Accelerating Leadership Development:

An evidence-based perspective

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CONTENTS

CHAPTER 1

GENERAL INTRODUCTION

In the past decade, leadership development has gained status as a critical enabler for increasing and sustaining the competitiveness of organizations. This new emphasis on "development" represents a shift from the traditional approach of talent management that relies on recruitment, compensation, and performance monitoring. While the conventional model of talent management might have worked well in the past, it might not be equipped to fare well in today's environment. Organizations are now operating in a context that is increasingly dynamic and complex—raising the demands to fill critical talent gaps and changing the requirements for the leadership pipeline. Some business commentators have argued that we are moving from the "War for talent" to the "War to *developing* talent" era (Schwartz et al., 2013). A survey of 500 top executives conducted by McKinsey revealed that almost two-thirds of the survey respondents identified leadership development as their number one concern (McKinsey, 2012). US companies alone are estimated to spend almost 14 billion US dollars annually on leadership development, and this spending is expected to increase significantly in the future (O'Leonard & Loew, 2012). In response to this demand, business schools are focusing their mission and activities around 'educating leaders' (DeRue et al., 2011; Kniffin et al., 2020). The cost of such leadership development offerings from a top business school can reach 150,000 US dollars per person (Gurdjian et al., 2014).

However, as organizations and business schools continue with their engagement in leadership development, some scholars have questioned the value and efficacy of these leadership development programs and activities. In his latest book *Leadership BS*, Pfeffer (2015) concludes that "the leadership industry has failed" (p.4)—arguing that there is scarce evidence that all the spending produces better leaders, and that many prescriptions for developing leaders are often more problematic and invalid than generally acknowledged. This comment is echoed by other scholars in the field who have long lamented over the lack of rigorous theoretical grounding and empirical research on leadership development and called for more critical, evidence-based work (Conger, 1993; Day, 2000).

The clear and urgent demand for rigorous research on leadership development to serve the dual purpose of addressing organizational priority and contributing to this nascent but growing stream of literature constitutes an impetus for this dissertation. To prevent any potential confusion, however, an explicit distinction should be made here between the field of leadership and leadership development, the latter of which forms the basis of this dissertation. While studies of leadership (Lord et al., 2017), spanning over a century, have centered around building leadership theories and testing those theories (such as charismatic leadership, transformational leadership, situational leadership, etc.), research on leadership development—a relatively new field, tends to focus less on leadership theory and more on developmental science (Day et al., 2014). In other words, rather than exploring various characteristics that might correspond with effective leaders, leadership development scholars, and this dissertation, are more interested in understanding what can be done to help individuals develop to be more effective in leadership roles and processes (Day & Dragoni, 2015; Van Velsor et al., 2010).

An Evidence-based Perspective on Accelerating Leadership Development

The proliferation of more experiential leadership development programs is not necessarily accompanied by evidence that more and better leaders are being developed. There is a paucity of empirical research that examines these developmental efforts--both in business schools and in companies (Avolio, 2007). Without systematic and rigorous research, it is difficult to know what is effective and what is not. Conger (2010, p. 709) observes that much leadership development "*has never had the impact that their champions, designers, and sponsors aspire to have*." Admittedly, evaluating the effectiveness of LDPs is a complex process given there are many factors that are involved in influencing the effectiveness of the intervention, including the training criteria, design, delivery, context, and the participants' characteristics (Hoole & Martineau, 2014). As a result, Ling (2012, p. 80) contends that the practice of evaluation tends to "*start with optimism and end with modest or immeasurable outcomes*." It is not difficult to see why evaluation proves to be a frustrating business and is thus often ignored in practice (Saunders, 2006).

However, without the support of (scientific) evidence and rigorous evaluation, management practice is likely to have dubious value. As Pfeffer & Sutton (2006, p. 78) argued, organizations need to "*face hard facts about what works and what doesn't, understanding the dangerous half-truths that constitute so much conventional wisdom and rejecting the total nonsense that too often passes for sound advice*". Within management research, this concept is called evidence-based management, which refers to translating knowledge and principles based on the best available scientific evidence into organization practice, enabling managers to make decisions informed by social science and organizational research (Rousseau, 2006). As with the case of leadership development, what we had observed instead is the prevailing research-practice gap, where research findings don't appear to transferred well to the organization, and managers and practitioners are more likely to follow bad advice from popular books or consultants based on weak evidence (Rousseau, 2006). This dissertation is intended to answer the call for more research to provide empirical substantiation to illuminate this relationship between management research and management practice (Kieser et al., 2015), specifically in the area of leadership development.

The Case for Acceleration of Leadership Development

In a recent review of leadership development research, Day & Dragoni (2015) suggest that leadership development, particularly at the individual level, is essentially a form of human development. This perspective, with strong roots in developmental theory, stresses the notion that adult development involves the growth and elaboration of a person's holistic way of understanding the self in relation to the environment across the lifespan. While we agree that leadership development, similar to the process of human development, could be viewed as something that unfolds over a longer time period, perhaps across the entire lifetime of a person (Brim & Kagan, 1980), we also recognize the pressing need and pressure of organizations for a way to address their immediate problem of leadership talent shortage. Apart from the embedded on-the-job developmental opportunities as a long-standing vehicle for learning (Dragoni et al., 2009; McCall et al., 1988), we are seeing more offerings of shorter, formal training programs given to managers, with the assumption that they come out of these programs being ready to lead effectively.

This is why the notion of 'acceleration' is important in the context of leadership development (Avolio & Hannah, 2008). It is simply not enough for a leadership development intervention to be *effective* in terms of delivering the desired result, but it should also be able to achieve that set goal in a relatively limited period of time. The question, therefore, becomes, whether and how we can expedite this change process that underlies much of an individual's learning and transformation. In other words, what might be the critical ingredients that *accelerate* leadership development, and in this way also enhance the value and efficacy of developmental intervention?

In the race to develop better leaders more effectively, we see an exponential growth of experiential leadership development programs. These programs are designed to get leaders to go through a significant transformation in a relatively short period of time by 'shocking' participants into an enhanced understanding of their leadership approach as well have participants experiment with new ways of leading. This idea is rooted in literature which suggests clear benefits to focus on the negative which can lead to more fundamental changes with a potential long-lasting effect--essentially, that "bad is stronger than good" (Baumeister et al., 2001). For example, people are relatively more likely to monitor negative feedback than a positive one, more likely to remember it, and more likely to be influenced by it.

Central to this idea is the belief that these difficult experiences can help facilitate changes in the mindsets of the participants. Mindset in leader development context can be referred to as a way of characterizing changing assumptions and patterns of thinking that leaders look at oneself or the world (Kennedy et al., 2013). The literature on mindsets or implicit theories suggests that behavior is influenced by these underlying blueprints in a subtle but systematic way– changing leadership behavior may thus require changing the underlying core assumptions that people have (Lord et al., 2020; Schyns et al., 2011).

Therefore, with the limited time that available for a program, it might be more effective to shift the focus from the training of new behavioral habits (which usually takes a lot more time and practice) to targeting mindsets that form the basis of changing behavior. Moreover, drilling leaders towards incorporating specific behaviors may lead to an inability to transport the behavior from one situation to the next. This is known as a "transfer problem" which refers to the tendency for targeted behaviors to fail to transfer to the relevant environment. Leaders often find it challenging to implement the transfer because what is required of them is essentially the change in behaviors that may disrupt the routines or habits (based on old mindset) that formerly relied upon to accomplish their tasks. For instance, take the mindset or identity of being a leader. While we can train leaders to demonstrate more confidence in their role as a leader (e.g., by speaking up more, or louder) it is impossible to teach leaders the 'right answer' for every situation. By cultivating a new leadership mindset, tied into their unique values and characters, however, will help them to lead more effectively in different situations.

Developing Leaders for Diverse Workplace

One of the important mindsets for leaders today is arguably one that pertains to the issue of diversity. Given the increasingly diverse teams and organizations, effective management of diversity is a complicated challenge given the potential advantages and disadvantages of diversity. With leadership now seen as a socially constructed process involving an entire group, and effective leadership is relational in nature (Crossan et al., 2008), leaders are in the position to play a key role in the ultimate success or failure of diverse teams and organizations (Homan et al., 2020).

At the team level, the benefits of diversity come from the team's ability to tap into and integrate diverse knowledge, expertise, and perspectives (De Dreu et al., 2008). On the other hand, diversity can also harm group functioning because the dissimilarity can bring tension and conflicts that disrupt team information elaboration (Van Knippenberg et al., 2004). This highlights the need to identify factors that can help leaders shape team dynamics in a way that the synergetic benefits of diversity can be realized. One of the potential magic bullets that researchers have proposed and examined is diversity beliefs—this is the mindset that people have about the value of diversity for group functioning (Homan et al., 2007). However, while there's plenty of evidence establishing the benefits of diversity beliefs for team functioning (Hentschel et al., 2013; Homan et al., 2007; Van Knippenberg et al., 2007), not much research has answered the question of whether and how diversity beliefs can be cultivated.

This is a missed opportunity as beliefs are malleable (Phillips & Lount, 2007) and understanding how such beliefs can be predicted stands to benefit organizations greatly by helping them design impactful interventions (Nishii et al., 2018) that move the needle in terms of changing people's behavior (as we have argued earlier in the discussion of mindset). Similar to leadership development programs, organizations are spending a lot of money each year on diversity training and initiatives (Leslie, 2019). Yet, diversity training has yielded mixed results and not much confidence in terms of its effectiveness (Chang et al., 2019). A focus on changing diversity mindset for leaders and teams holds a promise for increasing the efficacy diversity intervention, and thereby helping teams and organizations to harvest the benefits of their diversity.

Dissertation Overview

The dissertation consists of three empirical chapters (chapters 2-4) that utilize different methods (qualitative study, field survey study, and an experiment, respectively). While all three projects fall under this domain of experiential learning and leadership development, each chapter is intended to be a self-contained, publishable paper that deals with a more fine-grained specific research focus and can be read as such. The three empirical chapters are embedded in this introductory chapter (chapter 1) and the general discussion chapter (chapter 5). I want to note here that for the rest of the dissertation, I will use the first-person plural pronouns (e.g. "we" instead of "I") to recognize the contributions from my supervisors and collaborators to each of the chapters.

In Chapter 2, we tackle the fundamental question around the perplexing phenomenon that we observe in the leadership development industry: *why do organizations continue to engage and invest in leadership development without sufficient evidence that leaders are actually being developed*. This question addresses the increasing need related to the evaluation of leadership development program—the expanded understanding of relevant criteria for program effectiveness. To examine this question and understand the nuance around this disconnect, we take a qualitative approach starting with a pilot study involving a focus group with business school professors. Here, we found that what academics count as 'evidence' for their leadership programs went well beyond the goals of developing better leaders. We confirm and build on those ideas in study 2, involving interviews with key stakeholders in leadership development across six organizations. Our qualitative analysis identifies four narratives (i.e., empiricist, believer, cynic, and pragmatist), each of which suggests distinct storylines for investing in leadership development programs. We discuss how these results confirm, challenge, and extend the current thinking on leadership development effectiveness and ideas around evidence-based management.

In chapter 3, we take a closer look at a particular type of leadership development program—the kind that involves putting participants in uncomfortable situations, which we argued earlier can help to accelerate learning and change for leaders. We focus particularly on the role of negative emotion triggered in these types of programs and explore whether that negative emotional experience can be beneficial for learning. However, we further propose that for negative emotion to be adaptive, one of the key enablers is mindfulness. Drawing on mindfulness theory and prior research on emotion and learning, we suggest that mindfulness can play a key moderating role to achieve either the proposed benefits or the known downsides from emotionally challenging experiences. We focus on two field survey studies involving business school students participating in leadership development programs (one with EMBA, and another with MBA students). The results of both studies provided partial support for our hypotheses. In study 1, we found mindfulness to be a critical condition that helps to mitigate the negative effect of negative emotion on behavioral transfer, and in study 2 we further demonstrated a positive effect of negative emotion on behavioral transfer. We discuss the theoretical implications and investigated the effects of mindfulness and negative emotions on different indicators of training effectiveness in the workplace.

Building on the theme of this dissertation that highlights the developmental role of experience especially the uncomfortable one in changing mindset, in chapter 4 we focus on a particular kind of mindset that leaders today need to cultivate in themselves and their teams—a diversity mindset. We argue that diversity mindset, or as coined in the literature, diversity beliefs, can be influenced by having people reappreciate the lessons learned from their past experience working with diverse others. We test this idea with an experiment—a 2x2 design where we manipulated a promotion (vs prevention) focus and a personalized (vs factual) information about the role of diversity in work teams. Results from an experiment with 175 randomly composed teams (each team demonstrating high diversity in preferred work approaches) revealed that promotion focus and personalized knowledge independently contributed to higher diversity beliefs and, in turn, indirectly, team information elaboration. These effects further improved the team's ability to integrate opposing viewpoints (i.e., team integrative complexity). Our results help to uncover key antecedents of diversity beliefs and add to a growing body of evidence demonstrating the pivotal role of diversity beliefs in improving the extent to which team members share information and integrate diverse perspectives. This has implications on how to design intervention in organizations to develop diversity beliefs in leaders and their teams.

Finally, in Chapter 5, we summarize the previous chapters and discuss the contributions of all the chapters in an integral manner. This includes the theoretical and practical implications as well as potential avenues for future research that can be derived from this dissertation.

CHAPTER 2

LEADERSHIP DEVELOPMENT BEYOND DEVELOPING LEADERS: TOWARDS A MULTI-NARRATIVE UNDERSTANDING OF EVIDENCE

ABSTRACT

While leadership development programs are often criticized for lacking evidence that leaders are developed, such practices continue to garner investment. In this study, we examine alternative criteria people use to justify leadership development programs, if not to develop better leaders. We extend prior literature on leadership development effectiveness with insights from epistemological pluralism which suggests a broader view on what can be counted as ‘evidence’. In an initial focus group with business school professors, we found that what academics count as ‘evidence’ for their leadership programs went well beyond the goals of developing better leaders. We confirm and build on those ideas in study 2, involving interviews with key stakeholders in leadership development across six organizations. Our qualitative analysis identifies four narratives (i.e., empiricist, believer, cynic, and pragmatist), each of which suggests distinct storylines for investing in leadership development programs. We discuss how these results confirm, challenge, and extend the current thinking on leadership development effectiveness and ideas around evidence-based management.

INTRODUCTION

The demand for formal leadership development programs (LDPs[1]) in organizations has resulted in a thriving leadership development industry (Schwarz et al., 2014). US companies alone are estimated to spend almost 14 billion US dollars annually on leadership development (O'Leonard and Loew, 2012). In addition, universities have increasingly expanded their offerings of degree and non-degree courses on leadership—with the cost of such programs reaching up to 150,000 US dollars per person (Gurdjian et al., 2014). A survey among 500 executives, asking to rank their human capital priorities, suggested almost two-thirds of respondents identified leadership development as their top priority (McKinsey, 2012). Clearly, companies have allocated significant resources to leadership development.

Nevertheless, there seems to be some critique on leadership development activities, particularly on whether these LDPs are deemed as effective (Day, 2000; DeRue et al., 2011). For instance, in his book *Leadership BS*, Pfeffer (2015, p. 6) concludes that 'the leadership industry has failed and continues to fail in its task of producing leaders who are effective'. Similarly, Beer et al. (2016, p. 1) refer to 'the great training robbery' suggesting the leadership development industry is not as effective as it claims to be. Interestingly, it is not that the scientific evidence on the effectiveness of such programs does not exist (as many meta-analyses demonstrating the value of LDPs exist, e.g., Avolio et al., 2010; Lacerenza et al., 2017; Richard et al., 2014; Seidle et al., 2016), but that these insights are not driving program selection, program design, and/or program evaluation. For instance, Kaiser & Curphy (2013) estimated that amongst the premier leadership training providers, fewer than one in ten programs were rigorously evaluated (Avolio et al., 2010). In sum, LDPs do not seem to be chosen or evaluated based on high-quality evidence that those programs actually develop better leaders.

The preceding suggests that there seems to be a paradoxical situation for those operating in the leadership development industry - characterized by the thriving demand and supply of leadership development activities, on the one hand, and the scarcity of substantive verification, on the other hand. This is a rather perplexing phenomenon that begs the question as to what keeps this paradox in place. Considering that most organizations continue to pride themselves on making rational decisions (Kniffin et al., 2020), there must be something that we are missing. We thus pose the following research question: *What do organizational actors view as 'evidence' that leadership development programs work?*

Questions about what evidence is appropriate and how evidence is used to sustain practices have been part of the field of evidence-based management (EBM). This field concerns itself with how the appropriate use of evidence can lead to better (i.e., more effective) organizational decision making (Pfeffer & Sutton, 2006; Rousseau, 2006). A key question in that literature is what counts as good or appropriate evidence. EBM has been cautioned against epistemological sovereignty where what counts as good evidence is only determined by academics, who may not always have a complete understanding of the complexity of organizational realities that drive decision making (Hornung, 2012; Learmonth, 2006, 2008). In contrast, epistemological pluralism (i.e., the study of the different approaches to knowledge creation and validity (Healy, 2003; Spender, 1998) recognizes that there may be several valuable ways of knowing and thinking (Hornung, 2012; Learmonth, 2006; Miller et al., 2008). For instance, organizational actors may take a more pragmatic philosophy in suggesting that evidence is only relevant to the extent that it is practically useful. In this paper, with the goal to better understand LDP investment decisions, we follow the advice to maintain an open perspective on what constitutes as evidence (Healy, 2003; Tourish, 2013).

Our investigation started with a pilot focus group of academics, responsible for LDPs in their own institutions, expecting to find a singular dedication to EBM (i.e., an LDP should only be used when proven to develop better leaders). Instead, we found multiple reasons why LDPs should be sustained, well beyond developing leaders. Intrigued but also puzzled by these initial observations, in a second study, we proceeded with a more systematic investigation using qualitative interviews of different stakeholders of LDPs in six organizations, where the following narratives emerged: (1) believer, (2) empiricist, (3) pragmatist, and (4) cynic.

These four narratives describe broad logics around the functions that leadership development fulfills in organizations, consisting of specific rationales that are associated with a unique set of evaluation criteria that make sense under distinct temporal, individual, and situational circumstances. For instance, consider a young assistant professor who is not confident about delivering an LDP for the first time. She might take the perspective of a 'believer', convincing oneself and others of the value of what she is doing, looking to positive reactions (i.e., the satisfaction of herself as a trainer or participants) as the primary metric of evaluation. Later in her academic career (with more experience, more confidence), however, this perspective may shift to an 'empiricist', wanting to demonstrate whether her intended learning objectives are actually met. This person may also take up a different role in the organization (e.g., Dean of Education) and change to a 'pragmatic' perspective by placing more emphasis on other types of evidence to justify programs (e.g., rankings, accreditation, opinions of the board, alumni building). Or, in climbing the corporate ladder this person might be subjected to many attempts to develop her leadership skills over various LDPs but repeatedly such programs failed to deliver. This person is likely to become a 'cynic' and consider that LDPs are just done for other reasons (e.g., window dressing) than actually helping people become better leaders.

In highlighting the plurality of narratives that exist around leadership development, we contribute to past literature on criteria of effectiveness for LDPs (Day & Dragoni, 2015; DeRue & Myers, 2014). We follow others' suggestions to 'cast a wider net' in terms of the criteria associated with LDP effectiveness (Hoole & Martineau, 2014; Mabey, 2013). For instance, prior work has shown the importance of 'believing' (e.g., placebo effects, Pygmalion effects) to LDP effectiveness (Avolio et al., 2009), suggesting smile sheets offer more pertinent information than just satisfaction. Alternatively, cynics indicate how LDPs contribute to different yet important goals (e.g., a positive employer image), other than developing leaders. Finally, pragmatists highlight how LDPs contribute to the strategic goals of the organization, for instance by creating more vertical and horizontal alignment in terms of people management (Ardichvili et al., 2016; Clarke, 2012). Overall, these ideas align with the emerging view that LDP is a multi-level, multi-function phenomenon that goes well beyond the development of individual leaders (Batistič et al., 2017; Leroy et al., 2018; Ployhart & Moliterno, 2011).

Additionally, our paper also contributes to prior work on EBM. We respond to the call of past reviews of the literature (e.g., Bartunek & Rynes, 2014; Reay et al., 2009) to go beyond the predominant theoretical accounts on how evidence should be used and provide an account of how evidence is actually used in organizations that is grounded in empirical data. Furthermore, in our empirical investigation of this phenomenon, we maintain an open and descriptive rather than a normative and prescriptive view of what counts as evidence. This alternative lens on the phenomenon allows us to extend prior work on EBM with insights from epistemological pluralism (Healy, 2003; Spender, 1998). In doing so, we support the growing idea within the EBM literature that we should remain open to a broad interpretation of what counts as evidence (Briner & Walshe, 2013; Rousseau & Gunia, 2016), and suggesting that others (e.g., practitioner) can also have a claim to the 'truth'.

THEORETICAL BACKGROUND

Pluralism of Evidence within Evidence-based Management

EBM refers to translating knowledge based on the best available evidence into organization practice, enabling managers to make decisions informed by social science and organizational research (Rousseau, 2006). The EBM movement emerged from the recognition that, without the support of rigorous evidence and evaluation, management practice is likely to have limited value (Pfeffer & Sutton, 2006). EBM uses the field of medicine as an exemplar and suggests that the concept of evidence-based medicine (i.e., vaccines are only applied when they have undergone extensive testing) be transferred to the area of management. Building on these principles, scholars have highlighted that LDPs are quite popular without substantial evidence that they do indeed 'work' (DeRue et al., 2011; Pfeffer, 2015), suggesting that the 'medicine' subscribed by LDPs may not always work or may even cause adverse side effects.

EBM has evolved in its clarification of what constitutes as good 'evidence' and thus the evidence-based decision making. Original work emphasized the importance of scientific evidence influenced by positivist paradigm, such that deductively derived, quantified evidence is prized over other types of evidence (Hornung, 2012; Morrell, 2008; Syed et al., 2010). Later work, however, recognized that scientific evidence is not always accessible, practical, or relevant (Rousseau & Gunia, 2016). Indeed, the basic principles of evidence-based thinking can be applied to a variety of metrics of evidence (Briner & Rousseau, 2011) as long as it includes acknowledging the intended goals of a managerial decision upfront and then systematically evaluate the quality of evidence in light of those espoused goals (Rousseau & Gunia, 2016).

Epistemological Pluralism

What defines good evidence has been subject to a wider debate in the field of epistemology (Losee, 1972). Epistemology concerns the origin, nature, and validity of knowledge (Bryman & Bell, 2003; Burrell & Morgan, 1979). Within this field, there exists a range of views of what counts as 'evidence' and these perspectives are coherently clustered in larger, unifying structures like paradigms or traditions, shared and practiced by given communities (Kuhn, 1970)[2]. Within the broader spectrum of epistemological traditions, the evidence-based perspective is largely driven by 'positivism', used predominantly in the natural sciences where the deductive approach, cause-and-effect relations between variables, and generalizability are key (Blalock, 1984; Kolakowski, 1968).

Beyond positivism, prior literature has suggested other ways of looking at evidence. We highlight just a few of these perspectives relevant to our work. For instance, 'idealism' focuses on the primacy of truth as it unfolds in the mind of the observer, arguing there is not much to gain by focusing on the empirical reality (Moore & Baldwin, 1993). Where the positivist would categorize personal experience and thoughts as irrelevant and personal conviction as a potential bias, the idealist accepts them as the most legitimate source of knowledge (Dunham et al., 2011). In contrast, 'skepticism', fundamentally questions both beliefs as well as empirics as a means to gather knowledge. Indeed, some go as far that it is impossible to have truth (Greco, 2011). Finally, a 'pragmatist' position disconnects itself from the quest for absolute knowledge and focus on what has practical relevance (Rorty, 1979). While these are philosophical traditions may not be used in the same way by practitioners (i.e., lay epistemologies are the focus of our study), these perspectives can be useful to understand the wide interpretations of what people consider as evidence in organizations.

