifically in order to foster employee commitment to change, visible backing of a change initiative by influential leaders is argued to be crucial (Sirkin et al., 2005).

In academic research as well, perceived top management commitment has been proposed to be conducive to supportive change recipient reactions (e.g. A. A. Armenakis et al., 2007; Thong et al., 1996). Scholars also include the importance of perceived management commitment to a proposed change as an antecedent of employee change attitudes, for instance in the constructs of change cynicism and readiness for change (A. Armenakis, Harris, & Feild, 1999; A. A. Armenakis et al., 1993; Holt et al., 2007).¹⁰ Moreover, leader activities demonstrating commitment to a change initiative are explicitly advised (A. Armenakis et al., 1999; A. A. Armenakis & Harris, 2002). However, the development of leader change commitment perceptions as well as the underlying mechanisms of its effect on employee commitment remain largely unexplored.

Despite its arguable importance in creating supportive responses to change, perceived CEO change commitment is not self-evident. In a 2017 global survey by McKinsey & Company, only two thirds of respondents agreed that leaders in their organization demonstrate true ownership and commitment to making the change happen (Lindsay, Smit, & Waugh, 2018). Executives may sometimes be reluctant to show commitment for initiatives, which e.g. include layoffs or other negatively perceived consequences for employees (Sirkin et al., 2005). Moreover, even when leaders are in fact committed to a change program, employee perceptions might fall behind top managers' perception of sufficiently conveying their commitment to employees (Sirkin et al., 2005). Employees will thus face uncertainty and information asymmetry concerning CEO commitment to a change program.

Therefore, I examine leader change commitment signaling, i.e. the manner in which a leader can credibly convey to followers that he or she is committed to a change initiative. Making top management level commitment visible with actual behavior is underlined to be crucial for organizational change outcomes (Kotter, 2005; Sirkin et al., 2005). In particular, behaviors such as going beyond managerial duty to realize a change project or devoting a lot of personal time have been proposed to demonstrate leader change commitment (Huy, 2002). Investing significant work time can be considered especially costly for top managers, who are involved in a variety of courses of action and thus face high opportunity costs of dedicating time to any particular project (Porter & Nohria, 2018).

Thus, such a signal of commitment can be considered credible, as only leaders who are indeed committed can be expected to be willing to incur these costs (Connelly et al., 2011; Spence, 1973). In other words, for CEOs, time is their scarcest resource, rendering time investment for change a particularly costly, hence credible, means of signaling change commitment.

I extend this line of reasoning by hypothesizing that signaled leader change commitment will increase follower affective and normative commitment to change.

2.4.2. Signaled Leader Change Commitment and Affective and Normative Employee Change Commitment

Recall that I refer to signaled leader change commitment as discretionary behavior that credibly conveys that a leader is bound to and stands behind a change initiative. As research has not yet addressed the underlying mechanisms indepth, I elucidate two processes via which signaled leader change commitment may influence follower affective and normative change commitment. Specifically, I propose that signaled leader change commitment will also signal a change program's organizational importance and the leader's change support intentions.

Signaled Leader Change Commitment as a Signal for Change Importance

In today's environment of recurring changes, which seem to have become the new reality of organizational life (Tsoukas & Chia, 2002; Weick & Quinn, 1999), employees may justifiably be generally skeptical of and attentive to the level of CEO commitment for and priority of any new change initiative (A. A. Armenakis & Harris, 2002). As a result, credibly demonstrating leader commitment to a newly proposed change should help focus employees' attention as well as bring clarity to the priority of a new change. Signaling theory has been held to provide a useful framework for considering how management conveys expectations to employees concerning courses of actions they view as important (Connelly et al., 2011; Pfeffer, 1981). Hermalin's (1998) economic perspective on leadership emphasizes the

terchangeably (e.g. Holt et al., 2007; Kotter & Schlesinger, 1979; Sirkin et al., 2005) to describe a leader's backing of a change project. Others have used the term of leader change support to comprise change management activities, such as planning, funding, or implementing activities (e.g. Coyle-Shapiro, 2002; Lok, Hung, Walsh, Wang, & Crawford, 2005; Thong, Yap, & Raman, 1996), whereas other authors have used the term for social support for employees, such as listening to concerns (e.g. Dirks & Ferrin, 2002; Iverson, 1996; Logan & Ganster, 2007; Rafferty & Griffin, 2006).

¹⁰Change cynicism is defined as "a pessimistic viewpoint about change efforts being successful because those responsible for making change are blamed for being unmotivated, incompetent, or both" (Wanous, Reichers, & Austin, 2000: 133), alluding to negative reactions as a result of leaders' perceived lack of change commitment. Readiness for change also features top managers' standing behind a change as one of five dimensions of change readiness, termed senior leadership support, i.e. "the belief that the organizational leaders were committed to the change" (Holt et al., 2007: 251).

informational aspect of leadership, and points to the leadership problem of inducing followers to expend more effort in organizational courses of action that are the most important.

Information asymmetry between the leader and followers concerning the anticipated organizational return to effort from a particular organizational initiative causes followers to observe the leader's actions for signals concerning the importance of exerting effort for a specific initiative (Hermalin, 1998). Leaders thus have to appropriately signal which actions the collective should invest in (Antonakis et al., 2016). Therefore, a costly signal of leader commitment to a change program (conveyed e.g. by investing a significant amount of personal time for it) can be indicative of the leader's, and thus organizational, priority assigned to the program, convincing followers to contribute as well (A. A. Armenakis et al., 1993; Hermalin, 1998; Potters, Sefton, & Vesterlund, 2007). Consequently, followers should perceive the change program the leader signaled to be committed to as beneficial and important to the organization.

Therefore, first, followers' affective commitment to change, i.e. their belief in the change's inherent benefits to the organization, should be increased, since an organization's initiatives can be expected to be prioritized in importance as a result of their respective expected strategic impact for organizational success (Nieto-Rodriguez, 2016).

Second, followers should feel obligated to contribute to centrally important initiatives. A significant stream of research has revolved around individuals' social identity¹¹, and specifically organizational identification in more recent decades (e.g. Albert & Whetten, 1985; Ashforth, Harrison, & Corley, 2008; Ashforth & Mael, 1989; Dutton, Dukerich, & Harquail, 1994; Pratt, Rockmann, & Kaufmann, 2006). Scholarly work on organizational identification influentially holds that individual identity emerges from organizational membership, namely the essences of roles and collectives the individual is a member of (Ashforth et al., 2008; Postmes, Baray, Haslam, Morton, & Swaab, 2006). Because employees have an inherent need for organizational identification (Glynn, 1998; Kreiner & Ashforth, 2004) and seek to feel positively about their organizational membership, they are highly likely to find sources of positive affect and pride in their organizations (Ashforth et al., 2008). As a result, employees generally tend to identify with their employer organization. Organizational identification, as the psychological bond between the organization and individual, is a key mechanism for explaining employees' work towards the strategic interest of the organization (M. R. Edwards, 2005; Riketta, 2005).

Consequently, employees expectedly feel a sense of obligation to contribute toward organizational initiatives that are deemed important and most central to the organization's interests, and therefore experience normative commitment to change (Meyer & Parfyonova, 2009).

To conclude, a leader's signaled change commitment will convey a change initiative's organizational importance and therefore likely foster follower affective and normative commitment to change.

Signaled Leader Change Commitment as a Signal of Leader Change Support

Further, I posit that signaled leader commitment will also signal the leader's intention to behaviorally support the change. Behavioral support intentions are an essential component of the definition of commitment to change (Herscovitch & Meyer, 2002) and have been convincingly found to be a consequence of change commitment in previous research (Bouckenooghe et al., 2015). Hence, if a leader credibly demonstrates that he or she stands behind the change, employees presumably will also anticipate considerable leader support for the change as a result. Following previous work (e.g. Coyle-Shapiro, 2002; Lok et al., 2005; Thong et al., 1996) and for clarity in the distinction from leader commitment, I refer to leader support for change as change-supportive involvement in change management activities, such as planning, funding, or implementing change-related activities. Since an organization's CEO holds a powerful position in allocating organizational resources, such as personnel and capital, as well as guiding strategic planning and implementation, leader support for change is arguably crucial for change success. For instance, in a 2017 global survey conducted by McKinsey, organizations reporting successful change agreed at more than double the rate that their organizations were endowed with sufficient resources and capabilities to execute the change (Lindsay et al., 2018). Indeed, practitioner publications recommend that CEOs quickly make sufficient funding available for change programs, secure resources and expertise by allocating suitable employees to implement the change initiative, as well as create other organizational conditions conducive to change success such as suitable incentive systems, stakeholder engagement and strategic planning (e.g. Bürkner, Faeste, & Hemerling, 2015; Johnston, Lefort, & Tesvic, 2017; Lindsay et al., 2018).

Further, committed CEOs can be expected to be willing to use their power and energy to overcome problems and obstacles that might occur during change implementation. An examination of academic literature also yields insights on the role of resources in organizational change. As a case in point, organizational ecological theory (Hannan & Freeman, 1977, 1984, 1989) holds that organizational change is limited by strong inertial pressures, including resource constraints and internal political constraints of vested interests. Consequently, a CEO supporting organizational change and dedicating needed resources to the change rather than other organizational courses of action should aid change efforts. Thus, the CEO's commitment to a change initiative, by determining proactive support intentions, holds large impact potential in helping change implementation succeed.

¹¹Social identity was famously defined as "that part of an individual's selfconcept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978: 63).

The majority of change efforts fail to achieve their intended results (Beer & Nohria, 2000; W. Burke & Biggart, 1997). Signaled leader commitment to a proposed change, by allowing inferences about change success via anticipated leader change support, should therefore alleviate possible employee concerns and increase change commitment. Expectancy theory (Vroom, 1964) is insightful here because beliefs about the likelihood of successful change are similar to beliefs that good performance will result from personal efforts (i.e. the expectancy component in expectancy theory) (Wanous et al., 2000). As leader support, such as securing necessary resources, increases the probability of change success, the anticipated likelihood of successful change resulting from the efforts of those responsible should also be increased. When subordinates feel that the coming change is expected to succeed with a higher probability, they should be more likely to commit to achieving the goal of change (Locke & Latham, 2002). As anticipated inherent benefits of an initiated change are expected to occur at a higher probability, follower affective commitment to change (the desire to support a change based on a belief in its benefits) should be fostered.

Further, followers' normative commitment to change is also likely to be increased as a result of anticipating leader change support, as individuals learn acceptable, normative attitudes and behavior by considering others' behavior (Bandura, 1986). Leaders can, via the actions they signal to value and put emphasis on, affect follower behavior and beliefs about how others in the organization may act (Antonakis et al., 2016). By observing the leader's response to the change initiative and anticipating his or her supportive behavior, followers infer what kinds of attitudes are socially expected, and which behaviors concerning the change should be developed by organization members (Antonakis et al., 2016; Coyle-Shapiro & Morrow, 2003).

As a result of anticipating positive consequences, such as favorable social reactions by other organizational members, positive behavior toward the change will be positively reinforced (Mahoney, 1974; Manz & Sims, 1981). Hence, anticipated leader change support should induce normative commitment to change in followers, as they are likely to derive a sense of obligation to support a change from the internalization of this normative social influence (Herscovitch & Meyer, 2002; Meyer & Allen, 1991).

Consequently, I posit that signaled leader change commitment, via anticipated leader change support, will enhance followers' affective and normative commitment to change.

Cumulatively, based on previous research findings I discussed, I conclude with the following hypotheses:

Hypothesis 2a. A signal of leader commitment to the proposed change results in stronger follower affective commitment to change.

Hypothesis 2b. A signal of leader commitment to the proposed change results in stronger follower normative commitment to change.

In the previous sections I have set out which main effects

of signaled leader charisma and change commitment on follower change commitment I expect. As I will lay out in the following, I further suggest both signals will positively interact in their effect on follower affective and normative change commitment.

2.5. Interaction Effect between Leader Charisma and Change Commitment Signals

Leaders need to "walk the talk", as advised by one of the most ubiquitous business aphorisms (Taylor, 2014). In fact, this notion has also been argued for in the context of charisma signaling (Bastardoz, n.d., forthcoming). In order to reinforce their charisma signal, leaders need to stand for the values and emotions they have signaled rhetorically and act accordingly. Charismatic leadership theory contends that role modeling is a major way through which leaders encourage followers to contribute to the common goal (e.g. Bass, 1985; Conger & Kanungo, 1987; House, 1977; Shamir et al., 1993). Exemplary behaviors refer to the leader's display of a commitment to the collective values and goals, increasing followers' intrinsic valence of efforts on behalf of the common goal (Shamir et al., 1993; Shamir, Zakay, Breinin, & Popper, 1998; Yaffe & Kark, 2011). In contrast, leaders who pledge something, such as the benefits of a change and call for supporting it, and then do not act accordingly, risk losing their followers' trust and willingness to exert effort, and thus their legitimacy as a leader (Bastardoz, n.d., forthcoming; De Cremer, 2003; Dineen, Lewicki, & Tomlinson, 2006; Simons, Tomlinson, & Leroy, 2011). As the author of a threeyear field study in a large technology company concludes, "the perceived gap between the CEO's rhetoric and his actions generated much negative emotion and mistrust that ultimately led to the failure of this cultural [change] initiative" (Huy, 2011: 1399).

Drawing from behavioral integrity¹² theory (Simons, 2002), I therefore argue that perceived consistency between a leader's charisma signal, entailing an emotional and values-based argumentation in favor of a change, and a commitment signal, entailing a costly demonstration of change commitment, will be especially successful in creating follower affective and normative change commitment. An alignment between both signals will likely be perceived as coherence between rhetoric (i.e. espoused values) and actions (i.e. enacted values), and therefore as a display of behavioral integrity. According to R. C. Mayer et al. (1995), trust is determined by three critical antecedents: perceptions of another's ability, benevolence, and integrity. As I have posited previously, a signal of charisma itself engenders perceptions of leader ability and benevolence, instilling trust in the leader. Moreover, I propose that by aligning the charisma signal with enacting the communicated intention,

¹²Behavioral integrity refers to "the perceived pattern of alignment between an actor's words and deeds" (Simons, 2002: 19). The ascription of behavioral integrity bears no judgment on the morality of espoused and enacted principles, however.

values, and goals (by also signaling commitment to the proposed change), ascriptions of leader integrity, as the third antecedent, should further strengthen trust in the leader (R. C. Mayer et al., 1995).

In turn, increased trust will instill confidence in the merits of the leader's messages and goals, instigate perceptions of a positive social exchange between leader and followers, fostering follower willingness to reciprocate, and hence induce more follower affective and normative commitment to the collective goal (Braun, Peus, Weisweiler, & Frey, 2013; C. S. Burke, Sims, Lazzara, & Salas, 2007; Simons, 2002; Simons, Leroy, Collewaert, & Masschelein, 2015).

This leads me to the following strengthening moderation (R. G. Gardner, Harris, Li, Kirkman, & Mathieu, 2017) hypotheses:

Hypothesis 3a. The leader commitment signal moderates the positive relationship between the leader charisma signal and follower affective commitment to change such that the relationship becomes stronger when the leader commitment signal is also received.

Hypothesis 3b. The leader commitment signal moderates the positive relationship between the leader charisma signal and follower normative commitment to change such that the relationship becomes stronger when the leader commitment signal is also received.

2.6. The Moderating Role of Followers' Personal Values

How are signals perceived? The answer may be: it depends on the individual. Receiver interpretation - the process of translating a signal into perceived meaning (Connelly et al., 2011) - may differ according to receivers' personal characteristics (Perkins & Hendry, 2005; Srivastava, 2001). Signaling scholars thus have recently begun to include the receiver's perspective (e.g. Suazo, Martínez, & Sandoval, 2009; Turban & Greening, 1996). For instance, signals may be assigned different strengths or even different meanings, based on personal values, priorities, and principles (Branzei, Ursacki-Bryant, Vertinsky, & Zhang, 2004; Ehrhart & Ziegert, 2005; Highhouse, Thornbury, & Little, 2007). In reflecting on the charismatic leadership literature, Yukl (2002) specifically calls for scholars to investigate the role of values in the charismatic leadership process. A recent McKinsey survey, concluding that two thirds of change initiatives fail due, in part, to the quality of leadership and nature of congruence between leader and employee values during organizational changes (McKinsey & Company, 2008), also underlines the importance of followers accepting leaders' values during change.

Personal values can be defined as cognitive representations of motivational goals, which serve as guiding principles in people's lives (Schwartz, 1992). As such, values transcend contexts and time (Rokeach, 1973; Schwartz & Bilsky, 1987). Research has shown that values influence the most basic ways in which individuals perceive their environment (Fischer & Smith, 2004; Schwartz, Sagiv, & Boehnke, 2000), in turn affecting how individuals interpret events and correspondingly form attitudes (Bardi & Schwartz, 2003; Meglino & Ravlin, 1998; Oreg & Berson, 2011). Each individual holds numerous values, to which varying levels of importance are attached (Rokeach, 1973). The Schwartz theory of basic values (Schwartz, 1992) defines ten broad values which can be arrayed in a two-dimensional circular space. The two dimensions are based on two fundamental conflicts (Rohan, 2000; Schwartz, 1992). Openness to change versus conservation constitutes the first dimension, reflecting the conflict between the motivation to follow one's intellectual and emotional interests in uncertain directions, emphasizing the search for stimulation, novelty and change (high openness) versus the motivation to preserve the status-quo and the certainty resulting from conformity to norms (low openness). The second dimension is termed self-transcendence versus self-enhancement. It juxtaposes values in terms of the conflict between the motivation to promote the welfare of others and collective interests (high self-transcendence) versus the motivation to enhance personal outcomes and interests (low self-transcendence).

Charismatic leadership as "values-based, symbolic, and emotion-laden leader signaling" (Antonakis et al., 2016: 304) is inextricably linked to the concept of personal values. The effect of charismatic leadership is prominently based on appealing to followers' values and creating an emotional bond between leader and followers (Antonakis et al., 2016; Antonakis & House, 2002; Etzioni, 1964; French & Raven, 1968; Shamir et al., 1993). Importantly, the effect of charismatic signaling on followers only occurs if followers accept the values conveyed by the leader's message and perceive them to be congruent to their own personal values (Antonakis et al., 2016; Keyes, 2002; Shamir et al., 1993; Tucker, 1968). Consequently, a charismatic leader signal should be more effective if followers share the values transmitted in the signal. I further propose that a charismatic signal will convey a leader's own and appeal to followers' self-transcendence and openness to change values.

First, inducing followers to transcend their self-interests for the benefit of the organization has been referred to as "the essence of charismatic leadership" (D. van Knippenberg et al., 2004: 830). Charismatic leaders influence followers to make self-sacrifices and inspire them to transcend self-interests and lower-level motivational needs in favor of a collective valueladen vision centered around organizational interests during times of change (Bass, 1985; Burns, 1978; House, 1977; Yukl, 1999). Hence, charismatic leaders signal their own self-transcendence values and also appeal to followers' selftranscendence values. Individuals who place importance on self-transcendence values grounded on collective-oriented values likely perceive organizational change as an opportunity to transcend self-interests in favor of collective interests (Groves, 2020). In contrast, self-enhancement oriented individuals may be primarily concerned with loss of power and / or valued possession due to the change (Piderit, 2000; Tushman, Newman, & Romanelli, 1986), leading to less inclination to sacrifice their personal interests in favor of collective interests. Therefore, a charismatic leader's message emphasizing collective efforts toward a common goal should especially resonate with followers who share and relate to these self-transcendence values (Meyer & Parfyonova, 2009), rendering the leader's charismatic signal particularly effective for these followers.

As a result, I set forth in the following strengthening moderation (R. G. Gardner et al., 2017) hypotheses:

Hypothesis 4a. Follower self-transcendence moderates the positive relationship between a charismatic leadership signal and follower affective commitment to change such that the relationship becomes stronger as follower selftranscendence increases.

Hypothesis 4b. Follower self-transcendence moderates the positive relationship between a charismatic leadership signal and follower normative commitment to change such that the relationship becomes stronger as follower selftranscendence increases.

Second, a charismatic leader signal entails stimulating and inspiring followers by offering a compelling vision of future changes in the organization (Bass, 1985). Charismatic leaders craft an emotional and values-laden vision of how the status quo should be changed (Antonakis et al., 2016; Sosik, 2005). In other words, charismatic leaders espouse a need for change and articulate it in a vision of a better future for followers, framing the change as an opportunity for renewal and growth rather than a threat. A charismatic leader signal thus likely is perceived to reflect the leader's openness to change values (Schwartz, 1992; Sosik, 2005). In turn, followers who place importance on openness to change values can be expected to be more attracted to the leader's charismatic message. Individuals with high openness to change values generally tend to view changes as opportunities for growth, renewal, and stimulation, and thus are likely to be readily engaged by the leader's message (Groves, 2020). In contrast, employees with high conservation values may be less likely to accept even the possibility that a change will benefit the organization or themselves (Groves, 2020). Hence, followers with high rather than low openness to change values should respond more positively to the leader's charisma signal, and thus should develop stronger affective and normative commitment to change, as the charisma signal expectedly takes stronger effect, as depicted in the following strengthening moderation (R. G. Gardner et al., 2017) hypotheses:

Hypothesis 5a. Follower openness to change moderates the positive relationship between a charismatic leadership signal and follower affective commitment to change such that the relationship becomes stronger as follower openness to change increases.

Hypothesis 5b. Follower openness to change moderates the positive relationship between a

charismatic leadership signal and follower normative commitment to change such that the relationship becomes stronger as follower openness to change increases.

2.7. Change Commitment and Behavioral Support for Change

Employee behavioral support for change denotes employees' discretionary behavioral demonstration of support for a change by exerting extra effort and going above what is formally required to ensure the success of the change (Herscovitch & Meyer, 2002; Meyer et al., 2007). Prior research emphasizes that employees' behavioral support is important for the successful implementation of change initiatives (Heifetz & Laurie, 2001; Herscovitch & Meyer, 2002; Kotter & Cohen, 2002). Conceptually, employees who believe in the inherent benefits of the change and want to contribute to its success (strong affective commitment) or who feel a sense of obligation to support the change (strong normative commitment) should be willing to go beyond what is required of them and personally exert effort in order to benefit the change, even if it involves some personal cost (e.g. working extra hours) (Meyer et al., 2007). Consistently, there is ample research evidence that affective and normative commitment to change are significant precursors of behavioral support for change as found by a recent meta-analysis (Bouckenooghe et al., 2015). Therefore, I seek to replicate the established relationship between affective and normative commitment and behavioral change support intentions.

Beyond replicating this finding, my study extends previous knowledge by examining the effect with a behavioral measure. Research has pointed out that almost all measures of the change support construct focus on the intention to support the change, i.e. the subjective probability of engaging in discretionary behavior, rather than capturing actual behavior when confronted with change (Cinite & Duxbury, 2018).