Pluralism of Evidence in Leadership Development

The leadership development literature has also begun to consider a wider perspective on what counts as evidence to support LDPs. Most research to date is preoccupied with the behavioral models of leadership, where the purpose of leadership and management development is to ensure the development of the most appropriate style of leadership or specific leadership skillset and competencies (Bolden & Gosling, 2006). In other words, leadership development is predominantly focused on the question of how to enhance the qualities of individual leaders (Lacerenza et al., 2017).

In contrast, some scholars (e.g., Day et al., 2014; Day & Dragoni, 2015) have begun to argue that leadership development should not just focus on the development of individual leaders, but that LDPs can serve a broader purpose in terms of developing leadership capacity. For instance, even when a program does not improve the individual capacities of leaders, it may still enhance the overall leadership capacity of the organization by helping leaders who followed a similar program to cultivate similar language and mindset, thus improving communication and coordination for interdepartmental collaboration (Garavan, 2007).

The suggestion to 'cast a wider net' in terms of criteria used to justify LDPs also comes from authors taking a more critical view of leadership development. For instance, in a review of different discourses in the literature, Mabey (2013) argues that the field's reliance on the dominant positivist perspective is potentially limiting and implores future research to examine the multiple functions of leadership development in organizations. For example, Ackers & Preston (1997) use a religious analogy to explore management programs in an organization through the evangelical notion of 'conversion' and radical personal change. They found LDPs to employ emotional experience to remold individuals to fit the corporate culture in a way that mimics the religious conversion process. Similarly, Kamoche (2000) found that

LDPs were used for culture transmission to sustain corporate ideology (i.e., beliefs of desired managerial behavior). The paper also points to the inequality aspects created by these programs as they were used to legitimize the power structures that institutionalized the creation of a privileged group of high achievers. Finally, Alvesson & Spicer (2014) question how the leadership industry is set out to not simply develop leaders, but to also entertain—an imitation of the 'tourism industry,' with all the experiential activities such as horseback riding, climbing, and trust game, etc. In sum, these authors suggest a different kind of discourse to explain why LDPs are initiated and sustained than what the espoused goals of the program (i.e., leader development) would suggest.

To conclude, in this paper, we take note of these alternative interpretations of what counts as evidence in terms of leadership development specifically, and in terms of EBM more broadly. With this in mind, we take a grounded, qualitative approach to discover the narratives that practitioners use to justify their LDPs and what they see as evidence. We believe an interesting starting point to enhance our understanding of what people count as evidence are academics in business schools, particularly those that offer LDPs as key elements of their business school curriculum. On the one hand, these academics are typically trained in high-quality teaching (i.e., formulating clear learning objectives) and employing rigor in evaluating whether those learning objectives are met. As such, one might expect less variation in what counts as evidence for academics in business schools. On the other hand, the leadership development curricula in business schools do not always score highly in terms of showing that it develops better leaders (DeRue et al., 2011; Pfeffer, 2015), and hence there must be a good rationale to explain this paradox.

STUDY 1: PILOT STUDY

METHOD

Exploratory Interviews

As an impetus for our pilot study, we first interviewed 20 academic directors of leadership centers of leading business schools (as determined by the Financial Times top 100 MBA ranking in 2019) across the world. These directors both conducted research on leadership and/or leadership development and delivered leadership development within a business school. They are thus an ideal audience to ask about the quality of evidence for LDPs. The majority of these academics were located in the US (60%) and Europe (30%) with one person from Asia (5%) and Australia (5%). Twenty percent were female and the largest portion (80%) were full professors at their university.

During the interview, we asked them to describe 'the type of leadership development activities you are doing in your institution?' and 'how do you evaluate those programs/activities in terms of effectiveness?'. While our original intent of these interviews was to identify the range of practices used for leadership development in business schools and the evidence to support them, we were surprised that not all of the practices used in business schools were demonstrated to be evidence-based nor that these academics engaged in rigorous evaluation of their efforts[3]. Curious about this we asked these academics 'how do you justify your use of these programs, seemingly with little evidence to support it?'. We were surprised to learn that their answers did not always conform to what one would expect from academics. For instance, one academic said: 'Imagine that we actually start to evaluate whether what we do works. The truth is that we likely find that a lot actually has little effect. Best to just assume that we know what we are doing'.

Rationale for Focus Group

Intrigued by these accounts, we decided to conduct a focus group with these academics. While we considered more in-depth and structured interviews, we decided a focus group best fits our research objective at this stage. As we heard a wide variety of justifications for LDPs in the exploratory interviews, we were curious to see the spontaneous interaction between this group of academics when confronted with the diversity of opinions about what counts as evidence (Edmunds, 2004; Powell & Single, 1996; Puchta & Potter, 2004; Morgan, 1996). In other words, we wanted to learn whether these alternative truths were unique perspectives by only a few individuals or whether they were widely shared. We were also interested in the collective sense-making between academics about what counts as appropriate evidence for leadership development, assuming to some extent that some sort of consensus might be reached (Brinkman & Kvale, 2015). Of those 20 interviewees invited, only 10 participants were able to attend the focus group, with 50% from Europe and 50% from the US, all-male, and all full professors.

Conducting the Focus Group

One author acted as the moderator while another author observed, took notes of the in-group dynamics (e.g., interaction patterns, non-verbal communication), and transcribed the recordings (Kehoe & Lindgren, 2003; Rodrigues et al., 2010). The session lasted 45 minutes and resulted in 20 pages of transcripts. We followed the recommendation for focus group research and adopted a conversational approach to facilitate the discussion (Krueger, 1997) and used follow-up questions to elaborate on the discussion as well as encourage counterpoints to be expressed and deliberated (Smithson, 2000). Based on our preliminary interviews we asked the following question: *'Why do we keep investing in leadership development even though there seems to be insufficient evidence?'*.

Analyzing the Results

The transcripts were subjected to group discourse analysis (Kidd & Parshall, 2000). This means that our focus is on describing and summarizing the overall narrative as it unfolds between participants rather than focusing on identifying common themes. In other words, the discussion itself is our primary unit of analysis and captures a wide range of positions and identifies areas of agreement and controversy.

FINDINGS

Initially, participants showed themselves to be critical and argued that organizations were doing leadership development to achieve instrumental purposes. One director offered that most organizations didn’t seem to hold LDPs in high regard and that these LDPs were mostly ‘perks’ for their managers. They did not expect these programs to actually develop leadership. Instead, these LDPs were perceived to help increase employees’ morale and reduce turnover by offering employees time off from work. They just wanted the program to provide a ‘fun and interesting experience’ or ‘infotainment’. Accordingly, the learning objectives of a program did not matter as much as, for instance, the proper (i.e., luxurious) setting in which it took place. In this initial phase, the academics thus found them to be quite cynical towards the leadership development industry. Building on that idea, some academics expressed the belief that business schools were the superior provider of leadership training. When challenged with what led business schools to make this claim vis-à-vis their competitors (e.g., consultancies), a clear answer emerged: accreditation. Going through an accreditation process could be considered as a quality control mechanism, one which consultancies were not necessarily subject to. Therefore, business schools cannot ‘let them [consultancies] have this market’.

A critical self-reflection emerged in the group at this point. While these accreditations might indeed serve as a proxy for quality to a certain extent, these evaluations were usually done at the program level (e.g., MBA), and the criteria involved (e.g., alignment of educational activities with the overall mission of the organization) were not specific to the leadership development training and activities. In further reflecting on the evaluation of LDPs in business schools, most participants agreed that the lack of evidence to demonstrate the value of the program was also present in business schools. With regards to evaluation, most business schools resorted to the use of smile-sheets—a short survey to determine whether the students were satisfied with the course or not. However, the results of this survey were at most indicative of how much they liked the instructor, their expectations, and the 'on-stage' performance, but less likely to offer any insights into the effect on the students' learning and development. Unfortunately, such emphasis on the 'liking' factor also made the instructors hesitant to design the course and activities that might be perceived as too challenging—which could result in an undesirable dip in their satisfaction rate.

This critical self-reflection was counted with a more positive view of LDPs offered in business schools. One participant compared LDPs to 'vitamin pills'—although there was no conclusive evidence that these supplements provided any substantive health benefits, people continued to consume them. In other words, this person believed that LDPs didn't really 'work'. Someone else agreed but added that there could 'placebo effect' in operation here—that while placebo has no substantial effect, it does not mean that it's of no value, as placebos are still known to have an effect regardless of whether they actually do what they intend to do. The effect, however, is non-specific to the training; it is the individual time and attention that is given to students that boosts their personal well-being.

Others offered more pragmatic counter-responses to the critical view that business schools LDPs do not offer value. One person argued that the demand for leadership training in and of itself justified the supply of courses that were offered. Despite the ambiguous value that they may offer, if the market ‘speaks so loudly’, there must be significant benefits to these leadership courses. Indeed, others acknowledged that leadership courses were typically used as a ‘marketing tool’ for business schools to attract future students and that while you could be cynical about that window dressing it was just part of the reality they were in.

Towards the end of the conversation, some participants tried to summarize and integrate the different perspectives by arguing that LDP might serve complementary goals: (1) to deliver results for organizations, and (2) to give the sense of growth for individual students going through the program. This person argued that the question prompt might be misleading given its assumption on the need for measurable or quantifiable results. While most management scholars would subscribe to the notion of ‘what gets measured gets improved’, this participant countered that perhaps what really matters could not always be measured and that there are intangible results that you won’t get from traditional evaluation measures. Others also supported this view and argued that even organizations, which mostly care about profits and efficiency, may not expect the change in their bottom line as a result of sending their people to a LDP, as much as they wanted to create a certain ‘culture’ in their organization from it. Similarly, one academic rebutted to the use of the term leadership ‘industry’—which seemed to assume that people were there just to ‘make money’, and then further claimed her work was partially a missionary one to put individuals on the path toward leadership development. In sum, LDP offered value in ways that went beyond the traditional and instrumental thinking in organizations.

DISCUSSION

While we selected a relatively homogenous group of participants, we found a diversity of opinions within that group. More specifically, we observed variations in terms of (1) rationales, (2) criteria of effectiveness, and (3) contextual factors connected to these rationales and criteria.

First, we noticed several 'rationales' that academics use for investing in LDPs that go beyond the goal of 'developing leaders' to goals such as infotainment or a marketing tool to recruit students. While all of these rationales could be simultaneously applied to the same LDP, there was some inherent tension between them (e.g., instrumental versus non-instrumental) such that not all rationales would likely be shared by one individual. This was clear in the focus group discussion where the voice of one rationale was shared and agreed upon by some (explicitly by voicing consent or implicitly by nodding in agreement) versus clearly rejected by others (by offering counter rationales or non-verbally through frowns, rolling eyes, etc.). This suggests that there were 'camps' that were formed throughout the discussion with different groups of people aligning with a different version of the discourse.

Second, and related to the rationales, participants used a variety of criteria of effectiveness by which LDPs could be evaluated. These ranged from satisfying market demand (i.e., enhanced clientele) to the retention of highly valued employees. These different criteria would suggest that programs may serve different goals and that there is a wide variety of evidence that could support the effectiveness of LDPs. Unfortunately, while various metrics were offered, this does not mean that such criteria were being used to demonstrate effectiveness. This counters the central idea of EBM, which is open to these alternative criteria of evidence yet still prioritizes only certain evidence to be measured in practice.

Similar to the rationales, one could argue that one LDP could serve all goals of producing better leaders, improve marketing, bond the students, etc. However, once again, that there seems to be some trade-off between these criteria such that the extent to which one focuses on implementing one of these goals well, comes at the expense of others. Of course, there are some criteria that fit more naturally together (e.g., marketing effort, retention strategy) than others such that some sort of clustering of criteria may be needed.

Third and finally, those rationales and the associated set of evaluation criteria seem to make sense within a specific context. For example, some of the respondents in our group also served in more senior positions in the business schools – those were more likely to highlight the importance of LDPs for overall morale, enhanced clientele, and alumni building, and care less about whether the program actually produces better leaders. In contrast, a person who actually runs the leadership programs will pay more attention to the effect on individual students, being it in terms of smile sheets or actual development. From the role that these individuals play or the specific personal or contextual circumstance they find themselves in, a certain set of rationales and list of criteria becomes more or less relevant. Indeed, these factors help to better understand why people adopt a similar rationale and criteria.

The diversity in these three elements (i.e., rationales, criteria for effectiveness, and contextual factors) but also the inherent tensions and clustering between them, suggests that there is something that connects them to a larger whole. Specifically, we argue that there seem to be 'narratives' in place, adopted by one or more individuals, that help individuals in making sense of LDPs from their specific individual and situational circumstances. These narratives are the focus of our second study, where we more systematically identify which important narratives are at play in organizations when it comes to making sense of LDPs.

STUDY 2: MAIN STUDY

METHOD

Informed by what we learned from Study 1, we chose to do a more in-depth qualitative study to better understand and identify the narratives about LDPs that exist among organizational actors. Our use of the term 'narrative' here refers to accounts that typically include an interpretation of a phenomenon involving focal actors, events, and motivations. Narratives have been given an increasingly prominent role in the field of management and organizational studies (Haack et al., 2012; Sköldberg, 1994; Sonenshein, 2010; Vaara, 2002). As Weick (1995) argues, narratives are employed to make sense of organizational life. Indeed, narratives have been used previously as a means to understand the contextualized nature of people's justifications (Vough et al., 2015). Furthermore, narratives are useful to both participants and observers of organizations because they are the basic tool that individuals use to communicate and create (common) understanding (Feldman et al., 2004). Narratives help to impose coherence and order to otherwise fragmented experiences (Boje, 2001; Byrne & Shepherd, 2015) and reveal heterogeneous interpretations of the same organizational phenomena (Brown & Jones, 1998).

Sampling and Data Collection

To collect our data, we relied on a purposive sampling strategy (Miles & Huberman, 1994). First, we searched for managers and practitioners who have been involved with LDPs in their organization. More generally, we aimed to include actors from different organizations, in diverse industries and countries to increase the probability that we would collect a broad range of justifications for the organizational actors' engagements and investment in these activities. This diversity is important as our focus group indicated that what counts as evidence for LDPs (and thus the existence of different narratives) may depend on certain contextual factors.

Second, we engaged in snowball sampling, where each organization's interviewees were asked to recommend additional interviewees (Denzin & Lincoln, 2011). For each organization, we initially approached the head of HR manager and/or Learning directors, because they are usually the main person responsible for overseeing leadership development activities in organizations. After the interview, we asked them to refer us to others in the organization who held different roles with respect to LDPs. This sampling continued until we managed to connect with key stakeholders ranging from senior executives to junior participants, as well as trainers, and consultants. Our selection of a broad range of stakeholders to LDPs was intended to increase the richness of explanations obtained from more than one standpoint or role (Cohen et al., 2000). Similar to our choice for purposive sampling, this wide range of organizational actors is important as our focus group indicated that narratives may depend on the role one plays with regard to leadership development. In the end, interviews were conducted with twenty-eight people from six organizations either face-to-face or via skype. Table 1 summarizes our sample.

Table 1. Characteristics of interviewees

Organization	*Industry*	*Interviewee*	*Gender*	*Position of Interviewee*
A	Semiconductor	A.1	F	Program Director Talent Management
		A.2	F	Vice President of Human Resources
		A.3	M	Participant
		A.4	M	Participant
		A.5	M	Participant
B	Oil and gas	B.1	F	Executive Director of Trade
		B.2	M	Chief Manager of Training & Development
C	Construction	C.1	F	LD Program Director
		C.2	F	HR Manager
		C.3	F	Participant
		C.4	F	Participant
		C.5	F	Participant
D	Building materials	D.1	M	Group Procurement Director
		D.2	F	HR Business Partner
		D.3	F	Learning & Development Manager
		D.4	M	Trainer
		D.5	F	Participant
		D.6	M	Participant
E	Government	E.1	F	Director of Finance & Control
		E.2	M	Management Development Consultant
		E.3	M	Participant
		E.4	M	Participant
F	Human resource consulting	F.1	M	Commercial Director
		F.2	F	Director of Training & Leadership
		F.3	F	HR Director
		F.4	M	Trainer
		F.5	M	Participant
		F.6	F	Participant

Note: Gender: F) Female - M) Male; Country: Netherlands (company A, D, E, F), India (company B), China (company C).

The interviews were semi-structured and guided by the following three questions, mirroring the exploratory interviews that were conducted as part of the pilot study, to gain insights into how individuals made sense of leadership development: (1) What organizations are doing in terms of their leadership development?; (2) What impacts/benefits are gained? How it is being evaluated/measured?; and, (3) How do organizations justify their investment/commitment to leadership development? (see Appendix 1 for interview protocol). The interviews range in length from 45 minutes to 95 minutes (one hour was the average). We used this structure for all the interviews but allowed flexibility for conversations to flow in a natural manner. The interviews were transcribed (resulting in about 306 single-spaced pages of transcripts).

Data Analysis

In the data analysis stage, interview transcripts were analyzed using a thematic approach to identify and construct 'narratives' that can portray justifying accounts that capture the complexity of the multiple discourses of what, why, and how people explain their reasoning for engaging and investing in leadership development in their organizations.

To achieve this goal, our analysis proceeded in three stages. First, informed by what we learned from Study 1, we focused on identifying and highlighting parts of the data that are related to rationales for LDPs. We used the qualitative data analysis software Atlas.ti to facilitate the coding of the text passages and explore the relationship between emergent themes. Three authors of this work began by reading through the interview transcripts and coded typical characteristics such as keywords and themes independently (Lee, 1999; Miles & Huberman, 1994). Next, we discussed interpretations to resolve potential misunderstandings until consensus was reached. From this process of open coding (Glaser & Strauss, 1967), we noticed that several themes emerged concerning the different types of rationales.

In the second step, we started axial coding where we grouped similar open codes into categories. For example, for the subcategory of rationales, the open codes ‘corporate branding’, ‘ticking the box’, and ‘political reasoning’ were categorized under the axial codes ‘legitimizing byproducts’. While some codes were confirmed and grouped given their common features, some codes were discarded or recategorized as the initial categories were more refined. Through this process, we identified twelve rationales, represented in Table 2, with corresponding exemplary quotes.

In the third stage, the aim was to establish the different narratives and clarify their meanings. To achieve this, we followed an interactive process of going back and forth between data and existing literature on different epistemological traditions. Specifically, we considered how different epistemological traditions could help understand our data. This ultimately yielded four narrative categories (i.e., empiricist, believer, cynic, and pragmatist) (see Figure 1 for the data structure). We further refined and substantiated these narratives, by linking each of these narratives to associated evaluation criteria and contextual factors. At this stage, we also revisited the transcripts several times to check that the narratives and its elements we established as theoretical coding captured accurately the organizational actors’ accounts. We found no new categories that emerged and were satisfied with our set of narratives.

Table 2. Examples of rationales

Rationales	*Exemplary quotes*
Measurable results	'Ideally, you want to have measurable results ending in different behaviors, although it would be very hard in this organization with the lack of infrastructure. But it would be interesting. It would be very good if that would happen.' (D.2)
Contingency approach	'No behavior change happens unless that kind of reinforcement happens. So, what gets measured, what gets asked, etc. If the individual goes back into the organization, and if he is measured on performance and on targets more, rather than how he achieves them, he would again go back to concentrating on achieving the targets.' (B.2)
Acknowledging limitations	'The flipside, of course, is that the high performers who are invested – get more investment – perform even higher than people who don't get into that group. So, you end up with maybe things moving further apart, which is what I struggle with also – how to make the overall team better. And more importantly how to balance it – like "if we train these people, they are going to, in the future, leave the company", so it's always hard to figure out what the right balance is.' (A.5)
Primacy of feelings	'We already know that the program actually works. Why would you go through so much trouble to prove it objectively? That sounds like a waste of time and effort to me.' (C.1)
Humanistic value	'And it may or may not bring out visible differences or they may end up not pursuing it, but does that mean that you should not put that investment or effort? Of course, you should! Because that's the right thing to do. And nothing goes to waste in this world in terms of effort.' (B.1)
Trust in authority	'I think companies know that these programs work. The HR department definitely has it figured out when they designed the program. Otherwise, why would they put us through this, right?' (C.2)
Skeptical questioning	'I never have the illusion with this kind of program that there's a lot of content in all these days that you are together, so a lot of case studies from which you can extract learning, a lot of theory around leadership, a lot of practices. You can absorb a lot, but there are only some things that you actually apply in practice.' (A.4)

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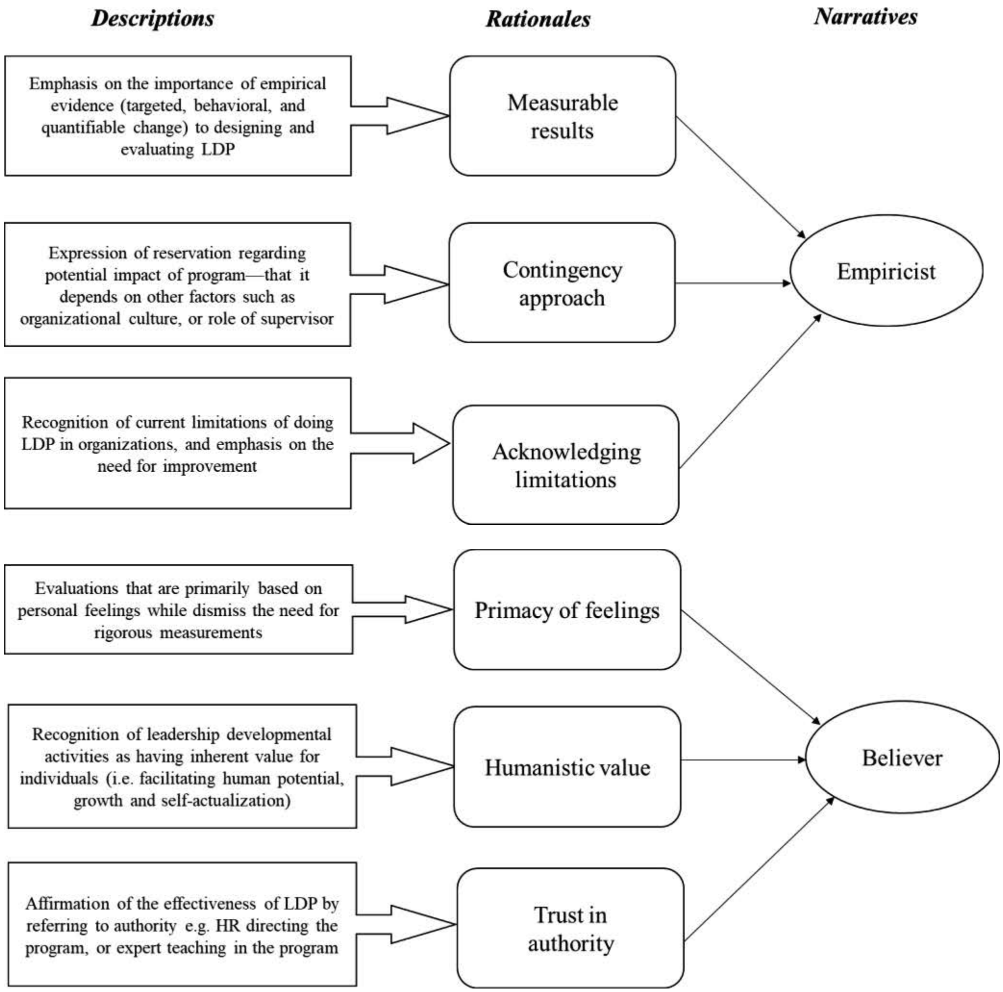
Rationales	*Exemplary quotes*
Window dressing	‘Look, if you come and work for us this is your educational trajectory, fancy, fancy, fancy. It’s just for branding.’ (F.5)
Legitimizing byproducts	‘You're happy to be in there. You think it's a career chance. Some of them just use it as ticking the box. So you can't go up if you don't have this, so tick the box after you've completed it.’ (E.4)
Institutional pressure	‘Sometimes it’s almost a “must-do” stuff. For different reasons. One, because everyone’s doing it, you can’t chicken out. If your competitors are doing it, then you have to do it as well.’ (A.2)
Multi-level thinking	‘The program brings people from multiple countries. Now if I get a tender somewhere, then I can just call that director and say “hey can you help me out?” While when you don’t see and experience each other, that will naturally be much harder. So it [LDP] also stimulates internal cooperation.’ (F.1)
Strategic perspective	‘Personal development and growth [from LDPs] for people cause talent development, and so the improvement of your people which causes people to stay challenged, and retains them.’ (F.4)

Figure 1. Data structure



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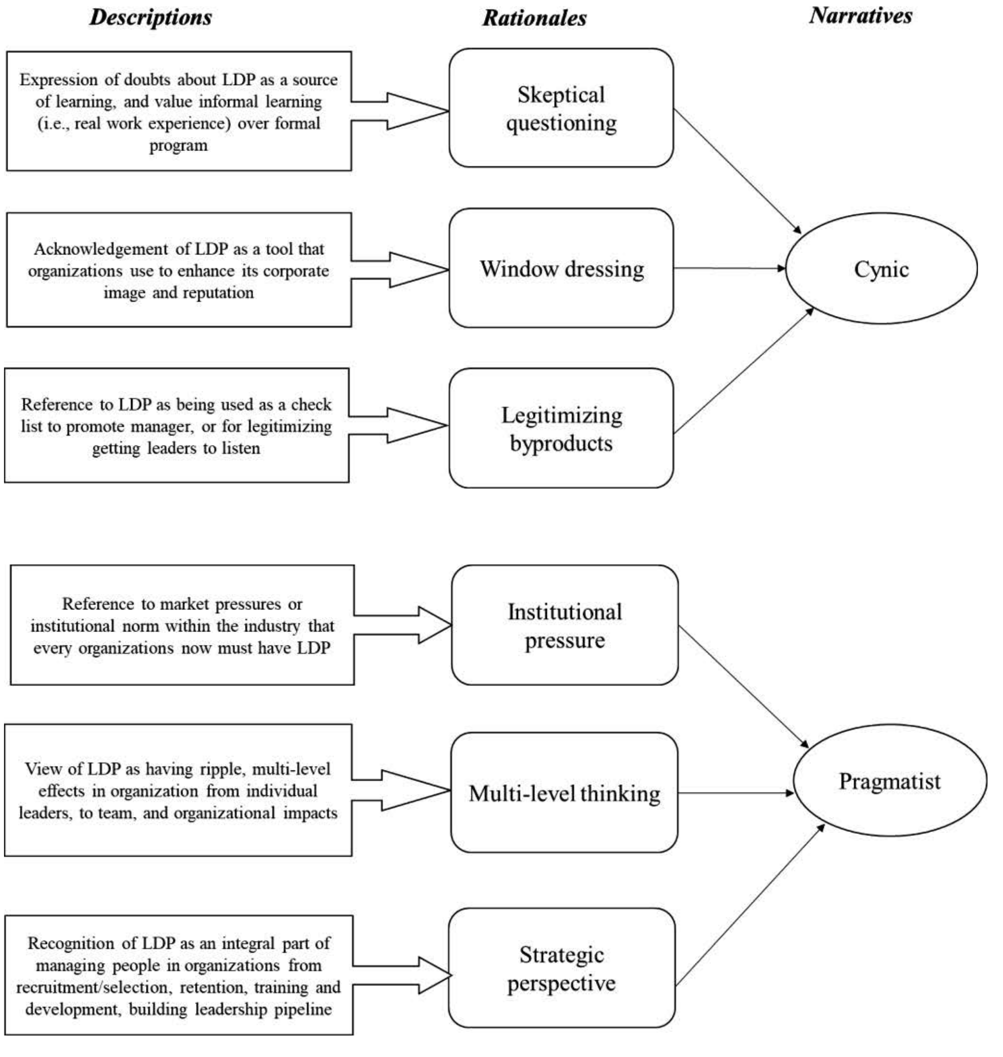


FINDINGS

As indicated earlier, the main focus of our second study was to identify the most prominent and distinct narratives that exist in terms of LDPs. Table 3 provides an overview of these central narratives and their elements. In the next section, we describe each narrative in more detail. It is important to note that given that the data are constructed from multiple sources (different organizations and stakeholders), each of these narratives did not unfold in its 'pure' form as they are presented in this paper (Boje, 1991). Our distillation and differentiation of the narratives is an attempt to deal with the complexities inherent in representing sensemaking (Weick, 1995). After discussing each of the narratives in detail we turn to a discussion on the distinctions between them.

Empiricist

The first narrative that we observed in our data was 'empiricist'. Empiricists were dedicated to letting empirical data (in contrast to, for instance, opinions or experience) be the primary source of information to evaluate the quality of a LDP. The available evidence was then carefully considered on whether or not it contributed to the espoused and/or intended goals of a program. Or as one participant suggested: 'Look this is what you call an inconvenient truth – we promote these programs as developing leaders but we owe it to ourselves to be honest about whether that is actually the case and believe that knowing the result will help us develop better programs' (D.4). In sum, the empiricist was characterized by a goal-directed, data-driven approach.

Table 3. Narratives and its elements

Dimensions	*Empiricist*	*Believer*	*Cynic*	*Pragmatist*
Rationales	• Measurable results • Contingency approach • Acknowledging limitations	• Primacy of feelings • Humanistic value • Trust in authority	• Skeptical questioning • Window dressing • Legitimizing byproducts	• Multi-level thinking • Strategic perspective • Institutional pressure
Evaluation metrics	• Leaders' skill and capabilities improvement (i.e., better performance as a leader)	• Trainer and trainee satisfaction • Sense of personal growth, self-awareness	• Corporate branding • Individual leader promotion	• Strategic HRM • Building a leadership pipeline • Bridging silos and building internal collaboration
Contextual factors	• Maturity of LDP (growth stage) • Stakeholder roles (HR/LDP directors)	• Age/Career stage (junior employees) • Stakeholder roles (trainers)	• Age/Career stage (older, more experienced employees) • Personal life (lack of time)	• Stakeholder roles (senior executives, strategic HR directors) • Maturity of LDP (developmental culture in organizations)

In terms of specific rationales offered by empiricists, these individuals applied a scientific lens by emphasizing the tangible outcomes of LDPs, defined as a behavioral change of the participants after they went through the program (i.e., measurable results). Furthermore, they recognized that whether the LDP 'worked' would depend on many supporting factors, primarily those that could facilitate the transfer of learning (i.e., contingency approach). Finally, they were also oriented toward the improvement of the program in the future, by acknowledging the shortcoming and the flaws of the LDPs (i.e., acknowledging limitations). More explanation and example quotes for each of these themes can be found in Figure 1 and Table 2.

In terms of evaluation criteria, most of the empiricists argued that the satisfaction score or even how much knowledge leaders gained were not meaningful indicators for showcasing the real value of LDPs. For them, it was more important to look at a more sustained effect, specifically, the transfer of learning into actual performance change in the workplace. And for this to happen, they also recognized that, for example, organizational culture played a pivotal role. So rather than investing solely in the program itself, these empiricists believed that it's equally important to invest in the supporting mechanisms to ensure that the effects actually stick, suggesting the importance of contingent thinking within this narrative. The empiricist thus strived to find the most tangible measures to demonstrate the effectiveness of the program.

The emphasis on measurable results while acknowledging challenges seemed to be related to a variety of contextual factors. One important factor that was related to the adoption of this mode of thinking is the maturity of the LDP. In a more well-developed program, people were more experienced with leadership development, and better able to develop a more critical view. As one respondent suggested: 'For your first few runs of the program, people realize you are still figuring out things like flow and timing … and thus give you the benefit of the doubt.

Those considerations likely go out the window as your program matures' (F.2). This indicated that as programs matured over time, the more critical people would become. In terms of roles, we noted that there were also many HR/LDP directors that expressed empiricist attitudes, especially when training and development were their core responsibilities. In this role, they focused on making sure that the program demonstrated return on investment by improving the behaviors, skills, and performance of employees who participated in LDPs that they were championing for.

In sum, empiricists appear to follow the gold standard principle that it is heavily influenced by the natural science where deductive approach and cause-and-effect relations are key (Kolakowski, 1968). It is close to the epistemology of positivism which focuses on the role of empirical evidence or observation in the formation of ideas (rather than innate ideas or traditions) (Blalock, 1984). Knowledge for empiricists is tentative, and therefore, the proof of it (i.e., 'evidence') is subjected through continued revision through validated measurement. Similar to the scientific endeavor, empiricists focus on only a limited set of criteria aligned with specific intended goals. This narrow, scientific scope clearly differentiates it from the next two narratives.

Believer

The 'believer' narrative describes individuals whose view of evidence was primarily based on personal beliefs. In this base, program participants believed in what the trainer was doing and/or the trainer believed in what he or she was doing. This personal conviction in who they were and what they did influence the goals of LDP and methods to assess its value. One respondent captured this perspective eloquently by stating: 'Look I am a leadership evangelist, my job is to make sure that participants understand the importance of leadership to themselves and their career, so in everything I do, with every fiber of my being, I make sure that I breathe the importance of leadership development to make sure participants feel the same' (E.3).

We found that the believer category could be distinguished by the following rationales. For instance, we found that these individuals rely on (subjective) feelings (i.e., primacy of feelings) as the primary source of knowledge (often discounting other empirical evidence when it countered these feelings). Furthermore, these individuals often held fundamental beliefs and values about themselves or the world (i.e., humanistic value) that did not require 'testing' as they were felt to be true. Finally, we noticed that they deferred to authority to helped defined what was true, conditional on that authority confirming their feelings and assumptions (i.e., trust in authority). A more extensive explanation and quotes for each of these rationales, please see Table 2 and Figure 1.

These rationales were typically translated into a primacy of subjective evaluation criteria, be it satisfaction with the training, satisfaction with the trainer, or satisfaction of the trainer itself**.** For instance, whereas for empiricists, smile sheets were not valid points of data, for believers the subjective experience was the most important part of the program. Even when there was little discernable effect on whether participants actually became better leaders, respondents needed 'to get a sense that they had grown as leaders but also as human beings' (B.1). Note that such (positive) subjective experience was not just limited to satisfaction of participants with the training content but also (and more often) the satisfaction with the trainer. Interestingly, the satisfaction with the enthusiasm and positive intent towards the participant seemed more important than the expertise of the trainer in the subject matter**.** Respondents further indicated that they needed to feel that the trainer wanted to truly develop them. Finally, trainers in the believer category would add their own satisfaction with their own delivery as an important criterion.

The primacy of experience and accordingly the use of subjective criteria for evaluation seemed to be linked to a variety of contextual factors. For instance, believer attitudes were often seen to manifest in junior participants. When someone was young and new to the organization and their position, they appeared to be much more positive toward the LDP because they were hungry for any type of developmental opportunities. Another stakeholder that expressed fervor in the efficacy of LDPs was the trainers of the program. This was unsurprising given that their professional success and survival depended on continued positive evaluations and so they needed to 'make sure it works'. However, it is important to note that a focus on beliefs also arose in some senior trainers with little to prove. These trainers described as being very observant of the place and situation that their students are in (i.e., developmental readiness). They used their emotional intelligence to see what students needed, beyond pre-determined learning objectives.

In conclusion, the believer category seems to be most akin to the epistemology of idealism. An idealist gives primacy to the mind, emphasizing that there is a unity to the world that is simply more than the sum of its parts (Dunham et al., 2011). In a way, this resists the explanation of things being a system of cause and effect (Gardner, 1999), as we might have seen in the case of empiricists. Idealist argues for the synthesis of knowledge and faith to the extent that it aligns with their personally held belief system and experiences.

Cynic

The 'cynic' narrative describes individuals whose view of evidence was based on the instrumental nature of LDPs or as one respondent suggested: 'Let's be honest with each other, leadership development is not primarily done to develop leaders, at least I haven't heard that many followers boast how much better their leaders have become. Now that doesn't mean they do not serve a function' (F.5). While the believer and empiricist narrative conceived LDPs as a valid means of developing better leaders, the cynics' ideas challenge this intrinsic value of LDPs. Some of these appraisals were expressed as doubts about the value of formal programs (i.e., skeptical questioning) arguing that real, on-the-job experience was more effective in developing people compared to traditional classroom-based training. Others referred to what amounted to the organization's attempt to window dress as they suspected that organizations cared little about actually developing people, but were engaging in LDPs simply for marketing purposes (i.e., window dressing). The cynics sometimes also equated LDPs as a way to 'tick the box', a necessary rite of passage that was more symbolical than substantive (i.e., legitimizing byproducts). Quotes and explanations for each of these rationales can be found in Figure 1 and Table 2.

In terms of the evaluation criteria, given that their starting point already contained some doubts over the intrinsic value of LDP, the cynics typically assumed that measuring whether the program developed leaders or not did not really matter. They assumed that LDPs already did the 'trick' and achieved the purpose of its effectiveness by way of providing the legitimacy for the organizations to brand themselves as attractive employers or through merely advertised the existence of the programs (without substantial money actually being invested in these programs). For managers participating in these programs, they also cared less about seeing whether they themselves developed or learned any leadership skills, as long as they received their promotion at the end, which was what most organizations implicitly promised by having these programs in place.

These cynical attitudes were expressed mostly by older employees that did not believe that the LDPs would contribute significantly to their leadership capability. They believed they had gained enough knowledge and experience over the years and, thus, did not recognize the added value that an LDP could have for them. It makes sense as an employee who has reached the threshold of seeing the end of their career that they might not be as enthusiastic about their learning and development as the junior worker who just started out in their career. In addition to the age and career stage, sometimes personal life circumstances could also affect motivation to develop, and hence how participants perceived the developmental opportunities. Respondents could even see the LDP as disturbing, which reinforced their pessimistic attitude toward the program, as one participant suggested: ‘it was not the right moment in my career and not the right moment in my personal life. When you’re not into it and not personally in a state to learn, you just “survive” such a program, you don’t learn, and it won’t be effective at all’ (E.4).

Cynics are most akin to the epistemological position of skepticism, conceived as the attitude of doubting knowledge claims (Broughton, 2003). As illustrated in our case, the cynic does not deny the benefits of leadership development but recognizes the false nature of its idealized image (Bewes, 1997). While a cynical attitude is tinged with scorns, it does not imply that they believe that nothing can be improved. On the contrary, we believe that in some cases cynicism might be even a greater force for change than optimism (in our case, the believer). The cynics share the practical orientation with the pragmatist but also confront head-on with the potential political implications of LDP.

Pragmatist

The ‘pragmatist’ narrative describes individuals whose view of evidence was primarily based on whether it provided sufficient added value to the organization. They were aligned with empiricists in needing clear discernable outcomes of a program, but their viewpoint was often broader to understand how LDPs fit into the larger whole of the organization. For instance, in terms of specific rationales, we found that that pragmatists typically considered how LDPs contributed to enhancing the leadership capacity of the organization as a whole (i.e., multi-level thinking). Furthermore, they considered whether and how LDPs were best aligned with the strategic objectives of the organization (i.e., strategic perspective), viewing LDP as an instrument to further a strategic agenda (e.g., using LDP to socialize leaders into a new strategic direction). Finally, we saw that pragmatists looked outward towards institutional trends and the importance of staying competitive given the changing norms (i.e., institutional pressure). Further descriptions and examples for these rationales can be found in Figure 1 and Table 2.

This pragmatic perspective on the role and function of LDP was translated into a broad range of criteria. Whereas the empiricist focused predominantly on effects at the individual level (i.e., looking at the observable change in behaviors), the pragmatists expected that the benefits that could be accrued from LDPs were more at the macro level. For instance, LDPs contributed to strategic HR practice in the sense that it could be used for recruitment and selection of managers. Therefore, having LDPs could help organizations build their brand and reputation, and created 'ambassadors' of the organization to draw in new talent. While this sentiment might have some resemblance to the cynical view that LDP served as a marketing tool, the pragmatists saw it as a key component that integrated the overall people management (HR) system in their organizations.

The view also emphasized the perpetual need of the organization to cultivate leaders who could take on the increased scope and complexity of higher-level management positions. Therefore, they believed that LDPs directly contributed to building the leadership pipeline. Moreover, in multinational organizations, a LDP might sometimes consisted of participants from different subsidiaries, regions, or countries, which provided them the opportunity to learn and connect with each other forming a strong intraorganizational network. In other cases, a rapidly growing company used LDPs as a way to bridge the silos between each department, as one manager observed: 'We see now that we are growing, we are losing each other in these silos. So what this program aims is really to provide a broader scope on the business, and we also put a lot of assignment in it cross-sectoral, so that we break the silos down' (A.2).

It came as no surprise then that pragmatists were often found in the job that required them to have a more holistic view of the organization. For instance, seniority in terms of executive role (i.e., top management team) seemed to be related to a 'pragmatist' narrative. Moreover, if the HR department was more of a 'strategic partner' in the organization, meaning they had a seat in the C-suite, the HR manager was more likely to show a 'pragmatist' view of LDPs. Indeed, they needed to be able to demonstrate how these expensive programs contributed to the strategic value of the organization, otherwise, those programs would be the first thing to be cut from the budget. Concurrently, this was also related to the organizational level contextual factor where leadership development had been long implemented and was part of the culture—akin to what Kegan & Lahey (2016) described as a deliberately developmental organization. This is an organizational culture in which support of people's development is woven into the daily fabric of working life and the organization's regular operations, daily routines, and conversations.

In conclusion, the pragmatist category seems most akin to the category of pragmatism. Pragmatism emphasizes holistic thinking, such as not just 'whatever works' but whether that works within a larger ecosystem (McClennen, 1997). In this sense, these pragmatists show some overlap with believers who have a similar feel for the larger ecosystem in which they operate but let their gut sense drive their decisions. In contrast, these pragmatists are not driven by feelings but by a larger strategic perspective. As has been established in the literature on epistemology, pragmatism disconnects itself from the quest for absolute knowledge and focus on what has practical relevance (Rorty, 1979). They adhere to a more synergistic view of how LDP contributes to the success of organizations.

Conclusion

The narratives present four unique perspectives on leadership development. There are some clear distinctions to be found between them in terms of rationales and evaluation criteria. Whereas believers were driven primarily by feelings and subjective evaluation criteria, empiricists were more rational in their perspectives, relying instead on data and sound logic. This suggests a clear difference in preference for rational versus emotional forms of decision making (Kahneman, 2003). Pragmatists also relied on more rational forms of decision making but suggested a wider, more holistic, perspective than empiricists to help understand LDPs. Indeed, whereas the empiricists typically only looked at the espoused goals of a program (i.e., most often to develop leaders), the pragmatists considered this in the wider context of the organization. This seems akin to more micro- versus more meso- or macro-perspectives on organizational behavior, each suggesting a valuable but different lens at looking at the world (Hannah & Lester, 2009; Rousseau, 2011). Interestingly, the lens of a pragmatist may match more closely to the believer's focus on the overall satisfaction of trainer, trainee, HR manager, etc. with the program – when all stakeholders are enthusiastic, the program seems to provide some value. However, the difference between pragmatists and believers, however, is that pragmatists wanted to understand and see those wider effects on LDP specified, whereas believers took a more heuristic, intuitive approach to arrive at their conclusion. Finally, cynics also considered the wider implications of LDPs but typically not from a holistic or interconnected perspective. Similar to the empiricists, they were more targeted in their perspective of whether an LDP lived up to its espoused goals or the other specific reasons an organization might have for pursuing it. Interestingly, cynics were also more emotional in their decision making, akin to believers, albeit in a negative direction, limiting them to see the possibilities that pragmatists envision.

GENERAL DISCUSSION

The purpose of this study was to understand the alternative reasons to invest in leadership where there doesn't seem to be clear evidence that LDPs actually develop better leaders. The results of two qualitative studies (one pilot focus group and one qualitative analysis of interviews with key stakeholders of LDPs in six organizations) revealed four different narratives related to how people make sense of LDPs: from 'empiricists' using data and logic to show whether leadership competencies are actually being developed to 'believers' emphasizing the primacy of feelings, values, and satisfaction scores to help grapple with the precarious nature of the leadership development enterprise (Petriglieri & Petriglieri, 2015). Moreover, we found 'cynics' who highlight the hypocrisy around the non-espoused functions of LDPs in organizations (e.g., window dressing) and 'pragmatists' who see the multitude of ways in which LDPs fit into the organizational strategy. These narratives highlight how individuals use different criteria for evaluation which make sense for specific reasons (rationales) in certain contexts. These narratives suggest the need to cast a wider net of criteria to understand LDP effectiveness, from developing leaders to a broader understanding of how LDPs add value in organizations.

Additionally, these narratives suggest that different conversations may be happening around leadership development in organizations, each with its own and unique set of rationales and decision rules. In other words, there is not a single storyline around the value of leadership development in organizations but rather a pluralistic understanding of the perceived purpose of LDPs for organizations. Our identification of these narratives is thus important not only to highlight the range of evaluation metrics at play for LDPs but to also illuminates the diverse discourses about leadership development by different organizational actors. These insights many allow leadership development practitioners and academics to be more cognizant of the multi-meanings of LDPs in organizations.

Theoretical Contributions to Evidence-based Management

Our findings contribute to the field of EBM, which addresses the questions about what evidence is appropriate and how evidence should be used to enhance organizational practices (Pfeffer & Sutton, 2006; Rousseau, 2006). One of the limitations of EBM is that most work in this area has so far been theoretical, in need of more empirical support (Bartunek & Rynes, 2014; Reay et al., 2009). With our focus on narratives as representing the justification accounts that people use to give credence to their view of evidence, we uncover the lay epistemologies that are being used in practice (Raelin, 2007). This helps to bring closer the connection between academic reasonings and the understanding of how practitioners actually engage in their sensemaking with regards to evidence. Our study, therefore, offers insights into and answers a call for research on not how EBM should be done, but how it is actually practiced in organizations (Rynes & Bartunek, 2017). Rather than providing a prescriptive theory about what should be the best 'evidence', our study builds accounts of evidence use and understandings (in the realm of leadership development practice) that are grounded in organizational reality.

The second theoretical contribution to the EBM literature lies in our discovery of the variations of what constitutes 'evidence' by these organizational actors. By identifying the types of evidence and rationales that organizational actors use, this paper uncovers different narratives that offer a complementary and expanded view of evidence as proposed by the proponents of the EBM movement (Briner et al., 2009; Pfeffer & Sutton, 2006; Rousseau, 2006). While EBM is increasingly open to different types of criteria (Rousseau & Gunia, 2016), many have argued that it still prioritizes a positivist tradition (Hjørland, 2011; Hornung, 2012; Learmonth, 2008; Tourish, 2013). In this paper, we adopt a pluralistic lens (Miller et al., 2008), which allows us to explore people's understanding and practice of evidence from the perspective of alternative epistemological traditions (Van Baalen & Boon, 2015). Our results provide a more nuanced view of what different kinds of perspectives might have to offer, for example, pragmatists looking at the ecology of the organization to examine the relation of LDP to the broader functions it serves in their organization, or believers looking at the importance subjective experience (Petriglieri, 2020), or cynics' emphasis on appearance as a legitimate objective also supports what many have considered as successful symbolism (Alvesson & Kärreman, 2007; French & Grey, 1996; Lord & Shondrick, 2011).