Yet researchers have named their reliance on self-report measures for change support a limitation, and have called for more objective measures of actual behavioral support in future studies (Antonakis et al., 2016; M. Choi, 2011; Herscovitch & Meyer, 2002; Meyer et al., 2007). Moreover, a behavioral measure of commitment offers the general advantage of complementing self-report measures of behavior and mitigating associated problems such as self-serving bias or common method variance (Herscovitch & Meyer, 2002; Meyer et al., 2007).

Therefore, I posit:

Hypothesis 6a. Follower affective commitment is positively associated with intended behavioral support for change.

Hypothesis 6b. Follower normative commitment is positively associated with intended behavioral support for change.

Hypothesis 6c. Follower affective commitment is positively associated with expressed behavioral support for change.

713

Hypothesis 6d. Follower normative commitment is positively associated with expressed behavioral support for change.

Taken together, the predictions I have proposed can be translated into the model depicted in Figure 1.

3. Method

3.1. Study Design and Procedure

To test my hypotheses, I used an experimental vignette methodology (Devos, Buelens, & Bouckenooghe, 2007; Lau & Woodman, 1995; Schultz, Utz, & Göritz, 2011; Thomas, Clark, & Gioia, 1993) in which participants were informed about an organizational change. In recent years, there have been increasing calls to implement research designs that secure internal validity and improve our knowledge about causal relationships in management research, specifically in change and leadership research (Aguinis & Bradley, 2014; D. G. Allen, Hancock, Vardaman, & Mckee, 2014; Antonakis et al., 2016; Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007; Devos et al., 2007; N. P. Podsakoff, Podsakoff, MacKenzie, Maynes, & Spoelma, 2014; Scandura & Williams, 2000). The experimental vignette methodology permits experimental control over the independent variables, which are manipulated in carefully designed and realistic scenarios to examine dependent variables such as intentions, attitudes and behaviors (Aguinis & Bradley, 2014). As such, experimental vignette studies enable isolating causal effects between study variables (internal validity), while also enhancing experimental realism (external validity) (Atzmüller & Steiner, 2010; Hox, Kreft, & Hermkens, 1991).

The present study followed a 2 (high vs. low signaled CEO charisma) x 2 (high vs. low signaled CEO change commitment) between-subject independent factorial design, resulting in four change announcement vignettes, which were specifically designed for high experimental realism (Morales, Amir, & Lee, 2017). Participants learned that the study involved an organizational communication scenario and that the experimenter was interested in the reactions of participants concerning the scenario. Participants were guaranteed anonymity and indicated informed consent electronically. Before the main part of the study, participants' personal values were measured. Thereafter, each participant received the same short description of a setting involving the fictitious US technological company HT-Corp., which was loosely based on previous research (Helpap, 2016). See Appendix B for the general setting and full vignettes. Participants were asked to assume the position of an employee in the fictitious firm and to imagine experiencing the situation described.

Depending on the condition they were randomly assigned to, participants then read one of four change announcement e-mails ostensibly written by the firm's CEO to all employees, which is a typical first contact point of employees with a new change program and generally common organizational communication channel (Beatty, 2015; McKinsey Global Institute, 2016; Men, 2014), aiding experimental realism. I took additional measures to further increase realism by visually designing the e-mail as realistically as possible, including an e-mail header and author signature featuring a fictitious HT logo. The e-mail first introduced HT's recent situation. Participants learned that the market has been changing and experiencing new technological developments, and that HT should therefore adapt. As a result, a new change initiative called "Boost HT" would be implemented in the firm. The subject of the change initiative was digital transformation. I selected this change situation because of the ubiquity of change prompted by technological advancements, its continuing cross-industry relevance, and its broad potential to increase profitability (Bughin, LaBerge, & Mellbye, 2018; By, 2005; Stouten et al., 2018). As such, pursuing a digital strategy should be relevant to the majority of companies, contributing to experimental realism. The CEO in the e-mail then went on to describe the goals and main measures of the new change program. The exact implementation from the scenario was based on recommendations described in recent McKinsey & Company publications on digital transformation (Bollard, Larrea, Singla, & Sood, 2018; Bughin et al., 2018; Dias, Hamilton, Khanna, Paquette, & Sood, 2018; Goran, LaBerge, & Srinivasan, 2018; Hancock, Lazaroff-Puck, & Rutherford, 2020). Concrete "Boost HT" measures would comprise a business unit reorganization, a new digital business unit, process redesigns, and a corporate digital education program. In order to mitigate potential participant apprehension and highly negative emotional reactions, I refrained from incorporating employee lay-offs in the scenario for more generalizable results. After the change program description, the leader change commitment signal was introduced. The CEO announced a kick-off event that was organized to explain the change program in more detail to the employees. Conducting such events, often called "town hall" meetings, in which top managers explain and discuss a new change program to and with employees is a very common change management practice, as evidenced by McKinsey and Boston Consulting Group publications and numerous mentions in change management field studies (Aiken & Keller, 2009; Bürkner et al., 2015; C. E. Cunningham et al., 2002; Meyer et al., 2010, 2007; Richardson & Denton, 1996). Finally, the CEO closed the e-mail with a reminder of HT's company history and priorities, an appeal for collaboration to achieve the common goals of the change program, and a call for action.

After having read the e-mail, participants responded to a series of measures assessing their change commitment and behavioral support intentions, and were asked to perform a writing task, which was framed as an opportunity to express support for the change and used as a behavioral measure of change support. The experiment closed with some demographic questions. After the experiment, the participants were thanked and provided a contact possibility for further questions.

All vignettes were professionally proofread and refined in discussions with management scholars as well as change management consulting experts. Further, I conducted three

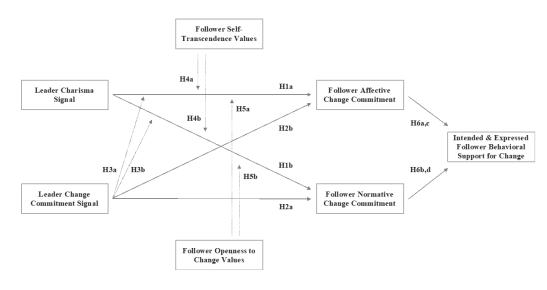


Figure 1: Conceptual Model.

pretests and a manipulation check in February and March of 2020 to finalize the vignettes for the main data collection.

3.2. Sample

For my main experimental study conducted in May of 2020¹³, I recruited participants on the Prolific crowdsourcing platform. To be eligible for this study, participants needed to be located in the US and be full-time employed. A total of 384 participants completed the 15 to 20-minute study. The participants were then screened on appropriate control questions and memory checks regarding the content of the vignettes, following recommendations for data obtained from online participant crowdsourcing platforms (Chmielewski & Kucker, 2019; Hauser, Paolacci, & Chandler, n.d.; Kapelner & Chandler, 2010; Mason & Suri, 2012) in order to ensure a pool of subjects who participated in a serious way. See Appendix E for more details on this process. These precautions should serve to mitigate possible data quality concerns to an acceptable degree (Chmielewski & Kucker, 2019; Hauser et al., n.d.). Analyses were based on a final sample of 284 participants (with n = 68 in the high charisma, high commitment signals condition, n = 64 in the high charisma, low commitment signals condition, n = 81 in the low charisma, high commitment signals condition, and n = 71 in the low charisma, low commitment signals condition). Participants in the final sample ranged in age between 19 and 64 years (M = 35.4; SD = 9.9).

Most (83.1%) indicated having received at least a bachelor degree. Gender identification was mostly given as male (59.9%), followed by female (39.4%) and other (0.7%). 47.2% occupied positions involving leadership responsibility.

3.3. Measures

3.3.1. Independent Variables

All constructs, if not otherwise noted, are measured on a 7-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree). I modeled the items to fit the current context where necessary, for instance by adapting the tense used. Scores on scale items are averaged to index participants' scores on the constructs of interest, if not otherwise noted.

CEO Charisma Signal Manipulation

When conclusive information about past performance is unavailable, employees will mostly rely on inferential reasoning to evaluate a leader (Jacquart & Antonakis, 2015). For a newly appointed CEO, as in this setting, employees will lack any information about the CEO's characteristics, intentions or past performance. Therefore, they will pay particular attention to the CEO's actions and messages in order to make inferences about his qualities and intentions (Awamleh & Gardner, 1999; Huy et al., 2014; Jacquart & Antonakis, 2015; Shamir et al., 1993; D. van Knippenberg et al., 2004). For charismatic leadership, the CEO's communication style will therefore act as a signal, as individuals often use only slivers of information (e.g. of charisma) as a basis to classify a target under a particular label (e.g. charismatic) (Jacquart & Antonakis, 2015; Tversky & Kahneman, 1974) and as leaders' typical way of conveying charisma is by communicating their messages to their audience in an attractive way (W. L. Gardner & Avolio, 1998). Because crafting a charismatic message is substantially easier (i.e. less costly) for more charismatic leaders as a result of their skillful impression management dramaturgy, and expressive and inspiring articulation,

¹³Note that data collection took place during the global COVID-19 pandemic. The consequences of COVID-19 in the USA have been far-reaching, as the USA were the country hit hardest on both confirmed cases and deaths as of June, 2020 (Statista, 2020; The Guardian, 2020). Economically, as well, the consequences have been substantial for many, as almost 40 million Americans have lost their jobs due to COVID-19 (as of May 27, 2020), corresponding to roughly 20% of the working population, which was unparalleled since the Great Depression of the 1930s (The Guardian, 2020).

a charismatic leader message will likely serve as a credible signal for charismatic leadership (Conger & Kanungo, 1987; Connelly et al., 2011; W. L. Gardner & Avolio, 1998).

Prior research has also documented the link between leader communication style and broader charismatic leadership perceptions in experimental settings (Antonakis, D'Adda, Weber, & Zehnder, 2019; Antonakis et al., 2011; Awamleh & Gardner, 1999; Jacquart & Antonakis, 2015). For the low and high signaled charisma conditions, I therefore used a standard change announcement and a substantively congruent change announcement, which was phrased more charismatically. Both change announcements contain the same number of words (804) and convey very similar content and the same information about the change itself. Yet, the high charisma change announcement strongly relies on the use of CLTs. As the change announcement was delivered in an e-mail, only the two verbal CLT categories (framing and substance) are included. See Appendix C for coded CLTs in the vignettes. Given the realistic context, it is important to point out that the low charisma signal condition was still, in absolute terms, a solid speech without total absence of rhetorical techniques. This design is necessary to ensure the speech is realistic (to actually compare low and high charisma signals instead of positive and negative charisma signals) and consistent with the change announcement content, as well as to ensure a fair comparison between conditions (Cooper & Richardson, 1986).

Following previous charismatic leadership research, I conducted two types of manipulation checks (Antonakis et al., 2019). As an objective manipulation check of charismatic communication, I coded all conditions at the sentence level for the absolute presence of CLTs (see Appendix C). For the high leader change commitment signal conditions, the number of CLTs used as a proportion of the total number of sentences in the low-charisma e-mail was 15.21% (i.e., 7 tactics over 46 sentences), and that of the high-charisma e-mail was 60.46% (i.e., 33 tactics over 52 sentences). This difference in proportions is highly significant (z = 4.85, se = .09, p < .001, (Koopman, 1984)).¹⁴

As a subjective manipulation check, I conducted a pretest to assess whether the high charisma conditions were also perceived as more charismatic. I recruited 104 participants (US location, full-time employees) via the Prolific platform, which were randomly assigned to one of the four conditions and asked them to rate the author of the change announcement, the fictitious CEO, in order to gauge their leader charisma perception.

For this purpose, I created a measure consisting of three items ("The CEO appeals to values that distinguish right from wrong.", "The CEO expresses emotional passion and conviction.", and "The CEO communicates in symbolic ways that make the message clear and vivid.") ($\alpha = .61$). This measure is based on the following definition of the charismatic signal: "the charismatic effect [...] stems from the leader (a) justifying the mission by appealing to values that distinguish right from wrong, (b) communicating in symbolic ways to make the message clear and vivid, and also symbolizing and embodying the moral unity of the collective per se, and (c) demonstrating conviction and passion for the mission via emotional displays" (Antonakis & Bastardoz, 2016: 304; Antonakis et al., 2011).¹⁵ An independent samples ttest yielded that participants who had read either of the high leader charisma signal vignettes (M = 5.323; SD = .815 for these two conditions combined) compared to those who had read either of the low leader charisma signal vignettes (M =4.703; SD = 1.057 for these two conditions combined) perceived the CEO to be a significantly more charismatic leader (t(100) = -3.387; p = .001; Cohen's d = .660; r = .314). A complementary OLS regression analysis supports these findings (cf. Appendix D for additional information on all pretest findings). Thus, I conclude that the leader charisma signal manipulation was successful.

CEO Change Commitment Signal Manipulation

Conducting meetings in which a planned change program is explained and discussed (often called "townhalls"), and especially visiting many corporate locations with such a format, has been proposed as an important means to convey top management change commitment in practice (Feloni, 2015; Sirkin et al., 2005). Interestingly, management initiatives such as townhalls have also been implied by scholars to potentially increase affective and normative employee change commitment without theorizing on the underlying causal relationships (Meyer et al., 2007). Thus, I used kick-off events conducted by the CEO in the format of townhalls as a manipulation of the CEO change commitment signal. The e-mail gives notice of the kick-off events and clarifies they will be held to lay out the next steps of the proposed change, explain what employees can expect, and answer employee questions.

Therefore, because of the highly realistic CEO change commitment signal manipulation, there should be high signal fit (Connelly et al., 2011). To manipulate the strength of the CEO change commitment signal, I vary the personal time sacrificed by the CEO (i.e. signal cost) to conduct the kick-off events (Bird & Smith, 2005; Connelly et al., 2011), while keeping constant the kick-off event format and purpose. In the high change commitment signal condition, kickoff events will be held personally by the CEO in all 18 HT company locations. The CEO also underlines that he made some changes to his time schedule to ensure that he can host

¹⁴If we compare the two low leader change commitment signal conditions, the proportion of CLTs in the low-charisma e-mail was 14.58% (i.e., 7 tactics over 48 sentences), and that of the high-charisma e-mail was 61.11% (i.e., 33 tactics over 54 sentences). This difference in proportion is also highly significant (z = 4.80, se = .1, p < .001 (Koopman, 1984)).

¹⁵As existing measures of charismatic leadership have been harshly criticized for endogeneity problems and rater biases (Antonakis, 2017; Antonakis et al., 2016), I follow Antonakis and colleagues' recommendations in mapping the charisma measure rather closely to charisma markers that have been manipulated in the experiment. That is, I aim to measure charisma in a specific way that is less prone to rater bias, but not too specific as to challenge participants' recollection of specific rhetorical devices used (Antonakis et al., 2016).

the events personally. In the low change commitment signal condition, a single kick-off event in HT's headquarters will be hosted not by the CEO, because he has other HT obligations, but by the CFO instead (on the CEO's request). In order to mitigate participants feeling left out by the single event, the e-mail also mentions a parallel livestream of the event. I did not design the low commitment signal conditions with events in all HT locations as to not convey a negatively low CEO commitment: I assume that in case the CEO did not find the time to participate personally in at least one or more of the events, this could be perceived quite negatively, while also possibly confusing participants why he would participate in some but not others, hindering fair treatment comparisons (Cooper & Richardson, 1986). As manipulated in this study, the low CEO change commitment signal should not be perceived negatively but more neutral, as he nevertheless organized and asked the CFO to represent him because of time constraints. For a more detailed overview of the manipulated commitment cost aspects, see Appendix C.

The manipulation check of whether low and high leader change commitment signals in the change announcement email actually varied in individuals' perceived signal cost was conducted along with the subjective manipulation check of perceived leader charisma described above. To gauge individuals' perception of the cost of leader's commitment signal, I developed a scale comprising three items ("The CEO invests a lot of personal time to drive this change.", "The CEO puts in substantial effort to change this organization.", and "The CEO is willing to make sacrifices to support this change.") ($\alpha = .822$). I reason that, following signaling theory, a costlier signal will be perceived as more credible and consequently should result in stronger perceptions of CEO change commitment (Connelly et al., 2011). An independent samples t-test yielded that participants who had read either of the high leader commitment signal vignettes (M = 5.923; SD = .813 for these two conditions combined) compared to those who had read either of the low leader commitment signal vignettes (M = 4.731; SD = 1.143 for these two conditions combined) perceived the CEO to be significantly more committed to the proposed change (t(92) =-6.129; p = .000; Cohen's d = 1.202; r = .515).

A complementary OLS regression analysis supports these findings (see Appendix D). These results indicate that the leader change commitment signal manipulation was also successful.

3.3.2. Dependent Variables

A list of all items included in the respective scales is included in Appendix F.

Affective Commitment to Change

I assessed followers' affective change commitment using four items of the affective commitment to change scale developed and validated by Herscovitch and Meyer (2002). Their affective and normative change commitment scales are widely used and well established in the context of organizational change research (A. A. Armenakis et al., 2007; G. B. Cunningham, 2006; Hill, Seo, Kang, & Taylor, 2012; Oreg et al., 2011). The specific items from the scales were selected because they exhibited the highest factor loadings with the affective and normative commitment to change, respectively, based on the factor analysis results reported in Herscovitch and Meyer (2002). (Sample item: "I believe in the value of this change."; $\alpha = .88$).

Normative Commitment to Change

Normative change commitment, accordingly, was measured using four items of the normative change commitment scale by the same authors (Herscovitch & Meyer, 2002). (Sample item: "I feel a sense of duty to work toward this change."; $\alpha = .78$).

Intended Behavioral Support for Change

Behavioral support for change was operationalized as championing behavior (Herscovitch & Meyer, 2002; Meyer et al., 2007). Championing is characterized by exerting discretionary effort, promoting the value of the change to others, and being willing to make personal sacrifices (such as working extra hours) in order to benefit the change initiative.¹⁶

Championing occurs when an individual is intrinsically motivated about a goal and is enthusiastic about it (Falbe & Yukl, 1992), and has been repeatedly linked to affective and normative change commitment (Bouckenooghe et al., 2015). Thus, intended behavioral support for change was assessed using three adapted items of the championing scale by Herscovitch and Meyer (2002). Items were selected based on fit with and applicability in the experimental context. (Sample item: "I would go above and beyond what is required to ensure the success of the change"; $\alpha = .89$).

Expressed Behavioral Support for Change

In addition, I extend previous work on behavioral support for change by answering the call to use an objective measure capturing actual change-related behavioral support (Antonakis et al., 2016; M. Choi, 2011; Cinite & Duxbury, 2018; Herscovitch & Meyer, 2002; Meyer et al., 2007). In developing the behavioral change support measure for this study, I followed general recommendations (e.g. Morales et al., 2017) and relied on previous experimental research employing behavioral measures (e.g. Stam, van Knippenberg, & Wisse, 2010; Venus, Stam, & van Knippenberg, 2013, 2019). Recall that the change announcements stressed that the success of the change was contingent on employee support. Therefore, I provided participants an opportunity to express their support for the change by helping a fictitious colleague, a

¹⁶Herscovitch and Meyer (2002) distinguish between compliance, cooperation, and championing. Compliance means demonstrating minimum support by reluctantly going along with the requirements of the change, whereas cooperation refers to passively demonstrating support by exerting effort concerning the change and going along with the spirit of the change. Following previous work (e.g. Seo et al., 2012), I only examine championing as the most active form of behavioral support for change (Fugate & Soenen, 2017).

member of the company ambassador network supporting the change, who is collecting employee statements about the change. Specifically, participants are asked to craft a message in order to increase awareness of the change program's importance with the specific goal of requesting employee support (adapted from Venus et al., 2019). Ambassador networks, consisting of volunteering employees who seek to help a given change succeed, have recently become more widespread (e.g. Bharat, 2017; Volkswagen AG, 2019) and are grounded on the idea of employee participation in internal change communication and management (e.g. Groysberg & Slind, 2012). The task was again presented in a highly realistic e-mail format ostensibly written by the respective colleague, aiding experimental realism. Accordingly, participants read that they could express their support for the change by writing a supportive message about the change. I reasoned that to the extent participants supported the introduced change, they should be willing to invest time and effort in writing a message for the ambassador network convincing others of the change, following the definition of championing laid out above. In conversations with change management consultants, the task was refined and confirmed to be high in experimental realism.

The variance in participants' effort in responding supports the validity of this indicator. While the vast majority of messages reflected agreement with the proposed change, individual effort in crafting the messages varied greatly. Following previous research employing behavioral support measures (e.g. Venus et al., 2019), I thus used the number of characters in the written message (M = 368.7, SD = 207.5) as an objective behavioral indicator of the construct of expressed (quantitative) behavioral change support.¹⁷ However, this measure was highly positively skewed (*skewness* = 1.15, SE = .15). I therefore relied on Box-Cox power transformation procedures to normalize the data (Cohen, Cohen, West, & Aiken, 2003). The Box-Cox transformation is defined as $Y_i^{\text{Transformed}} = (Y_i^{\lambda} - 1) / \lambda$, where λ signifies the optimal transformation parameter (Cohen et al., 2003: 237). A maximum-likelihood test for the Box-Cox power transformation indicated that the maximum normality could be attained at 0.40 for character length, which was consequently used for the transformation procedure.¹⁸

3.3.3. Moderators and Control Variables

Personal Values

To make efficient use of survey time and space, I employ the Short Schwartz's Value scale developed and validated by Lindeman and Verkasalo (2005). The scale comprises all 10 values of the Schwartz theory of basic values (Schwartz, 1992), which were rated on personal importance on a 7-point Likert scale (1 = against my principles, 2 = not important, 3 = somewhat important, 4 = important, 5 = quite important, 6 = very important, 7 = of supreme importance). By the procedure of weighting all individual values recommended by the authors, individuals' scores for the higher order value dimensions self-transcendence and conservation were then calculated (Lindeman & Verkasalo, 2005). Theoretically, these values form a bi-polar dimension in which the motivations underlying one pole of the dimension should mirror the motivations underlying the other pole. In other words, the more value a person places on one pole, the less she or he will value the opposite pole.

Control Variables

I follow recent recommendations for the inclusion of control variables (Aguinis & Bradley, 2014; Atinc, Simmering, & Kroll, 2012; Spector & Brannick, 2011). Variables were considered potential controls when there was theoretical ground suggesting that they could account for any of our proposed relationships (e.g. Atinc et al., 2012) and / or when they were typically included in previous research on organizational change reactions (e.g. in Armstrong-Stassen, 1998; Caldwell et al., 2004; Iverson, 1996; Oreg & Berson, 2011). Particularly personal change history has convincingly been shown to shape general change attitudes and reactions (Bordia, Restubog, Jimmieson, & Irmer, 2011; Bouckenooghe, 2012; Devos, Vanderheyden, & Van den Broeck, 2001; Lau & Woodman, 1995; Rafferty & Restubog, 2010, 2017; van der Smissen, Schalk, & Freese, 2013) and can therefore be considered a potentially important control variable. Thus, I treated age (in years), gender (male / female / other), leadership responsibility (yes / no) and personal history of change experiences as potential controls because these variables possibly share variance with both affective and normative commitment to change and support for change. Personal change history was assessed using three items of the change management history scale introduced by (Bordia et al., 2011). (Sample item: "Organizational change has been positive"; $\alpha = .854$). Further, I inspected zero-order correlations to identify variables sharing significant variance with our focal variables of interest, namely affective and normative commitment to change as well as intended behavioral support for change (Becker, 2005; Carlson & Wu, 2012; Spector & Brannick, 2011). This procedure led to the inclusion of personal change history based on zero-order correlations (affective change commitment: r = .40, p < .01; normative change commitment: r = .31, p < .01; support intention: r = .524, p < .01). Age was also included as a control because of significant overlap with normative commitment to change (r = .12, p < .05) and support intention (r = .14, p < .05), as well as leadership responsibility because of significant overlap with affective commitment to change (r = .16, p < .01) and support intention (r = .18, p < .01). Gender was omitted as a control variable because it did not share any significant variance with our focal variables of interest and because it has not been found

¹⁷In post-hoc analyses, I later also introduced a behavioral measure of expressed qualitative change support.