Beyond contributing to the EBM literature using epistemological pluralism, EBM can also contribute to epistemological pluralism. Our results suggest that epistemological pluralism need not counter the idea of EBM but that evidence-based thinking can be applied within various epistemological traditions. An evidence-based mindset requires people to be more clear about the intentions of a program as advertised and then systemically consider the evidence in support of those intentions (Briner & Walshe, 2013). If a program is advertised to only be about 'helping you become a better leader', then perhaps an evidence-based advocate could indeed argue that alternative viewpoints on evidence are not what the program actually intends to do. However, practitioners might not always be clear (e.g., that LDPs can help retain employees) or willing to be transparent (e.g., window dressing) about their intents or goals. Even within the scientific endeavor, researchers increasingly recognize that sometimes knowledge about organizational phenomena cannot deductively be derived upfront but rather is abductively found along the way (Bamberger, 2018). Nevertheless, this process of exploration should ultimately lead to more clarity about the goals of a program and high-quality evidence to support it, thus adopting essentially the evidence-based mindset.

Theoretical Contributions to Leadership Development Effectiveness

The next set of contributions focuses on advancing insights into on-going conversations and debates in the leadership development literature. While the trend is gradually shifting (Day & Dragoni, 2015), the dominant view in research seems to still center around identifying the 'holy grail' of leadership competencies entailing a set of highly desirable attributes, or a range of developmental outcomes including leadership knowledge, skills, and attitudes (KSA) (Mumford et al., 2007). In this paper, we explore how leadership development is practiced, articulated, and evaluated in organizations. By doing so, we discovered certain rationales that the mainstream leadership development literature has not paid sufficient attention to, yet shown to be an important indicator of the value of leadership development practice in organizations. For example, the believer's rationale that involves a reference to personal, moral, and societal values associated with giving developmental opportunities to employees. Or the cynic's perspective that LDP can be seen as a stepping-stone for promotion to a leadership position. These types of reasonings show that 'leadership' (and its development) is more than one kind of 'truth' (Petriglieri & Petriglieri, 2015). In doing so, our findings show that leadership development also has multiple meanings and multiple functions in organizations (Ford et al., 2008).

This paper also extends our understandings of the appropriate criteria for LDP evaluation in organizations. Our results suggest that evaluation should go beyond what previous research has examined (i..e, the development of leadership competencies), to include, for example, the strategic intentions behind LDPs (e.g., socializing the newest cohorts of executives within the new strategic direction for the organization as part of a larger chance initiative), thus contribute to strategic alignment of HR-management in the organization (Ardichvili et al., 2016; Clarke, 2012), or even the byproducts such as corporate reputation. This aligns with the emerging view that leadership development is a multi-level and multi-function phenomenon that operates beyond individual leaders to affect the leadership of the entire organization (Batistič et al., 2017; Leroy et al., 2018; Ployhart & Moliterno, 2011). Similar voices have advocated considering the importance of leadership, not just leader development. For example, LDP has been argued to improve performance management (Day, 2000), help cultivate the organization's leadership pipeline (Ready & Conger, 2007), and facilitate corporate socialization and improve interpersonal relationships (Burke & Collins, 2005). However, our findings suggest that these claims should be empirically examined as well as integrated systematically or incorporated into the language of evaluation. Adopting this more macro view of LDPs also means that research should also examine how LDPs can contribute to organizational practice, structure, culture, and strategy, where previous research has only so far suggested the reverse be examined (e.g., how organizational architecture influence leadership development).

Finally, our findings align with the suggestions of others (e.g., DeRue & Myers, 2014) to adopt a more holistic, multi-functional framework to measure the effects of LDPs. Traditionally, a causal argument is used, exemplified by the wide adoption of the Kirkpatrick framework (Lacerenza et al., 2017), where it is assumed that training satisfaction translates into increased learning thus promotes more transfer of that learning to actual work behavior, which ultimately contributes to improved organizational research. While the logic for this seems sound, prior meta-analyses (e.g., Arthur et al., 2003; Scaduto et al., 2008) have highlighted that these metrics are only moderately or even negatively correlated, suggesting that they capture distinct domains of impact. This finding might be explained by our study which shows how each narrative of LDPs contains different sets of metrics. For instance, whereas believers care about satisfaction, cynics look at corporate image, empiricists focus on behavior, and pragmatists prioritize organizational results.

Practical Implications

First and for all, our results have implications for evaluation metrics for LDPs adopted in organizations suggesting a need to go beyond whether or not LDPs develop better leaders. While this espoused goal may be one of the criteria used, if the organization wants to gain a more comprehensive understanding of the functions and impacts of its leadership development activities, they should consider looking at multiple criteria that we have uncovered in our study. This could be implemented in the form of, for example, the broadening of metrics in leadership development scorecard to include those criteria (Ulrich, 1997). Equally important, a better understanding of the different reasons why leadership development is offered can aid towards a more evidence-based mindset in the industry as a whole. For instance, when pragmatists suggest that leadership development focuses on helping with strategic HR alignment, then an evidence-based perspective would suggest that it is important to be clear about those objectives upfront in terms of program selection and ultimately evaluate on the right criteria.

An important practical implication for HR concerns our uncovering of strategic functions shows that leadership development can provide a pivotal link between HR strategy of the organization, and overall business strategy (Mabey et al., 1998; Weiss & Molinaro, 2006). This is potentially important for HR—who has long struggled to 'get the seat at the table'. Framing leadership development not just as 'training' activities, but rather a fundamental component for aligning HR and business strategy would help HR to become a more strategic partner in organizations (Wright & Nishii, 2007). Of course, this means that those responsible for LDPs design and evaluation must cultivate a good understanding of strategy and objectives and discuss the key issues with a range of stakeholders. This also suggests an ongoing dialogue between HR (or the learning department) and senior leaders of the organization (Anderson, 2009).

Our findings suggest unique value for each of these narratives for practitioners, such that there is no one ideal strategy and ideally practitioners can consider all of these. Empiricists are needed because of their scientific view, to work with the status quo to highlight problems—which in this case, could bring about tangible improvement of existing LDPs. Believers are needed for new programs—to get things going and underway even though there is no tangible evidence of the transfer of training just yet—similar to how visions/missions get formed. We might need the trainers to have high faith in what they teach, for them to invest their energy and push the participants to be more engaged in the course, resulting in them benefiting from the program. Cynics are needed for raising political capital against current leadership models and practices, highlighting the lack of time for development or the difficulties in practicing what was preached while providing the strong negative emotions that serve as a driver of change. Lastly, pragmatists could provide a more bird's-eye view—strategic thinking about leadership development practice—and connect the separate activities into a coherent system in organizations.

To practitioners and academics alike, the value of the narratives also lies in the opportunity to reflect and become more cognizant of their own dominant assumptions and to question their position at any particular time point, and either adjust it or embrace it in a more conscious way. From that conscious perspective, it will also be easier to communicate with others who adopt a different stance. Perspective-taking and framing are crucial here, where it might be wise to try to gauge what narratives they are operating on and to not assume that they share yours. To influence them effectively, you can challenge them by making your and their assumptions explicit, but also to get the buy-in from them by simply first 'meeting them where they are'.

Limitations and Future Research

We acknowledge that the findings of this study should be considered in light of its limitations, but ones that could also provide some anchors for future research. First, this study was inductive by design. Future research may try to capture these dominant modes of thinking through testing and development of scales through a survey study. However, we also see the challenge that people may not always be aware of their own mindset towards evidence, convinced that they are an empiricist whereas really they are in a different mindset. Therefore, such an approach may need measures that tap into implicit thinking. Those measures should further confirm how distinct these views are (to what extent can you be an empiricist and a believer at the same time?) and whether there are potentially additional views missed here.

Furthermore, future research can determine whether these different views can lead to certain outcomes, for example, the extent to which organizations invest in leadership development, or how organizations may prefer certain types of LDPs over the others. In addition to examining outcomes of different views, future research could also explore what could trigger or influence people to hold a dominant view. This research identified a few key contextual factors of narratives (e.g., stakeholder roles, the maturity of the program, and organizational culture, etc.). However, future research might reveal more relevant factors that influence people's evaluation and modes of thinking surrounding LDPs. Such research could also explore how each type of belief may be malleable, and therefore influenced. For example, is it possible that once a trainer is more experienced, and therefore, more confident in their ability to deliver a program (and therefore takes a believer perspective), it might make them less likely to care about looking at the limitations and seeking for improvements for the program (be more of an empiricist)?

Conclusion

This paper starts with the observation that over the past decade there has been a growing emphasis on leadership development activities in organizations. However, the increasing investments in leadership development efforts seem to run counter to the lack of evidence that they actually develop leaders. The paper also presents the view that LDPs may not necessarily only, or even mainly, be about developing people or effective leaders. It appears that there are many other functions of LDPs that signifies, for example, its moral/societal value, or byproducts like corporate image, or the potential multi-level impacts, particularly through its alignment with HR practice and organizational strategy. This indicates that LDPs may ‘work’ or ‘not work’ in the conventional technical-programmatic sense, but rather how it may be linked more to the individual and organizational narratives and its contexts. This view has important implications in terms of how both researchers and practitioners evaluate LDPs and encourage a reassessment in terms of the evidence its effectiveness of organizational practice in general, and of leadership development in particular.

NOTES

[1] In this study, we focus on formal development programs (as compared to more informal and on-the-job development; Day & Dragoni, 2015) and similar to Lacerenza et al. (2017) who define these as programs that have been specifically designed to enhance certain leader knowledge, skills, and abilities. This focus does not mean that we discount the importance of informal leadership development activities but when considering the rationale for investing in leadership development (the focus of our paper), it is easier for people to think about formal programs as it has clearer boundaries.

[2] We acknowledge that within these broad traditions there remains quite some variation of perspectives. We recognize that these positions (as with other epistemological traditions mentioned in this paper) have developed both synchronously (i.e., they coexist and interact) and diachronously (i.e., they evolved over time). However, in the interest of our paper, we chose to draw on each tradition with our understanding of its dominant form to help us compare and contrast the different narratives that emerged in our study. In other words, we do not seek to enter a philosophical debate but draw on the different lens to help us understand our data. Ultimately, the empirical reality as defined by organizational actors drives our four narratives, not these philosophical accounts.

[3] These results are available upon request.

APPENDIX: INTERVIEW PROTOCOL

Purpose of Research:

Provide critical analyses of how the leadership development industry operates and sustains itself. Taking a holistic view of all the stakeholders involved (b-schools, companies, participants, consultancies, etc.), we want to address the main question of how the developers and users (demand and supply) in this industry legitimize the use of interventions when there is no clear evidence of added value?

Two sets of questions:

(A) General questions applicable to everyone
(B) Specific questions tailored for each stakeholder groups (eg. Director of LD program in B-School, CEO/HR of companies, consultant/leadership coaches, participants who have gone to LD program, etc.)

General Questions

1. What are you doing now to develop leadership, generally in terms of programs and specifically in terms of one best practice/worst practice?
2. How do you evaluate whether you are effective in developing the programs?
3. Why do we invest so much in LD without guarantees that we can move the needle?

Specific Questions for Program Director

1) Program characteristics
    a. Describe your LD program (general program characteristics: target group, length)
    b. What is the link/relationship of your program to the school/institution/organization it's affiliated with?
2) Design of curriculum
    a. What are the key activities involved? (include pre-assessment, activities during and after the program) Identify the proportion of experiential vs classroom-based vs personal (coaching/reflection) activities.
    b. What is the most crucial element/activity in your program? Why is it important?
    c. How would you classify/describe the kind of experiences the participants go through in the program? Are they mostly feel-good exercise, or is there an activity that makes the participants uncomfortable (going out of their comfort zone)?
3) Program goals
    a. What is your program goal?

  b. Which developmental outcomes the program is trying to achieve (identify belief of how the program can impact the participants)?
  c. Is there an underlying paradigm/philosophy used for the design of the program curriculum?
4) Evaluation
  a. How do you evaluate or measure the impact of your program?
  b. What kind of information did you collect?
  c. What was the purpose of the evaluation?
  d. What were you trying to find out through the evaluation? What did you find out?
  e. Does it correspond with their goals of affecting specific developmental changes in the participants they stated earlier—if not, in the end, ask why wouldn't you measure that?
  f. Why do you still do what you do without the evidence? How do you make the case for your LD program at your school or market your program for your target group?
5) Ending questions (optional if time allows)
  a. What have been some obstacles or challenges in developing and running your program so far?
  b. Your reflection about the program—its development, and your vision for the future.

Specific Questions for Program Participants

1) Focus on your experience in the [insert] program – but now talk in general about any kind of experience - (this can either be on the job or during a developmental program).
2) Describe the most profound developmental experience
  a. How did it affect you? How did you feel during that time?
  b. Why do you think it was impactful? What was your take-away from the experience?
  c. Have you changed your behavior/attitudes in some ways as a result of the experience?
  d. Do you think it would be effective for everyone? If not, why wouldn't it work?
3) Motivation – why did you decide to attend the program?
4) Best activities/exercise/class for your leadership development
5) What about the worst practice? What might be some poor developmental practice/activity you've experienced?
6) What is your company doing in terms of leadership development?
  a. Have you participated in the program offered by the company?
  b. How was your experience? What are the goods and bads?
  c. How did it influence you as an individual? Or what you think might be the effect on the organization?

4. To you, what does effective leadership development look like?
5. Evaluation
    a. In the program you've participated in, were there any sorts of evaluation measures? What were those?
    b. How do you think leadership development programs should be evaluated?
    c. Why do we invest so much in leadership development when we don't know whether it works?
    d. Would you say the experience is shared across the participant? What makes a difference? Why would someone have a good vs bad experience?

CHAPTER 3

UNCOMFORTABLE BUT DEVELOPING: HOW MINDFULNESS QUALIFIES THE RELATIONSHIP BETWEEN NEGATIVE EMOTIONS DURING TRAINING AND TRAINING OUTCOMES

ABSTRACT

While prior work has argued that negative emotions can be detrimental for learning, leadership development theory and practice continue to advocate for emotionally challenging programs. Integrating literature on emotions, learning, and mindfulness, we suggest that mindfulness plays a key moderating role to alleviate the known downsides from negative emotional experiences and achieve the proposed benefits. We explored this idea in two studies of business students participated in leadership development programs (one with full-time residential MBAs engaged in an action learning project, and another with part-time executive MBAs participated in an experiential leadership simulations). While we found that negative emotions were inversely related to student satisfaction scores, the relationship between negative emotions and behavioral transfer was more nuanced, depending on mindfulness: In study 1, we found mindfulness to be a critical condition that helped to mitigate the negative effect of negative emotions on behavioral transfer, and in study 2 we further demonstrated a positive effect on behavioral transfer. We discuss the theoretical contributions and practical implications of the role of mindfulness and negative emotions on different indicators of leadership training effectiveness.

INTRODUCTION

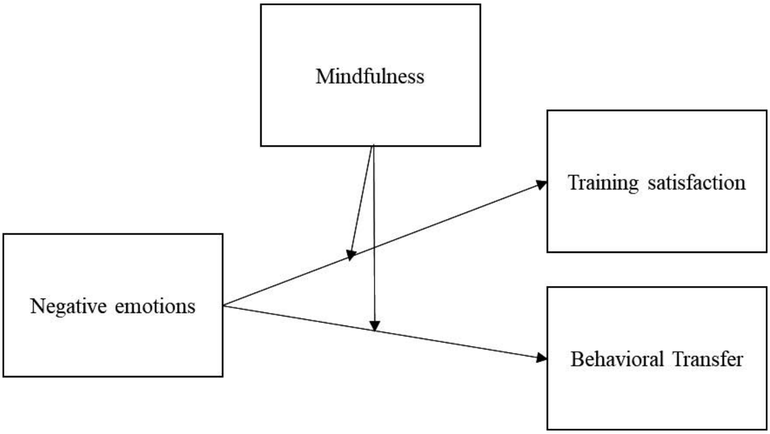
Challenging experiences have been touted as the most effective means for accelerating leadership development (Day et al., 2008; Dragoni et al., 2009; McCall et al., 1988; McCauley et al., 1994). While the experience of gathering and processing challenging experiences might not be easy or comfortable, it can help accelerate the process of altering the leader’s mental models and behavioral routines (Argyris, 1991). Based on this idea, we have seen a proliferation of leadership development programs that, while utilizing experiential learning principles, center around putting leaders in situations that induce stress and discomfort. This can be observed by the increased popularity of challenging simulations or action learning projects used in leading business schools such as leadership expeditions (Myers & Doyle, 2020) where people learn leadership skills in an unpredictable, challenging, and dynamic environment.

However, one may question whether this trend is justified. That is, one could imagine a scenario where countereffects of these challenging programs are more likely to occur. Challenging experience disrupts routines in ways that release strong negative emotions (Mandler, 1984). Further, according to several reviews and meta-analyses, it’s been well-established that emotions, especially, negative emotions can be debilitating for learning (Beal et al., 2005; Zeidner, 2014). This work primarily suggests that negative emotions disengage people from the situation, and thereby detracts from their learning. Despite the majority of research suggesting a negative relationship, some scholars argue that negative emotions can have an adaptive function (Frijda, 1986; Keltner & Gross, 1999) and that challenging negative emotions may be crucial to produce transformative behavioral change (e.g., crucible events, Bennis & Thomas, 2002). Our paper intends to contribute to the knowledge of how negative emotions during training contribute versus detract from learning.

Theory and research on mindfulness can help us better understand this double-sword nature of negative emotions. Mindfulness is defined by openness and attentiveness to moment-to-moment experiences (Brown & Ryan, 2003). Given the demonstrated emotional regulatory capacity of being aware of one's own emotions (Cooper et al., 2018; Hill & Updegraff, 2012), we expect mindfulness can help to counter the established effects of negative emotions on dissatisfaction with training. Furthermore, mindfulness can enhance learning from negative emotions through more detached introspection of one's challenging behavioral patterns as well as the neuroplasticity to accept and internalize new behavioral routines (Kabat-Zinn, 2003; Vago & David, 2012). Specifically, we will look at the role of negative emotions and mindfulness in promoting training satisfaction scores as well as behavioral transfer (Kirkpatrick, 1994). Figure 1 provides an overview of our conceptual model.

While both satisfaction and transfer have been used as proxies for developmental effectiveness (Lacerenza, Reyes, Marlow, & Joseph, 2017), our focus on negative emotions reinforces the critique of others (Alliger et al., 1997; Brown, 2005) that satisfaction scores and training transfer are distinct development outcomes, with unique nomological networks. Whereas smile sheets often completed right after training will likely be negatively affected by negative emotions, behavioral transfer may actually be benefited by negative emotions when there are enough emotional and cognitive resources (i.e., mindfulness) to tackle the difficult behavioral patterns. In sum, to understand the role of negative emotions in developing leaders, it is important to consider different types of training outcomes. Furthermore, mindfulness can play a role in both; from mitigating any potential negative effect of negative emotions on satisfaction scores, to harnessing negative emotions as a motivator (rather than as a demotivator) towards effective behavioral change (Roberts et al., 2005).

Figure 1. Conceptual Model



LITERATURE REVIEW

Negative Emotions and Learning

With the paradigm shift marked by the “affective revolution” in organization studies (Ashkanasy & Dorris, 2017), scholars have offered evidence of the significant role that emotions can play in influencing attitudes and behaviors (Conroy et al., 2017; Little et al., 2016; Seo et al., 2010; Van Knippenberg & van Kleef, 2016). Within the realm of leadership training and development, however, the literature has emphasized cognitive view and pathways and paid less attention to the relationships between affective states, mechanisms and learning outcomes (Aguinis & Kraiger, 2009; Noe et al., 2010; Vogel et al., 2020).

Further insights can be drawn from psychology and education literature, where the role of emotions have been examined more extensively. In the adult education context, the affective aspects of teaching and learning in adulthood has also become a major theme in academic literature and professional development programs (Taylor, 2008). Influenced by the positive psychology movement, one of the influential works in this area is Fredrickson's Broaden-and-Build Theory (1998) which emphasizes the benefits of positive emotional feelings on 'broadening' people's perspective on oneself and the world, and the narrowing effect of negative emotions. In this regard, negative emotions have been argued and shown to cause rumination, which prevents the analysis of the information being given, thus hindering learning (Kross et al., 2005; Pearson, 2017). Moreover, negative emotions have been found to interfere with learning by disrupting individuals' ability to process information (Wells & Matthews, 2014), narrow the scanning for information (Easterbrook, 1959), and divert scarce information from the event to the emotions generated by the event (Nolen-Hoeksema & Morrow, 1991).

With some work thus considers negative emotions to be a hindrance to effective learning, others highlight the potential positive impact of negative emotions. The benefits of negative emotions include providing motivation and energy to attain goals and reduce errors (Lyubomirsky, 2011). Several reviews have also indicated that negative emotions are closely tied to a reappraisal of past actions, and counterfactual thinking (Baumeister et al., 2007), which can inform future behavior (Roese & Olson, 1997). Research on posttraumatic growth also supports this notion that intense and distressing emotions can act as a catalyst for transformational change such as broadened identities (Maitlis, 2009), or deeper self-understanding (Zikic & Richardson, 2007). Similarly, leadership development scholars suggest that high impact experiences propel development because it creates a point of disequilibrium that can lead to a change in the linkages of an individual self-construct (Avolio & Hannah, 2008). This is in line with some of the well-known theory about change such as Festinger's cognitive dissonance theory where the negative emotions that result from such disequilibrium can motivate individuals to engage in change including attitudes and behaviors to reduce that negative emotional states and discrepancy (Diamante, 2011; Hinojosa et al., 2017).

The preceding overview suggests that the role of negative emotions during training may be a double-edged sword. The process of learning from negative emotional experience is imperfect, and uneven in its achievement, such that for the same uncomfortable situations, some people come away with many lessons learned, while others do not. That is to say, we expect variance in the way that individuals respond to a negative emotional reaction. In psychology research, most of the work revolves around emotion regulation and coping. Within the leadership development literature, we can draw some insights from work on the role of developmental challenge, which can be seen as experiences that disrupt routines in ways that trigger negative emotions (Cao & Hamori, 2019; Mandler, 1984). Within this area, the mixed results of the impact of developmental challenges on leader development have also produced a line of research focusing on factors that can help explain variance in how people learn from such experience. In this study, we propose and empirically investigate the role of mindfulness in its potential to help people benefit from negative emotional experience in the context of leadership development programs.

Leadership Development and its Effectiveness

Leadership development can be defined as "*the expansion of the capacity of individuals to be effective in leadership roles and processes*" (Day & Dragoni, 2015, p. 134). Leadership development is unique to other forms of training in that it focuses on personal growth (transformative rather than instrumental or incremental change) (Petriglieri et al., 2011). Heifetz (1994) labeled this a 'wicked' problem as solving a leadership dilemma is not just about learning new knowledge but about challenging one's current way of doing things to come to new behavioral routines. Similarly, Day et al. (2008) argues that understanding how leaders develop would include how their mental models of themselves and their leadership change as well.

However, while leadership learning might be one of the desired outcomes from a developmental perspective, it is not the only expected outcome of leadership training. There are other ways to determine whether a leadership development program is effective. Research in this area often uses the Kirkpatrick framework to evaluate the success of the formal intervention or programs (Lacerenza et al., 2017; Reyes et al., 2019), ranging from positive reaction to a program to learning and actual behavioral change. One of the most widely used frameworks was Kirkpatrick, which categorized outcomes of training and development into different levels. The first training outcome that we investigate in this paper is “satisfaction score”. Training satisfaction (or reaction) is an attitudinal indicator of effectiveness (e.g. training utility and satisfaction with training) (Kirkpatrick, 1994; Lacerenza et al., 2017; Salas et al., 2012). Practically known as ‘smile sheet’, it is by far the most widely used evaluation measure, given the ease with which these can be collected (Lee & Pershing, 2000). Some researchers argue that satisfaction might precede other positive training outcomes (Sitzmann et al., 2008) because it serves as an indicator of the motivation to learn (Bandura, 1977). On the other hand, various meta-analyses have found virtually no relationship between training satisfaction and learning or transfer (Alliger et al., 1997; Dixon, 1996). Some researchers argue that perhaps this is because these different metrics are just taxonomy of outcomes—each with its own nomological network (Holton, 1996). Supporting this notion, recent work suggesting that satisfaction may capture additional outcomes unrelated to learning such as serving client needs, for example, of providing training as perks or infotainment for their leaders (Alvesson & Spicer, 2014).

In sum, considering the definition and view of leadership development as transformative change as mentioned earlier, one of our outcomes of interest is the behavioral transfer that ensues from LDPs. This is important as previous research has highlighted a “transfer problem”, whereby targeted behavior does not translate to changes (Salas et al., 2012). At the same time, our focus on negative emotions suggests that people’s satisfaction scores with training are crucially linked to their positive or negative experiences within a training. With the leadership development industry becoming increasingly a client-driven enterprise, including satisfaction is important as most programs have reportedly still use reaction (i.e. smile sheets) as a measure of effectiveness (Kaiser & Curphy, 2013). Therefore, in what follows, we consider the role of negative emotions and mindfulness on both outcomes: satisfaction scores and behavioral transfer.

The Moderating Role of Mindfulness

Mindfulness has been defined as "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally" (Kabat-Zinn, 1994, p.4). Whereas psychological research has traditionally focused on the contents of consciousness (e.g. cognition, emotions, or their behavior consequences), mindfulness fundamentally pertains to the consciousness itself (Brown et al., 2015). This quality of consciousness, characterized by an openness and attentiveness to moment-to-moment experience (Brown & Ryan, 2003), is what allows for an accurate perception of reality without distortion or avoidance (Niemiec et al., 2010). The concept of mindfulness has received considerable attention in clinical and social psychology given its benefits for mental health, physical health, behavioral regulation, and interpersonal relationships (Brown et al., 2007). In recent years, the study of mindfulness has also appeared to gain traction within the organization and management literature, although empirical research in this field remains scarce, but steadily increasing (Dane, 2011; Reb et al., 2020). Initial evidence, however, suggests that mindfulness is consequential in the workplace (Glomb et al., 2011).

While we know of no empirical studies yet to investigate mindfulness specifically in the realm of leadership development, some theoretical work exists. For example, Ashford & DeRue's (2012) model of mindful engagement for experiential leadership development which argues that to maximize the developmental value of any experience, individuals must approach and go through their experiences mindfully. They considered mindfulness as a ''state of being'' where people are actively aware of themselves and their surroundings, open to new information, and willing and able to process their experience from multiple perspectives. Atkins & Styles (2015) argue that mindfulness can contribute to the development of mental complexity in leaders, especially in response to dynamic challenges. They theorize that cultivating mindfulness allows leaders to self-regulate more effectively, and better to respond rather than react and to learn from, rather than avoid the challenge. Similarly, Reb et al. (2015) propose that by facilitating the shifting of experiences from identification to detachment, mindfulness provides a way for constructive development that can allow leaders to progress through higher stages of their development. Following these lines of thoughts, in the next section, we hypothesize how mindfulness may determine different training outcomes in response to emotionally challenging situations in developmental programs.

Next, we hypothesize how mindfulness can moderate the effects on negative emotions on two outcomes of training: satisfaction and behavioral transfer. First, we consider the role of negative emotions and mindfulness on satisfaction. In the examination of the nomological network of training satisfaction, Brown (2005) found that experienced affect in training is associated with trainee reaction. When the leader experience negative emotions, the leader is less likely to be engaged and more likely to have a lower satisfaction score. However, mindfulness can moderate this effect of negative emotions. Specifically, we argue that mindfulness can be a protective factor that can help to offset negative emotions' adverse influence on training satisfaction. We expect that mindfulness is likely to have that compensatory function, given its association to improved down-regulation of negative emotions (Giluk, 2009) including less suppression and intensity of negative emotions (Siegel, 2007). Mindfulness has also been shown to help with faster recovery from unpleasant emotions and aversive experiences (Broderick, 2005). This notion that mindfulness provides a buffer to negative affectivity is consistent with neuroscientific findings which suggest that high mindful adults have greater prefrontal cortical activation that enhances emotion regulation in the limbic brain region (Brown et al., 2013; Creswell et al., 2007). These findings support the idea that mindfulness will help to lessen the negative effects of negative emotions experienced during the training session on participants' rated satisfaction with the training afterward.

> *Hypothesis 1: Mindfulness moderates the relationship between negative emotions and satisfaction in a mitigating manner, such that the relationship becomes less negative when mindfulness is high rather than when mindfulness is low.*

Another outcome of interest is the transfer of learning, which focused on a "behavioral" measure that represents what the leader does—whether their performance as a leader improves (Kirkpatrick, 1994; Lacerenza, et al., 2017; Salas et al., 2012). We argue that in the leadership development context, emotionally challenging experiences are seen as jolting triggers (Roberts et al., 2005) that can disrupt routine and change the pre-existing schema and mental representation of self and the world. Notable events are atypical and therefore significant and memorable, distinguishing them from ordinary or mundane situations that evoke only neutral, mildly positive, or mildly negative emotions (Fokkinga & Desmet, 2013). Thomas (2008) argues that for most people, the most memorable events are the ones where they learned something important about themselves, that led to a new or altered sense of identity. These transformative experiences or "crucibles" (as first coined by Warren Bennis) can be thought of as a 'kind of super-concentrated form of leadership development'. However, as these experiences are novel, disruptive, and emotionally intense, leaders run the risk of emotional overload by shifting cognitive resources away from learning and development to performance anxiety (DeRue &

Wellman, 2009; Noe et al., 2010). To this end, we expect mindfulness can help the leader to leverage the benefit of negative emotions while preventing its potential downside.

We draw from the Mindfulness-to-Meaning Theory (Garland et al., 2015) which proposes that mindfulness evokes a metacognitive state that transforms how one attends to a negative experience, thereby promoting reappraisals that facilitate adaptive behavior. Center to this theory is the role of mindfulness in broadening the scope of the appraisal to appreciate that even aversive experience and emotions can be potential vehicles for personal changes and growth. Such a generative account of mindfulness goes beyond the predominant eliminative account where mindfulness is usually seen to reduce or eliminate negative emotions and reaction in response to stressors (Kross & Ayduk, 2008).

Building on this theory, we argue that when it comes to transferring what the leaders learn from negative emotional experience, mindfulness can be facilitative for the following reasons: first, when the participants experience negative emotions, mindfulness can help with emotion regulation, as described earlier, by dampening the intensity of the negative emotions and preventing it from overwhelming or exhausting the participants as they go through the difficult situation.

Second, mindfulness contains an important element of non-judgemental awareness. This refers to an ability to hold painful thoughts and feelings in balanced awareness rather than avoidance or overidentification. Such ability allows people to approach their emotionally challenging situations with curiosity and openness (Neff et al., 2007). This can contribute to a leader's greater discernment in detecting valuable information from their challenging emotions and events, which facilitate learning (Chang et al., 2015; Williams & Kabat-Zinn, 2011). Brown et al. (2007) argue that the informational value is salient largely because the ego is quiescent. Mindfulness, therefore, helps the leaders to take a step back, and see themselves more clearly and accurately including the potentially difficult assumptions or habits that might have previously been hidden behind their "ego" or otherwise susceptible to automatic defensive reaction (that might have prevented them to accept those difficult assumptions or habits as something to address).

Lastly, leaders face the hurdle of translating this new information and goal toward actually changing their target behavior. Here, neuroscientific research provides substantive evidence that mindfulness can change behavior by altering the brain at a structural and functional level—a process known as neuroplasticity. By changing individuals' reactions to their thoughts and emotions, the maladaptive habits that have formed over time can be modified, and the new behavioral pattern is internalized. In this aspect, behavior can shift from the realm of mindless habitual reactions to mindful purposeful action. This may help leaders better the ability to make more adaptive behavioral responses (Tang, 2017).

> *Hypothesis 2: Mindfulness moderates the relationship between negative emotions and behavioral transfer in a reversal manner such that the relationship becomes positive when mindfulness is high and negative when mindfulness is low.*

STUDY 1

METHODS

Sample, Setting, and Procedure

We collected data from MBA students participating in an intense, concentrated one-week leadership course at the outset of an MBA Program at a German business school. It was designed to teach leadership by having students apply core principles around leadership in an experiential setting. The students worked in teams (of 4-5 people) and face a different challenge every day. This was a “real” challenge in the sense that the funds that the students raised during the week would go to benefit children's rights organizations in Germany. As such this can be considered action learning project (Day & Sin, 2011; Marquardt et al., 2009).

A new leader was chosen for every challenge (for each day), ensuring that each student steps up as leader once over the course of the week. After completing the challenge, students first took time to reflect on the leadership and team process. Then, moderated by their mentor, they met to discuss the learnings of the day in order to improve leadership and team dynamics.

The challenges featured core topics of the MBA program: product development, marketing, strategy, negotiations, and logistics/product distribution. All challenges were extremely demanding - students worked under enormous time pressure, in fierce competition with the other student teams, and with team members that had diverse experiences, strong personalities, and differing cultural backgrounds. Of the 137 students contacted, 130 completed the surveys. In the final sample, respondents consisted of 71% men. The average age of our participants was 30. 53% were Caucasian, 27% Asian, 3% African-American, and 5% Hispanic (12% missing ethnicity data).

Measures

The data collection process involved two different phases. For the first phase, participants first completed an online survey that assessed their demographic information, and personality traits before they started the course. In the second phase, for each day during the course, we asked the leaders of the teams to report their experienced emotions, mindfulness, and reaction to the experience on that day. In addition, we asked team members (i.e. followers) to complete the ratings of their respective team leaders and the end of the day.

Experienced emotions. For the assessment of daily emotions, we used the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988). The PANAS measures positive emotions and negative emotions with 12 adjectives. Individuals rate the extent to which they experienced each emotion during the session on a scale (1 = “Not at all”; 5 = “An extreme amount”). Sample adjectives for positive emotions included “enthusiastic”, “active”, “inspired”. Sample adjectives for negative emotions included “upset”, “distressed”, “anxious”. The average alpha for positive emotions was .62, and negative emotions, .84.

Mindfulness. We measured mindfulness using a 10-item mindfulness scale (Brown & Ryan, 2003; Feldman et al., 2007) (alpha = .69). Participants rated their agreement with the ten statements (1 = strongly disagree; 5 = strongly agree). Sample items were “It was easy for me to concentrate on what I was doing”, “I could tolerate emotional pain”, “I tried not to notice any feeling and thoughts without judging them”. The measure was intended to capture the generalized mindfulness over the course of the program.

Satisfaction. To measure satisfaction, we used a single item to indicate the level of satisfaction that participants felt for each session. The item was “I am satisfied with what I learned from the experienced today”. The use of such item is quite common to tap into the gut reaction of the participants after the training. Ratings were made on a 5-point Likert scale.

Behavioral transfer. Many leadership scholars have highlighted the development of an individual capacity to be effective in leadership roles and processes to define leader development (Van Velsor et al., 2010). For this reason, we obtained team members' ratings of team leaders’ effectiveness as a leader. The item was to indicate “how effective was your leader today” (on a scale of 1 (weak) to 10 (strong)). Therefore, this can be considered a general perception of leadership effectiveness to indicate the extent to which the leader implemented every aspect of the leadership lessons that they were taught on the day that they had to lead the team.

Control variables. Because the response to negative emotions is not only dependent on the experienced negative emotions but also the experience of positive emotion (Fredrickson, 2009), in all analyses we controlled for positive emotions. We also controlled for age and gender which have been shown to relate to learning (Cassara, 1990; Maurer, 2001; Severiens & Ten Dam, 1994). Trait learning goal orientation and openness to experience were also examined in this study as control variables because previous research found them to be related to motivation to learn (e.g. Chen et al., 2000; Young & Dixon, 1996). Learning goal orientation was measured using a 3-item 5-point scale developed by Vandewalle (1997). A 5-item 5-point scale developed by John & Srivastava (1999) was used to measure openness to experience.

RESULTS

Descriptive statistics and bivariate correlations are reported in Table 1. Here, positive emotions were not significantly related to satisfaction (r = .11, *ns*) nor behavioral transfer (r = .16, *ns*). Negative emotions were not significantly related to satisfaction (r = .10, *ns*). However, negative emotions were significantly and negatively related to transfer (r = -.29, $p < .01$).

Hypothesis 1 predicted mindfulness to moderate the relationship between negative emotions and training satisfaction. As shown in Table 2, Model 3 shows that the interaction between negative emotions and mindfulness was not statistically significant, B = -.47, *ns*. Therefore, hypothesis 1 is not supported.

Hypothesis 2 predicted mindfulness to moderate the relationship between negative emotions and behavioral transfer. As shown in Table 3, Model 3, shows a significant Negative emotions x Mindfulness interaction coefficient, B = 1.24, $p < .05$. The interaction graph can be seen in Figure 2. We examined the interaction results and the simple slope test revealed that the relationship between negative emotions and transfer was statistically significant when mindfulness was low (B = -1.26, SE = .37, t = -3.37, p <.01), but not high (B = -.05, SE = .29, t = -.16, *ns*). This result suggests that high negative emotions were more likely to be associated with lower transfer when mindfulness was low rather than high.

Table 1. Means, Standard deviations, and Correlations (Study 1)

	M	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1. Age	29.33	3.47								
2. Gender	1.29	.46	.04							
3. Openness to experience	3.86	.75	.01	-.13						
4. Learning goal orientation	4.41	.48	-.17	-.05	.35**					
5. Positive emotions	3.20	.62	-.20*	-.16	.09	.12				
6. Negative emotions	2.10	.67	.14	.16	.08	.08	-.27**			
7. Mindfulness	3.58	.49	-.06	.05	.24**	.31**	.10	.05		
8. Training satisfaction	3.04	1.06	-.12	-.06	-.11	.14	.11	.10	.15	
9. Behavioral transfer	6.57	1.56	-.13	-.05	-.09	-.08	.16	-.29**	-.13	-.12

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

Table 2. Regression Analyses for Training Satisfaction (Study 1)

	Model 1		*Model 2*		*Model 3*	
	B	*SE*	*B*	*SE*	*B*	*SE*
Age	-.02	.03	-.02	.03	-.03	.03
Gender	-.13	.22	-.21	.22	-.20	.22
Openness to experience	-.27	.14	-.32*	.14	-.31*	.14
Learning goal orientation	.41	.22	.30	.23	.27	.23
Positive emotions	.22	.17	.25	.16	.26	.17
Negative emotions			.25	.16	1.99	1.31
Mindfulness			.30	.21	1.26	.74
Negative emotions x Mindfulness					-.47	.35
R^2	.08		.11		.13	

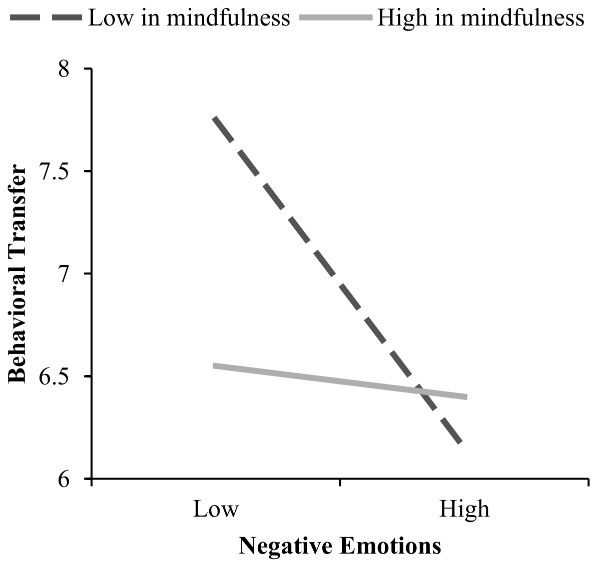
*p <.05, **p <.01. Unstandardized regression coefficients are reported.

Table 3. Regression Analyses for Behavioral Transfer (Study 1)

	Model 1		*Model 2*		*Model 3*	
	B	*SE*	*B*	*SE*	*B*	*SE*
Age	-.05	.04	-.05	.04	-.03	.04
Gender	-.16	.32	.03	.31	-.06	.31
Openness to experience	-.15	.20	-.09	.20	-.11	.20
Learning goal orientation	-.26	.32	-.10	.33	-.03	.32
Positive emotions	.15	.24	.06	.24	.04	.24
Negative emotions			-.51*	.23	-5.07**	1.85
Mindfulness			-.34	.30	-2.84**	1.05
Negative emotions x Mindfulness					1.24*	.50
R^2	.04		.09		.14	

*p <.05, **p <.01. Unstandardized regression coefficients are reported.

Figure 2. Interactive effect of mindfulness and negative emotions on behavioral transfer (Study 1)



DISCUSSION

Overall, Study 1 failed to provide support for the moderating effect of mindfulness in the relationship between negative emotions and training satisfaction. However, it provided support for hypothesis 2—that mindfulness buffers against the negative effect of negative emotions on behavioral transfer. The purpose of Study 2 was to replicate the findings from Study 1 in examining the relationship between negative emotions, mindfulness, and training outcomes. Study 2, however, used a different measure of behavioral transfer i.e. a written personal case to demonstrate what students learn and integrate their learnings into the new behavioral pattern. We believe that this is an improvement of the measure of behavioral transfer than the one we use in Study 1 because the written case was an assignment that took place three weeks after the sessions (where the negative emotional experience occurred). This time lags can help to reduce the common method bias (Podsakoff et al., 2003) and might be needed for the learning to be processed and manifest into changes (Bransford et al., 2006).

STUDY 2

METHODS

Sample, Settings, and Procedure

Similar to Study 1, we also collected data from an experiential leadership development course for Study 2. However, instead of an action learning project, students engaged in leadership simulations in class. We collected data from EBMA students participating in a leadership development course at a large Dutch university for 4 consecutive days at the start of the EMBA program. Following the hierarchical-taxonomy of leadership behavior by Gary Yukl (Yukl, 2012), each session focused on one specific aspect of leadership: task-oriented leadership, relationship-oriented leadership, change-oriented leadership, and ethics-oriented leadership. Each session lasted about three hours. For more details of the course activities for each day please refer to Appendix 1.

Three weeks after the course, students were asked to reflect upon each of the sessions and integrate the findings in a plan to improve their leadership behaviors. Specifically, this was done by challenging students to write a case about themselves, highlighting the problem they face in each component of leadership and a proposed solution (based on the feedback and teachings) of how to implement, with concrete actionable steps by which they would lead differently moving forward. We explain this in more detail below in the method section. This assignment was intended to aid students with the internalization of the materials into their daily lives. The assignment also helps us with our assessment of the behavioral transfer taking place.

Of the 47 students contacted, 44 completed the surveys. For those in the final sample, we obtained 183 (out of a maximum of 220) sets of experienced sample surveys. Approximately 73% of the students were men, 89% were Caucasian, and on average they were 36 years old (*SD* = 5.88).

Measures

The data collection process involved three different phases. For the first phase, participants first completed an online survey that assessed their demographic information, and personality traits before they started the program. In the second phase, students report their experienced emotions, mindfulness, and reaction to the sessions (e.g. how satisfied with the session) at the end of each session (i.e. day). The experience sampled data were collected through a short online survey. In the third phase, as part of an assignment for the course, the participants completed a personal case.

The same measures as in Study 1 were used to assess positive and negative emotions, training satisfaction, and the control variables (age, gender, learning goal orientation, openness to experience). Last, given the possibility that the effect of the sessions might depend on the students' baseline leadership proficiency (as measured by their 360-degree feedback data collected at the start of the program), we also include this as another control variable.

Mindfulness. We measured mindfulness using an adapted 3-item mindfulness scale used in Study 1 (alpha = .52). The other items from the original scale were not included in this study because they did not seem suitable in the simulated nature of this class. Moreover, given the nature of the survey (measured every session, we had to shorten the scale to reduce the lengths of the survey. But given the recent nature of the experience, a shorter scale (three items) is acceptable (Shrout & Lane, 2011).

Behavioral transfer. About three weeks after the course, students were given the assignment to write a personal case. This is a personal case that describes one or more leadership challenges where the course materials came to light. The case reflects a real and unfinished leadership problem that each student was still wrestling with. In addition to identifying the problem, the students also had to incorporate the suggested solution, which was encouraged to be implemented in the workplace (this is possible given that these EMBA students were enrolled in a part-time program, which required them to still manage their day-to-day jobs during the program). The case is around 1000 words. Participants' scores on this assignment were used as the measure of their learnings. Grades were given by the teaching assistant of the course unaware of our hypotheses. The evaluation criteria were based on two main dimensions (1) root cause analysis and problem description (2) credible solution. Appendix 2 provides more details into these grading dimensions and an example of a high and low score case. Essentially, the overall score indicates the extent to which students were able to integrate what they have learned from the course and develop an insightful, practical solution to their leadership challenges. The internalization and behavioral change aspects are illustrated by their articulation of the behavioral problem they face and use course concepts to work towards a solution that effectively solves the problem using course concepts

RESULTS

Table 4 reports the descriptive statistics and between-individual correlations among trait scores and average experienced-sampled scores for all the study variables. Positive emotions were positively, but not significantly related to satisfaction ($r = .09$, *ns*) and behavioral transfer ($r = .18$, *ns*). Negative emotions were negatively and significantly related to satisfaction ($r = -.43$, $p < .01$) but not significantly related to behavioral transfer ($r = -.02$, *ns*).

In this study, we used Mplus 7 (Muthén & Muthén, 2012) to conduct regression analyses controlling for the nested nature of the data. We tested how mindfulness influences the relationship between negative emotions that occurred during the session and satisfaction with session and subsequent behavioral transfer.

Hypothesis 1 predicted that mindfulness buffers the adverse effects of negative emotions on training satisfaction. As shown in Table 5, Model 3 shows that mindfulness did not moderate the effect of negative emotions on satisfaction., $B = .03$, *ns*. Therefore, hypothesis 1 is not supported.

Hypothesis 2 predicted mindfulness to moderate the relationship between negative emotions and behavioral transfer. As shown in Table 6, Model 3 shows a significant Negative emotions x Mindfulness interaction coefficient, $B = .77$, $p < .01$. The interaction graph can be seen in Figure 3. In support of Hypothesis 2, the relationship between a leader's negative emotions and behavioral transfer was positive when mindfulness was high ($B = .81$, $SE = .17$, $t = 4.72$, $p < .01$, but not significant when mindfulness was low ($B = -.10$, $SE = .16$, $t = -.62$, *ns*). Accordingly, negative emotions seem to offer the potential to enhance a leader's behavioral transfer, but this potential is realized only when mindfulness is high.

Table 4. Means, Standard deviations, and Correlations (Study 2)

	M	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1. Age	35.73	5.87									
2. Gender	1.27	.45	-.23								
3. Openness to experience	2.8	1.66	-.36*	-.04							
4. Learning goal orientation	3.44	1.48	-.43**	.07	.95**						
5. Leadership Proficiency	50.43	21.60	-.10	-.01	.05	.08					
6. Positive emotions	3.67	.47	-.15	.04	.37*	.38*	-.18				
7. Negative emotions	1.76	.47	.05	.00	-.26	-.23	-.30	-.08			
8. Mindfulness	4.62	.51	.27	-.10	-.26	-.27	-.07	.23	-.03		
9. Training satisfaction	3.93	.72	-.03	.24	-.07	-.07	.14	.09	-.43**	.18	
10. Behavioral transfer	6.9	.61	.19	-.21	.05	.02	.15	.18	-.02	.64**	-.08

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

Table 5. Regression Analyses for Training Satisfaction (Study 2)

	Model 1		*Model 2*		*Model 3*	
	B	*SE*	*B*	*SE*	*B*	*SE*
Age	-.01	.01	-.00	.01	-.00	.01
Gender	.34	.15	.31	.15	.32	.15
Openness to experience	.18*	.14	.17	.14	.17	.14
Learning goal orientation	-.28	.16	-.28	.15	-.28	.15
Leadership Proficiency	.00	.00	.00	.00	.00	.00
Positive emotions	.19	.12	.26*	.12	.26*	.12
Negative emotions			-.35**	.12	-.50	.83
Mindfulness			-.02	.12	-.08	.32
Negative emotions x Mindfulness					.03	.18
R^2	.08		.14		.14	

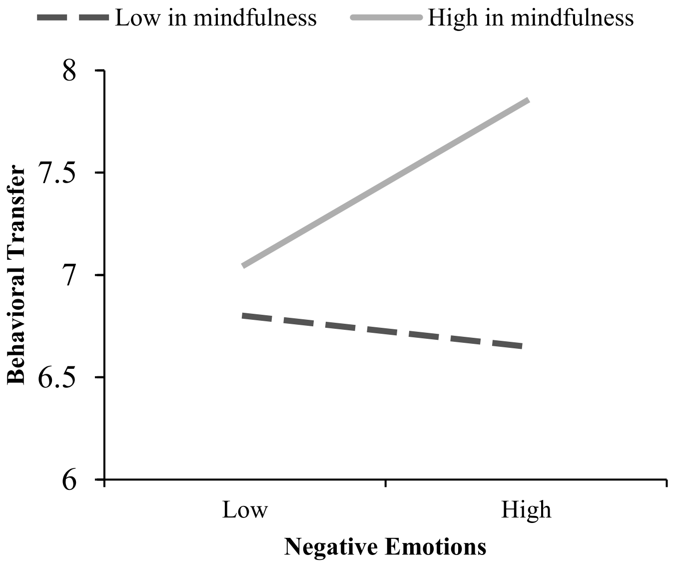
*p <.05, **p <.01. Unstandardized regression coefficients are reported.