¹⁸Ultimate analyses reveal very similar results when the original behavioral support measure was transformed using a natural logarithm. As an additional robustness check, I used time spent writing the message as an alternative objective measure of expressed quantitative behavioral support, yielding essentially comparable overall results.

to predict change reactions (Armstrong-Stassen, 1998).

4. Results

4.1. Descriptive Statistics

Table 1 presents the means, standard deviations, ranges and zero-order correlations of the study variables.

None of the correlations were extremely high; thus, there appears to be no major risk of multicollinearity (Anderson, Sweeney, & Williams, 1996). I now turn to formally testing the proposed hypotheses.

4.2. Test of Hypotheses

For all analyses, follower age, personal change history, and leadership responsibility were entered as control variables, if not otherwise noted.

4.2.1. Effects of Leader Charisma and Change Commitment Signals on Follower Affective and Normative Change Commitment

To test the first two hypotheses, which predict that the conditions entailing high (vs. low) leader charisma and high (vs. low) leader charisma end high (vs. low) leader change commitment signals will each, respectively, be more successful in creating affective and normative follower change commitment, I conduct a hierarchical multiple regression analysis. Control variables are entered in step 1 and dependent variables, in this case indicator variables for conditions, included in step 2. I apply the same general approach for all following hierarchical multiple regressions. Note that the variables "High Charisma Signal" and "High Commitment Signal" are indicator variables for treatments in all regressions.

However, the depicted correlations above show no significant linear relation between the study conditions and affective or normative change commitment, giving a first indication that the conditions were not successful in eliciting significantly different follower affective and normative change commitment. Figure 2 depicts mean affective and normative change commitment scores by experimental condition and gives a similar impression.

Table 2 gives the results of the hierarchical multiple regression analyses.

Models 1b and 2b indeed reveal that there was no significant effect of either leader signal on follower affective and normative change commitment (*p*-values were all above .25). Therefore, hypotheses 1a, 1b, 2a and 2b are not supported.

4.2.2. Moderating Effect of Leader Change Commitment Signal

All moderation analyses were conducted using the PRO-CESS macro for SPSS, an existing computational tool for estimating and probing interactions (Hayes & Matthes, 2009). By default, PROCESS generates 95% bias-corrected bootstrap (5000 samples) confidence intervals for all indirect effects. Non-categorical variables were centered for moderation analyses, and a heteroscedasticity consistent standard error and covariance matrix estimator was used (Davidson & MacKinnon, 1993; Hayes & Cai, 2007).

Hypotheses 3a and 3b predict a strengthening moderation effect (R. G. Gardner et al., 2017) of the leader change commitment signal on the relationship between the leader charisma signal and follower affective and normative change commitment, respectively. Results of the moderated multiple regression analyses are depicted in table 3.

Since the interaction term fails to reach statistical significance in both model 1 and 2 (*p*-values were above .15 and simple slopes yielded no regions of significance), the interaction between leader signals does not explain significant incremental variance in the respective criterion variables beyond that accounted for by the main effects of the leader signals alone (R. G. Gardner et al., 2017). It can thus be concluded that there is no significant interactive effect of leader charisma and change commitment signals on follower affective and normative change commitment. Hence, hypotheses 3a and 3b are not supported.

4.2.3. Moderating Effect of Follower Self-Transcendence and Conservation

Hypotheses 4 and 5 propose strengthening moderation effects of followers' personal self-transcendence and openness values on the relationship between the leader charisma signal and ensuing follower affective and normative change commitment, respectively (R. G. Gardner et al., 2017). I first present the moderated multiple regression results for follower self-transcendence values in table 4.

Since the interaction term of self-transcendence and the charisma signal indicator variable fails to reach statistical significance in both models (*p*-values were above .40), I do not find evidence that follower self-transcendence moderates the effect of leader charisma signaling on follower affective and normative change commitment. Therefore, hypotheses 4a and 4b are not supported.

Table 5 presents the moderated multiple regression results for follower conservation values as a moderator. Similarly, as the interaction term of conservation and the charisma signal indicator variable also fails to reach statistical significance in both models (*p*-values were above .60), I do not find evidence that follower openness moderates the effect of leader charisma signaling on affective and normative change commitment either. Therefore, hypotheses 5a and 5b are not supported.

4.2.4. Effects of Follower Affective and Normative Change Commitment on Intended and Expressed Behavioral Support for Change

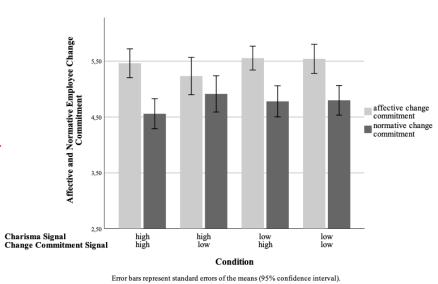
To test hypotheses 6a through 6d, which predict that follower affective and normative change commitment will be positively associated with intended and expressed behavioral support for change, I conduct a hierarchical multiple regression analysis. Results are depicted in table 6.

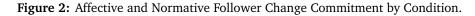
 Table 1: Descriptive Statistics and Inter-Correlations among Study Variables.

Variable	Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10	11
1. Age (years)	35.41	9.89	119	64	1										
2. Leadership Responsibility (yes /	.47	.50	0	1	.128*	1									
no)															
3. Personal Change History	4.66			7	.003	.134*	1								
4. High Charisma Condition (yes /	.46	.50	0	1	.038	.061	.050	1							
no)															
5. High Change Commitment Condi-	.52	.50	0	1	.040	.109	.017	.018	1						
tion (yes / no)															
6. Affective Commitment to Change	5.46	1.12	1	7	.012	.156**	.400**	.088	.053	1					
7. Normative Commitment to Change	4.76	1.20	1	7	.123*	.065	.313**	.024	.073	.489**	1				
8. Intended Behavioral Support for	5.28	1.12	1	7	.143*	.175**	.524**	.004	.024	.580**	.531**	1			
Change															
9. Expressed Behavioral Support for	369	207	7	1267	.057	.123*	.079	.145*	.022	.064	.097	.149*	1		
Change (number of characters in writ-															
ing task, untransformed)															
10. Self-Transcendence	.54	.98	-3.56	2.05	.253**	.037	.108	.019	.007	.022	.037	.057	.001	1	
11. Conservation	.21	1.35	-3.51	3.72	.079	.034	.210**	.005	.043	.054	.228**	.213*	.024	.020	1

N = 284

*p<.05; **p<.01 (two-tailed)





Model 1b shows that both follower affective and normative change commitment predict intended behavioral support for change in such a way that intended behavioral support increases as affective ($\beta = .319, t(278) = 6.27, SE = .051, p < .01$) and normative change commitment ($\beta = .263, t(278) = 5.35, SE = .046, p < .01$) increase. Therefore, both types of change commitment uniquely contribute to behavioral support intentions. Affective and normative change commitment also explain a significant proportion of the variance in intended behavioral support above and beyond the entered control variables ($\Delta R^2 = .21, F(2, 278) = 58.61, p < .01$).

This evidence thus fully supports hypothesis 6a and 6b. Model 2b, however, reveals that the relationships between affective and normative change commitment and expressed behavioral support as measured by the quantity of written signs were nonsignificant.¹⁹ Thus, hypotheses 6c and 6d are not supported.

4.3. Post-hoc Analyses

In addition to formal testing of hypotheses, I conduct supplementary post-hoc analyses to further examine the effects of leader charisma and change commitment signaling

¹⁹As I will lay out in more detail in my post-hoc analyses, when measuring expressed behavioral support qualitatively, I do find support for hypothesis 6d, as, controlling for follower age, change history and leadership responsibility, normative change commitment predicts expressed qualitative behavioral support for change in such a way that behavioral support increases as normative change commitment ($\beta = .132, t(278) = 1.90, SE = .079, p = .058$) increases. Therefore, overall, I find mixed support for hypothesis 6d.

Affective Cha	nge Commitment	Normative Change Commitment		
Model la	Model lb	Model 2a	Model 2b	
.003	.002	.121*	.118*	
(.006)	(.006)	(.007)	(.007)	
.386**	.385**	.312**	.309**	
(.051)	(.051)	(.057)	(.057)	
$.105^{+}$.096+	.008	.016	
(.123)	(.124)	(.137)	(.139)	
	.063		.005	
	(.122)		(.136)	
	.048		.064	
	(.122)		(.136)	
3.678**	3.699**	2.773**	2.878**	
(.326)	(.344)	(.363)	(.384)	
284	284	284	284	
.171	.177	.113	.117	
	Model la .003 (.006) .386** (.051) .105 ⁺ (.123) 3.678** (.326) 284	$\begin{array}{ccccc} .003 & .002 \\ (.006) & (.006) \\ .386^{**} & .385^{**} \\ (.051) & (.051) \\ .105^{+} & .096^{+} \\ (.123) & (.124) \\ & .063 \\ & (.122) \\ .048 \\ (.122) \\ .048 \\ (.122) \\ \end{array}$	Model la Model lb Model 2a .003 .002 .121* (.006) (.006) (.007) .386** .385** .312** (.051) (.051) (.057) .105 ⁺ .096 ⁺ .008 (.123) (.124) (.137) .063 (.122) .048 (.122) .048 (.122) .3678** 3.699** 2.773** (.326) (.344) (.363) 284 284 284	

 Table 2: Hierarchical Multiple Regression Results with Affective and Normative Change Commitment as Dependent Variables and Leader Signals as Independent Variables.

Standardized regression coefficients (β) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

 Table 3: Moderated Multiple Regression Results with Affective and Normative Change Commitment as Dependent Variables and Commitment Signal as a Moderator.

Dependent Variable:	Affective Change Commitment	Normative Change Commitment
Dependent variable.	Model 1	Model 2
Age	.000	.015+
	(.006)	(.008)
Change History	.358**	.315**
	(.066)	(.063)
Leadership Responsibility	$.221^{+}$.022
	(.122)	(.142)
High Charisma Signal	.234	.197
	(.199)	(.205)
High Commitment Signal	.021	.033
	(.156)	(.188)
High Commitment Signal	.180	.397
x High Charisma Signal	(.250)	(.277)
Constant	3.753**	2.759**
	(.386)	(.381)
Observations	284	284
R-squared	.179	.124

Unstandardized regression coefficients (B) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

on change reactions as well as the moderating role of followers' personal values.

First, above and beyond the hypothesized effects of leader charisma and change commitment signals on follower change commitment, I assess potential direct effects of both signals on intended and expressed behavioral change support. Figures 3 and 4 depict mean intended and expressed behavioral support by the leader signals received in the respective experimental condition.

While there do not seem to be significant differences

Dependent Variable:	Affective Change Commitment	Normative Change Commitment
Dependent variable.	Model 1	Model 2
Age	.002	.013
	(.006)	(.008)
Change History	.368**	.317**
	(.067)	(.064)
Leadership Responsibility	$.232^{+}$.026
	(.123)	(.141)
High Charisma Signal	.138	.007
	(.124)	(.138)
Self-Transcendence (centered)	.125	.045
	(.095)	(.115)
High Charisma Signal	.093	.019
x Self-Transcendence	(.126)	(.163)
Constant	3.784**	2.807**
	(.369)	(.379)
Observations	284	284
R-squared	.182	.115

Table 4: Moderated Multiple Regression Results with Affective and Normative Change Commitment as Dependent Variables and Self-Transcendence as a Moderator.

Unstandardized regression coefficients (B) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

 Table 5: Moderated Multiple Regression Results with Affective and Normative Change Commitment as Dependent Variables and Conservation as a Moderator.

Dependent Variable:	Affective Change Commitment	Normative Change Commitment	
Dependent variable.	Model 1	Model 2	
Age	.000	.013+	
-	(.006)	(.008)	
Change History	.363**	.277**	
	(.066)	(.062)	
Leadership Responsibility	$.222^{+}$.047	
	(.124)	(.139)	
High Charisma Signal	.141	.011	
	(.124)	(.136)	
Conservation (centered)	.012	.165*	
	(.060)	(.076)	
High Charisma Signal	.018	.043	
x Conservation	(.091)	(.105)	
Constant	3.732**	2.985**	
	(.384)	(.376)	
Observations	284	284	
R-squared	.176	.139	

Unstandardized regression coefficients (B) are reported. Standard errors given in parentheses. ** p < .01, * p < .05, $^+p < .10$

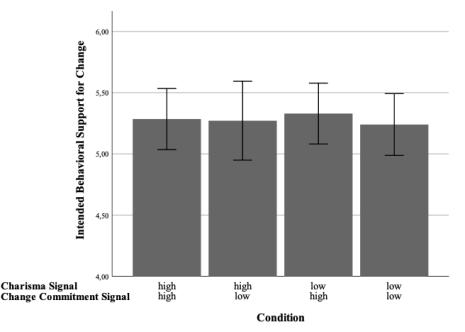
among conditions concerning intended behavioral change support, there seems to be a significant main effect of charisma signaling on expressed behavioral change support. To confirm those impressions, I conduct a hierarchical multiple regression analysis. Results are given in table 7.

As evident in model 1b, leader charisma and change

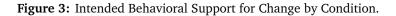
Dependent Variable:	Intended Be	havioral Support	Expressed Be	Expressed Behavioral Support	
Dependent variable.	Model la	Model lb	Model 2a	Model 2b	
Age	.130*	.099*	$.107^{+}$.118+	
	(.006)	(.005)	(.014)	(.015)	
Change History	.512**	.306**	.051	.016	
	(.047)	(.044)	(.119)	(.131)	
Leadership Responsibility	$.090^{+}$.054	.141*	.138*	
	(.114)	(.097)	(.287)	(.289)	
Affective Change Commitment		.319**		.017	
		(.051)		(.153)	
Normative Change Commitment		.263**		.091	
		(.046)		(.138)	
Constant	2.425**	.559+	10.350**	9.710**	
	(.302)	(.310)	(.760)	(.926)	
Observations	284	284	284	284	
R-squared	.302	.509	.032	.041	

Table 6: Hierarchical Multiple Regression Results with Intended and Expressed Behavioral Change Support as Dependent Variables and Affective and Normative Change Commitment as Independent Variables.

Standardized regression coefficients (β) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

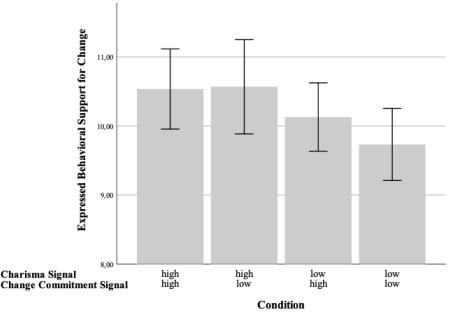


Error bars represent standard errors of the means (95% confidence interval).



commitment signals do not exert significant influence on intended behavioral support for change. Further, model 2b shows that a high leader charisma signal does predict expressed behavioral support for change in such a way that expressed behavioral support (as measured by the quantity of produced text) increases when a high leader charisma signal is received ($\beta = .135, t(278) = 2.29, SE = .282, p < .05$),

whereas the effect of signaled leader change commitment is not statistically significant. Leader charisma signaling also explains a significant proportion of the variance in expressed behavioral support above and beyond the entered control variables ($\Delta R^2 = .02, F(1, 279) = 5.26, p < .05$). Therefore, a high leader charisma signal significantly predicts expressed quantitative behavioral support, while a high leader change



Error bars represent standard errors of the means (95% confidence interval).

Figure 4:	Expressed	Behavioral	Support	for Change	(transformed)	by Condition.

Table 7: Hierarchical Multiple Regression Results with Intended and Expressed Behavior as Dependent Variables and Leader

 Signals as Independent Variables.

Dependent Variable:	Intended Be	havioral Support	Expressed Behavioral Support		
Dependent variable.	Model la	Model lb	Model 2a	Model 2b	
Age	.130*	.132**	.107**	.101+	
	(.006)	(.006)	(.014)	(.014)	
Change History	.512**	.514**	.051	.057	
	(.047)	(.048)	(.119)	(.119)	
Leadership Responsibility	.090+	$.088^{+}$.141*	.145*	
	(.114)	(.115)	(.287)	(.288)	
High Charisma Signal		.032		.135*	
		(.113)		(.282)	
High Commitment Signal		.029		.023	
		(.113)		(.283)	
Constant	2.425**	2.338**	9.875**	9.875**	
	(.302)	(.319)	(.797)	(.797)	
Observations	284	284	284	284	
R-squared	.302	.304	.032	.050	

Standardized regression coefficients (β) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

commitment signal does not.

Second, I assess the moderating role of followers' personal values in the effect of leader signaling on intended and expressed behavioral change support. Table 8 depicts the moderated multiple regression results.

Models 1a and 1b reveal that for both types of leader signaling, there is a significant moderation effect of conservation values on the relationship between leader signaling and intended behavioral support, while this is not the case for expressed behavioral support (cf. models 2a and 2b). I conduct simple slopes analyses (cf. Appendix G) and use the Johnson-Neyman technique to interpret the moderation effects.

The Johnson-Neyman technique (Johnson & Neyman, 1936) can identify ranges of values of conservation for which the interaction effect between charismatic signaling and conservation is significant (Hayes, 2013). This tech-

Dependent Variable:	Intended Be	havioral Support	Expressed B	ehavioral Support
Dependent variable.	Model la	Model lb	Model 2a	Model 2b
Age	.015+	.014*	.026	.026
	(.005)	(.006)	(.018)	(.018)
Change History	.462**	.462**	.119	.113
	(.060)	(.060)	(.125)	(.124)
Leadership Responsibility	$.219^{+}$.188	.709*	.618*
	(.115)	(.116)	(.291)	(.298)
Conservation (centered)	.163**	.014	.160	.194
	(.057)	(.068)	(.144)	(.162)
High Charisma Signal	.071		.645*	
	(.113)		(.288)	
High Charisma Signal	$.158^{+}$.272	
x Conservation	(.082)		(.202)	
High Commitment Signal		.056		.11
		(.115)		(.162)
High Commitment Signal		.177*		.291
x Conservation		(.087)		(.209)
Constant	2.473**	2.532**	9.966**	10.259**
	(.364)	(.386)	(.828)	(.865)
Observations	284	284	284	284
R-squared	.323	.324	.056	.039

Table 8: Moderated Multiple Regression Results with Intended and Expressed Behavioral Support as Dependent Variables and Conservation as a Moderator.

Unstandardized regression coefficients (B) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

nique indicates that the region of significant moderation (p < .10) of conservation values on the relationship between charisma signaling and intended behavioral support lies between -3.718 and -1.354 (centered) values of conservation. Therefore, approximately, for values of conservation 1 to 3 standard deviations below the (centered) mean (that is, high openness to change values (Lindeman & Verkasalo, 2005)), there is a significant positive relationship between leader charisma signaling and intended behavioral support (p < .10). For the moderating effect of conservation values on the relationship between leader change commitment signaling and intended behavioral support, the boundaries of the zone of significance (p < .05) are 1.404 and 3.516 (centered) values of conservation. Hence, approximately, for values of conservation 1 to 3 standard deviations above the (centered) mean (that is, low openness to change values (Lindeman & Verkasalo, 2005)), there is a significant positive relationship between leader change commitment signaling and intended behavioral support (p < .05).

Next, I examine follower self-transcendence. I summarize moderated multiple regression results in table 9.

Model 1a shows a significant interaction effect between charisma signaling and self-transcendence, whereas the interaction terms included in models 1b, 2a and 2b fail to reach statistical significance. Via the Johnson-Neyman technique, I find that the region of significant moderation (p < .10) of self-transcendence values on the relationship between charisma signaling and intended behavioral support lies between -3.021 and -1.057 (centered) values of conservation. Therefore, approximately, for values of self-transcendence 1 to 3 standard deviations below the (centered) mean (that is, high self-enhancement values (Lindeman & Verkasalo, 2005)), there is a significant positive relationship between leader charisma signaling and intended behavioral support (p < .10).

Third, I conduct an in-depth analysis of the changesupportive messages created by participants in the writing task to provide deeper insights into the conditions' effects above and beyond those on self-reported support intentions and objectively measured quantitative support effort (character length). Specifically, I examine two qualitative content indicators. Firstly, I examine CLT use in the written messages to determine which conditions are most conducive to qualitative effort reflected in producing rhetorically well-crafted messages above and beyond quantitative effort reflected in character length. Hence, I differentiate between the effort of producing a long message and the effort of producing a message containing figurative and emotional language

725

Table 9: Moderated Multiple Regression Results with Intended and Expressed Behavioral Support as Dependent Variables and
Self-Transcendence as a Moderator.

Dependent Variable:	Intended Be	havioral Support	Expressed B	ehavioral Support
Dependent variable.	Model la	Model lb	Model 2a	Model 2b
Age	.013*	.012*	.028	.029
	(.006)	(.006)	(.019)	(.020)
Change History	.497**	.493**	.132	.118
	(.060)	(.060)	(.127)	(.126)
Leadership Responsibility	$.208^{+}$	$.222^{+}$.719*	.695*
	(.117)	(.120)	(.297)	(.305)
Self-Transcendence	.203*	.020	.237	.081
(centered)	(.086)	(.098)	(.223)	(.243)
High Charisma Signal	.075		.651*	
	(.114)		(.289)	
High Charisma Signal	$.215^{+}$		(.179	
x Self-Transcendence	(.116)		(.304)	
High Commitment Signal		.059		.091
		(.115)		(.291)
High Commitment Signal		.144		.115
x Self-Transcendence		(.123)		(.314)
Constant	2.380**	2.413**	9975**	10.343**
	(.351)	(.368)	(.807)	(.834)
Observations	284	284	284	284
R-squared	.320	.314	.055	.036

Unstandardized regression coefficients (B) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

Table 10: Hierarchical Multiple Regression Results with Expressed Qualitative Behavior as Dependent Variables and Affective and Normative Change Commitment as Independent Variables.