Table 6. Regression Analyses for Behavioral Transfer (Study 2)

	Model 1		*Model 2*		*Model 3*	
	B	*SE*	*B*	*SE*	*B*	*SE*
Age	.02	.02	.01	.02	.01	.01
Gender	-.21	.20	-.23	.17	-.10	.16
Openness to experience	.02	.18	.06	.15	-.02	.15
Learning goal orientation	-.01	.21	.08	.18	.14	.17
Leadership Proficiency	.00	.00	.00	.00	.00	.00
Positive emotions	.19	.16	-.17	.14	-.05	.14
Negative emotions			.31*	.13	-3.27**	.88
Mindfulness			1.09**	.13	-.28	.36
Negative emotions x Mindfulness					.77**	.19
R^2	.03		.34		.41	

*p <.05, **p <.01. Unstandardized regression coefficients are reported.

Figure 3: Interactive effect of mindfulness and negative emotions on behavioral transfer (Study 2)



GENERAL DISCUSSION

Negative emotions can have significant and long-lasting effects on individuals (Elfenbein, 2007). While the dominant narrative suggests that negative emotional experience is unpleasant and that if possible, people should avoid it, our preliminary research had shed light on why going through emotionally challenging situations might not necessarily bad. Instead, we argued in this paper that that negative emotions have a salutary potential because experiencing negative emotions, if combined with mindfulness, could help leaders attain better development outcomes. While the moderating effect of mindfulness was not observed for the satisfaction measure, we found support for the moderating effects of mindfulness on leader behavioral transfer, suggesting that not all can benefit from negative emotions; a key factor is mindfulness.

Specifically, for Study 1, mindfulness helped to attenuate the negative association of negative emotions and behavioral transfer (measured by perceived leader effectiveness rated by the followers in team action learning project). For study 2, the linkage between negative emotions and behavioral transfer (measured by a written case about personal leadership challenge and implementation) became positive when mindfulness was high. Our findings offer several implications for theory and research on training effectiveness, emotions, mindfulness, and leadership development.

Theoretical Contributions

Negative emotions have traditionally been regarded as powerful yet debilitating. Although commonly experienced in organizations (Elfenbein, 2007; Lindebaum & Jordan, 2014), its potentially adaptive functions are still scarcely investigated. Based on the adaptive views of emotions (e.g., Keltner & Gross, 1999), more research has started to examine the conditions under which negative emotions may result in desirable outcomes for the individuals and organizations (Cheng & McCarthy, 2018; González-Gómez & Richter, 2015). This paper contributes to this perspective by adding leader training and development outcomes as important effects of negative emotions (in combination with mindfulness). Therefore, this paper enhances our understanding of the double-edged sword nature of negative emotions. This affective approach complements previous leadership training and development research and contributes to broadening the range of antecedents considered in these literature (Aguinis & Kraiger, 2009; Noe et al., 2010; Vogel et al., 2020). Specifically, we add to the research by helping to create a more nuanced understanding as to how the negative effects of negative emotions can be mitigated and leveraged to predict leadership training outcomes. Most importantly, we found mindfulness to influence the relationship between negative emotions and behavioral transfer, which is an important indicator of leadership training effectiveness (Lacerenza et al., 2017).

Equally important, our results further demonstrate that mindfulness is a crucial boundary condition for the role of negative emotions. This finding is especially noteworthy because several scholars have proposed the role of mindfulness for leadership development (Ashford & DeRue, 2012; Reb et al., 2015), yet our work is amongst the first to examine this idea empirically. Furthermore, we contribute the general literature on mindfulness by demonstrating that mindfulness not only has effects in well-being which has been quite well-established in the literature but also other relevant outcomes for organizations.

Limitations and Future Research

This study is not without limitations. First of all, given that our study only examines the moderation effects, future research could employ multiple-temporal-point design to test the mechanisms we have theorized to explain how and why negative emotions and mindfulness can help people reap the learning benefits from an emotionally challenging experience. The second issue worth mentioning is that both of our studies are field-based. Future research could thus conduct experimental replications of our findings in a more controlled setting to provide stronger causal inference. For instance, participants could be given a brief mindfulness meditation (Hafenbrack et al., 2014) in the lab, before performing a challenging task that induces stressful negative emotions such as preparing and performing a leadership pitch. An interesting element of the suggested study design here might be to have participants also perform in multiple rounds to allow researchers to examine the role of negative emotions and mindfulness on learning and development in repeated performance episodes. Finally, with the development of the neuroscientific approach in organizational research (Becker & Menges, 2013), another suggestion for future research is to measure mindfulness and negative emotions more objectively through physiological measures such as heart rate variability.

Practical Implications and Conclusion

We believe that our findings can speak to leadership development educators. Our findings about the affective states, in this case, negative emotions, that emerge in response to different teaching and experiential learning activities and its relationship to different training and developmental outcomes can be an important guide for instructional planning and evaluation. Putting people in an emotionally challenging situation can potentially hurt satisfaction scores. However, if the target outcome is more toward the transfer of learning, then inducing negative emotions in class might prove to be beneficial, while also making sure that participants are being mindful. This may also present the case for incorporating mindfulness practice and brief intervention with the leadership development programs (Atkins & Styles, 2015).

Similarly, such findings may provide practical implications for leaders to become more effective in learning from uncomfortable experience. While our study focuses on the context of formal educational programs, the insights may be extended to day-to-day activities in organizations. Mindfulness can be beneficial not only for ensuring well-being at work, but also crucial for learning under challenging situations.

APPENDIX 1

Course Activities Description

Each day followed a similar design: students started with a short overview of the gathered knowledge in each of these domains of leadership, to ensure students have a good understanding of the core aspects of a certain approach to leadership. Building on this understanding of these core aspects of leadership, students received a 360 feedback assessment of how they scored on this specific aspect of leadership – this 360 was not only quantitative but included extensive qualitative examples and stories to demonstrate the quantitative component. Building on this 360 assessment, students engaged in a simulation exercise (akin to a development center) to test their proficiency in this aspect of leadership. For instance, for task-oriented leadership students were given an in-basket selection exercise that demonstrated their ability to organize and plan and communicate effectively as well as set effective goals for themselves and others (see Anseel et al., 2016 for a description of this exercise). For relationship-oriented leadership students practiced courageous conversations where they had to address an actor who played a difficult fictive person on their EMBA-team, asking them to demonstrate their ability to listen well, take other people's perspective, and use political skill to influence the difficult person to better performance. For change-oriented leadership, students were asked to come up with a legacy-speech that builds on their life story to answer the question "why should anyone be led by you?" (Goffee and Jones, 2005) – this speech was done in front of their peers and students were evaluated by their peers, this challenged students to effectively communicate their vision for the future as well as understand how their life has shaped. For ethics-oriented leadership students engaged in a life-boat exercise where they imagined being stranded in the middle of the ocean with the boat only big enough for one person to survive and they were asked to come up with a speech that demonstrates "what value that they would bring back to society", this challenged students to be clear about what it is that they value, how different values are prioritized, and whether or not they walk the talk. After every experiential simulation, there was feedback from peers and coaching from the course professor.

APPENDIX 2

Personal Case Scoring Criteria

1. **Root Cause Analysis and Problem Description**

- **Problem choice:** Was the problem aligned with class topics?
- **Depth:** Was the problem just stated or was it thoroughly analysed? Was there evidence of different levels of analysis or was it just focused on the symptom?
  - Subjective norms: How is the environment linked to your problem?
  - Behavioural attitude: How does the problem link to what you value? What competing values stand in your way?
  - Perceived behavioural control: Do you feel capable? What external factors stand in your way?
- **Clear description of the problem:** Is there a concrete and independent problem statement? Is it formulated as a question or did you jump to goal-setting?

2. **Credible Solution**

- **Link to problem:** Was the solution clearly linked to the problem?
  - Business Case: Was there a clear business case to be made?
  - Smart goals: Did you follow the principles of smart goals – specific, measurable, achievable, relevant, and time-sensitive?
  - Adaptive challenge: Did you understand how your own character could stand in the way of their proposed solution (this links to problem statement)?
  - Environmental analyses: How can your environment help you solve these problems?
  - Goal tracking: Is there a plan to check whether goals are being reached and to course-correct where necessary?
- **Clear description of the solution:** Is there a concrete and independent solution statement? Is it specific enough (to allow people to invest money)?

Example of a high score case

I have an interesting (and sometimes troublesome) relationship in dealing with both men and women in the workplace. I used to have great friendships with both men and women. Both parties appreciated the candor that I brought to the relationship. Nevertheless, now and then I would step on some very sensitive toes. Giving my “straightforward” personality, school advisors suggested I study civil engineering, lawyer or physician. I was curious however what I was doing wrong in stepping on sensitive toes and I ignored their advice and studied psychology instead. These studies really opened my eyes: all of the sudden I saw all of the problems I was running into. Solving them however was another matter … Being trained as a psychologist, I became emotionally sensitive enough to understand when I would offend women, but I am still not agreeable and mindful enough not step on sensitive toes. I often have the impression that women see me as a threat when I do not “play nice”. As a result, my current strategy is: “tip-toe around female friends and colleagues and avoid confrontation”. Needless to say that this hinders my effectiveness as a leader. Similarly, I seem to run into trouble with male authority figures. Being trained as a psychologist, I do better with talking about my feelings than some of my male colleagues, something which not all of men particularly appreciate. I remember a performance feedback with one of my previous bosses … he was utterly uncomfortable to talk about my work-related functioning. I never asked for feedback afterwards. When I have an emotional problem with a male friend, I am often afraid to voice these emotions. This is problematic because important problems remain unresolved that way. My current strategy toward men is: “Hoping that problems solve themselves and go away.” With regards to men and women, it seems that I am caught between being emotionally sensitive to talk to women but still not enough to be accepted and at the same time it appears that I am emotionally too sensitive for men. Maybe I should have studied civil engineering ...

I realize that my old candor has burned a few bridges along the way. The fact that I have burned those bridges is strange because despite my candor I absolutely hate conflict! I like a good discussion and debate now and then and I am happy to go out and seek feedback but I hate the idea that someone else fundamentally thinks badly of me. In other words, I don't mind a bit of task conflict now and then but I hate relationship conflict. It seems that I am both the competent jerk and a fool eager to be loved. What is pushing me toward the conflict I desperately hope to avoid? This need to both search and avoid conflict puts me in no-mans-land. I believe a big part of the problem lies in the difference between emotional sensitivity and emotional intelligence. While I am sensitive to what others think about me, I may not be fully aware of how others truly perceive me, understanding their emotions (emotional intelligence). Perhaps I am thinking about this too much from my own perspective, while I should perhaps try to take their perspective instead. Rather than forcing men to talk about their feelings and forcing women to accept my dominant male values, perhaps I should try to get into their mindset first. Seek first to understand before being understood. In doing this exercise, I am amazed to understand for example how many emotions can be exchanged between men without ever saying a word and how many subtle behaviors and words may be upsetting to women. Being more mindful of the message others are conveying to me should help me. And perhaps I should also realize that I am getting better at it, after my education in psychology I have burned a lot less bridges and even repaired a few bridges deemed beyond repair.

Example of a low score case

My whole life I have been considering myself as a highly empathic person. I saw myself as someone who is able to understand other's people feelings and take their perspectives in any situation. Even so, my husband or colleague at work would tell me that I need to listen more carefully. These feedbacks I would receive during feedback sessions at work or after some discussions with my husband. Throughout my professional career I have learned to embrace a critique and try to learn something out of it. Yet, I was having a hard time to accept that my listening skills are poor. It simply didn´t match with my own self-image of emphatic person that I have cultivated for so long.

After receiving a few negative feedbacks about this issue, I started thinking about it in more depth. The truth is that I had this tendency to filter the information I receive in a sense that I simply didn´t listen to the parts that I consider to be non-relevant. This led me in few occasions to discussions, privately and professionally, where my interlocutor would reproach my bad habit. Both, personal and professional challenge I had was to see the situation from another person's perspective. Although I was doing my best to maintain good relations with everybody around me, privately and professionally, sometimes conflicts were unavoidable. As somebody who has an aversion to any kind of conflicts, I was making an effort to smooth out the problems. But even then, I rarely listened how other person felt and his/her opinion. Instead, I focused only on my opinion and my feelings, and waited for my turn to say something. This has led me to insecurities on how to approach some people. Very often my reactions on other's people actions were too rapid and without considering their motives.

However, knowing that a colleague or close friend/family member was angry on me was making me feel very uncomfortable. So unwillingly I led a long discussions until I knew that "everything is ok" and that the conflict made no harm to our relationship. Yet even than I felt bad and thought for days about the conflict. After profound reflections, I realized that I was just too concerned about myself. Now I see that I didn´t like to feel like the victim in any kind of conflict, but rather above all circumstances. At the end, I started doubting very much the level of empathy and compassion for others, and was questioning my self-confidence and its reflection on listening skills. I wondered what would change in my relationship with others if I would show truly more empathy and compassion?

So I decided to take control of the situation and get in front of this. The feedbacks I received from the persons close to me, as well as colleagues made me think seriously about my listening skills. I had to face the fact that my self-image was not in line with how I act and what I communicate to interlocutors. When I first confronted this problem, I made myself clear that I have to split perception of myself as well as my emotions from my behavior. This is very important as myself perception was stopping me often to understand the impressions I was making on others. The truth is that my bad listening skills firstly reflected on my private relationships, mainly with my husband. As he was the one who was pointing out this issue all the time, I knew that he was the starting point. I sat with my husband and asked him about the honest feedback regarding my behavior in the moments when he feels I don´t listen what he is saying. I listened carefully what he was explaining without trying to find an excuse or filtering out the information I was receiving at that moment.

At work I set myself a concreate goal: applying the same pattern of behavior and by the next annual performance review have my listening skills two levels better. What helps me in achieving this goal is the nature of my job, where very often I am forced to lead a long conversations and sometimes even unpleasant discussions. I started thinking profoundly about the what would change in my relationship with others if I would truly show more empathy and compassion by involving myself in mindful and active listening. I have occupied my mind with this matter and got to the conclusion that better listening skills would among other give me more credibility as a future leader, but also as a partner, member of the family and a friend.

The challenge I faced was to see the situation from other's person perspective especially in the situations of conflict when I was unconsciously victimizing myself. The moment I became highly aware of the issue I had, I realized that the only way to fight this is to control my behavior. By controlling my behavior I understand forcing myself to listen and concentrate on what other person is trying to tell me. It includes both, the facts and emotions as a result of a certain situation. Parallelly, rather than having long discussions, my goal is to resolve the problems based on pure facts.

However, I am aware that I cannot receive the feedbacks on a daily basis. This is why in my case a self-control is crucial. Therefore, I am practicing on a daily basis a self-control and developing it as a part of behavior pattern. It will help me keep under control my emotional side and the notion that I am always right, urge to explain, and making sure that "everything is ok".

CHAPTER 4

REAPPRICIATING PAST DIVERSITY EXPERIENCES: HOW A PERSONALIZED, PROMOTION-FOCUSED INTERVENTION PROMOTES TEAM DIVERSITY BELIEFS AND TEAM INFORMATION ELABORATION

ABSTRACT

Despite previous research suggesting the importance of team members' perceived value of diversity (i.e., diversity beliefs) for exchange of information in teams, little attention has been paid to whether and how team diversity beliefs can be influenced. Drawing on theory and research on team diversity beliefs, we propose that team diversity beliefs result from both a promotion (compared to a prevention) focus and a personalized (compared to factual) knowledge. Results from an experiment with 175 randomly composed teams (each team demonstrating high diversity in preferred work approaches) revealed that promotion focus and personalized knowledge independently contributed to higher team diversity beliefs and, in turn, indirectly, team information elaboration. These effects further improved the team's ability to integrate opposing viewpoints (i.e., team integrative complexity). Our results help to uncover key antecedents of diversity beliefs, and add to a growing body of evidence demonstrating the pivotal role of team diversity beliefs in improving the extent to which team members share information and integrate diverse perspectives.

INTRODUCTION

Prior research has argued that an important leverage to harvest the benefits of diverse teams, is team members' diversity beliefs (Van Knippenberg & Schippers, 2007). Diversity beliefs refer to team member's beliefs about the value of diversity for group functioning (Homan et al., 2007). Pro-diversity beliefs have the potential to enhance team functioning in diverse work groups because individuals are more willing to cooperate by openly sharing and integrating ideas of diverse others. In other words, there is a positive effect on team informational exchange. In confirmation of these ideas, diversity beliefs have been shown to be a key ingredient for team information elaboration and thereby positively influence team outcomes such as team identification (Hentschel et al., 2013; Homan et al., 2007; Van Knippenberg et al., 2007), team creativity (Homan et al., 2015), and buffer against relationship conflict (Hentschel et al., 2013).

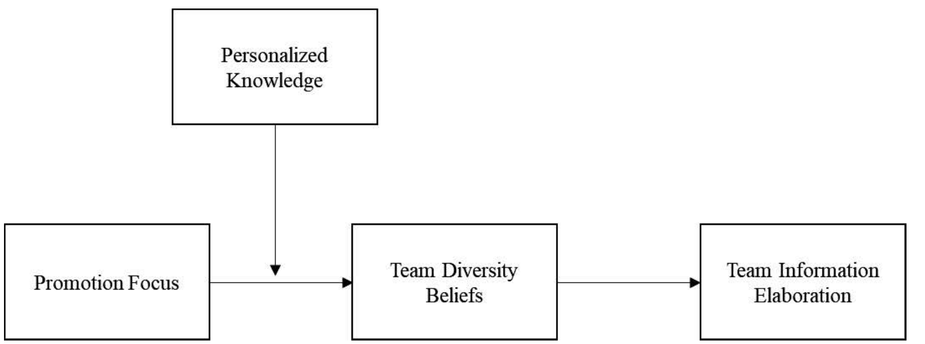
While there is plenty of evidence establishing the benefits of team diversity beliefs, not much research has answered the question of how team diversity beliefs can be influenced. In other words, previous research has investigated the role of diversity beliefs as a predictor or a moderator, but not its antecedents. This is a missed opportunity as beliefs are malleable (Phillips & Lount, 2007) and understanding how such beliefs can be predicted stands to benefit organizations greatly by helping them design impactful interventions (Nishii et al., 2018). One of the first studies in this area that we know of is an empirical study by Homan et al. (2007) who manipulated diversity beliefs by portraying scientific evidence about the value of either working in a homogenous or heterogeneous team. They found that teams performed better under pro-diversity than pro-similarity beliefs because they elaborated better on task-relevant information.

In the current study, we seek to build on the seminal empirical work of Homan et al. (2007) as mentioned above, and the theoretical work of Van Knippenberg et al. (2013) which proposed additional factors that could be conducive to pro-diversity beliefs. Specifically, drawing from Regulatory Focus Theory, Van Knippenberg et al. (2013) suggested that one key factor that can determine attitudes toward diversity is regulatory focus. In practice, one might observe a prevention focus to dominate the conversation in today's organizations, and much of the media framing of diversity issues continue to emphasize the avoidance of the potential negative effect of diversity (Kochan et al., 2003; Leslie, 2019). Admittedly, there may be good arguments to focus on the negative: prior theory and research suggest that negative emotions are a powerful determinant of behavior (Baumeister et al., 2001). Nevertheless, Van Knippenberg et al. (2013) proposed that a promotion focus will be more effective: As individuals may be evolutionarily predisposed to be distrusting of those who are different (Samuelson & Zeckhauser, 1988), a prevention focus reinforces this already natural wariness toward diversity. In contrast, a promotion focus, by taking people's attention away from their default orientation, could stand to make a greater difference in their pre-existing beliefs. Furthermore, a promotion approach will likely be more stimulating for people to take action towards diversity (i.e., elaborating on and integrating information) given that prior work has established that the more active approach orientation leads to seeking out new perspective whereas the more passive prevention approach leads to defensive behaviors such as reticence and holding off (Midgley & Urdan, 1995).

Another key factor relevant to determining diversity beliefs, according to Van Knippenberg et al. (2013), is the role of personalizing the diversity beliefs. Whereas Homan et al. (2007) focused on declarative or factual knowledge (i.e., providing scientific evidence), there are arguments that processing information based on facts and external data, may not be profound enough for people to change their beliefs. Indeed, some have argued that these beliefs operate at the level of a "mindset", that consists of fundamental assumptions that they hold about diversity (Van Knippenberg et al., 2013) which are often rooted in past experiences in dealing with diverse others, sometimes outside of conscious awareness (Gebert et al., 2017). When knowledge disconnects from experience, even favorable attitudes may not translate to desirable behaviors (Ajzen & Madden, 1986), or at least it is possible that the behaviors may not be as long-lasting (Festinger, 1962). Therefore, using experiential learning theory, we concur with Van Knippenberg et al. (2013) that diversity beliefs are ideally rooted in personal experience. More specifically, we look at the reappreciation of past diversity experiences—reinforcing what was learned (promotion-focus) rather than what was difficult (prevention-focus).

Figure 1 summarizes our conceptual model, highlighting how a promotion focus and personalized knowledge work together to influence team diversity beliefs and team information elaboration. Beyond a better understanding of the drivers of team diversity beliefs, this model highlights how team diversity beliefs can serve as a powerful theoretical mechanism to understand and predict team dynamics. This approach is inspired by an emerging body of work in the field of management that focuses on investigating fundamental beliefs as precursor to behaviors in the workplace: implicit voice theory (Detert & Edmondson, 2011), growth mindset (Heslin & Keating, 2017), implicit leadership theory (Epitropaki et al., 2013). Doing so, we extend the investigation of team information elaboration's antecedents from previous research's focus on static contextual variables to more beliefs-oriented drivers.

Figure 1. Conceptual model.



THEORY AND HYPOTHESES

Team Diversity Beliefs

As mentioned above, diversity beliefs fit into the realm of other important beliefs identified in management research in the past decades (e.g., Detert & Edmondson, 2011; Epitropaki et al., 2013; Heslin & Keating, 2017). A key feature of these beliefs or 'mindset' is that it goes beyond explicit attitudes (e.g., "I like working with John.") but are considered to be more ingrained, and often operate outside of conscious awareness (Bargh & Ferguson, 2000; Hertel & Kerr, 2001), unless explicitly brought to the surface with targeted questioning. Therefore, people rarely are aware of their specific beliefs about diversity nor its immense impact on their behavior. For instance, people may casually claim that "Of course, diversity is important." But, when triggered by probing questions, they might admit that actually "they wouldn't, for example, invite a stranger who's a foreigner into their home."