Dependent Variable:	Expressed Qualitative Behavioral Support			
	Model la	Model lb		
Age	.097	.113+		
	(.008)	(.008)		
Change History	.009	.027		
	(.068)	(.075)		
Leadership Responsibility	.053	.053		
	(.165)	(.166)		
Affective Change Commitment		.014		
		(.088)		
Normative Change Commitment		$.132^{+}$		
		(.079)		
Constant	1.605**	1.250**		
	(.436)	(.530)		
Observations	284	284		
R-squared	.011	.025		

Standardized regression coefficients (β) are reported. Standard errors given in parentheses. **p < .01, *p < .05, ⁺p < .10

Dependent Variable:	Exp	Expressed Qualitative Behavioral Support			
Dependent variable.	Model la	Model lb	Model 2a	Model 2b	
Age	.014	.013	.015	.013	
-	(.009)	(.008)	(.009)	(.009)	
Change History	.037	.013	.02	.006	
	(.064)	(.065)	(.065)	(.067)	
Leadership Responsibility	.173	.183	.131	.102	
1	(.163)	(.164)	(.175)	(.169)	
Self-Transcendence	.222*		.048		
(centered)	(.108)		(.113)		
Conservation (centered)		.037		.061	
		(.088)		(.119)	
High Charisma Signal	.643**	.640**			
0	(.161)	(.163)			
High Charisma Signal	.304+				
x Self-Transcendence	(.166)				
High Charisma Signal		.003			
x Conservation		(.131)			
High Commitment Signal			.211	.213	
0			(.168)	(.168)	
High Commitment Signal			.045		
x Self-Transcendence			(.168)		
High Commitment Signal				.166	
x Conservation				(.140)	
Constant	1.172*	1.254**	1.499**	1.531**	
	(.462)	(.473)	(.500)	(.506)	
Observations	284	284	284	284	
R-squared	.081	.067	.02	.025	

 Table 11: Moderated Multiple Regression Results with Expressed Qualitative Behavioral Support as Dependent Variables and

 Self-Transcendence and Conservation as Moderators.

Unstandardized regression coefficients (B) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

(e.g. Gibbs & Colston, 2006; Kellogg, 1999).²⁰ Two independent raters who were blind to the conditions coded each message for total number of CLTs included. To test interrater agreement, I used the Intraclass Correlation Coefficient (ICC) (LeBreton & Senter, 2008). ICC estimates and their 95% confidence intervals were calculated based on a mean-rating (k = 2), consistency, two-way random-effects model. All following ICC calculations were based on this model as well. ICC(2,2) = 0.94, 95% CI [0.925, 0.953]. Thus, I conclude that interrater agreement of CLT use per message was excellent (Cicchetti, 1994; Koo & Li, 2016). I use the mean of both raters' indicated number of CLTs per message for further analyses. A multiple regression analysis with condition indicator variables entered as independent variables and CLT use as a dependent variable ($R^2 = .063$) yields a highly significant positive main effect of charismatic

signaling ($\beta = .235, SE = .158, p = .000$) and a main effect of commitment signaling significant at the 15%-level ($\beta = .091, SE = .158, p = .116$).²¹ Consequently, while charisma leader signaling significantly increases CLT use in participants' messages, commitment signaling does so to a weaker and less significant extent.

In addition, I examine whether two findings obtained for my quantitative support measure are replicated with my qualitative support measure. Thus, first, I assess whether affective and normative change commitment significantly predict qualitative follower effort (cf. hypotheses 6c, d) in change support by conducting a hierarchical multiple regression analysis. Results are depicted in table 10.

Consequently, when measuring support effort qualitatively instead of quantitatively, I find support for hypothesis 6d, which proposed that normative change commitment will

²⁰Both measures of expended effort were relatively highly positively correlated (when the number of characters was untransformed, r = .51, p < .01; when transformed, r = .51, p < .01).

 $^{^{21}\}mathrm{I}$ did not include the previously used control variables here as they did not share any significant variance with our focal variable of interest, CLT use.

Dependent Variable:	Expressed Openness Values		Expressed Conservation Values	
	Model la	Model lb	Model 2a	Model 2b
Age	.063	.064	.094	.088
	(.004)	(.004)	(.003)	(.003)
Change History	.079	.083	.057	.063
-	(.032)	(.032)	(.028)	(.028)
Leadership Responsibility	.071	.083	.003	.005
	(.077)	(.077)	(.068)	(.069)
High Charisma Signal		.135*		.080
		(.075)		(.067)
High Commitment Signal		.037		.056
0		(.075)		(.067)
Constant	.161	.084	.490**	.394*
	(.203)	(.212)	(.180)	(.189)
Observations	284	284	284	284
R-squared	.018	.037	.012	.021

 Table 12: Hierarchical Multiple Regression Results with Expressed Openness and Conservation Values as Dependent Variable and Leader Signals as Independent Variables.

Standardized regression coefficients (β) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

Table 13: Hierarchical Multiple Regression Results with Expressed Self-Transcendence and Self-Enhancement Values as Dependent Variable and Leader Signals as Independent Variables.

Dependent Variable:	Expressed Self-Transcendence Values		Expressed Self-Enhancement Values	
	Model la	Model lb	Model 2a	Model 2b
Age	.058	.059	.035	.037
	(.003)	(.003)	(.004)	(.004)
Change History	.002	.000	.021	.024
	(.028)	(.028)	(.037)	(.037)
Leadership Responsibility	.032	.039	.052	.047
	(.068)	(.069)	(.089)	(.090)
High Charisma Signal		.079		.080
		(.067)		(.088)
High Commitment Signal		.028		.009
		(.067)		(.089)
Constant	.281	.246	.600*	.664**
	(.180)	(.190)	(.236)	(.249)
Observations	284	284	284	284
R-squared	.005	.012	.004	.01

Standardized regression coefficients (β) are reported. Standard errors given in parentheses. **p < .01, *p < .05, +p < .10

be positively associated with behavioral support for change. Overall, there is thus mixed support for hypothesis 6d.

Further, second, I determine whether followers' personal values also moderate not only their intended, but also their qualitative change support effort in response to leader signaling. To this end, I calculate multiple moderated regressions. I depict results for leader charisma signaling in models 1a, b and leader change commitment signaling in models 2a, b in table 11.

Models 1a through 2b reveal that only for charisma signaling, there is a significant moderation effect of selftranscendence values on the relationship between leader signaling and expressed qualitative behavioral support. The Johnson-Neyman technique indicates that the region of significant moderation (p < .05) of self-transcendence values on the relationship between charisma signaling and expressed qualitative behavioral support lies between -3.021 and -0.764 (centered) values of self-transcendence.

Therefore, approximately, for values of self-transcendence 3 standard deviations below the (centered) mean to almost 1 standard deviation above the (centered) mean (that is, high to moderate self-enhancement values (Lindeman & Verkasalo, 2005)), there is a significant positive relationship between leader charisma signaling and expressed qualitative behavioral support (p < .05). Please refer to Appendix G for additional simple slopes analyses and graphical representations.

As a second step in my in-depth text analysis, I examine the reasons to support the change named by participants and assess which value dimensions these reasons reflect, in order to gain an indication of which value dimensions are mirrored depending on the leader signals received. Two independent raters who were blind to the conditions coded each message with regard to how often openness to change, conservation, self-transcendence, and self-enhancement values are conveyed in the message's argumentation based on Schwartz's (1992) value dimension definitions. ICC calculations were used to assess interrater agreement. The mean of both raters' value scores per message was used as input for further analyses. Expressed openness to change was found in messages motivating organizational change by emphasizing the general merits of changing and adapting to new technological circumstances. See Appendix H for detailed examples for all coded values. ICC(2,2) = 0.84,95% CI [0.798, 0.873]. This level of interrater agreement is indicative of good to excellent reliability on interrater scores of openness to change expressions (Cicchetti, 1994; Koo & Li, 2016). Conservation values were reflected in arguments to preserve the current success of HT, honor its long tradition, and retain HT's market position for the future. ICC(2, 2) = 0.76, 95% CI [0.696, 0.810]. Thus, I conclude that interrater agreement was good to excellent on scores of expressed conservation values (Cicchetti, 1994; Koo & Li, 2016). I conduct a hierarchical multiple regression to assess the influence of leader signaling on the expression of openness to change vs. conservation values. Results are presented in table 12.

Regression results show that leader commitment signaling does not significantly impact the expression of openness to change or conservation values. While leader charisma signaling does not exhibit highly significant positive influence on followers' expression of conservation values (p = .182), charisma signaling does have a significant positive effect on the expression of openness values in the writing task (p <.05). Leader signals also explain a significant proportion of the variance in expressed openness values above and beyond the entered control variables ($\Delta R^2 = .020, F(2, 277) =$ 2.82, p < .10).

Expressed self-transcendence values are found in sentences mentioning perceived advantages for the welfare of others due to the change or considering others' interests. ICC(2,2) = 0.85, 95% CI [0.815, 0.884]. This level of

interrater agreement can be classified as good to excellent for scores of expressed self-transcendence values (Cicchetti, 1994; Koo & Li, 2016). Sentences are coded to mirror self-enhancement values when perceived advantages for the self due to the change are mentioned. ICC(2, 2) = 0.93, 95% CI [0.915, 0.947].

This level of interrater agreement indicates excellent interrater agreement on self-enhancement expression scores (Cicchetti, 1994; Koo & Li, 2016). The results of the conducted hierarchical multiple regression to assess the influence of leader signaling on the expression of selftranscendence vs. self-enhancement values are depicted in table 13.

Again, leader commitment signaling does not significantly impact follower expression of self-transcendence or self-enhancement values. While leader charisma signaling also does not reach high statistical significance, we can still observe a weakly significant positive effect on selftranscendence (p = .189) and a weakly significant negative effect on self-enhancement (p = .181) expressions.²²

5. Discussion

5.1. General Discussion

Researchers are increasingly recognizing employee change support as a primary determinant of change success. Although employees attentively observe their leaders during organizational change to infer their characteristics and intentions, and although there is no disagreement on the vital roles of leadership and communication during change, communication mechanisms to address employee uncertainty regarding the leadership of change in order to foster change support remain largely unexplored so far.

This thesis, based on a signaling theory framework, investigated the effects of leader charisma and change commitment signaling on employee responses to change, as well as the role of employees' personal values in this process. The results of this thesis contribute to the discussion on effective change management by emphasizing the potential of leader signaling to foster supportive employee responses to change, and by showing the relevance of personal values in leader signaling and follower reactions thereto. I address my findings in more detail below.

As my first set of findings, I did not find support in this experimental study of leader charisma and change commitment signals' significant main or interaction effects on follower affective and normative change commitment. Concerning the role of followers' self-transcendence and openness to change values, I did not find evidence of significant moderating effects on the relationship between leader charisma signaling and affective and normative change commitment. There are

²²The obtained results on the expression of values in writing were essentially unchanged when controlling for participants' self-transcendence and openness values, which were self-reported at the beginning of the experiment. Therefore, obtained results are not due to sampling issues.

several plausible interrelated reasons why my experimental manipulations might not have been able to capture the signals' full effects. First, paper people vignette studies, lacking the nonverbal dimension, cannot fully reflect charismatic signaling (Antonakis et al., 2016). Even the high charisma signal conditions can thus only incompletely capture the nature and cost of charisma signaling. As a result, the perceived contrast between low and high charisma signals may have been insufficient to elicit the full differential charismatic effect.

Second, I suspect that participants may not have been attentive enough to the leader change commitment signal to produce its full differential effect, as the change commitment signal occupied only around 10% of the announcement's email space.²³ Therefore, even if the difference in signal cost might have been sufficient, the signal's observability (Connelly et al., 2011) may have been insufficient to capture the signal's full differential effect. Third, mainly to increase experimental realism, I chose digital transformation as the type of change and based the measures of the change program on recommendations in literature. Yet the change overall thus elicited relatively high endorsement in terms of affective and normative change commitment and intended support, as was also reflected in the written messages. Evidently, participants did not perceive the change as having any severe disadvantages to oppose. Thus, there was likely limited room for differences in change reactions between conditions to emerge. Further, these aspects may have contributed to creating a "strong" situation (Mischel, 1977), leaving limited room for individual differences to arise in terms of change commitment. Fourth, despite the potential for generating causal results and isolating effects (e.g. Weick, 1977), whether laboratory experiments can truly capture the realities of organizational life (e.g. Bedeian, 1980) remains a topic of debate, as critical voices have lamented their inability to reflect the full complexity of organizational change (Barnes, 1967; Bedeian, 1980; Skyia & Sheehan, 1977). Thus, despite my best efforts for experimental realism, participants may view a fictitious change more positively in an experimental than in a real setting, as they do not truly need to face its consequences. Together, these aspects could explain why my manipulations likely were not able to reflect the full effects of the leader signals.

For my second set of findings, I report that affective and normative change commitment both highly significantly predict intended behavioral change support. For expressed behavioral support, my findings are mixed, as only normative change commitment significantly determines qualitative change support, which is consistent with recent research documenting a more versatile and stronger effect of normative, compared to affective, change commitment on changerelated behavior (Seo et al., 2012; Shin et al., 2012). Therefore, while reported change commitment is indicative of support intentions, it does not consistently predict expressed support. Overall, I thus find a lack of consistency between reported intentions and subsequent behavior, which has been a subject of research for the past decades (Ajzen, 1985; Ajzen & Madden, 1986; Bagozzi, 1992; Fishbein, 1980; Sheeran & Abraham, 2003; Triandis, 1980).

In a classic meta-analysis, intention accounted for, on average, 28% of the variance in behavior, with a sampleweighted average correlation of .53 between intention and behavior.²⁴ In other words, we often fail to accurately predict our behavior. Therefore, while I do replicate the finding that affective and normative change commitment predict intended support (Bouckenooghe et al., 2015; Cinite & Duxbury, 2018), the same does not consistently hold true for expressed support in my observed sample.

Above and beyond formally hypothesized relationships, I report several additional insights. First, I find a significant positive direct effect of leader charisma signaling, but a nonsignificant effect of change commitment signaling, on expressed quantitative behavioral support for change. Intended behavioral support is not significantly impacted by either signal. Evidently, the influence of the received leader signals is not reflected in participants' differing intended support (which was generally high, see above), but in their expressed support. Therefore, although participants seemingly do not accurately anticipate it, leader charisma signaling elicits significantly higher expressed behavioral support. The nonsignificant finding for leader change commitment signaling likely is a result of a lack of participant attention to the commitment signal itself, as discussed above in more detail.

Second, I find that receiving a high leader charisma signal elicits significantly higher CLT use in producing a changesupportive message. Leader change commitment signaling also exhibits a weak positive effect on subsequent follower CLT use, indicating that both signals induce followers to exert qualitative effort in devising rhetorically well-crafted messages in order to gather support for organizational change. Taken together, my findings indicate that both signals, and especially the charisma signal, are successful in fostering expressed behavioral support in followers across different measures.

Third, my findings reveal that leader charisma signaling exerts highly significantly positive influence on followers' expression of openness to change values in advocating organizational change. In addition, leader charisma signaling weakly positively influences the expression of conservation and self-transcendence values, and weakly negatively influences the expression of self-enhancement values. Thus, when asked to explain why the change should be supported, followers may reflect the values transmitted by the leader signals they had received.

²³Because participants were specifically asked about the CEO's personal involvement, I could not infer from the pre-test with certainty that participants would sufficiently attend to the signal.

 $^{^{24}}$ In this sample, the correlation between the composite measure of intended support and the transformed measure of expressed support was .169 (p < .01). For the untransformed measure of expressed support, the correlation was .149 (p < .05). Generally quite high intended support and relatively low variance likely contribute to this rather low level of correlation.

My findings are thus consistent with the notion that a charisma signal can be expected to transmit openness to change and self-transcendence values. Interestingly, I also find a weak positive effect of charisma signaling on the expression of conservation values. Recent research by Venus and colleagues (Venus et al., 2019) demonstrates the positive effect of visions of change emphasizing continuity on follower change support under conditions of high uncertainty. Similarly, the manipulation of the charisma signal in this study also includes stressing the need to preserve the company's legacy and carry it into a digital future (see Appendix B for the full vignettes), framing the change as a different expression of organizational identity and legacy, which is consistent with the concept of a vision of continuity (Venus et al., 2019) and also a reflection of conservation values (Schwartz, 1992). Hence, these conveyed conservation values then likely were mirrored in followers' changesupportive messages. Another explanation could be that followers internally adopt instead of merely repeat the values modeled by the charisma signal, as proposed by recent empirical research (Groves, 2020) and charismatic leadership theory (Bass & Steidlmeier, 1999; Conger, 1999; Shamir et al., 1993). However, the exact process and timeline of value adoption still remains unclear and requires further research (Groves, 2020). Thus, I cannot infer from the content of the change-supportive messages to which degree the expressed values were indeed internalized versus repeated. Further, I do not find evidence of influence of leader change commitment signaling on followers' expression of the focal values, which may be due to the fact that a change commitment signal is inherently less values-based than a charisma signal, which per definition is inextricably linked to leaders' and followers' values (Antonakis et al., 2016).

Lastly, I find that the relationship between leader signaling and expressed behavioral support is largely not significantly moderated by followers' personal values. However, I report that the impact of charisma signaling on intended behavioral support is strengthened for followers with low selftranscendence (i.e. high self-enhancement values (Lindeman & Verkasalo, 2005)), which is corroborated by the same moderation effect for expressed qualitative effort. Intended support is also increased as a result of a leader charisma signal in followers with high openness to change (i.e. low conservation values). The latter finding is not surprising, as a charismatic leadership signal is likely interpreted as reflective of openness to change values, which should, in the case of congruence between signaled leader values and followers' personal values, result in a stronger signal effect (Antonakis et al., 2016).

The former finding, however, is somewhat surprising, since transmitting self-transcendence values has been argued to be a fundamental element of charismatic leadership (Bono & Judge, 2003; House, 1977; D. van Knippenberg et al., 2004; Yukl, 1999), in theory rendering the leader's charisma signal particularly effective for followers with strong self-transcendence values (Antonakis et al., 2016; J. R. Edwards & Cable, 2009; Kristof-Brown, Zimmerman, & Johnson,

2005). Thus, the finding that the charisma signal was particularly effective among followers with low self-transcendence values could be a result of the circumstances during data collection. Due to grave consequences for the US economy as a result of the global Covid-19 pandemic and widespread and sudden unemployment (The Guardian, 2020), employees may currently primarily view organizational change from a self-enhancement, rather than a self-transcendence perspective because fear of job loss and uncertainty about one's further career might be dominant during the current situation. Indeed, research has shown that salient fear or worries about one's welfare can shift value orientations toward selfenhancement (Konty, Duell, & Joireman, 2004; Schwartz et al., 2000), thus shifting standards of judging and processing information and justifying actions (Schwartz, 1992). Hence, employees holding high self-enhancement values might intend to support the change to a higher degree, when a high (versus low) leader charisma signal convinces them more that the change will presumably make the company more competitive and thus secure e.g. employees' jobs (a theme frequently reflected in the content of messages produced in the writing task), whereas transmitted self-transcendence values may be less attended to, rendering congruence on this value dimension less important. As I can only speculate on the underlying mechanisms, it behooves future research to examine situational moderators on the relationship between followers' personal values and leadership. For leader change commitment signaling, I do not find a moderating effect of self-transcendence values on intended behavioral support. Yet, holding low openness to change (i.e. high conservation values) increases followers' intended support for change as a reaction to leader change commitment signaling. Employees not only infer a leader's values and motives from his or her rhetoric, but also his or her actions (O'Reilly & Pfeffer, 2000). The importance and benefits of employees' perceived value congruence has also been underlined outside the realm of charismatic leadership studies (Cable & Edwards, 2004; Endler & Magnusson, 1976; Kristof-Brown et al., 2005; Pervin, 1989). On the one hand, a leader's change commitment signal could be perceived as a manifestation of openness to change by showing that he or she is willing to go beyond what is formally required to help advance the change(Conger & Kanungo, 1998; House, 1996; Sosik, 2005).

However, depending on the perceived inevitableness of the change, a change commitment signal might also be perceived as the leader's attempt to retain the status quo, i.e. the attempt to introduce organizational change to defend the company's current position - a reflection of conservation values (Schwartz, 1992). Thus, a change commitment signal might not necessarily be perceived as a manifestation of the leader's intrinsic preference for change (openness to change) as is likely with charisma signaling, since the leader's true motivation might not necessarily be very clear to followers. In the case of this study, the leader's change commitment signal thus was likely perceived as a reflection of the leader's conservation values, which would explain its increased effectiveness in fostering intended change support in followers placing value on conservation. Above and beyond specific effects, it is also interesting to note that personal values largely did not moderate expressed, but only intended behavioral support. The exact relationship between held values and enacted behavior remains elusive (Bardi & Schwartz, 2003). One primary moderator on this relationship seems to be the level of deliberate decision-making prior to a certain action: when there is conscious, careful choice involved, values are argued to be far more likely to influence behavior (McClelland, 1985). Therefore, it is not unexpected that followers' held values exert stronger influence on behavioral support within the experimental setting. Future research will hopefully gain further insights into the influence of values along different aspects of employee reactions to change.

5.2. Theoretical Implications

This research contributes to several literatures.

First, my findings add to the literature on organizational change communication in two major ways. Firstly, although research on change communication has predominantly focused on the implementation of change, namely employee participation in implementation decision-making and the continuous provision of information on the change (Bordia et al., 2004; Lewis & Seibold, 1998; K. I. Miller et al., 1990; Sagie et al., 1995), my study illuminates the phase before change implementation (Lewin, 1947) by investigating the impact of change announcements on employee change responses. Despite their importance in determining change reactions, change announcements have been lamented to receive insufficient research attention (DiFonzo & Bordia, 1998; Gioia et al., 2012; Lewis et al., 2013).

Thus, I address the gap in research attention and show that leader signaling in change announcements can be an important and suitable means to foster supportive employee responses to change at the beginning of the change process.

Further, a common theme in organizational communication literature is the notion of dealing with employee uncertainty during change (Bordia et al., 2004), which is noted to fundamentally impede supportive reactions to change (J. Allen et al., 2007; Ashford, 1988; Schweiger & Denisi, 1991). Thus, secondly, I shift attention away from a predominant focus on employee uncertainty about different aspects of the change itself (Bordia et al., 2004; Buono & Bowditch, 1989; Jackson et al., 1987), and identify a type of uncertainty previously not attended to in change communication research: uncertainty relating to the leader of the change. Therefore, I extend the organizational change communication literature by shedding light on the important role of leader signaling in communicating about change as a mechanism through which employee uncertainty about the change leader is addressed, thereby fostering supportive employee responses to change.

Second, this research contributes to the leadership literature in two distinct ways. Leadership scholars have only recently begun to adopt a signaling theory perspective to explain the diverse effects of leader behavior on employees (e.g. Amabile et al., 2004; Detert & Burris, 2007; Karakowsky et al., 2019; A. Towler et al., 2014). However, the role of signaling by leaders still remains underexplored (Bastardoz, n.d.; Karakowsky et al., 2019; Taj, 2016) and, to the best of my knowledge, has yet to be studied empirically in the context of organizational change.²⁵ Therefore, as a first contribution to the literature on leadership, specifically the part of that literature investigating the role of signaling, I demonstrate the relevance of leader signaling during organizational change, namely charisma and change commitment signaling. For the charisma signal, I add to the recent perspective of explaining charismatic leadership using signaling theory (e.g. Antonakis et al., 2016, 2011; Bastardoz, n.d., forthcoming; Grabo et al., 2017) by proposing change announcements as a suitable signaling channel for change leaders, using a paper people study (Kosloff, Greenberg, Weise, & Solomon, 2010), operationalizing the charisma signal relying on objective markers (Antonakis et al., 2016), and demonstrating its effect on follower change reactions.

Turning to change commitment, research still lacks a cohesive definition of what constitutes leader change commitment, how it can be conveyed to followers, how it affects followers' change reactions both theoretically and empirically, and what factors potentially moderate this effect. Consequently, I addressed these questions in this study and hope my investigation adds to a needed cohesive narrative around the impact of signaled leader change commitment on followers.

Despite ample theoretical indications that values are a central part of the charismatic leadership process (Antonakis et al., 2016; Bass & Avolio, 1990; Burns, 1978; Shamir et al., 1993), there is a surprising paucity of empirical evidence (Groves, 2020). Hence, as a second contribution to the leadership literature, I add to the newly emerging stream of research empirically investigating the role of followers' openness to change and self-transcendence values in determining reactions to organizational change and leadership thereof (e.g. Brown & Treviño, 2009; Groves, 2020; Hannah et al., 2016; Sverdlik & Oreg, 2009, 2015). Firstly, I find that charisma signaling increases intended support for followers with low self-transcendence and high openness to change values. While the strengthening moderation effect of follower self-enhancement values on leader charisma is somewhat surprising and might be the result of the special circumstances of data collection, the strengthening moderation effect of follower openness to change values adds an interesting perspective to the current discussion of the moderating effect of openness values on change reactions. Sverdlik & Oreg propose that for individuals with strong openness to change values undergoing imposed change, the novelty of the change is likely appreciated, while the lack of autonomy may feel threatening (Sverdlik & Oreg, 2009, 2015). Hence,

²⁵See Kraft, Sparr, & Peus, 2004 who use a qualitative design to explore the influence of leader support and availability signals on alleviating employee uncertainty and concerns during organizational change for a rare examination of leader signaling during change.

it may depend on the given change situation whether the motivation toward either novelty or autonomy will have a greater impact on individuals' reactions, and thus whether openness to change will be positively or negatively related to supportive change reactions (Sverdlik & Oreg, 2009). My results add to Sverdlik & Oreg's findings: I suggest that a leader's charisma signal in a change context appeals more readily to followers with strong openness to change values, who should be convinced more easily of and inspired by a charismatic change vision embodying openness to change values, aiding behavioral support for change. I find according empirical evidence. Thus, a person's values regarding openness to change are reflected not only in their interpretation of a given change situation (Sverdlik & Oreg, 2009), but also indirectly reflected in their reaction to values transmitted when leaders announce and motivate change.

Further, I also add to the investigation of the mediating role of followers' value adoption in charismatic leadership process. Charismatic leadership theory postulates that changing followers' values is a primary influence mechanism of charismatic leaders (Bass & Steidlmeier, 1999), as followers internalize the values transmitted by the leader's vision, inspiring followers to transcend their self-interests and embrace organizational change as an opportunity (Conger, 1999; Shamir et al., 1993). Yet, these claims currently lack empirical evidence (Groves, 2020). My findings complement Groves (2020) observation that transformational leaders' modeled openness to change and self-transcendence values were related to followers adopting those values and demonstrating support for change. Similarly, I find that individuals express values transmitted by the leader's charismatic signaling in reasoning why organizational change should be supported, corroborating Groves (2020) correlational field evidence with, to my knowledge, first experimental evidence.

Therefore, value congruence between leader and followers, in addition to being a potentially critical moderator on leadership effectiveness by determining followers' acceptance and support of the charismatic leader's change vision (Antonakis et al., 2016; Burns, 1978; Conger, 1999; Weber, 1947), could also be a potentially central mediator in explaining leadership effectiveness such that leader values are internalized by followers over time (Groves, 2020; Hannah et al., 2016; Hoffman et al., 2011) or at least viewed as congruent to followers' personal values as a result of the leader's effective framing (Klein & House, 1995). Future research is needed to corroborate and extend current knowledge on the role of personal values in explaining the effects of leadership on follower responses to organizational change.

Third, my findings contribute to the organizational change literature, primarily to the investigation of the relationship between change commitment and change-related behavior. Despite strong empirical and theoretical previous evidence that affective and normative change commitment precede behavioral reactions to change (Bouckenooghe et al., 2015; Gioia & Chittipeddi, 1991; Meyer, Stanley, Herscovitch, & Topolnytsky, 2009; Sonenshein & Dholakia, 2012), I primarily find direct effects of leader signals on behavioral responses to change. While, for reasons already discussed, this may be an artefact of limitations in the manipulation of the examined signals, my findings nevertheless lend support to the proposition that behavioral responses need not be determined by conscious belief in the benefits of change or feelings of support obligations, but may be the result of other mechanisms above and beyond change commitment.

Recent research, for instance, showed that employees' positive affective experiences directly predicted employees' behavioral responses toward the change above and beyond the indirect effect via employee change commitment (Seo et al., 2012). Future research is needed to conclusively establish the precise mechanisms through which follower change reactions can be impacted without the well documented mediation via change commitment.

Lastly, my study contributes to new methodological approaches in measuring the impact of leadership on employees' change-related behaviors and personal values.

First, I use a behavioral measure to capture real changerelated behavior. Typically studied outcomes of leadership are primarily perceptual in nature or merely measure behavioral intentions (Cinite & Duxbury, 2018), leading researchers to call for more studies to use objective and consequential measures of actual behavioral support (Antonakis et al., 2016; M. Choi, 2011; Herscovitch & Meyer, 2002; Meyer et al., 2007). Therefore, in addition to examining perceptual consequences, such as change commitment and support intentions, I assess objective behavioral outcomes of leader charisma and change commitment signaling, namely qualitative and quantitative effort expended in expressing support for change in written form. Furthermore, evaluations of and behavior toward organizational change have been shown to have a significant social component. For instance, change is perceived to be more meaningful when there is a shared sense of meaning supported by the work groups and social networks change recipients are part of (Hülsheger, Anderson, & Salgado, 2009; Rousseau & Tijoriwala, 1999). Indeed, according to social information-processing theory (Salancik & Pfeffer, 1978), individuals adapt their attitudes toward and willingness to support a change to their social context, which has also been corroborated empirically (e.g. A. A. Armenakis et al., 1993; K. I. Miller & Monge, 1985; V. D. Miller, Johnson, & Grau, 1994). Consequently, employees expressing their support for change toward colleagues and convincing them to support the change could be a potentially important multiplying mechanism for broad change support among the workforce. Therefore, the behavioral task included in this experiment can be considered realistic and consequential in nature, as well as an extension of previous operationalizations of employee change reactions.

Second, I examine employees' expressed values when arguing for organizational change. Studies on the role of values in the leadership process during organizational change largely rely on self-reported personal value questionnaires, such as Schwartz's well-established values measure (Schwartz, 1992, 1996) or different abbreviated versions of the same (e.g. Lindeman & Verkasalo, 2005; Schwartz et al., 2001; Stern, Dietz, & Guagnano, 1998), as evident in typically employed research methodologies (e.g. Brown & Treviño, 2009; Groves, 2020; Oreg & Berson, 2011; Seppälä, Lipponen, Bardi, & Pirttilä-Backman, 2012; Sosik, 2005; Sverdlik & Oreg, 2009, 2015). Only exceptionally are values objectively coded, such as in communication messages (e.g. Frese et al., 2003), allowing for an investigation of expressed values above and beyond internally held values. I thus contribute to new methodological approaches in the study of the role of values in the influence of leadership on employees during change.

5.3. Limitations and Future Directions

The major strength of this research lies in establishing causality due to its controlled experimental design (Shadish, Cook, & Campbell, 2002). The application of vignettes helps maximize the control of various factors that are important for research on organizational change, such as the content and context of change (Pettigrew, 1990), and also helps minimize disruptive factors, such as rater biases coloring leader-ship perceptions (Cantor & Mischel, 1977; Jacquart & Anton-akis, 2015; Lord, Binning, Rush, & Thomas, 1978; Meindl & Ehrlich, 1987), by manipulating leadership objectively. Thus, experimental vignette studies yield findings with high internal validity (Aguinis & Bradley, 2014).

Despite the positive attributes of this study, it is of course not without limitations and opportunities for further development. First, the major criticism of the experiments in general is the sacrifice of generalizability of obtained findings (e.g. Bedeian, 1980; Hughes & Huby, 2002). However, the experimental vignette methodology is particularly well suited to provide realistic experimental scenarios (Aguinis & Bradley, 2014).

As laid out before, I thus paid particular attention to experimental realism in designing the vignettes and writing task (Aguinis & Bradley, 2014; Atzmüller & Steiner, 2010; Hox et al., 1991), allowing for optimism in terms of external validity, although probably no laboratory experiment can ever fully shed the hypothetical nature of the situation participants are placed in.

Second, because some of the data is self-reported and collected within one survey, common method and common source variance may be potential concerns. Note, however, that the main effects of the conditions on quantitative and qualitative behavioral support, as well as expressed values in arguing for change, were assessed with different behavioral measures as dependent variables in the experimental setup, which do not underlie common method and common source variance. Further, while common method variance tends to inflate main effects, it tends to deflate interaction effects (Schriesheim & DeNisi, 1981). Thus, the revealed significant moderation effects of followers' personal values and leadership responsibility indicate that method bias cannot account for these findings (M. G. Evans, 1985; P. M. Podsakoff, MacKenzie, & Podsakoff, 2012; Siemsen, Roth, & Oliveira, 2010).

Third, there are some likely limitations specific to my vignette design that should be addressed in future extensions of this study. As previously discussed, I suspect that my manipulations could not fully capture the effects of the investigated leader signals. To address those concerns, I propose corroborating and extending the findings obtained in this study. For one, the experimental change setting could be adapted to elicit more mixed reactions from the onset and thus leave more room for individual differences and condition effects to emerge. For instance, the change could entail more controversial measures, such as strict cost-cutting, or a more critically regarded change context. Further, a different leader signaling format could be used to capture the signals' effects more completely. For instance, future vignettes could consist of a video message from the leader about the upcoming change to signal charisma. Having a trained actor portray both low and high charisma signal conditions would allow to control for any person-related effects and include all (also nonverbal) CLTs as objective markers for charisma (Antonakis et al., 2016, 2019, 2011). The video message could, for instance, be accompanied by a supposed Intranet article announcing the planned kick-off events to signal leader change commitment. By focusing the article solely on the change commitment signal, the signal is likely to be more attended to by participants and thus become more observable. Above and beyond the format of presenting the change commitment signal, one could also test different ways to signal change commitment (Connelly et al., 2011).

For instance, for types of change requiring specific individual behavior change, such as learning new digital skills, future research could explore leader change commitment signals conveyed by visibly investing time to also learn new relevant skills and thus demonstrating commitment to the change measures.

As a further extension, it would also be insightful to explore leader signals beyond those of change commitment and charisma. For instance, leader's self-sacrificial behaviors have been proposed to help organizational members adapt to changing environments (Y. Choi & Mai-Dalton, 1998) and motivate followers to support the leader's initiatives (De Cremer & van Knippenberg, 2005; B. van Knippenberg & van Knippenberg, 2005), but lack conclusive causal evidence, to my knowledge. For instance, for change initiatives including cost-cutting measures, a costly way of signaling self-sacrificial leadership as a leader could be to voluntarily cut one's salary.

Methodologically, this research should also be extended to be studied a field setting. The combination of different research methods offers the potential of providing a balance of external and internal validity (Dipboye, 1990). For instance, one could gather correlational data in firms currently undergoing change by assessing employee-reported signaled leader charisma and change commitment, as well as supervisor-rated employee support for change, to demonstrate the relevance of signaled leader characteristics during change. One could also assess signaled charisma and change commitment in change announcements across organizations and compare employees' change responses among organizations. Further, field experiments could be promising venues for future research. For example, in a multi-location organization in which a leader is planning to conduct townhall meetings to explain the change to employees in a subset of all locations, one could randomly assign locations to either the townhall or no townhall treatment and assess differences in employees' support for change.

Above and beyond specific extensions to this study, approaching the study of leadership during change through a signaling perspective opens new interesting starting points for future research directions.

First, we know very little about the dynamic and temporal dimension of leader signaling during change. A general cue to assess the honesty of signals is the consistency of signaling over time (Connelly et al., 2011). Thus, a leader who repeatedly signals the same attribute or intention in a costly and consistent manner should be more likely to be perceived as possessing the signaled attribute or intention than a leader who signals only once or even sends conflicting signals. However, I expect a too-much-of-a-good-thing-effect of too frequent signaling such that leaders who over-signal may ineffectively convey their positive attributes and intentions, e.g. by emotionally exhausting followers (Kim, Hornung, & Rousseau, 2011). Longitudinal study designs could help shed light on the benefits of repeated signaling. Rather than a simple linear or curvilinear relationship between the frequency of signaling repetition and signaling effectiveness, I would anticipate a more complex, oscillating relationship so that periodically repeated signals in order to keep the signals sufficiently salient should prove most effective. Hence, I hope future research will attempt to answer questions relating to the optimal pattern of leader signaling over time.

Second, future research could examine the dynamics between leaders' signals. Since "all management actions send signals to employees that affect perceptions and influence behavior" (Baldwin & Magjuka, 1991: 26), it is important to understand how different signals might interact in their effects on followers. Which signals are mutually reinforcing? Which signals are inhibiting each other? Which signals do followers most attend to? Which signals are most effective in fostering supportive follower change reactions? Evidently, these questions can only be addressed in-depth by future research.

Third, social dynamics of signal interpretation could be explored. An employee's environment can be expected to shape how he or she perceives and interprets a leader's signals (Connelly et al., 2011). Especially when an individual is not certain about how a signal is to be interpreted, he or she may imitate how others make sense of the signal (Sliwka, 2007). Yet, we still know relatively little about how organizational members influence each other in the interpretation of leader signals. One could raise several important questions. How do signal interpretations diffuse in groups? Do leaders benefit from influential employees quickly validating their signal to set a precedent for others? How does signal interpretation cascade throughout organizational hierarchies?

As a shared sense of understanding within work groups

and organizational relevant social networks appear to catalyze perceptions of meaning in employees (Hülsheger et al., 2009; Rousseau & Tijoriwala, 1999), one could infer that a shared interpretation of a leader signal will likely strengthen its effects on followers. Further, middle managers are often central nodes in cascading information within the organization and implementing organizational change (Balogun, 2003). Some evidence also suggests that middle managers' behavior and leadership significantly shape employees' change reactions (Balogun & Johnson, 2004; Herold et al., 2008; Huy, 2002; Seo et al., 2012). It could thus also be a promising area of future research to examine how signal interpretation may vary across and cascade through hierarchical levels, for instance due to different reference points regarding baseline levels of specific leader attributes and intentions against which signals are evaluated.

Lastly, what are the boundaries of signal effectiveness in the context of organizational change? What kind of employee reactions can leader signals elicit that enhance the probability of change success? It would be valuable to see whether future research could extend my findings to other change-relevant outcomes, such as employee satisfaction or turnover intentions. Above and beyond that, future research could extend behavioral measures of change responses to include other consequential outcomes, such as effects on productivity in changed work processes or organizational citizenship behaviors. Longitudinal designs could also help illuminate the effect of leader signals on followers' openness to change and self-transcendence values, and other potential long-term effects. Attempts should further be made to deepen our understanding of the mediating mechanisms of the effects specific leader signals exert on followers.

5.4. Practical Implications

My findings may also yield important practical implications for fostering employee support when implementing organizational change.

Thus, first, leaders should profit from recognizing uncertainties employees face during organizational change pertaining to the change itself and its leaders. Leaders should expect employees to observe their behavior and draw conclusions based on that. Thus, by signaling their change commitment, and especially their charisma, leaders can foster follower change support by conveying information that followers care about in their change leaders. Therefore, leaders should learn to increase their awareness about their personal characteristics (e.g. Church, 1997), be attentive to and actively manage which signals they send to followers, and find creative ways to signal their desirable attributes and intentions in a credible manner. Leaders should also reflect on the values they transmit to followers when advocating change and signaling their attributes or intentions, and be aware that these values will likely be picked up or even internalized by followers who try to make sense of the change and understand why it is needed. In the end, "the genius of leadership lies in the manner in which leaders see and act on their own and their follower's values" (Burns, 1978: 19).

Second, my findings suggest that leaders should not assume that employees will respond to leader signaling in the same manner. Although my results suggest that, in general, signaling leader change commitment, and especially leader charisma, will foster follower change support, followers' personal values (Cable & Edwards, 2004; Meglino & Ravlin, 1998; Meyer & Parfyonova, 2009) will likely determine to what extent they will support the change initiative as a response to the leader's signals. Thus, leaders should recognize the potentially critical role of followers' personal values in shaping responses to change. To identify their employees' levels of openness to change and self-transcendence values, leaders could use focus groups as well as employee surveys and other measures in order to better understand the values held within the organization, and be attentive to their subordinates' expressed values to gauge how these values may influence responses to change. Leaders could thereby identify followers who more readily accept and adapt to change and are willing to transcend their self-interests to advance the change vision, and encourage them to take an active role in the common change effort, e.g. by supporting their peers who might find the change more difficult to adjust to, or advocating the change to colleagues.

6. Conclusion

While the importance of leadership and communication during change seem to be universally agreed upon, the current state of research leaves us in the dark about how change leaders can and why they should signal their characteristics and intentions in order to address employee uncertainty. To study the potential of leader signaling to foster supportive change responses in employees, I introduced two distinct signals in change announcements: those of leader charisma and commitment to the proposed change. This study gives first indications that both signals, and particularly the one of leader charisma, are effective in creating supportive behavioral responses to change, as evidenced by quantitative and qualitative follower effort exerted in advocating the change. I do not find that these effects on change-related behavior are indirect and operate through follower affective and change commitment. I also do not find both signals to be interactive in their effects on followers. Above and beyond effects concerning follower effort, I also find leader charisma signaling to increase the expression of openness to change, conservation, and self-transcendence values when explaining why the change initiative should be supported. Further, I report that followers' personal values moderate the influence of leader signals on expressed and intended behavioral reactions to change, respectively.

Ultimately, when employees decide how much effort to invest in supporting a change initiative, they seem to rely on their perceptions of the leader advocating the change. They might process questions such as: Is the leader's vision for change appealing? Do I share the values the leader stands for? Is the leader able to lead this change and how will his or her leadership look like? Do I trust the leader? Is the leader really committed to the vision he or she communicates? Will the leader support the change? How important is this change for the organization? It is up to the change leader to find ways to credibly signal their characteristics and intentions in order to alleviate employee uncertainty and achieve support for change, since "if there is one generalization we can make about leadership and change it is this: No change can occur without willing and supportive followers." (Bennis, 2000: 117). Although this study adds to the knowledge about the mechanisms and effects of leader signaling during organizational change, it is only a beginning for what ultimately needs to be understood.

References

- Agle, B. R., Nagarajan, N. J., Sonnenfeld, J. A., & Srinivasan, D. (2006). Does Ceo Charisma Matter? An Empirical Analysis Of The Relationships Among Organizational Performance, Environmental Uncertainty, And Top Management Team Perceptions Of Ceo Charisma. Academy of Management Journal, 49(1), 161–174.
- Aguinis, H., & Bradley, K. J. (2014). Best Practice Recommendations for Designing and Implementing Experimental Vignette Methodology Studies. Organizational Research Methods, 17(4), 351–371.
- Ahn, M. J., Adamson, J. S. A., & Dornbusch, D. (2004). From Leaders to Leadership: Managing Change. Journal of Leadership & Organizational Studies, 10(4), 112–123.
- Aiken, C., & Keller, S. (2009). The irrational side of change management. McKinsey Quarterly. Retrieved 2020-02-24, from Https://Www.Engageforsuccess.Org/Wp-Content/Uploads/ 2015/10/The-Irrational-Side-of-Change-Management.Pdf
- Ajzen, I. (1985). Action Control. In J. Kuhl & J. Beckmann (Eds.), (chap. From Intentions to Actions: A Theory of Planned Behavior). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 22(5), 453–474.
- Albert, S., & Whetten, D. A. (1985). Organizational identity. Research in Organizational Behavior, 7, 263–295.
- Allen, D. G., Hancock, J. I., Vardaman, J. M., & Mckee, D. N. (2014). Analytical mindsets in turnover research. *Journal of Organizational Behavior*, 35(S1), 61–86.
- Allen, J., Jimmieson, N. L., Bordia, P., & Irmer, B. E. (2007). Uncertainty during Organizational Change: Managing Perceptions through Communication. Journal of Change Management, 7(2), 187–210.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18.
- Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, 15(1), 5–32.
- Anderson, D. R., Sweeney, D. J., & Williams, T. A. (1996). Statistics for business and economics. St. Paul: West Publishing Company.
- Antonakis, J. (2017). The Nature of Leadership. In J. Antonakis & D. V. Day (Eds.), (3rd ed., chap. Charisma and the "New Leadership"). Thousand Oaks: SAGE Publications, Inc.
- Antonakis, J., & Bastardoz, N. (2016). Charisma: An ill-defined and illmeasured gift. Annual Review of Organizational Psychology and Organizational Behavior, 3, 293–319.
- Antonakis, J., Bastardoz, N., Jacquart, P., & Shamir, B. (2016). Charisma: An Ill-Defined and Ill-Measured Gift. Annual Review of Organizational Psychology and Organizational Behavior, 3(1), 293–319.
- Antonakis, J., D'Adda, G., Weber, R., & Zehnder, C. (2019). Just words? Just speeches? On the economic value of charismatic leadership.
- Antonakis, J., Fenley, M., & Liechti, S. (2011). Can Charisma Be Taught? Tests of Two Interventions. Academy of Management Learning & Education, 10(3), 374–396.
- Antonakis, J., Fenley, M., & Liechti, S. (2012). Learning Charisma: Transform yourself into the person others want to follow. *Harvard Business Review*, June, 127–130.
- Antonakis, J., & House, R. J. (2002). Transformational and charismatic leadership: The road ahead. In B. J. Avolio & F. J. Yammarino (Eds.), (pp. 3–34). Amsterdam: JAI Press.
- Aristotle, & Butcher, S. H. (2008). Poetics. New York: Cosimo Books.
- Armenakis, A., Harris, S. G., & Feild, H. S. (1999). Handbook of organizational behavior. In R. Golembiewski (Ed.), (chap. Paradigms in organizational change: Change agent and change target perspectives). New York: Marcel Dekker.
- Armenakis, A. A., & Bedeian, A. G. (1999). Organizational Change: A Review of Theory and Research in the 1990s. *Journal of Management*, 25(3), 293–315.
- Armenakis, A. A., Bernerth, J. B., Pitts, J. P., & Walker, H. J. (2007). Organizational Change Recipients' Beliefs Scale: Development of an Assessment Instrument. *The Journal of Applied Behavioral Science*, 34(4), 481–505.