There are evolutionary reasons to assume that we are pre-disposed to be skeptical of those who are different from us (Kurzban & Leary, 2001): Survival often depended on sticking with those who are similar to you. Furthermore, we like those who are similar to us as their behavior is likely to be more predictable (similarity-attraction bias, Byrne, 1971). Finally, people typically possess prior experiences in their lives where they had to deal with those who are different from them and, considering the documented difficulties of diverse interactions (Mannix & Neale, 2005), may have had built up negative stance towards diversity. This set of evolutionary predispositions and personal experiences formed individuals' fundamental assumptions that diversity may not be a good thing (Van Knippenberg et al., 2007). This further highlights the importance of interventions that aim to influence diversity beliefs, which is the primary goal of our study.

The deep-wired and seemingly initial aversive nature of diversity beliefs suggests two important factors might be necessary to influence such beliefs. First, the initial suspicion towards diversity could benefit from a more positive stance, specifically one that goes against the natural and evolutionary tendency that “different is bad”, but instead promotes the benefits of diversity, encouraging people to pursue its benefits. Indeed, while the negative emotions associated with being more vigilant and prevention-oriented are powerful, taking a promotion approach is likely to be more effective in helping people to value diversity given that it has been shown to produce more eagerness (Forgas, 2012). We investigate this by comparing a promotion versus a prevention focus on diversity.

Secondly, because diversity beliefs may be deep-seated—often based on personal experiences, changing those diversity beliefs will require an intervention that targets deeper level rather than surface level beliefs. Prior work has looked at how presenting scientific evidence may alter diversity beliefs (Homan et al., 2007) - in this study we take it one step further to suggest that whatever ‘evidence’ is presented need to be own and experienced, and articulated by the team members rather than externally imposed. By reminding team of their past successes dealing with diversity or learning points of those experiences, it can activate positive attitudes that value diversity that are intrinsically (rather than extrinsically motivated). We investigate this by comparing a fact-based exercise (i.e., presenting new knowledge about the benefits or downsides of diversity) with a more personalized, experiential exercise that encourages participants to reevaluate prior diversity experiences. We discuss these two antecedents of team diversity beliefs in more detail in the next sections.

Before further clarifying our proposition the two antecedents of diversity beliefs, it is important to highlight that our focus here is on team diversity beliefs, as opposed to individual diversity beliefs. Individual team members in one team can differ in the extent to which they have diversity beliefs. Indeed, a team can differ in whether one, a few, or the entire team adopts diversity beliefs. We argue here that it is important for all the team members to have a shared mental model about the importance of diversity in the team. Van Knippenberg et al. (2013) suggested that mental models about diversity maybe expected to be more influential the more they are shared by members of the team, because the shared mental representation is conducive to team coordination and communication.

However, similar to other team cognitions, diversity beliefs reflect an individual construct. Because of such nature of diversity beliefs, any intervention should then target first at one's own beliefs before those beliefs of each members emerged as a collective property of the team. Accordingly, in specifying our interventions, we start at the individual level but include a component of team discussion that can help to facilitate the sharedness of diversity beliefs, and therefore, extrapolate it to the team level.

Promotion versus Prevention Focus as a Driver of Team Diversity Beliefs

Regulatory focus theory starts with individual-level research. According to Higgins (1998), individuals can engage in two regulatory systems, namely prevention regulatory focus and promotion regulatory focus, in order to regulate and achieve their goals. At the team level, which is our focus for this study, team promotion focus can be thought of as a collective orientation that motivates members to focus on what they want to achieve, whereas team prevention focus us one that leads members to focus on possible negative outcomes (Ferris et al., 2013; Li et al., 2018).

As mentioned earlier, from an evolutionary perspective, humans are hardwired to be suspicious toward people who are different from them (Kurzban & Leary, 2001). To belong to a group of similar comrades may have offered important short-term means of threat protection to security and survival in our evolutionary past (Levine et al., 2005). Naturally, this vigilant state that exemplifies prevention focus makes it hard for people to see the value of diversity. For example, several research studies about intergroup relations have shown that when people feel threatened they recur to strategies to protect their own cultural group, and decrease tolerance of diversity, which consequently lead to more support for assimilation and less support for multiculturalism (Florack et al., 2003; Tip et al., 2012; Verkuyten, 2009).

Within the team diversity context, Van Knippenberg et al. (2013) proposed that an understanding of diversity that focuses on the prevention of negative outcomes versus one that focuses on promotion of positive outcomes will significantly influence the way in which team members engage with diversity. A promotion focused strategy involves being open and seeking out possibilities and alternatives—generally facilitates team to adopt a more "exploratory" working style. This may draw team members' attention to the potential benefits of diversity as it offers the team to leverage the unique information that each team members possess. Whereas a prevention focused strategy would entail narrowing in on what is most certain and neglecting alternative hypotheses—initiating team to have more "cautious" working style (Ferris et al., 2013; Friedman & Förster, 2001; Liberman et al., 2001). This may create a shared focus on what's already known, and a desire among team members to be more oriented toward familiarity and similarity than uniqueness that diversity can provide. It stands to reason then that teams with a promotion focus can create enthusiasm to pursue benefits from alternatives and diversity while a prevention focus makes teams more sensitive to indication that diversity can be risky.

Hypothesis 1: Teams where a promotion focus is present will exhibit more positive team diversity beliefs, compared to teams with a prevention focus.

Personalized versus Factual Knowledge as a Driver of Team Diversity Beliefs

In addition to the role of team promotion focus, having team members who have personally experienced and thought about their past interaction with diverse others should intuitively affect the extent to which they see value in diversity. This is in line with prior research on fundamental beliefs, which posits that these beliefs develop through direct experience in repeated situations (Anderson & Lindsay, 1998). By having people reflect on their past experiences with diversity in an intentional, it can help promote better understanding, insights, and increase awareness of their otherwise implicit attitudes toward diversity.

Previous research, however, has mainly focused on promoting diversity beliefs through acquiring knowledge from an external source, without necessarily involving concrete experiences of individuals in the team. Homan et al. (2007), for example, successfully induced team members' diversity beliefs by having participants read an article containing research that provides evidence about the benefits of diversity on team processes and outcomes. It might be the case that reflecting on team members' own personal experience could also be a (potentially more) effective way to influence team pro-diversity beliefs. In other words, when teams simply acquire external information about the benefits of diversity, they are less likely to internalize the potential value of the diversity in the teams and thus are less likely to make a meaningful impact on their diversity beliefs.

Experiential learning theory (ELT) provides a dynamic and comprehensive view of the process of how people learn from experience (Kolb, 1984). Active and authentic involvement during the learning process that characterizes experiential learning affects emotions that may arise during the learning experience and result in a change in attitude and behavior (Vermunt & Vermetten, 2004). A direct experience results in greater consistency between attitudinal change and behavioral change than an indirect experience, thus allowing for more information to draw from, and thus create stronger and long-lasting beliefs.

In line with the arguments proposed by ELT, Van Knippenberg et al. (2013) derive that team members' diversity beliefs are primarily developed through experience. Once a team achieves an understanding of the team's diversity through experience, then team members are better equipped to see the value of diversity and thus make changes to their existing team diversity beliefs accordingly. Therefore, we propose the following:

Hypothesis 2: Teams where personalized knowledge is present will exhibit more positive team diversity beliefs, compared to teams with factual knowledge.

The most effective way to cultivate team diversity beliefs, however, is expected to be the situation where team members articulate the positive learning points from an experience they have had with diverse others. Previous research suggests that the positive impact of past experiences can be magnified by encouraging people to think about the valuable lessons they have learned and devise ways in which they can apply it to future opportunities and challenges (Luthans & Youssef, 2007). On the other hand, when reflecting on the challenges and negative outcomes of past experiences working with diverse others, teams are less likely to form favorable diversity beliefs because the negative affect associated with those adverse or uncomfortable situations were activated. In other words, a focus on problems and conflicts from past experiences might risk cultivating an "us-versus-them" mindset (Gilmore et al., 1997), whereas the feelings of appreciation triggered by the recall and reflection of positive experience can promote trust and interest in continuing to constructively engage with diverse others (Fredrickson et al., 2003). In other words, team members may be less likely to elaborate and internalize the value of diversity if the knowledge of diversity is presented in a factual manner, compared to if it's brought about by their own experiences. However, if the experiences were processed in a negative, prevention frame, team members may elaborate on those experiences, but also feel threatened and ultimately reject the value of diversity. In sum, we expect that teams should have highest pro-diversity beliefs in the promotion focus-personalized knowledge condition. With similar reasonings above, we also expect diversity beliefs to be lowest in teams under the prevention focus-personalized knowledge condition.

Hypothesis 3: Personalized knowledge moderates the effect of promotion focus on diversity beliefs such that promotion focus has a more positive effect on team diversity beliefs when personalized knowledge is present than when factual knowledge is.

Information Elaboration and the Mediating Role of Team Diversity Beliefs

Finally, based on our theorizing, we believe that encouraging teams to have a promotion orientation toward diversity, and based that on their personal experience interacting with diverse others will enhance diversity beliefs, and as a result, increase the extent to which team members engage in information elaboration processes. Through information elaboration—listening to others, exchanging task-relevant information, seeking clarification on perspectives offered by others, and integrating the diverse information—diverse teams can draw from available information resources and outperform homogenous teams (Homan et al., 2007; Van Ginkel & Van Knippenberg, 2008).

Our argument for the proposed mechanism underlying the effect of promotion focus and personalized knowledge on team information elaboration through diversity beliefs also build on existing models of behavioral change (Ajzen, 1991). Namely, that behavior is said to be a function of beliefs (Baranowski et al., 2003; Fishbein & Ajzen, 1975; Fiske & Taylor, 2013). Some researchers suggest that an intervention is most effective in changing behaviors when it's targeted at beliefs (Parker et al., 1996). It is thus expected that teams whose team members with pro-diversity beliefs resulting from promotion (vs prevention) focus and knowledge based on personal experience (vs fact), will be more likely to engage in information elaboration.

Hypothesis 4: Team diversity beliefs mediate the interaction effect between promotion focus and personalized knowledge on team information elaboration.

METHOD

Participants

We collected data on 175 teams, composed of 724 students, who were randomly assigned to teams of 3-6 members. These are business students that were enrolled in a bachelor program at a large Dutch University. In the sample, 49.7% were male, 42% were female, and data was missing from 8.3%. Regarding the nationality of the sample, 55.6% of the participants were Dutch, 35.8% had nationalities from other countries (e.g., America, Belgian, Colombian, etc.), and data was missing from 8.6%. To test the conditions, 47 teams participated in the promotion focus-personalized knowledge, 39 teams for prevention focus-personalized knowledge, 40 teams for prevention focus-factual knowledge, and 49 teams for promotion focus-factual knowledge.

Experimental task

For this study, we designed a specific decision-making task inspired by a well-known team-building exercise—a team charter task. A team charter represents an agreement among members as to how the team will work together (Mathieu & Rapp, 2009). It can be viewed as guidelines for future behavior, and is usually done in the initial teamwork planning stage (Marks et al., 2001). In our adapted version of the team charter task, each member had to state if he/she agreed or disagreed with ten controversial statements about group dynamics (for example, "Everyone gets an equal say in a decision, no matter their expertise", "Only make a decision when there is consensus in the team") (see Appendix 1 for team charter task materials and how these were developed). Aligned with our randomization research design, the average Blau's index we used to measure group value diversity was .18 (*SD* = .13). After individuals finished reflecting and responding to each statement, teams were instructed to discuss the statements (especially the ones that they disagree about the most) with their groups so as to determine the rules of interaction within the team for the future. Groups were asked to write how they managed to solve disagreements that emerged from the discussion of the statements.

Procedure

In this experiment, the students were instructed to fill in the first part of an online questionnaire individually, including the demographic measures and the experimental condition, followed by a manipulation check. In the second part, teams then engaged in the team charter task. In the final part, the students responded to the rest of the questionnaire intended to capture team processes resulting from the team charter task.

Manipulation

The 2x2 experimental design intended to change diversity beliefs focused on manipulating participant's factual (vs personalized) knowledge and promotion (vs prevention) focus. For the factual knowledge condition, participants were instructed to read a fictitious scientific article about the effect of diversity on teams and individuals. For the personalized knowledge condition, participants were asked to think of a person that was different from them in some way and describe their relationship with that person in detail. For the prevention focus condition, participants focused how to prevent the negative outcomes of diversity—either identifying the difficulties they had in interacting with that person and describe how they could avoid similar challenges in the future, or reading the potential negative effects of diversity on teams and individuals, with recommendations from research on how this can be avoided. For the promotion focus condition, participants were either asked to define one learning point of that interaction with their diverse other, or reading about the recommendations from research on how to reap the benefits of diversity on teams and individuals (see Appendix 2 for more details of the manipulations).

Measures

Diversity beliefs. Diversity beliefs were measured with four items adapted from (Homan et al., 2010). The scale was adapted to be specific to the team context and includes the following four items: "Diversity is an asset for teams.", "Diversity is a good thing for teams.", " I enjoy working together with diverse people in a team.", and "I feel enthusiastic about diversity in a team." The four items measured individuals' diversity beliefs after the manipulation (α = .82). Responses were given on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). In support of aggregating measure to the team level, the average inter-rater agreement of teams were ICC(1) = .18, and ICC(2) = .47.

Information elaboration. Information elaboration measure was based on a previously developed scale from Homan et al. (2007). The four items measured the extent to which group members shared and elaborated on information to complete the task (α = .75). An example of an item is "The group members complemented each other by openly sharing knowledge during the group task." Responses were rated on a Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). In support of aggregating measure to the team level, the average inter-rater agreement of teams were ICC(1) = .21, and ICC(2) = .53.

RESULTS

Manipulation Checks

In order to provide the evidence that each condition had the desired effects, we asked participants to respond to a one-item statement per each condition. The items for measuring the factual and personalized knowledge conditions were “The previous exercise helped me understand that there is academic knowledge about how to manage diversity for teams and organizations.”, and “The previous exercise helped me reflect on my past experience in which I interacted with diverse others.” The items for measuring the prevention and promotion focus conditions were, “The previous exercise helped me understand how to prevent the potential negative outcomes of diversity.”, and “The previous exercise helped me understand how to leverage the potential benefits of diversity.” Responses were given on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

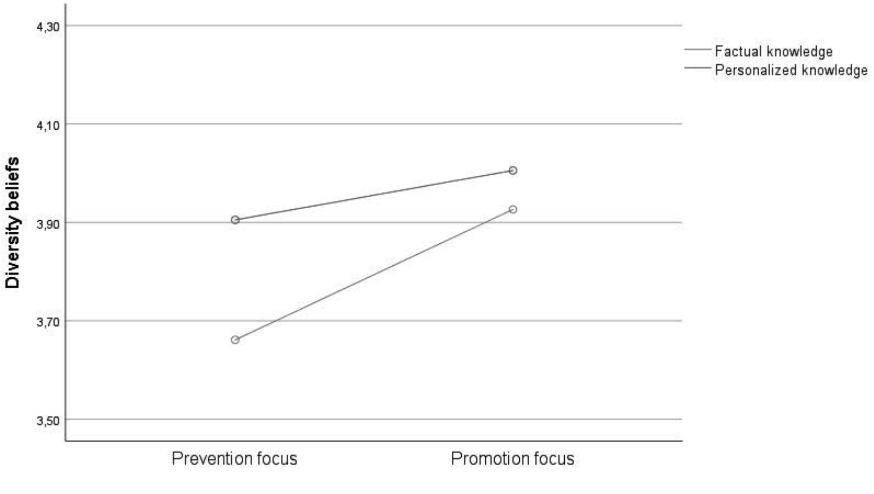
Separate independent sample t-test analyses were conducted to determine whether the conditions had their intended effect on participants. There was a significant difference in the scores for factual ($M = 3.16$, $SD = 1.26$) and personalized ($M = 2.82$, $SD = 1.06$) knowledge in the factual knowledge condition; $t = 3.86$, $p < .001$. Similarly, personalized knowledge scores ($M = 3.58$, $SD = 1.00$) were significantly higher in the personalized knowledge condition compared to factual knowledge scores ($M = 3.03$, $SD = .93$, $t = -7.60$, $p < .01$). These results suggest that the manipulation checks for factual (vs personalized) knowledge were successful.

Similarly, there was a significant difference in the scores for the prevention ($M = 3.07$, $SD = 1.10$) and promotion focus ($M = 3.89$, $SD = .77$) in the promotion focus condition ($t = -11.42$, $p < .001$). The difference in the scores for prevention ($M = 3.67$, $SD = .92$) and promotion focus ($M = 2.80$, $SD = 1.13$) in the prevention focus condition were also statistically significant ($t = 11.40$, $p < .001$). These results suggest that the manipulation checks for promotion vs prevention) focus were successful.

The Effect of Promotion Focus and Personalized Knowledge on Team Diversity Beliefs

A one-way ANOVA was conducted to examine the effect of promotion (vs prevention) focus and personalized (vs factual) knowledge on teams’ diversity beliefs. In line with hypothesis 1, simple main effects analysis showed that teams that participated in the promotion focus condition (*M* = 3.97, *SD* = .32) had significantly higher pro-diversity beliefs than participants in the prevention focus (*M* = 3.78, *SD* = .44), (F(1,173) = 13.30, p = .002). Hypothesis 2 was also supported by the analysis as teams in the personalized knowledge condition had significantly more pro-diversity beliefs (*M* = 3.97, *SD* = .36) than those that participated in the factual knowledge condition (*M* = 3.81, *SD* = .39), (F(1,173) = 7.05, p < .001). The interaction between promotion focus and personalized knowledge on diversity beliefs was not statistically significant (F(1,171) =2.15, p =.14), and therefore hypothesis 3 was not supported. As illustrated in Figure 2, the results show an additive effect of promotion focus and personalized knowledge in which teams in the personalized knowledge condition experienced a greater positive change in their diversity beliefs than those in the factual knowledge condition. Similarly, the condition inducing a promotion focus was shown to be superior to another that adopted a prevention focus.

Figure 2. Effects of promotion focus and personalized knowledge on diversity beliefs at the team level.



Mediation Analyses

Given that the interaction was not statistically significant, in this section, we report the results of mediation analyses of the two main effects on team information elaboration through diversity beliefs instead of the hypothesized conditional indirect effect. As recommended by Hayes (2013), bootstrapping analyses were used to test the model of diversity beliefs as a mediator of the relationship between promotion focus and personalized knowledge at the team level. Separate analyses were made in order to test the effect of two independent variables (i.e., promotion focus and personalized knowledge). Following the recommendation of Hayes (2013) for the estimation of a model with multiple independent variables, one independent variable was controlled while testing the mediation model of the other.

Results based on 10000 bootstrapped samples indicated that the indirect effect of promotion focus on information elaboration mediated by diversity beliefs was significant (95% CI [.03, .12]). Teams had more positive diversity beliefs scores in the promotion focus condition compared to the prevention focus condition (b = .18). Diversity beliefs, in turn, positively predicted information elaboration in the team (b = .41). The same analysis was used to test the meditational model of diversity beliefs as a mediator of the relationship between personalized knowledge and information elaboration. Results based on 10000 bootstrapped samples indicated that diversity beliefs partially mediated the relationship between personalized knowledge and information elaboration in the team. The indirect effect of personalized knowledge on information elaboration mediated by diversity beliefs was significant (95% CI [.02, .11]). Teams in the personalized knowledge condition compared to the factual knowledge condition (b = .15) had more pro-diversity beliefs and, thus, engaged in more information elaboration (b = .41). Overall, the results of both mediation analyses indicated that diversity beliefs mediated the relationship of promotion focus and information elaboration, as well as the relationship between personalized knowledge and information elaboration.

Additional Analysis

We conducted the following supplementary analysis: a robustness check to examine whether diversity beliefs also mediate the relationship between the manipulations and team integrative complexity as measured by each team's written response in the team charter task (as an alternative measure to the self-reported team information elaboration).

Team Integrative complexity. Integrative complexity was measured using the method of content analyzing the teams' open-ended response from the team charter task. As mentioned before, once team members individually reflected on each of the ten controversial statements about group dynamics, the team members then came together as a team to discuss and identify the rules of interaction for the future—what each team wrote was used to assess their integrative complexity. The coding scheme was adapted from (Baker-Brown et al., 1992).

Results based on 10000 bootstrapped samples indicated that the indirect effect of promotion focus on team integrative complexity mediated by diversity beliefs was significant (95% CI [.04, .27]). Teams had more positive diversity beliefs scores in the promotion focus condition compared to the prevention focus condition (b = .19). Diversity beliefs, in turn, positively predicted team integrative complexity (b = .75). The same analysis was used to test the model of diversity beliefs as a mediator of the relationship between personalized knowledge and team integrative complexity. Results based on 10000 bootstrapped samples indicated that diversity beliefs partially mediated the relationship between personalized knowledge and team integrative complexity. The indirect effect of personalized knowledge on team integrative complexity mediated by diversity beliefs was significant (95% CI [.02, .25]). Teams in the personalized knowledge condition compared to the factual knowledge condition (b = .15) had more pro-diversity beliefs and thus, showed higher team integrative complexity (b = .75). The results thus indicated a full mediation of diversity beliefs on the relationship between promotion focus and team integrative complexity, as well as on the relationship between personalized knowledge and team integrative complexity.

DISCUSSION

The main aim of the present research was to examine how diversity beliefs can be influenced, and how this could lead to better information elaboration in teams. Specifically, we assess whether promotion focus and personalized knowledge regarding diversity have an effect on team diversity beliefs. Moreover, we proposed a mediation effect of diversity beliefs in the relationship between promotion focus and personalized knowledge and team information elaboration. Although the interaction hypothesis was not supported, we found that both promotion focus and personalized knowledge had an additive effect in contributing to more positive team diversity beliefs, which in turn predicted team information elaboration.

Teams who were primed with a promotion focus had higher diversity beliefs than those exposed to a prevention focus. Highlighting the potential benefits of working with diverse others and how to leverage those benefits, thus, help individuals and teams recognize the importance of diversity more than the approach that showcases the potential challenges and how to avoid negative outcomes of diversity. The predictive validity of promotion focus on information elaboration, through diversity beliefs, provides empirical support to the claim previously made by Van Knippenberg et al. (2013) that individuals' regulatory focus can influence team diversity beliefs and team dynamics.

Furthermore, we found support for ELT's argument for the relevance of experience for learning (Kolb, 1984) and its valuable role for motivating participants to re-examine their diversity beliefs. This finding also extends the arguments made by Van Knippenberg et al. (2013) that reflecting on experience may be an important tool for teams to develop their mental representation of their teamwork and ultimately improve team processes and performance.

However, as our study manipulations would indicate, even drawing from personal experience interacting with diverse others *outside* the team, the benefits are transferable (positive effects on attitudes and behaviors specific to the team). The present study also builds on and extends the work of Homan et al. (2007) by showing that having team members reflect on their experience with diverse others is more effective in stimulating pro-diversity beliefs compared to simply offering them scientific or factual knowledge about the benefits of diversity. However, the insignificant interaction effect highlights the impact of experience—that it doesn't matter as much if the experience was positive or negative, the lessons that people derived from it are usually powerful enough to influence their beliefs.

Together, the results of the present research show that involving the experience of participants with diverse others and guiding them to focus on what they learned from the experience, is an effective way to influence team diversity beliefs. Our study, therefore, makes a theoretical contribution to the diversity literature by shedding light on the antecedents of diversity beliefs—answering the call for more research focusing on identifying which characteristics of diversity training and intervention are associated with positive outcomes (Bezrukova et al., 2016; Kulik & Roberson, 2008). More specifically, we identify promotion focus and personalized knowledge as two strategies that can positively influence team's beliefs about the value of diversity. This finding adds to the diversity literature that has so far predominantly focused on establishing how and why diversity beliefs matter rather than examining the factors that contribute to it. The results of this research can encourage scholars to further explore other ways in which diversity beliefs can be cultivated. In addition, our study also contributes to information elaboration literature by identifying diversity beliefs (which can be manipulated) as a way to increase effective team information elaboration, where past research has primarily focused on more static antecedents.