- Armenakis, A. A., & Harris, S. G. (2002). Crafting a change message to create transformational readiness. *Journal of Organizational Change Management*, 15(2), 169–183.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating Readiness for Organizational Change. *Human Relations*, 46(6), 681–703.
- Armstrong-Stassen, M. (1998). The Effect of Gender and Organizational Level on How Survivors Appraise and Cope with Organizational Downsizing. *The Journal of Applied Behavioral Science*, 34(2), 125– 142.
- Arnestad, M. N., Selart, M., & Lines, R. (2019). The causal effects of referential vs ideological justification of change. *Journal of Organizational Change Management*, 32(4), 397–408.
- Ashford, S. J. (1988). Individual Strategies for Coping with Stress during Organizational Transitions. *The Journal of Applied Behavioral Science*, 24(1), 19–36.
- Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in Organizations: An Examination of Four Fundamental Questions. *Journal* of Management, 34(4), 325–374.
- Ashforth, B. E., & Mael, F. (1989). Social Identity Theory and the Organization. Academy of Management Review, 14(1), 20–39.
- Atinc, G., Simmering, M. J., & Kroll, M. J. (2012). Control Variable Use and Reporting in Macro and Micro Management Research. Organizational Research Methods, 15(1), 57–74.
- Attaran, M. (2004). Exploring the relationship between information technology and business process reengineering. *Information & Management*, 41(5), 585–596.
- Atzmüller, C., & Steiner, P. M. (2010). Experimental Vignette Studies in Survey Research. *Methodology*, 6(3), 128–138.
- Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *The Leadership Quarterly*, 6(2), 199–218.
- Awamleh, R., & Gardner, W. L. (1999). Perceptions of leader charisma and effectiveness. The Leadership Quarterly, 10(3), 345–373.
- Babalola, M. T., Stouten, J., & Euwema, M. (2016). Frequent Change and Turnover Intention: The Moderating Role of Ethical Leadership. *Journal of Business Ethics*, 134(2), 311–322.
- Bagozzi, R. P. (1992). The Self-Regulation of Attitudes, Intentions, and Behavior. Social Psychology Quarterly, 55(2), 178–204.
- Baldwin, T. T., & Magjuka, R. J. (1991). Organizational training and signals of importance: Linking pretraining perceptions to intentions to transfer. *Human Resource Development Quarterly*, 2(1), 25–36.
- Balogun, J. (2003). From Blaming the Middle to Harnessing its Potential: Creating Change Intermediaries. British Journal of Management, 14(1), 69–83.
- Balogun, J., & Johnson, G. (2004). Organizational Restructuring and Middle Manager Sensemaking. Academy of Management Journal, 47(4), 523–549.
- Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice Hall.
- Banks, G. C., Engemann, K. N., Williams, C. E., Gooty, J., & McCauley, e. a., K. D. (2017). A meta-analytic review and future research agenda of charismatic leadership. *The Leadership Quarterly*, 28(4), 508–529.
- Bardi, A., & Schwartz, S. H. (2003). Values and Behavior: Strength and Structure of Relations. *Personality and Social Psychology Bulletin*, 29(10), 1207–1220.
- Barnes, L. B. (1967). Methods of Organizational Research. In V. H. Vroom (Ed.), (chap. Organizational Change and Field Experiment Methods). Pittsburgh: University of Pittsburgh Press.
- Barrett, D. J. (2002). Change communication: Using strategic employee communication to facilitate major change. *Corporate Communications: An International Journal*, 7(4), 219–231.
- Barsade, S. G. (2002). The Ripple Effect: Emotional Contagion and Its Influence on Group Behavior. Administrative Science Quarterly, 47(4), 644–675.
- Barsade, S. G., & Gibson, D. E. (2007). Why Does Affect Matter in Organizations? Academy of Management Perspectives, 21(1), 36–59.
- Bartram, T., & Casimir, G. (2007). The relationship between leadership and follower in-role performance and satisfaction with the leader: The mediating effects of empowerment and trust in the leader. *Leadership* & Organization Development Journal, 28(1), 4–19.

- Bartunek, J. M. (1984). Changing Interpretive Schemes and Organizational Restructuring: The Example of a Religious Order. Administrative Science Quarterly, 29(3), 355–372.
- Bass, B. M. (1985). Leadership and Performance Beyond Expectations. New York: Free Press.
- Bass, B. M. (1988). Charismatic leadership: The elusive factor in organizational effectiveness. In J. A. Conger & R. N. Kanungo (Eds.), (pp. 40–77). San Francisco, CA: Jossey-Bass.
- Bass, B. M., & Avolio, B. J. (1990). Developing Transformational Leadership: 1992 and Beyond. *Journal of European Industrial Training*, 14(5), 21–27.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly*, 10(2), 181–217.
- Bastardoz, N. (n.d.). Signaling Charisma, The Routledge International Handbook of Charisma.
- Bastardoz, N., & Van Vugt, M. (2019). The nature of followership: Evolutionary analysis and review. *The Leadership Quarterly*, 30(1), 81–95.
- Battilana, J., Gilmartin, M., Sengul, M., Pache, A.-C., & Alexander, J. A. (2010). Leadership competencies for implementing planned organizational change. *The Leadership Quarterly*, 21(3), 422–438.
- Beatty, C. (2015). Communicating during an organizational change. Organization Studies, 15(3), 337–352.
- Becker, T. E. (2005). Potential Problems in the Statistical Control of Variables in Organizational Research: A Qualitative Analysis With Recommendations. Organizational Research Methods, 8(3), 274–289.
- Bedeian, A. G. (1980). Organizations, Theory and Analysis. Dryden Press.
- Beer, M. (1980). Organizational change and development. Santa Monica: Goodyear.
- Beer, M., Eisenstat, R. A., & Spector, B. (1990). Why change programs don't produce change. *Harvard Business Review*, 158–166.
- Beer, M., & Nohria, N. (2000). Cracking the code of change. Harvard Business Review, 78(3), 133–141.
- Bennis, W. (2000). Breaking the code of change. In M. Beer & N. Nohria (Eds.), (pp. 113–121). Boston, MA: Harvard Business School Press.
- Beyer, J. M. (1999). Taming and promoting charisma to change organizations. The Leadership Quarterly, 10(2), 307–330.
- Bharat, S. (2017). Ambassadors for Change: How to Engage Employees in Strategy. LinkedIn. Retrieved 2020-05-10, from Https://Www.Linkedin.Com/Pulse/Ambassadors-Change -How-Engage-Employees-Strategy-Sruti-Bharat/
- Bird, R., & Smith, E. A. (2005). Signaling Theory, Strategic Interaction, and Symbolic Capital. *Current Anthropology*, 46(2), 221–248.
- Blaney, P. H. (1986). Affect and memory: A review. Psychological Bulletin, 99(2), 229–246.
- Blankenship, K. L., & Wegener, D. T. (2008). Opening the mind to close it: Considering a message in light of important values increases message processing and later resistance to change. *Journal of Personality and Social Psychology*, 94(2), 196–213.
- Bollard, A., Larrea, E., Singla, A., & Sood, R. (2018). The Next-Generation Operating Model for the Digital World. *Digital McKinsey*.
- Bono, J. E., & Ilies, R. (2006). Charisma, positive emotions and mood contagion. *The Leadership Quarterly*, 17(4), 317–334.
- Bono, J. E., & Judge, T. A. (2003). Self-Concordance at Work: Toward Understanding the Motivational Effects of Transformational Leaders. *Academy of Management Journal*, 46(5), 554–571.
- Bordia, P, Hobman, E., Jones, E., Gallois, C., & Callan, V. J. (2004). Uncertainty During Organizational Change: Types, Consequences, and Management Strategies. *Journal of Business and Psychology*, 18(4), 507–532.
- Bordia, P., Restubog, S. L. D., Jimmieson, N. L., & Irmer, B. E. (2011). Haunted by the Past: Effects of Poor Change Management History on Employee Attitudes and Turnover. *Group & Organization Management*, 36(2), 191–222.
- Bouchard, T. J., & Loehlin, J. C. (2001). Genes, Evolution, and Personality. Behavior Genetics, 31(3), 243–273.
- Bouchard, T. J., & McGue, M. (2003). Genetic and environmental influences on human psychological differences. *Journal of Neurobiology*, 54(1), 4–45.
- Bouckenooghe, D. (2012). The role of organizational politics, contextual resources, and formal communication on change recipients' commit-

ment to change: A multilevel study. European Journal of Work and Organizational Psychology, 21(4), 575–602.

- Bouckenooghe, D., Schwarz, G., & Minbashian, A. (2015). Herscovitch and Meyer's Three-Component model of commitment to change: Metaanalytic findings. *European Journal of Work and Organizational Psychology*, 24(4), 578–595.
- Bower, G. H. (1981). Mood and memory. American Psychologist, 36(2), 129–148.
- Branzei, O., Ursacki-Bryant, T. J., Vertinsky, I., & Zhang, W. (2004). The formation of green strategies in Chinese firms: Matching corporate environmental responses and individual principles. *Strategic Management Journal*, 25(11), 1075–1095.
- Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. *The Leadership Quarterly*, 24(1), 270–283.
- Bürkner, H.-P., Faeste, L., & Hemerling, J. (2015). The New CEO's Guide to Transformation: Turning Ambition into Sustainable Results. Boston Consulting Group. Retrieved 2020-02-18, from Https://Www.Bcg.Com/Publications/2015/Transformation -Change-Management-New-Ceo-Guide-Transformation.Aspx
- Brockner, J., Konovsky, M., Cooper-Schneider, R., Folger, R., Martin, C., & et al. (1994). Interactive Effects of Procedural Justice and Outcome Negativity on Victims and Survivors of Job Loss. Academy of Management Journal, 37(2), 397–409.
- Brown, M. E., & Treviño, L. K. (2009). Leader–follower values congruence: Are socialized charismatic leaders better able to achieve it? *Journal* of Applied Psychology, 94(2), 478–490.
- Buck, R., Miller, R. E., & Caul, W. F. (1974). Sex, personality, and physiological variables in the communication of affect via facial expression. *Journal of Personality and Social Psychology*, 30(4), 587–596.
- Bughin, J., LaBerge, L., & Mellbye, A. (2018). The Case for Digital Reinvention. Digital McKinsey.
- Bulbulia, J., & Frean, M. (2010). The Evolution of Charismatic Cultures. Method & Theory in the Study of Religion, 22(4), 254–271.
- Buono, A. F., & Bowditch, J. L. (1989). The human side of mergers and acquisitions. San Francisco, CA: Jossey-Bass.
- Burke, C. S., Sims, D. E., Lazzara, E. H., & Salas, E. (2007). Trust in leadership: A multi-level review and integration. *The Leadership Quarterly*, 18(6), 606–632.
- Burke, W., & Biggart, N. (1997). Enhancing organizational performance. In D. Druckman, J. Singer, & H. Van Cott (Eds.), (pp. 120–149). Washington, DC: National Academies Press.
- Burns, J. M. (1978). Leadership. New York: Harper & Row.
- By, T. R. (2005). Organisational change management: A critical review. Journal of Change Management, 5(4), 369–380.
- Cable, D. M., & Edwards, J. R. (2004). Complementary and Supplementary Fit: A Theoretical and Empirical Integration. *Journal of Applied Psychology*, 89(5), 822–834.
- Caldwell, S. D., Herold, D. M., & Fedor, D. B. (2004). Toward an Understanding of the Relationships Among Organizational Change, Individual Differences, and Changes in Person-Environment Fit: A Cross-Level Study. Journal of Applied Psychology, 89(5), 868–882.
- Campos, A. (1989). Emotional Values of Words: Relations with Concreteness and Vividness of Imagery. *Perceptual and Motor Skills*, 69(2), 495– 498.
- Cantor, N., & Mischel, W. (1977). Traits as prototypes: Effects on recognition memory. Journal of Personality and Social Psychology, 35(1), 38–48.
- Carlson, K. D., & Wu, J. (2012). The Illusion of Statistical Control: Control Variable Practice in Management Research. Organizational Research Methods, 15(3), 413–435.
- Casper, W. J., Eby, L. T., Bordeaux, C., Lockwood, A., & Lambert, D. (2007). A review of research methods in IO/OB work-family research. *Journal of Applied Psychology*, 92(1), 28–43.
- Certo, S. T. (2003). Influencing Initial Public Offering Investors with Prestige: Signaling with Board Structures. Academy of Management Review, 28(3), 432–446.
- Chmielewski, M., & Kucker, S. C. (2019). An MTurk Crisis? Shifts in Data Quality and the Impact on Study Results. *Social Psychological and Personality Science*, 1–10.
- Choi, J. (2006). A Motivational Theory of Charismatic Leadership: Envisioning, Empathy, and Empowerment. *Journal of Leadership & Orga*-

nizational Studies, 13(1), 24-43.

- Choi, M. (2011). Employees' attitudes toward organizational change: A literature review. Human Resource Management, 50(4), 479–500.
- Choi, Y., & Mai-Dalton, R. R. (1998). On the leadership function of selfsacrifice. *The Leadership Quarterly*, 9(4), 475–501.
- Church, A. H. (1997). Managerial self-awareness in high-performing individuals in organizations. *Journal of Applied Psychology*, 82(2), 281– 292.
- Cicchetti, D. V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, 6(4), 284–290.
- Cinite, I., & Duxbury, L. E. (2018). Measuring the Behavioral Properties of Commitment and Resistance to Organizational Change. *The Journal* of Applied Behavioral Science, 54(2), 113–139.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences. Mahwah, NJ: Erlbaum.
- Colbert, A. E., Kristof-Brown, A. L., Bradley, B. H., & Barrick, M. R. (2008). Transformational Leadership: The Role of Goal Importance Congruence in Top Management Teams. Academy of Management Journal, 51(1), 81–96.
- Conger, J. A. (1989). The charismatic leader: Behind the mystique of exceptional leadership. San Francisco, CA: Jossey-Bass.
- Conger, J. A. (1999). Charismatic and transformational leadership in organizations. *The Leadership Quarterly*, 10(2), 145–179.
- Conger, J. A., & Kanungo, R. N. (1987). Toward a Behavioral Theory of Charismatic Leadership in Organizational Settings. Academy of Management Review, 12(4), 637–647.
- Conger, J. A., & Kanungo, R. N. (1998). Charismatic Leadership in Organizations. Thousand Oaks, CA: SAGE Publications, Inc.
- Conger, J. A., Kanungo, R. N., & Menon, S. T. (2000). Charismatic leadership and follower effects. *Journal of Organizational Behavior*, 21(7), 747– 767.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. Journal of Management, 37(1), 39–67.
- Conner, D. R., & Patterson, R. W. (1982). Building commitment to organizational change. *Training and Development Journal*, 36, 18–30.
- Cooper, W. H., & Richardson, A. J. (1986). Unfair comparisons. Journal of Applied Psychology, 71(2), 179–184.
- Cooperrider, D. L. (1990). Appreciative management and leader- ship: The power of positive thought and action in organizations. In S. Srivastva & D. L. Cooperrider (Eds.), (pp. 1–125). San Francisco, CA: Jossey-Bass.
- Cooperrider, D. L., & Srivastva, S. (1987). Research in organizational change and development. In W. A. Pasmore & R. W. Woodman (Eds.), (pp. 29–169). Greenwich, CT: JAI Press.
- Coyle-Shapiro, J. A.-M. (2002). Changing Employee Attitudes: The Independent Effects of TQM and Profit Sharing on Continuous Improvement Orientation. *The Journal of Applied Behavioral Science*, 38(1), 57–77.
- Coyle-Shapiro, J. A.-M., & Morrow, P. C. (2003). The role of individual differences in employee adoption of TQM orientation. *Journal of Vocational Behavior*, 62(2), 320–340.
- Cunningham, C. E., Woodward, C. A., Shannon, H. S., MacIntosh, J., Lendrum, B., & et al. (2002). Readiness for organizational change: A longitudinal study of workplace, psychological and behavioural correlates. *Journal of Occupational and Organizational Psychology*, 75(4), 377–392.
- Cunningham, G. B. (2006). The relationships among commitment to change,coping with change, and turnover intentions. *European Jour*nal of Work and Organizational Psychology, 15(1), 29–45.
- Davidson, R., & MacKinnon, J. G. (1993). Estimation and inference in econometrics. Oxford, UK: Oxford University Press.
- Davila, A., Foster, G., & Gupta, M. (2003). Venture capital financing and the growth of startup firms. *Journal of Business Venturing*, 18(6), 689–708.
- De Cremer, D. (2003). Why inconsistent leadership is regarded as procedurally unfair: The importance of social self-esteem concerns. *European Journal of Social Psychology*, *33*(4), 535–550.

De Cremer, D., & van Knippenberg, D. (2005). Cooperation as a function of

leader self-sacrifice, trust, and identification. Leadership & Organization Development Journal, 26(5), 355–369.

- DeGroot, T., Kiker, D. S., & Cross, T. C. (2009). A Meta-Analysis to Review Organizational Outcomes Related to Charismatic Leadership. Canadian Journal of Administrative Sciences / Revue Canadienne Des Sciences de l'Administration, 17(4), 365–372.
- Detert, J. R., & Burris, E. R. (2007). Leadership Behavior and Employee Voice: Is the Door Really Open? Academy of Management Journal, 50(4), 869–884.
- Devos, G., Buelens, M., & Bouckenooghe, D. (2007). Contribution of Content, Context, and Process to Understanding Openness to Organizational Change: Two Experimental Simulation Studies. *The Journal* of Social Psychology, 147(6), 607–630.
- Devos, G., Vanderheyden, K., & Van den Broeck, H. (2001). A framework for assessing commitment to change: Process and context variables of organizational change. Paper Presented at the Annual Meeting of the Academy of Management, Washington, DC.
- Dias, J., Hamilton, D., Khanna, S., Paquette, C., & Sood, R. (2018). How to Start Building your Next-Generation Operating Model. *Digital McKinsey*.
- DiFonzo, N., & Bordia, P. (1998). A tale of two corporations: Managing uncertainty during organizational change. *Human Resource Management*, 37(3&4), 295–303.
- Dineen, B. R., Lewicki, R. J., & Tomlinson, E. C. (2006). Supervisory guidance and behavioral integrity: Relationships with employee citizenship and deviant behavior. *Journal of Applied Psychology*, 91(3), 622– 635.
- Dipboye, R. L. (1990). Laboratory vs. field research in industrial and organizational psychology. International Review of Industrial and Organizational Psychology, 5, 1–34.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611–628.
- Douglas, S. C., Kiewitz, C., Martinko, M. J., Harvey, P., Kim, Y., & et al. (2008). Cognitions, Emotions, and Evaluations: An Elaboration Likelihood Model for Workplace Aggression. Academy of Management Review, 33(2), 425–451.
- Durkheim, E. (1912). The elementary forms of religious life. Glencoe, IL: Free Press.
- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational Images and Member Identification. Administrative Science Quarterly, 39(2), 239.
- Eby, L. T., Adams, D. M., Russell, J. E. A., & Gaby, S. H. (2009). Perceptions of Organizational Readiness for Change: Factors Related to Employees' Reactions to the Implementation of Team-Based Selling. *Human Relations*, 53(3), 419–442.
- Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. Journal of Applied Psychology, 94(3), 654–677.
- Edwards, M. R. (2005). Organizational identification: A conceptual and operational review. International Journal of Management Reviews, 7(4), 207–230.
- Ehrhart, K. H., & Ziegert, J. C. (2005). Why are individuals attracted to organizations? *Journal of Management*, 31, 901–919.
- Elitzur, R., & Gavious, A. (2003). Contracting, signaling, and moral hazard: A model of entrepreneurs, 'angels,' and venture capitalists. *Journal* of Business Venturing, 18(6), 709–725.
- Elving, W. J. L. (2005). The role of communication in organisational change. Corporate Communications: An International Journal, 10(2), 129– 138.
- Emrich, C. G., Brower, H. H., Feldman, J. M., & Garland, H. (2001). Images in Words: Presidential Rhetoric, Charisma, and Greatness. Administrative Science Quarterly, 46(3), 527–557.
- Endler, N. S., & Magnusson, D. (1976). Interactional psychology and personality. New York: Wiley.
- Erez, A., Misangyi, V. E., Johnson, D. E., LePine, M. A., & Halverson, K. C. (2008). Stirring the hearts of followers: Charismatic leadership as the transferal of affect. *Journal of Applied Psychology*, 93(3), 602– 616.
- Etzioni, A. (1961). A Comparative Analysis of Complex Organizations. New York: Free Press.
- Etzioni, A. (1964). Modern organizations. Prentice Hall.

739

- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. Organizational Behavior and Human Decision Processes, 36(3), 305–323.
- Evans, R. (1994). The Human Side of Business Process Re-engineering. Management Development Review, 7(6), 10–12.
- Falbe, C. M., & Yukl, G. (1992). Consequences for managers of using single influence tactics and combinations of tactics. Academy of Management Journal, 35(3), 638–652.
- Fedor, D. B., Caldwell, S., & Herold, D. M. (2006). The Effects of Organizational Changes on Employee Commitment: A Multilevel Investigation. *Personnel Psychology*, 59(1), 1–29.
- Feloni, R. (2015). Boston Consulting Group executive says the best managers practice these 5 habits. *Business Insider*. Retrieved 2020-02-24, from Https://Www.Businessinsider.Com/Boston-Consulting -Groups-Tips-for-Managers-2015-8?R=DE&IR=T
- Filatotchev, I., & Bishop, K. (2002). Board composition, share ownership, and underpricing of UK IPO firms. Strategic management journal, 23(10), 941–955.
- Fischer, R., & Smith, P. B. (2004). Values and Organizational Justice: Performance- and Seniority-Based Allocation Criteria in the United Kingdom and Germany. *Journal of Cross-Cultural Psychology*, 35(6), 669–688.
- Fishbein, M. (1980). A theory of reasoned action: Some applications and implications. *Nebraska symposium on motivation*, 27, 65–116.
- Ford, J. D., & Ford, L. W. (1995). The Role Of Conversations in Producing Intentional Change in Organizations. Academy of Management Review, 20(3), 541–570.
- French, J. R. P., & Raven, B. H. (1968). Group dynamics: Research and theory. In (3rd ed., pp. 259–269). New York: Harper & Row.
- Frese, M., Beimel, S., & Schoenborn, S. (2003). Action training for charismatic leadership: Two evaluations of studies of a commercial training module on inspirational communication of a vision. *Personnel Psychology*, 56(3), 671–698.
- Frijda, N. H. (1996). Emotion: Interdisciplinary Perspectives. In R. D. Kavanaugh, B. Zimmerberg, & S. Fein (Eds.), (pp. 1–27). Mahwah, NJ: Erlbaum.
- Fugate, M., Kinicki, A. J., & Prussia, G. E. (2008). Employee Coping with Organizational Change: An Examination of Alternative Theoretical Perspectives and Models. *Personnel Psychology*, 61(1), 1–36.
- Fugate, M., & Soenen, G. (2017). Predictors and processes related to employees' change-related compliance and championing. *Personnel Psychology*, 71(1), 109–132.
- Gardner, R. G., Harris, T. B., Li, N., Kirkman, B. L., & Mathieu, J. E. (2017). Understanding "It Depends" in Organizational Research: A Theory-Based Taxonomy, Review, and Future Research Agenda Concerning Interactive and Quadratic Relationships. Organizational Research Methods, 20(4), 610–638.
- Gardner, W. L., & Avolio, B. J. (1998). The Charismatic Relationship: A Dramaturgical Perspective. Academy of Management Review, 23(1), 32–58.
- Gibbs, R. W., & Colston, H. L. (2006). Handbook of Psycholinguistics. In M. J. Traxler & M. A. Gernsbacher (Eds.), (2nd ed., pp. 835–861). Academic Press.
- Gilley, A., McMillan, H. S., & Gilley, J. W. (2009). Organizational Change and Characteristics of Leadership Effectiveness. *Journal of Leadership &* Organizational Studies, 16(1), 38–47.
- Gintis, H., Smith, E. A., & Bowles, S. (2001). Costly Signaling and Cooperation. Journal of Theoretical Biology, 213(1), 103–119.
- Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and Sensegiving in Strategic Change Initiation. *Strategic Management Journal*, 12(6), 433–448.
- Gioia, D. A., Nag, R., & Corley, K. G. (2012). Visionary Ambiguity and Strategic Change: The Virtue of Vagueness in Launching Major Organizational Change. Journal of Management Inquiry, 21(4), 364–375.
- Glynn, M. A. (1998). Identity in organizations: Building theory through conversations. In D. A. Whetten & P. C. Godfrey (Eds.), (pp. 238– 244). Thousand Oaks, CA: SAGE Publications, Inc.
- Gooty, J., Connelly, S., Griffith, J., & Gupta, A. (2010). Leadership, affect and emotions: A state of the science review. *The Leadership Quarterly*, 21(6), 979–1004.