By uncovering the underlying mechanisms of diversity belief change, the proposed conceptual model also provided preliminary evidence for the effectiveness of an intervention that incorporates both a positive orientation and the experience of participants. Trainings which ignore these elements might thus not be successful in achieving their goals, explaining in part the inconsistency and lack of effectiveness of many diversity training (Bezrukova et al., 2016; Chang et al., 2019). More specifically, our findings challenge the existing diversity training practices in organizations which predominantly adopted the preventative focus (Leslie, 2019) and dogmatic form of communication with few opportunities for participants to share their own personal experience dealing with diversity (Gebert et al., 2017). Shifting from the harm-avoidance culture to one that promotes diversity and inclusivity from a perspective of shared human experiences is what organizations should aim for (Graso et al., 2020)

Finally, our study also provides an additional robustness check measure to the typical self-reported team information elaboration construct. Relying exclusively on single-source measures is problematic because (a) common method assessments may inflate relationships and (b) outcome ratings looking at the perception of a relationship are not necessarily a consequence of diversity but are rather dictated by the diversity beliefs of the individuals (Van Knippenberg et al., 2013). In order to reduce the limitations of relying on a single-source and self-report measure of information elaboration, a variable "team integrative complexity" intended to objectively measure information elaboration was introduced in this study. As expected and consistent with our previous results, the same pattern emerged when examining others' ratings of information elaboration, lending further confidence in our findings. Relatedly, we employed an adapted team charter task, which entails controversial statements about teamwork that are intended to trigger opposing viewpoints and reactions regarding how team members should work together. This is different from previous studies which used tasks that focus on manipulating different distribution of unique information (Homan et al., 2007) or role perspectives (Hoever et al., 2012). By doing so, we also provide the initial empirical support to the emerging line of theorizing on this type of integrative behavior at the team level (Wong et al., 2011). Practically, this team charter task presents a way for team members to storm and norm themselves in the team early on, which is something that teams usually take for granted (Mathieu & Rapp, 2009). Such task is likely to be more effective than the team building activities commonly seen in organizations that are more light-hearted, fun, or simply increase time spent between team members (e.g., icebreaker) (Lacerenza et al., 2018).

Limitations and Future research

Although the present research provides reasonable and constructive evidence to the potential for the antecedents of team members' diversity beliefs, and its role to drive information elaboration, some limitations have to be acknowledged. While we draw from regulatory focus theory, given the nature of our stimuli, we operationalized it by asking participants whether they understand the potential benefits or downsides of working in diverse teams. Future research should include a measure of the regulatory focus of participants to see whether trait regulatory focus may also be responsible for the development of diversity beliefs. For the other factor manipulated in our study (personalized knowledge), an obvious extension for future research would be to conduct a field experiment where, rather than simply having people reflect on past diversity experience, actually ask them to seek out new experience where they have to engage in a conversation with someone who is different from them (for example, if someone is a liberal, then they can attend a conservative political rally and talk to someone there).

Another valuable recommendation for future research is including a different measure of diversity beliefs. In this study, we measured diversity beliefs with self-report scale through survey. While this approach was suitable for the nature of our experiment, a case could be made for more objective measure of diversity. Particularly, future research could more accurately tap into the more implicit element of diversity beliefs that might operate outside of conscious awareness (Becker & Menges, 2013). It is possible that our manipulations may have different effects on the implicit and explicit measure of diversity beliefs. Furthermore, future research can also examine whether those implicit and explicit measures of diversity beliefs can interact with one another to influence relevant outcomes (Uhlmann et al., 2012).

Thirdly, future research should try to establish whether the effects of diversity beliefs on important team processes are long-lasting. No studies so far have investigated the relatively enduring effect of diversity beliefs. Our study and one of the few studies that actually primes diversity beliefs (Homan et al., 2007) assessed its effect on team dynamics within the lab setting. So, at this point, there is little or no data, whether manipulated diversity beliefs have more than a temporary effect on behavior. Such research can build on the growing body of research focusing on a brief intervention that can produce significant benefits on attitudes and behaviors over time (Walton, 2014).

Conclusion

In conclusion, the major interest on diversity beliefs stems from the ever more concrete possibility that they can be altered and managed from an organizational perspective, i.e. that managers and organizations could influence team members' beliefs about diversity in order to reap the benefits that heterogeneity can offer. However, the base of research on the drivers of diversity beliefs is underdeveloped. This paper found that team diversity beliefs could be cultivated through having teams reappreciate their past experience dealing with diverse others and deriving the lessons learned. In turn, these pro-diversity beliefs predicted team information elaboration. The results suggest that this intervention can be used for effective diversity training, and hopefully, encourage further research examining different ways in which diversity beliefs can be influenced.

APPENDIX 1

Team Charter Task

Please indicate with numbers, how many of your team members rated each statement. For example, 2 members in agree, and 3 members in disagree. Then, discuss in your team if there is any disagreement in order to find a middle ground. You may start with the statement that causes the most disagreement.

1 It is more important to get the job done than to make the team happy

2 Always give it 100% even if it comes at the expense of your social life

3 Get things done well ahead of schedule

4 Everyone gets an equal say in a decision, no matter their expertise

5 You spend so much time with colleagues – best treat them as friends

6 Only make a decision when there is consensus in the team

7 Take risks, even if that means having a lot to lose

8 Stick with your opinion, even if it does not make you popular

9 One should always be humble, allowing the team to take credit

10 Place others well-being before your own interest

Based on the above discussion, what are behavioral rules that will guide your interaction with your team in the future?

How did you and your team solve the disagreements that emerged from the discussions of the statement? Be specific.

APPENDIX 2

Manipulations

Promotion focus-personalized knowledge condition.

1. Think of 1 person who was significantly different (e.g. culture, personality, values or background) from you. Please describe your relationship with that person **in detail**, mentioning in which ways this person was different from you. Do not only name the difference but also how the difference contributed your relationship.
2. Describe **one thing** you learned from interacting with this person and how you can use this for future interactions. Please be as elaborate as you can.
3. Discuss the insights in your group.

Prevention focus-personalized knowledge condition.

1. Think of 1 person who was different from you in some way (e.g. culture, personality, values or background). Please describe your relationship with that person **in detail**, mentioning one way in which this person was different from you. Do not only name the difference but also how the difference affected your relationship.
2. Describe **the difficulties** you had in interacting with this person and how you can **avoid similar challenges** in the future. Please be as elaborate as you can.
3. Discuss the insights in your group.

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Promotion focus-factual knowledge condition.

Team diversity and performance

We encounter diversity in our everyday lives, and it gets more and more common for organizations to work with diverse teams. Some studies have shown that more diversity can lead to increased performance in a team, so how can you make sure you get the most out of your team?

By William Anas,
December 10, 2019

To be successful in the organization, working well as a team is a must. Here we focus on diversity in teams that refers to teams being composed of people with different values and perspectives, which could come from their different life experiences and background.

Diverse teams are believed to outperform homogenous teams in terms of productivity and performance. While diversity in teams could be a challenge because of the opposing views and perspectives that different people bring, those differences more often cause teams to do better because people from all walks of life come together to share new ideas.

So…Can diversity be beneficial?

Well, the potential benefits of diversity are more likely to outweigh the costs. Research by Professor Meir Shemla and colleagues showed that if managed well, workplace diversity can generate a huge boost in organizational productivity. Even if different members of the group will have a conflict of perspectives, by discussing and integrating these perspectives, team members will be able to generate a fusion of novel solutions.

For example, Professor Shemla's research finds that differences in attitudes towards risk-taking can significantly increase the success of the team project. Some people are willing to take more risks than others. Those are the ones who push the team to try new things, to experiment, and not rule out anything until it blew up in their hands. Others are very careful and assure that the final product is safe for the team's objective. Such differences within the team resulted in the initial more out-of-the-box, ground-breaking ideas, and later an optimal solution that ensure a suitable product ready for delivery. In the end, the different strengths among team members resulted in better performance in the project for such a team.

How to facilitate benefits created by the diversity of perspectives?

How should a diverse team be managed in order to increase the productivity and creativity of in teams? Research from Professor Shemla suggests a few practical tips to promote the positive outcomes of diversity:

- If you are a part of a diverse team, freely express your ideas and make sure that your teammates are comfortable to do so as well
- Foster an open culture of communication and encourage constructive criticism: do not take the initial consensus as a final answer;
- Focus on the strengths and talents of your fellow team members and think on how you can combine them to achieve your goals;
- Facilitate open communication and trustworthy relationships with your team.

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Prevention focus-factual knowledge condition.

Team diversity and performance

We encounter diversity in our everyday lives, and it gets more and more common for people in organizations to work with diverse teams. However, some studies have shown that more diversity often means more conflict in a team, so how can you effectively prevent team conflict?

By William Anas,
December 10, 2019

To be successful in the organization, working well as a team is a must. Here we focus on diversity in teams that refers to teams being composed of people with different values and perspectives, which could come from their different life experiences and background.

We should admit that when people with different perspectives working together, finding a common platform can be a challenge. While diversity in teams could be a strength because of all the views and perspectives that different people bring, those differences more often cause gaps, frustrations, and conflict.

So…Can diversity be harmful?

Well, the potential benefits are most likely to be outweighed by the costs. Research by Professor Meir Shemla and colleagues showed that if not managed well, team diversity can lead to a productivity disaster. So, the notion that increased diversity automatically results in higher performance has some real potential dangers. Instead, if not managed correctly, diversity is more likely to cause problems, including team members' dissatisfaction, counterproductive behavior, a lack of innovation, and reduced performance.

For example, Professor Shemla's research finds that differences in attitudes towards work-life balance can completely sabotage the team project. Someone with an attitude that values "work over pleasure" would be happy to work late into the night or the weekend; and, always is reachable by their work colleagues. These people would be frustrated to work with a team member who values more work-life balance and refuses to work or be on call beyond appropriate office hours. Such differences resulted in clashes over when and how long the team would work on the task together on a given day. In the end, the arguments and frustrations among team members resulted in poor performance in the project for such a team.

How to prevent conflicts caused by the diversity of values and perspectives?

How to overcome these challenges and minimize the possibilities of the team conflict occurring? Research from Professor Shemla suggests a few practical tips to prevent the negative outcomes of diversity:

- If you are a part of a diverse team, try to follow the line of being polite and preserve the peace within the team;
- Be careful of what your team members might deem problematic: consider the personal differences, and try to avoid ''heated'' topics;
- Be careful not to get stuck in your judgements and do not automatically think someone has a bad intention;
- Be aware that mistrust can breakdown communication and communication is essential.

CHAPTER 5

GENERAL DISCUSSION

Leadership development is a high priority for most organizations today. Much resources have been invested in training and development programs aimed at producing more effective, high performing leaders. Despite the increasing popularity and resources dedicated to developing leaders in practice (in both organizations and business schools), scientific research is still catching up to shed light on how to best develop leaders. This dissertation intends to add to this nascent but emerging field of leadership development. In this chapter, I will discuss how the three empirical chapters in this dissertation provide insights (both theoretical and practice implications) the important issues about leadership development that surfaced earlier in Chapter 1. I will also discuss some promising areas for future research.

Toward an Evidence-based Leadership Development

One of the important issues that emerge from our review of the literature on leadership development as well as some conversations with leadership developers in our network is about the evaluation of leadership development programs. Specifically, many have voiced concerns over insufficient evidence to show that these programs and activities (both in business schools and in organizations) actually develop better leaders (Day, 2000; DeRue et al., 2011). Several scholars lamented that not only there's not enough evidence, but that not enough effort has been put toward rigorous evaluation as indicated by the prevalent of smile sheets as usually used as a common indicator of program effectiveness (Kaiser & Curphy, 2013). This is an important question as leadership development is a large and growing industry, and we were puzzled how such an industry can be sustained without substantiated evidence that their product actually works. We explore this phenomenon in Chapter 2.

By adopting a pluralistic perspective, our findings suggest that there is more than one kind of evidence. Specifically, practitioners don't always only care about the data to indicate whether the program improves leader skills or performance (empiricists), but some emphasize the function that it serves for the organization as a whole (pragmatists), or take a more instrumental view where leadership development program is used to legitimize other activities (cynics), or they rely on personal feelings that they experienced from participating or observing the program (believers). In essence, the findings of our research turn the commonly asked question by scholars, "Does leadership training work?" into a more nuanced question of "What work does leadership training do?".

The findings of this chapter provide several implications for our efforts toward making leadership development more evidence-based. First, we highlighted that leadership development can serve more purposes than what has been identified in prior research. This is important to understand for those who 'play' in that field to understand what they are doing and why they are doing it. Interestingly, a better understanding of the different reasons why leadership development is offered can aid towards a more evidence-based mindset in the industry as a whole. For instance, when pragmatists suggest that leadership development focuses on helping with strategic HR alignment, then an evidence-based perspective would suggest that it is important to be clear about those objectives upfront in terms of program selection and to evaluate the effect of the program on relevant criteria.

Second, not only does this help practitioners get sharper and clearer in the intentions they have with their program, but it also aids in communication between practitioners who start from a different perspective. The insights generated in this chapter can help the practitioners in knowing how to effectively communicate by highlighting those criteria that are relevant and important to the other party. For instance, while one may have 10 good reasons why a program works from a pragmatist perspective when introducing a program to a believer those are not the arguments to highlight if one is seeking to get their buy-in.

Third, this chapter highlight that these perspectives vary not just between people in organizations but even within individuals. For instance, facing insecurity about a program, it is much easier to understand why you need a believer perspective (to convince yourself and the audience). Indeed, at one point or another in one's career, one may find oneself in a believer, empiricist, pragmatic or cynic perspective. As such we are not advocating that one approach is best and that having a single perspective may create even blind spots. Ideally, individuals or groups learn to adopt and embrace multiple perspectives.

Developing Leaders Through Uncomfortable Experiences

While the goal of Chapter 2 was to 'broaden' the understanding of what constitutes evidence of leadership development program effectiveness, in Chapter 3 we specifically adopted the 'empiricist' perspective to zoom in how best to help people develop in terms of their leadership mindset and skills. Here, we built on previous work of leadership development scholars that have documented how lived experiences that are novel and challenging—ones that take individuals out of their routines and stretch them beyond his or her comfort zone—are an important source of development (Dragoni et al., 2009; McCall et al., 1988; McCauley et al., 1994).

While existing scholarly work on the value of developmental experience, as cited above offers significant insights into certain aspects of learning from challenging experience and leadership development, there is one limitation that still needs to be addressed. The experiential learning theory by which the aforementioned empirical work built on has been predominantly cognitive (Aguinis & Kraiger, 2009; Kolb, 1984). Yet, challenging experience disrupts routines in ways that release emotion (Mandler, 1984). In other words, learning from challenging experiences are emotional events (Roberts et al., 2005). Therefore, in Chapter 3, we focus on the role of emotion to answer to call for more research on affective aspect of leadership training and development (Noe et al., 2014; Vogel et al., 2020).

In this chapter, we investigated the potentially adaptive role of negative emotion in relation to leader development. Although learning from experience that elicits negative emotion is often heralded in practice as evidenced by the increasing popularity of programs that focus on putting people in extremely stressful situations such as leadership expedition, police training simulations for managers, etc., scholarly work suggests that negative emotion can be a double-edged sword. In order to mitigate the dark side and leverage the bright side of negative emotion, we argue that mindfulness can play a crucial role. Indeed, we found that Study 1, mindfulness helps to attenuate the negative association of negative emotion and behavioral transfer (measured by perceived leader effectiveness rated by the followers in team action learning project). For study 2, we found mindfulness also moderates the linkage between negative emotion and transfer of learning (measured by a written case about personal leadership challenge and implementation), in such a way that the relationship actually changed from negative to positive when high mindfulness is present.

This chapter adds to the understanding of the nature of challenging experience which has thus far, consists primarily of challenging experience that occurs on the job or in personal life (Dragoni et al., 2009; Thomas, 2008), by complementing it with salient event/experience that occurs during a formal developmental program. Theoretically, this chapter provides insights into the boundary condition of the effect of challenging, uncomfortable experience on leadership development outcomes (Avolio & Hannah, 2008; Day & Dragoni, 2015; DeRue & Myers, 2014) by examining the role of mindfulness. Given mindfulness's ability to regulate attention, emotion, and behavior (Glomb et al., 2011), it seems like a crucial ingredient in learning and developmental process, especially in situations that are highly stressful and demanding.

Apart from the contribution to the theory, the results of this chapter may provide practical consideration for leaders to become more effective in learning from challenging experiences. It might also suggest a useful blueprint for organizations or business schools to follow when they develop and design their experiential-based developmental training program to address the possible psychological challenges the participants may face to facilitate desirable learning outcomes by incorporating mindfulness practice.

Cultivating Diversity Mindset for Leaders and Teams

In Chapter 4, we apply some of the insights we learn from the previous chapter about the importance of experience to see whether it can also influence one of the qualities that we believe are crucial for leading today's diverse team and organizations—diversity mindset (or diversity beliefs as operationalized in our study). We argue that the most effective way to cultivate team diversity beliefs is expected to be the situation where team members articulate positive learning points from an experience they have had with diverse others. Previous research suggests that the positive impact of past experiences can be magnified by encouraging people to think about the valuable lessons they have learned and devise ways in which they can apply it to future opportunities and challenges (Luthans & Youssef, 2007).

Specifically, we examined whether promotion focus (thinking about the potential benefits of diversity) and personalized knowledge (having people recall experience working with diverse others) regarding diversity affect team diversity beliefs. Moreover, we proposed a mediation effect of diversity beliefs in the relationship between promotion focus and personalized knowledge and team information elaboration. Although the interaction hypothesis was not supported, we found that both promotion focus and personalized knowledge had an additive effect in contributing to more positive team diversity beliefs, which in turn predicted team information elaboration.

This chapter makes a theoretical contribution to the diversity literature by shedding light on the antecedents of diversity beliefs—answering the call for more research focusing on identifying which characteristics of diversity training and intervention are associated with positive outcomes (Bezrukova et al., 2016; Kulik & Roberson, 2008). More specifically, we identify promotion focus and personalized knowledge as two strategies that can positively influence the team's beliefs about the value of diversity.

By uncovering the underlying mechanisms of how diversity belies can be influenced, the proposed conceptual model also provided preliminary evidence for the effectiveness of an intervention that incorporates both a promotion orientation and the experience of participants. This illustrates somewhat of a paradox of evidence-based approach (also aligned with the insights that we derived from the previous chapters) that: personal experience can be quite powerful in changing mindset. This is not to disregard the importance of scientific evidence, of course, as there are the fundamental building blocks of knowledge. However, when it comes to influencing people's mindset, for example, about diversity, evidence from research may not be enough or as powerful compared to letting people come up with their own "evidence" based on personal experience.

Future Research Directions

In chapter 2, through a qualitative approach, the different justifications for investing in leadership development that emerged points to a multi-function, multi-meaning nature of leadership development. Future research using a quantitative approach could investigate the prevalence of the narratives and their relationships to the LDPs outcomes in organizations. Longitudinal research can be conducted to provide a better understanding of the dynamics of narratives that unfold over time. Outcomes of interest may include how much time organizations allow their employees to engage in developmental activities, how much monetary investment is allocated to leadership development programs, and how much value do people give to developmental issues.

Furthermore, perhaps similar questioning taken in Chapter 2 can be applied to other contexts such as diversity training. One could imagine that leaders in organizations might be motivated to engage in diversity initiatives and programs for various reasons—from ticking the box, building a corporate image, to actually commit to real change in becoming more inclusive organizations. How do these different motivations manifest in the type of programs or policies they engage in? What factors differentiate these orientations? Can the antecedents found in Chapter 4 for cultivating a diversity mindset be used as a basis to design an intervention for leaders to the extent that they can enact the necessary changes we want to see for leading effective diversity management at the organizational level?

While we believe that a diversity mindset can and should be cultivated to every leader, a case can also be made for future research on leadership development to pay more attention to underrepresented, demographically diverse leaders (whether it's gender, race, or other social identity categories). While both diversity and leadership development literature on its own has become a burgeoning topic, there seems to be a lack of research connecting these two research streams. For example, women may have unique developmental needs, therefore, the developmental efforts should be tailored to meet their specific developmental needs. Such insights may have implications for developing women both in their everyday experiences in organizations and formal programs.

In chapter 3, we learn about the potential value of the negative emotional experience for leader development. With mindfulness present, such aversive emotion and experience can lead to the possibility of growth. Future research can be more precise in terms of when it is best to incorporate mindfulness practice into the leadership development program. Is it possible that introducing mindfulness too early on can actually demotivate the participants? Would a snippet of mindful breathing (for example, 10 minutes) in the session be enough or would a longer, repeated practice be necessary? What would happen if mindfulness is combined with other activities such as reflection? What kind of configurations can increase the efficacy of the program as a whole? In line with this goal to increase the returns on leader development efforts, future research can consider utilizing recent knowledge from neuroscience to develop brain or psychophysiological interventions that would work in tandem to more traditional techniques such as 360-degree feedback, executive coaching, etc. Using this type of neuroscience method also presents a new way of evaluating the efficacy of leadership and management training programs.

Conclusion

Leadership development has become one of the top priorities for organizations today. However, despite the popularity and multiplication of leadership development programs being offered, more research is still needed to examine these developmental efforts. This dissertation first unpacks the notion of program effectiveness and broadens the understandings of what counts as evidence in leadership development. To further understand the different evaluation metrics of experiential leadership development programs, this dissertation then identifies how negative emotional experience and mindfulness can together contribute to training effectiveness that goes beyond training satisfaction to influence leadership learning and behavioral transfer. Lastly, this dissertation identifies how to cultivate a diversity mindset—an important quality for leaders and teams—by using an experiential learning approach that allows individuals to reappreciate their past experience working with diverse others. It is my hope that this dissertation advances research in the field of leadership development, and provides practical insights to help enhance the effectiveness of leadership development programs and interventions in business schools and organizations.

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Pisitta Vongswasdi (1988) was born in Bangkok, Thailand. She joined ERIM and started her PhD at Rotterdam School of Management in 2016 and was a visiting researcher at University of Virginia Darden School of Business's Experiential Leadership Development Lab. Before starting her PhD, she was previously a research associate in Organisational behavior at INSEAD business school (based in their Singapore campus). Before that, she worked as a public policy analyst at Sasin Institute of Global Affairs in Thailand. Pisitta also holds a Master of Science (MSc)'s degree in Sociology from University of Oxford (UK), and a Bachelor (BA)'s degree in Economics from Chulalongkorn University (Thailand). She will start the new chapter in her academic career as an Assistant Professor at WHU - Otto Beisheim School of Management in Düsseldorf, Germany.

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Crowdsourcing replications: Methodological advances in behavioral research. With Eric Uhlmann (INSEAD), Stefan Thau (INSEAD), and numerous other co-authors. *Manuscript in preparation.*

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Teaching

Rotterdam School of Management, Erasmus University
Leadership Development and Training (MSc Human Resource Management, elective), Instructor and course designer. Spring 2018 (55 students)
Instructor and course designer. Spring 2017 (49 students)

Political skills (MBA workshop),
Co-instructor (with Hannes Leroy). Spring 2019.

Stereotype (IBA workshop),
Instructor. Fall 2019.

Darden School of Business, University of Virginia
Experiential Leadership Development (MBA course),
Coach and co-course designer (with Jim Detert and Bobby Parmar). Fall 2018.

The ERIM PhD Series

The ERIM PhD Series contains PhD dissertations in the field of Research in Management defended at Erasmus University Rotterdam and supervised by senior researchers affiliated to the Erasmus Research Institute of Management (ERIM). All dissertations in the ERIM PhD Series are available in full text through the ERIM Electronic Series Portal: http://repub.eur.nl/pub. ERIM is the joint research institute of the Rotterdam School of Management (RSM) and the Erasmus School of Economics (ESE) at the Erasmus University Rotterdam (EUR).

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