Goran, J., LaBerge, L., & Srinivasan, R. (2018). Culture for a Digital Age.

Digital McKinsey.

- Grabo, A., Spisak, B. R., & van Vugt, M. (2017). Charisma as signal: An evolutionary perspective on charismatic leadership. *The Leadership Quarterly*, 28(4), 473–485.
- Grafen, A. (1990). Biological signals as handicaps. Journal of Theoretical Biology, 144(4), 517–546.
- Groves, K. S. (2020). Testing a Moderated Mediation Model of Transformational Leadership, Values, and Organization Change. *Journal of Leadership & Organizational Studies*, 27(1), 35–48.
- Groysberg, B., & Slind, M. (2012). Leadership is a Conversation. *Harvard Business Review*.
- Hackman, J. R., & Wageman, R. (1995). Total Quality Management: Empirical, Conceptual, and Practical Issues. Administrative Science Quarterly, 40(2), 309.
- Hancock, B., Lazaroff-Puck, K., & Rutherford, S. (2020). Getting Practical about the Future of Work. *McKinsey Quarterly*. Retrieved 2020-02-18, from Https://Www.Mckinsey.Com/Business-Functions/ Organization/Our-Insights/Getting-Practical-about -the-Future-of-Work?Cid=other-Eml-Alt-Mcq-Mck&hlkid= ca66f922aa77470e88c773f740fce197&hctky=9248656&hdpid= a12f4458-7d0e-49cb-A646-92c956095e59
- Hannah, S. T., Schaubroeck, J. M., & Peng, A. C. (2016). Transforming followers' value internalization and role self-efficacy: Dual processes promoting performance and peer norm-enforcement. *Journal of Applied Psychology*, 101(2), 252–266.
- Hannan, M. T., & Freeman, J. (1977). The population ecology of organizations. American Journal of Sociology, 929–964.
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. Structural inertia and organizational change. American Journal of Sociology, 49, 149–164.
- Hannan, M. T., & Freeman, J. (1989). Organizational Ecology. Cambridge, MA: Harvard University Press.
- Harvey, S., Kelloway, E. K., & Duncan-Leiper, L. (2003). Trust in management as a buffer of the relationships between overload and strain. *Journal of Occupational Health Psychology*, 8(4), 306–315.
- Hatfield, E., Cacioppo, J., & Rapson, R. (1994). *Emotional contagion*. New York: Cambridge University Press.
- Hauser, D., Paolacci, G., & Chandler, J. (n.d.). Handbook in Research Methods in Consumer Psychology. In F. Kardes, P. Herr, & N. Schwarz (Eds.), (chap. Common Concerns with MTurk as a Participant Pool: Evidence and Solutions).
- Hayes, A. F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. Guilford Publications.
- Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods*, 39(4), 709–722.
- Hayes, A. F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior Research Methods*, 41(3), 924–936.
- Heifetz, R. A., & Laurie, D. L. (2001). The work of leadership. Harvard Business Review, 79(11), 131–140.
- Helpap, S. (2016). The Impact of Power Distance Orientation on Recipients' Reactions to Participatory Versus Programmatic Change Communication. The Journal of Applied Behavioral Science, 52(1), 5–34.
- Hermalin, B. E. (1998). Toward an economic theory of leadership: Leading by example. *American Economic Review*, 88(5), 1188–1206.
- Herold, D. M., Fedor, D. B., Caldwell, S., & Liu, Y. (2008). The effects of transformational and change leadership on employees' commitment to a change: A multilevel study. *Journal of Applied Psychology*, 93(2), 346–357.
- Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology*, 87(3), 474–487.
- Hess, U., & Fischer, A. (2013). Emotional Mimicry as Social Regulation. Personality and Social Psychology Review, 17(2), 142–157.
- Highhouse, S., Thornbury, E. E., & Little, I. S. (2007). Social-identity functions of attraction to organizations. Organizational Behavior and Human Decision Processes, 103(1), 134–146.
- Hill, N. S., Seo, M.-G., Kang, J. H., & Taylor, M. S. (2012). Building Employee Commitment to Change Across Organizational Levels: The Influence of Hierarchical Distance and Direct Managers' Transforma-

tional Leadership. Organization Science, 23(3), 758-777.

- Hillebrandt, A., & Barclay, L. J. (2017). Comparing integral and incidental emotions: Testing insights from emotions as social information theory and attribution theory. *Journal of Applied Psychology*, 102(5), 732–752.
- Hülsheger, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology*, 94(5), 1128–1145.
- Hoffman, B. J., Bynum, B. H., Piccolo, R. F., & Sutton, A. W. (2011). Person-Organization Value Congruence: How Transformational Leaders Influence Work Group Effectiveness. Academy of Management Journal, 54(4), 779–796.
- Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for Organizational Change: The Systematic Development of a Scale. *The Journal of Applied Behavioral Science*, 43(2), 232–255.
- House, R. J. (1977). The Cutting Edge. In J. G. Hunt & L. L. Larson (Eds.), (pp. 189–207). Carbondale, IL: S. Ill. University Press.
- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The Leadership Quarterly*, 7(3), 323–352.
- House, R. J. (1999). Weber and the neo-charismatic leadership paradigm. The Leadership Quarterly, 10(4), 563–574.
- House, R. J., & Aditya, R. N. (1997). The Social Scientific Study of Leadership: Quo Vadis? Journal of Management, 23(3), 409–473.
- House, R. J., & Howell, J. M. (1992). Personality and charismatic leadership. *The Leadership Quarterly*, 3(2), 81–108.
- House, R. J., & Shamir, B. (1993). Leadership theory and research: Perspectives and directions. In M. M. Chemers & R. Ayman (Eds.), (chap. Toward the integration of transformational, charismatic, and visionary theories). San Diego: Academic Press.
- House, R. J., Spangler, W. D., & Woycke, J. (1990). Personality and Charisma in the US Presidency: A Psychological Theory of Leadership Effectiveness. Academy of Management Proceedings, 1990(1), 216–220.
- House, R. J., Woycke, J., & Fodor, E. M. (1988). Charismatic leadership: The elusive factor in organizational effectiveness. In J. A. Conger & R. N. Kanungo (Eds.), (pp. 98–112). San Francisco: Jossey-Bass.
- Howell, J. M. (1988). The Jossey-Bass management series. Charismatic leadership: The elusive factor in organizational effectiveness. In J. A. Conger & R. N. Kanungo (Eds.), (pp. 213–236). Jossey-Bass.
- Howell, J. M., & Frost, P. J. (1989). A laboratory study of charismatic leadership. Organizational Behavior and Human Decision Processes, 43(2), 243–269.
- Hox, J. J., Kreft, I. G. G., & Hermkens, P. L. J. (1991). The Analysis of Factorial Surveys. Sociological Methods & Research, 19(4), 493–510.
- Hughes, R., & Huby, M. (2002). The application of vignettes in social and nursing research. *Journal of Advanced Nursing*, 37(4), 382–386.
- Huy, Q. N. (2002). Emotional Balancing of Organizational Continuity and Radical Change: The Contribution of Middle Managers. Administrative Science Quarterly, 47(1), 31–69.
- Huy, Q. N. (2011). How middle managers' group-focus emotions and social identities influence strategy implementation. *Strategic Management Journal*, 32(13), 1387–1410.
- Huy, Q. N., Corley, K. G., & Kraatz, M. S. (2014). From Support to Mutiny: Shifting Legitimacy Judgments and Emotional Reactions Impacting the Implementation of Radical Change. Academy of Management Journal, 57(6), 1650–1680.
- Iverson, R. D. (1996). Employee acceptance of organizational change: the role of organizational commitment. *The International Journal of Human Resource Management*, 7(1), 122–149.
- Jackson, S., Schuler, R., & Vredenburgh, D. (1987). Occupational stress and organizational effectiveness. In A. Riley & S. Zaccaro (Eds.), (pp. 141–166). New York: Praeger.
- Jacquart, P., & Antonakis, J. (2015). When Does Charisma Matter for Top-Level Leaders? Effect of Attributional Ambiguity. Academy of Management Journal, 58(4), 1051–1074.
- Johnson, P. O., & Neyman, J. (1936). Tests of certain linear hypotheses and their application to some educational problems. *Statistical Research Memoirs*(1), 57–93.
- Johnston, A., Lefort, F. & Tesvic, J. (2017). Secrets of successful change implementation. McKinsey & Company. Retrieved 202-04-20, from Https://Www.Mckinsey.Com/Business-Functions/

Operations/Our-Insights/Secrets-of-Successful-Change -Implementation

- Jones, R. A., Jimmieson, N. L., & Griffiths, A. (2005). The Impact of Organizational Culture and Reshaping Capabilities on Change Implementation Success: The Mediating Role of Readiness for Change. *Journal* of Management Studies, 42(2), 361–386.
- Jung, D. I., & Avolio, B. J. (2000). Opening the black box: An experimental investigation of the mediating effect of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior*, 21(8), 949–964.
- Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioral economics. *American Economic Review*, 93(5), 1449–1475.
- Kanter, R. (1999). Change is everyone's job: Managing the extended enterprise in a globally connected world. Organizational Dynamics, 28, 7–23.
- Kanter, R., Stein, B. A., & Jick, T. D. (1992). The challenge of organizational change: How companies experience it and leaders guide it. New York: Free Press.
- Kapelner, A., & Chandler, D. (2010). Preventing satisficing in online surveys. In Proceedings of CrowdConf.
- Karakowsky, L., Podolsky, M., & Elangovan, A. R. (2019). Signaling trustworthiness: The effect of leader humor on feedback-seeking behavior. *The Journal of Social Psychology*, 160(2), 170–189.
- Kellogg, R. T. (1999). *The psychology of writing*. Oxford, UK: Oxford University Press.
- Kelly, J. R., & Barsade, S. G. (2001). Mood and Emotions in Small Groups and Work Teams. Organizational Behavior and Human Decision Processes, 86(1), 99–130.
- Keyes, C. F. (2002). Weber and Anthropology. Annual Review of Anthropology, 31(1), 233–255.
- Kim, T. G., Hornung, S., & Rousseau, D. M. (2011). Change-Supportive Employee Behavior: Antecedents and the Moderating Role of Time. *Journal of Management*, 37(6), 1664–1693.
- King, A. J., Johnson, D. D. P., & Van Vugt, M. (2009). The Origins and Evolution of Leadership. *Current Biology*, 19(19), 911–916.
- Kirkpatrick, S. A., & Locke, E. A. (1991). Leadership: Do traits matter? Academy of Management Perspectives, 5(2), 48–60.
- Klein, K. J., & House, R. J. (1995). On fire: Charismatic leadership and levels of analysis. *Leadership Quarterly*, 6(2), 183–198.
- Klein, K. J., & Sorra, J. S. (1996). The challenge of innovation implementation. Academy of Management Review, 21, 1055–1080.
- Konty, M., Duell, B., & Joireman, J. (2004). Scared selfish: A culture of fear's values in the age of terrorism. *The American Sociologist*, 35(2), 93–109.
- Koo, T. K., & Li, M. Y. (2016). A Guideline of Selecting and Reporting Intraclass Correlation Coefficients for Reliability Research. *Journal* of Chiropractic Medicine, 15(2), 155–163.
- Koopman, P. A. R. (1984). Confidence Intervals for the Ratio of Two Binomial Proportions. *Biometrics*, 40(2), 513–517.
- Korsgaard, M. A., Schweiger, D. M., & Sapienza, H. J. (1995). Building Commitment, Attachment, and Trust in Strategic Decision-Making Teams: The Role of Procedural Justice. Academy of Management Journal, 38(1), 60–84.
- Kosloff, S., Greenberg, J., Weise, D., & Solomon, S. (2010). The effects of mortality salience on political preferences: The roles of charisma and political orientation. *Journal of Experimental Social Psychology*, 46(1), 139–145.
- Kotter, J. P. (1995). Leading change: Why transformation efforts fail. Harvard Business Review, 73(2), 59–67.
- Kotter, J. P. (1996). *Leading change*. Boston, MA: Harvard Business School Press.
- Kotter, J. P. (2005). Leading change: Why transformation efforts fail. Harvard Business Review, 73, 59–67.
- Kotter, J. P. & Cohen, J. P. (2002). *The heart of change*. Boston, MA: Harvard Business School Press.
- Kotter, J. P., & Schlesinger, L. (1979). Choosing strategies for change. Harvard Business Review, 57, 32–39.
- Kraft, A., Sparr, J. L., & Peus, C. (2004). Giving and Making Sense About Change: The Back and Forth Between Leaders and Employees. *Journal of Business and Psychology*, 33(1), 71–87.
- Kreiner, G. E., & Ashforth, B. E. (2004). Evidence toward an expanded model

of organizational identification. Journal of Organizational Behavior, 25(1), 1–27.

- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of Individuals' Fit at Work: A Meta-Analysis of Person-Job, Person-Organization, Person-Group, and Person-Supervisor Fit. *Personnel Psychology*, 58(2), 281–342.
- Lau, C.-M., & Woodman, R. W. (1995). Understanding Organizational Change: A Schematic Perspective. Academy of Management Journal, 38(2), 537–554.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, 46(8), 819–834.
- LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 Questions About Interrater Reliability and Interrater Agreement. Organizational Research Methods, 11(4), 815–852.
- Ledford, G. J., Mohrman, S., Mohrman, A., & Lawler, E. (1989). Large scale organizational change. In A. Mohrman, S. Mohrman, G. J. Ledford, T. G. Cummings, & E. Lawler (Eds.), (pp. 1–32). San Francisco, CA: Jossey-Bass.
- Lewin, K. (1947). Frontiers in Group Dynamics: II. Channels of Group Life; Social Planning and Action Research. *Human Relations*, 1(2), 143–153.
- Lewis, L. K. (2006). Employee Perspectives on Implementation Communication as Predictors of Perceptions of Success and Resistance. Western Journal of Communication, 70(1), 23–46.
- Lewis, L. K., Laster, N., & Kulkarni, V. (2013). Telling 'em How It Will Be: Previewing Pain of Risky Change in Initial Announcements. *International Journal of Business Communication*, 50(3), 278–308.
- Lewis, L. K., & Seibold, D. R. (1998). Reconceptualizing Organizational Change Implementation as a Communication Problem: A Review of Literature and Research Agenda. Annals of the International Communication Association, 21(1), 93–152.
- Lindeman, M., & Verkasalo, M. (2005). Measuring Values With the Short Schwartz's Value Survey. Journal of Personality Assessment, 85(2), 170–178.
- Lindsay, B., Smit, E., & Waugh, N. (2018). How the implementation of organizational change is evolving. McKinsey & Company Survey. Retrieved 2020-04-20, from Https://Www.Mckinsey.Com/Business -Functions/Mckinsey-Implementation/Our-Insights/ How-the-Implementation-of-Organizational-Change-Is -Evolving
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705–717.
- Locke, E. A., & Schweiger, D. M. (1979). Participation in decision making: One more look. *Research in Organizational Behavior*, 1, 265–339.
- Logan, M. S., & Ganster, D. C. (2007). The Effects of Empowerment on Attitudes and Performance: The Role of Social Support and Empowerment Beliefs. *Journal of Management Studies*, 44(8), 1532–1550.
- Lok, P., Hung, R. Y., Walsh, P., Wang, P., & Crawford, J. (2005). An Integrative Framework for Measuring the Extent to which Organizational Variables Influence the Success of Process Improvement Programmes. *Journal of Management Studies*, 42(7), 1357–1381.
- Lord, R. G., Binning, J. F., Rush, M. C., & Thomas, J. C. (1978). The effect of performance cues and leader behavior on questionnaire ratings of leadership behavior. Organizational Behavior and Human Performance, 21(1), 27–39.
- MacKenzie, S. B. (2003). The Dangers of Poor Construct Conceptualization. Journal of the Academy of Marketing Science, 31(3), 323–326.
- Maclachlan, B. (1996). *The Age of Grace: Charis in Early Greek Poetry*. Chichester, UK: Princeton University Press.
- Mahoney, M. J. (1974). Cognition and behavior modification. Cambridge, MA: Ballinger Publishing.
- Manz, C. C., & Sims, H. P. (1981). Vicarious Learning: The Influence of Modeling on Organizational Behavior. Academy of Management Review, 6(1), 105–113.
- Marks, M. L. (2006). Workplace Recovery after Mergers, Acquisitions, and Downsizings. Organizational Dynamics, 35(4), 384–399.
- Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. Behavior Research Methods, 44(1), 1–23.
- Mayer, J. D. (1986). Advances in cognitive science. In N. E. Sharkey (Ed.), (pp. 290–314). Chichester, UK: Ellis Horwood.

- Mayer, J. D., Gayle, M., Meehan, M. E., & Haarman, A.-K. (1990). Toward better specification of the mood-congruency effect in recall. *Journal* of Experimental Social Psychology, 26(6), 465–480.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An Integrative Model Of Organizational Trust. Academy of Management Review, 20(3), 709–734.
- McClelland, D. C. (1985). Human motivation. Glenview, IL: Scott, Foresman.
- McKinsey & Company. (2008). Creating organizational transformations. McKinsey Quarterly(2), 1–7.
- McKinsey Global Institute. (2016). How social tools can reshape the organization. McKinsey Global Institute. Retrieved 2020-02-24, from Https://Www.Mckinsey.Com/ Business-Functions/Mckinsey-Digital/Our-Insights/ How-Social-Tools-Can-Reshape-the-Organization
- McLain, D. L., & Hackman, K. (1999). Trust, risk, and decision-making in organizational change. Public Administration Quarterly, 23, 152– 176.
- Meglino, B. M., & Ravlin, E. C. (1998). Individual Values in Organizations: Concepts, Controversies, and Research. Journal of Management, 24(3), 351–389.
- Meindl, J. R., & Ehrlich, S. B. (1987). The Romance of Leadership and The Evaluation of Organizational Performance. Academy of Management Journal, 30(1), 91–109.
- Men, L. R. (2014). Strategic Internal Communication: Transformational Leadership, Communication Channels, and Employee Satisfaction. Management Communication Quarterly, 28(2), 264–284.
- Meyer, J. P., & Allen, N. (1997). Commitment in the Workplace: Theory, Research and Application. Thousand Oaks: SAGE Publications, Inc.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89.
- Meyer, J. P., Hecht, T. D., Gill, H., & Toplonytsky, L. (2010). Person–organization (culture) fit and employee commitment under conditions of organizational change: A longitudinal study. *Journal of Vocational Behavior*, 76(3), 458–473.
- Meyer, J. P., & Parfyonova, N. M. (2009). Normative commitment in the workplace: A theoretical analysis and re-conceptualization. *Human Resource Management Review*, 20(4), 283–294.
- Meyer, J. P., Srinivas, E. S., Lal, J. B., & Topolnytsky, L. (2007). Employee commitment and support for an organizational change: Test of the three-component model in two cultures. *Journal of Occupational and Organizational Psychology*, 80(2), 185–211.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2009). Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences. *Journal of Vocational Behavior*, 61(1), 20–52.
- Michaelis, B., Stegmaier, R., & Sonntag, K. (2009). Affective Commitment to Change and Innovation Implementation Behavior: The Role of Charismatic Leadership and Employees' Trust in Top Management. *Journal of Change Management*, 9(4), 399–417.
- Michaelis, B., Stegmaier, R., & Sonntag, K. (2010). Shedding light on followers' innovation implementation behavior: The role of transformational leadership, commitment to change, and climate for initiative. *Journal of Managerial Psychology*, 25(4), 408–429.
- Miller, D. W., & Marks, L. J. (1997). The effects of imagery-evoking radio advertising strategies on affective responses. *Psychology and Marketing*, 14, 337–360.
- Miller, K. I., Ellis, B. H., Zook, E. G., & Lyles, J. S. (1990). An Integrated Model of Communication, Stress, and Burnout in the Workplace. *Communication Research*, 17(3), 300–326.
- Miller, K. I., & Monge, P. R. (1985). Social Information and Employee Anxiety about Organizational Change. *Human Communication Research*, 11(3), 365–386.
- Miller, V. D., Johnson, J. R., & Grau, J. (1994). Antecedents to willingness to participate in a planned organizational change. *Journal of Applied Communication Research*, 22(1), 59–80.
- Milliken, F. J. (1987). Three Types of Perceived Uncertainty About the Environment: State, Effect, and Response Uncertainty. Academy of Management Review, 12(1), 133–143.
- Mischel, W. (1977). Personality at the Crossroads: Current issues in inter-

actional psychology. In D. Magnusson & N. S. Endler (Eds.), (chap. The interaction of person and situation). Hillsdale, NJ: Erlbaum.

- Morales, A. C., Amir, O., & Lee, L. (2017). Keeping It Real in Experimental Research—Understanding When, Where, and How to Enhance Realism and Measure Consumer Behavior. *Journal of Consumer Research*, 44(2), 465–476.
- Nadler, D. A., & Tushman, M. L. (1995). Discontinous Change: Leading Organizational Transformation. In D. A. Nadler, R. B. Show, & A. E. Walton (Eds.), (pp. 14–33). San Francisco: Jossey-Bass.
- Ndofor, H. A., & Levitas, E. (2004). Signaling the Strategic Value of Knowledge. Journal of Management, 30(5), 685–702.
- Neubert, M. J., & Cady, S. H. (2001). Program commitment: A multistudy longitudinal field investigation of its impact and antecedents. *Personnel Psychology*, 54(2), 421–448.
- Neves, P., & Caetano, A. (2009). Commitment to Change: Contributions to Trust in the Supervisor and Work Outcomes. *Group & Organization Management*, 34(6), 623–644.
- Nieto-Rodriguez, A. (2016). How to Prioritize Your Company's Projects. Harvard Business Review.
- Nohe, C., Michaelis, B., Menges, J. I., Zhang, Z., & Sonntag, K. (2013). Charisma and organizational change: A multilevel study of perceived charisma, commitment to change, and team performance. *The Leadership Quarterly*, 24(2), 378–389.
- O'Connor, C. A. (1993). Resistance: The Repercussions of Change. Leadership & Organization Development Journal, 14(6), 30–36.
- Oreg, S. (2006). Personality, context, and resistance to organizational change. European Journal of Work and Organizational Psychology, 15(1), 73–101.
- Oreg, S., & Berson, Y. (2011). Leadership and Employees' Reactions to Change: The Role of Leaders' Personal Attributes and Transformational Leadership Style. *Personnel Psychology*, 64(3), 627–659.
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change Recipients' Reactions to Organizational Change: A 60-Year Review of Quantitative Studies. *The Journal of Applied Behavioral Science*, 47(4), 461–524.
- O'Reilly, C. A., & Pfeffer, J. (2000). Hidden Value: How Ordinary People Can Produce Extraordinary Results. Boston, MA: Harvard Business School Press.
- Paper, D., & Chang, R.-D. (2005). The state of business process reengineering: A search for success factors. *Total Quality Management & Business Excellence*, 16(1), 121–133.
- Parish, J., Cadwallader, S., & Busch, P. (2008). Want to, need to, ought to: Employee commitment to organizational change. *Journal of Organizational Change Management*, 21(1), 32–52.
- Perkins, S. J., & Hendry, C. (2005). Ordering Top Pay: Interpreting the Signals. Journal of Management Studies, 42(7), 1443–1468.
- Pervin, L. A. (1989). Persons, Situations, Interactions: The History of a Controversy and a Discussion of Theoretical Models. Academy of Management Review, 14(3), 350–360.
- Pescosolido, A. T. (2002). Emergent leaders as managers of group emotion. The Leadership Quarterly, 13(5), 583–599.
- Pettigrew, A. M. (1990). Longitudinal Field Research on Change: Theory and Practice. Organization Science, 1(3), 267–292.
- Pfeffer, J. (1981). Organizational Behavior. In B. M. Staw & L. L. Cummings (Eds.), (pp. 1–52). Greenwich, CT: JAI Press.
- Piderit, S. K. (2000). Rethinking Resistance and Recognizing Ambivalence: A Multidimensional View of Attitudes Toward an Organizational Change. Academy of Management Review, 25(4), 783–794.
- Pillai, R., Williams, E. A., Lowe, K. B., & Jung, D. I. (2003). Personality, transformational leadership, trust, and the 2000 U.S. presidential vote. *The Leadership Quarterly*, 14(2), 161–192.
- Podsakoff, N. P., Podsakoff, P. M., MacKenzie, S. B., Maynes, T. D., & Spoelma, T. M. (2014). Consequences of unit-level organizational citizenship behaviors: A review and recommendations for future research. *Journal of Organizational Behavior*, 35(S1), 87–119.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology*, 63(1), 539–569.
- Porras, J., & Robertson, P. (1992). Handbook of Industrial & Organizational Psychology. In (2nd ed., pp. 719–822). Palo Alto: Consulting Psychologists Press.

Porter, M. E., & Nohria, N. (2018). How CEOs manage time. Harvard

Business Review.

- Postmes, T., Baray, G., Haslam, S. A., Morton, T. A., & Swaab, R. I. (2006). Individuality and the group: Advances in social identity. In (pp. 215–236). London: SAGE Publications, Inc.
- Potters, J., Sefton, M., & Vesterlund, L. (2007). Leading-by-example and signaling in voluntary contribution games: An experimental study. *Economic Theory*, 33(1), 169–182.
- Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing Professional Identity: The Role of Work and Identity Learning Cycles in the Customization of Identity Among Medical Residents. *Academy* of Management Journal, 49(2), 262.
- Quinn, J. B. (1985). Managing innovation: Controlled chaos. Harvard Business Review, 63(3), 73–84.
- Rafferty, A. E., & Griffin, M. A. (2006). Perceptions of organizational change: A stress and coping perspective. *Journal of Applied Psychology*, 91(5), 1154–1162.
- Rafferty, A. E., & Restubog, S. L. D. (2010). The Impact of Change Process and Context on Change Reactions and Turnover During a Merger. *Journal of Management*, 36(5), 1309–1338.
- Rafferty, A. E., & Restubog, S. L. D. (2017). Why Do Employees' Perceptions of their Organization's Change History Matter? The Role of Change Appraisals. *Human Resource Management*, 56(3), 533–550.
- Richardson, P, & Denton, K. (1996). Communicating change. Human Resource Management, 35(2), 203–216.
- Riketta, M. (2005). Organizational identification: A meta-analysis. Journal of Vocational Behavior, 66(2), 358–384.
- Rinck, M., Glowalla, U., & Schneider, K. (1992). Mood-congruent and moodincongruent learning. *Memory & Cognition*, 20(1), 29–39.
- Rohan, M. J. (2000). A Rose by Any Name? The Values Construct. Personality and Social Psychology Review, 4(3), 255–277.
- Rokeach, M. (1973). The nature of human values. New York: Free Press.
- Ross, S. A. (1977). The Determination of Financial Structure: The Incentive-Signalling Approach. *The Bell Journal of Economics*, 8(1), 23–40.
- Rousseau, D. M. (1995). Psychological contracts in organizations: Understanding written and unwritten agreements. Thousand Oaks, CA: SAGE Publications, Inc.
- Rousseau, D. M., & Tijoriwala, S. A. (1999). What's a good reason to change? motivated reasoning and social accounts in promoting organizational change. *Journal of Applied Psychology*, 84(4), 514–528.
- Sagie, A., Elizur, D., & Koslowsky, M. (1995). Decision type, participative decision making (PDM), and organizational behavior: An experimental simulation. *Human Performance*, 8(2), 81–94.
- Salancik, G. R., & Pfeffer, J. (1978). A Social Information Processing Approach to Job Attitudes and Task Design. Administrative Science Quarterly, 23(2), 224–253.
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. Imagination, Cognition and Personality, 9(3), 185–211.
- Scandura, T. A., & Williams, E. A. (2000). Research Methodology In Management: Current Practices, Trends, And Implications For Future Research. Academy of Management Journal, 43(6), 1248–1264.
- Schoel, C., Bluemke, M., Mueller, P., & Stahlberg, D. (2011). When autocratic leaders become an option—Uncertainty and self-esteem predict implicit leadership preferences. *Journal of Personality and Social Psychology*, 101(3), 521–540.
- Schriesheim, C. A., & DeNisi, A. S. (1981). Task dimensions as moderators of the effects of instrumental leadership: A two-sample replicated test of path-goal leadership theory. *Journal of Applied Psychology*, 66(5), 589–597.
- Schultz, F., Utz, S., & Göritz, A. (2011). Is the medium the message? perceptions of and reactions to crisis communication via twitter, blogs and traditional media. *Public Relations Review*, 37(1), 20–27.
- Schwartz, S. H. (1992). Advances in experimental social psychology. In M. P. Zanna (Ed.), (Vol. 25, pp. 1–65). New York: Academic Press.
- Schwartz, S. H. (1996). The psychology of values. In C. Seligman, J. M. Olson, & M. P. Zanna (Eds.), (pp. 1–24). Mahwah, NJ: Erlbaum.
- Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. Online Readings in Psychology and Culture, 2(1), 2307–2919.
- Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53, 550–562.
- Schwartz, S. H., Melech, G., Lehmann, A., Burgess, S., Harris, M., & et al.

(2001). Extending the Cross-Cultural Validity of the Theory of Basic Human Values with a Different Method of Measurement. *Journal of Cross-Cultural Psychology*, 32(5), 519–542.

- Schwartz, S. H., Sagiv, L., & Boehnke, K. (2000). Worries and Values. Journal of Personality, 68(2), 309–346.
- Schwarz, N. (1990). Handbook of motivation and cognition: Foundations of social behavior. In E. T. Higgins & R. M. Sorrentino (Eds.), (chap. Feelings as information: Informational and motivational functions of affective states). New York: Guilford.
- Schwarz, N., & Clore, G. L. (2003). Mood as Information: 20 Years Later. Psychological Inquiry, 14(3–4), 296–303.
- Schweiger, D. M., & Denisi, A. S. (1991). Communication with Employees Following a Merger: A Longitudinal Field Experiment. Academy of Management Journal, 34(1), 110–135.
- Seo, M.-G., Taylor, M. S., Hill, N. S., Zhang, X., Tesluk, P. E., & et al. (2012). The Role of Affect and Leadership during Organizational Change. *Personnel Psychology*, 65(1), 121–165.
- Seppälä, T., Lipponen, J., Bardi, A., & Pirttilä-Backman, A.-M. (2012). Change-oriented organizational citizenship behaviour: An interactive product of openness to change values, work unit identification, and sense of power: Change-oriented OCB. *Journal of Occupational and Organizational Psychology*, 85(1), 136–155.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Experimental and quasi-experimental designs for generalized causal inference. Boston, MA: Houghton-Mifflin.
- Shamir, B. (1999). Taming charisma for better understanding and greater usefulness. *The Leadership Quarterly*, 10(4), 555–562.
- Shamir, B., Arthur, M. B., & House, R. J. (1994). The rhetoric of charismatic leadership: A theoretical extension, a case study, and implications for research. *The Leadership Quarterly*, 5(1), 25–42.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory. Organization Science, 4(4), 577–594.
- Shamir, B., & Howell, J. M. (1999). Organizational and contextual influences on the emergence and effectiveness of charismatic leadership. *The Leadership Quarterly*, 10(2), 257–283.
- Shamir, B., Zakay, E., Breinin, E., & Popper, M. (1998). Correlates of charismatic leader behavior in military units: Subordinates' attitudes, unit characteristics, and superiors' appraisals of leader performance. Academy of Management Journal, 41(4), 397–409.
- Sheeran, P., & Abraham, C. (2003). Mediator of Moderators: Temporal Stability of Intention and the Intention-Behavior Relation. *Personality* and Social Psychology Bulletin, 29(2), 205–215.
- Shin, J., Seo, M.-G., Shapiro, D. L., & Taylor, M. S. (2015). Maintaining Employees' Commitment to Organizational Change: The Role of Leaders' Informational Justice and Transformational Leadership. *The Journal of Applied Behavioral Science*, 51(4), 501–528.
- Shin, J., Taylor, M. S., & Seo, M.-G. (2012). Resources for Change: The Relationships of Organizational Inducements and Psychological Resilience to Employees' Attitudes and Behaviors toward Organizational Change. Academy of Management Journal, 55(3), 727–748.
- Shum, P., Bove, L., & Auh, S. (2008). Employees' affective commitment to change: The key to successful CRM implementation. *European Journal of Marketing*, 42(11/12), 1346–1371.
- Siemsen, E., Roth, A., & Oliveira, P. (2010). Common Method Bias in Regression Models With Linear, Quadratic, and Interaction Effects. Organizational Research Methods, 13(3), 456–476.
- Silvia, P. J., & Beaty, R. E. (2012). Making creative metaphors: The importance of fluid intelligence for creative thought. *Intelligence*, 40(4), 343–351.
- Simons, T. (2002). Behavioral Integrity: The Perceived Alignment Between Managers' Words and Deeds as a Research Focus. Organization Science, 13(1), 18–35.
- Simons, T., Leroy, H., Collewaert, V. & Masschelein, S. (2015). How Leader Alignment of Words and Deeds Affects Followers: A Meta-analysis of Behavioral Integrity Research. *Journal of Business Ethics*, 132(4), 831–844.
- Simons, T., Tomlinson, E. C., & Leroy, H. (2011). Handbook of positive organizational scholarship. In K. S. Cameron & G. M. Spreitzer (Eds.), (chap. Research on behavioral integrity: A promising construct for positive organi-zational scholarship). Oxford, UK: Oxford University

Press.

- Sirkin, H., Keenan, P., & Jackson, A. (2005). The Hard Side of Change Management. Harvard Business Review, 1–25.
- Skinner, B. F. (1957). *Verbal Behavior*. New York: Appleton-Century-Crofts. Skyia, E., & Sheehan, P. W. (1977). The human subject: A study of individual
- experimental participation. *Human Relations*(30), 143–154. Sliwka, D. (2007). Trust as a Signal of a Social Norm and the Hidden Costs
- of Incentive Schemes. *American Economic Review*, *97*(3), 999–1012. Sonenshein, S., & Dholakia, U. (2012). Explaining Employee Engage-
- ment with Strategic Change Implementation: A Meaning-Making Approach. Organization Science, 23(1), 1–23.
- Sosik, J. J. (2005). The role of personal values in the charismatic leadership of corporate managers: A model and preliminary field study. *The Leadership Quarterly*, 16(2), 221–244.
- Spector, P. E., & Brannick, M. T. (2011). Methodological Urban Legends: The Misuse of Statistical Control Variables. Organizational Research Methods, 14(2), 287–305.
- Spence, M. (1973). Job Market Signaling. The Quarterly Journal of Economics, 87(3), 355–374.
- Spence, M. (2002). Signaling in Retrospect and the Informational Structure of Markets. American Economic Review, 92(3), 434–459.
- Srivastava, J. (2001). The Role of Inferences in Sequential Bargaining with One-Sided Incomplete Information: Some Experimental Evidence. Organizational Behavior and Human Decision Processes, 85(1), 166– 187.
- Stam, D., van Knippenberg, D., & Wisse, B. (2010). Focusing on followers: The role of regulatory focus and possible selves in visionary leadership. *The Leadership Quarterly*, 21(3), 457–468.
- Statista. (2020). Number of cumulative cases of coronavirus (COVID-19) in the United States from January 22 to June 4, 2020, by day. Statista. Retrieved 2020-06-04, from Https://Www.Statista.Com/ Statistics/1103185/Cumulative-Coronavirus-Covid19 -Cases-Number-Us-by-Day/
- Stern, P. C., Dietz, T., & Guagnano, G. A. (1998). A Brief Inventory of Values. Educational and Psychological Measurement, 58(6), 984–1001.
- Stiglitz, J. E. (2000). The Contributions of the Economics of Information to Twentieth Century Economics. *The Quarterly Journal of Economics*, 115(4), 1441–1478.
- Stiglitz, J. E. (2002). Information and the Change in the Paradigm in Economics. American Economic Review, 92(3), 460–501.
- Stouten, J., Rousseau, D. M., & De Cremer, D. (2018). Successful Organizational Change: Integrating the Management Practice and Scholarly Literatures. Academy of Management Annals, 12(2), 752–788.
- Suazo, M. M., Martínez, P. G., & Sandoval, R. (2009). Creating psychological and legal contracts through human resource practices: A signaling theory perspective. *Human Resource Management Review*, 19(2), 154–166.
- Sverdlik, N., & Oreg, S. (2009). Personal Values and Conflicting Motivational Forces in the Context of Imposed Change. *Journal of Personality*, 77(5), 1437–1466.
- Sverdlik, N., & Oreg, S. (2015). Identification During Imposed Change: The Roles of Personal Values, Type of Change, and Anxiety: Identification During Imposed Change. *Journal of Personality*, 83(3), 307–319.
- Sy, T., Côté, S., & Saavedra, R. (2005). The Contagious Leader: Impact of the Leader's Mood on the Mood of Group Members, Group Affective Tone, and Group Processes. *Journal of Applied Psychology*, 90(2), 295–305.
- Taj, S. A. (2016). Application of signaling theory in management research: Addressing major gaps in theory. European Management Journal, 34(4), 338–348.
- Tajfel, H. (1978). Differentiation between social groups: Studies in the social psychology of intergroup relations. In H. Tajfel (Ed.), (pp. 61–76). London: Academic Press.
- Taylor, B. (2014). The Best Leaders "Talk the Walk.". Harvard Business Review.
- Tetenbaum, T. J. (1998). Shifting paradigms: From Newton to Chaos. Organizational Dynamics, 26(4), 21–32.
- The Guardian. (2020). More than 100,000 Americans have died from Covid-19. Here is that tragic story in figures. *The Guardian*. Retrieved 2020-06-05, from Https://Www.Theguardian.Com/World/2020/ May/27/Us-Coronavirus-Deaths-Pass-100000-Statistics

- Thomas, J. B., Clark, S. M., & Gioia, D. A. (1993). Strategic Sensemaking and Organizational Performance: Linkages Among Scanning, Interpretation, Action, and Outcomes. Academy of Management Journal, 36(2), 239–270.
- Thong, J. Y. L., Yap, C.-S., & Raman, K. S. (1996). Top Management Support, External Expertise and Information Systems Implementation in Small Businesses. *Information Systems Research*, 7(2), 248–267.
- Tosi, H. L., Misangyi, V. F., Fanelli, A., Waldman, D. A., & Yammarino, F. J. (2004). CEO charisma, compensation, and firm performance. *The Leadership Quarterly*, 15(3), 405–420.
- Towler, A., Watson, A., & Surface, E. (2014). Signaling the importance of training. Journal of Managerial Psychology, 29(7), 829–849.
- Towler, A. J. (2003). Effects of Charismatic Influence Training on Attitudes, Behavior and Performance. *Personnel Psychology*, 56(2), 363–381.
- Triandis, H. C. (1980). Nebraska symposium on motivation. In H. Howe & M. Page (Eds.), (Vol. 27, pp. 195–259). Lincoln: University of Nebraska Press.
- Tsoukas, H., & Chia, R. (2002). On Organizational Becoming: Rethinking Organizational Change. Organization Science, 13(5), 567–582.
- Tucker, R. C. (1968). The theory of charismatic leadership. Daedalus, 731– 756.
- Turban, D. B., & Greening, D. W. (1996). Corporate social performance and organizational attractiveness to prospec- tive employees. Academy of Management Journal, 40, 658–672.
- Tushman, M. L., Newman, W. H., & Romanelli, E. (1986). Convergence and Upheaval: Managing the Unsteady Pace of Organizational Evolution. *California Management Review*, 29(1), 29–44.
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. Science, 185(4157), 1124–1131.
- van der Smissen, S., Schalk, R., & Freese, C. (2013). Organizational change and the psychological contract: How change influences the perceived fulfillment of obligations. *Journal of Organizational Change Management*, 26(6), 1071–1090.
- van Dierendonck, D., Stam, D., Boersma, P., de Windt, N., & Alkema, J. (2014). Same difference? exploring the differential mechanisms linking servant leadership and transformational leadership to follower outcomes. *The Leadership Quarterly*, 25(3), 544–562.
- van Knippenberg, B., & van Knippenberg, D. (2005). Leader Self-Sacrifice and Leadership Effectiveness: The Moderating Role of Leader Prototypicality. *Journal of Applied Psychology*, 90(1), 25–37.
- van Knippenberg, D., & Sitkin, S. B. (2013). A Critical Assessment of Charismatic—Transformational Leadership Research: Back to the Drawing Board? Academy of Management Annals, 7(1), 1–60.
- van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *The Leadership Quarterly*, 15(6), 825–856.
- Van Schaik, C. P. (2016). The primate origins of human nature. Hoboken, NJ: Wiley.
- Van Vugt, M. (2006). Evolutionary Origins of Leadership and Followership. Personality and Social Psychology Review, 10(4), 354–371.
- Van Vugt, M., & Ahuja, A. (2011). Naturally selected: The evolutionary science of leadership. Harper Business.
- Van Vugt, M., Hogan, R., & Kaiser, R. B. (2008). Leadership, followership, and evolution: Some lessons from the past. *American Psychologist*, 63(3), 182–196.
- Venus, M., Stam, D., & van Knippenberg, D. (2013). Leader emotion as a catalyst of effective leader communication of visions, value-laden messages, and goals. Organizational Behavior and Human Decision Processes, 122(1), 53–68.
- Venus, M., Stam, D., & van Knippenberg, D. (2019). Visions of Change as Visions of Continuity. Academy of Management Journal, 62(3), 667–690.
- Volkswagen AG. (2019). Dedicated ambassadors of integrity. Volkswagen AG. Retrieved 2020-05-11, from Https://Www.Volkswagenag.Com/ En/News/Stories/2019/07/Doing-the-Right-Thing.Html
- Vroom, V. H. (1964). Work and motivation. New York: Wiley.
- Waldman, D. A., Ramirez, G. G., House, R. J., & Puranam, P. (2001). Does Leadership Matter? CEO Leadership Attributes and Profitability Under Conditions of Perceived Environmental Uncertainty. Academy of Management Journal, 44(1), 134–143.

Waldman, D. A., & Yammarino, F. J. (1999). Ceo Charismatic Leadership:

Levels-of-Management and Levels-of-Analysis Effects. Academy of Management Review, 24(2), 266–285.

- Wanous, J. P., Reichers, A. E., & Austin, J. T. (2000). Cynicism about Organizational Change: Measurement, Antecedents, and Correlates. Group & Organization Management, 25(2), 132–153.
- Watkins, J. M., & Mohr, B. J. (2001). Appreciative inquiry: Change at the speed of imagination. San Francisco, CA: Jossey-Bass.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. Psychological Bulletin, 98(2), 219–235.
- Weber, M. (1905). The Protestant ehtic and the spirit of capitalism. New York: Scribner's.
- Weber, M. (1947). The theory of social and economic organization (A. M. Henderson & T. Parsons, Eds.). New York: Oxford University Press Trans.
- Weber, M. (1968). On Charisma and Institutional Building. Chicago: University Chicago Press.
- Weick, K. E. (1977). Laboratory Experimentation with Organizations: A Reappraisal. Academy of Management Review, 2(1), 123–127.
- Weick, K. E., & Quinn, R. E. (1999). Organizational change and development. Annual Review of Psychology, 50(1), 361–386.
- Wheatley, M. J. (1992). Leadership and the new science: Learning about organizations from an orderly universe. San Francisco, CA: Berrett-Koehler.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a Job: Revisioning Employees as Active Crafters of Their Work. Academy of Management Review, 26(2), 179–201.
- Yaffe, T., & Kark, R. (2011). Leading by example: The case of leader OCB. Journal of Applied Psychology, 96(4), 806–826.
- Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The Leadership Quarterly*, 10(2), 285–305.
- Yukl, G. (2002). *Leadership in Organizations* (5th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Yukl, G., & Van Fleet, D. D. (1992). Handbook of Industrial and Organizational Psychology. In M. D. Dunnette & L. M. Hough (Eds.), (3rd ed., chap. Theory and research on leadership in organizations). Palo Alto, CA: Consulting Psychologists Press.
- Zahavi, A. (1975). Mate selection—A selection for handicap. Journal of Theoretical Biology, 53, 205–214.