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ORIGINAL PAPER

Quantitative Research on Leadership and Business Ethics: Examining the State of the Field and an Agenda for Future Research

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Abstract
In this article, the co-editors of the Leadership and Ethics: Quantitative Analysis section of the journal outline some of the key issues about conducting quantitative research at the intersection of business, ethics, and leadership. They offer guidance for authors by explaining the types of papers that are often rejected and how to avoid some common pitfalls that lead to rejection. They also offer some ideas for future research by drawing upon the opinions of four noted experts in the field to consider the types of research questions we should be asking, the types of theory we should be building, the types of models we should be testing, and the types of methods we should be using.

Keywords Leadership · Ethics · Business · Ethical leadership

The study of leadership as it pertains to business ethics contains great potential for theoretical advancement and practical understanding. At the same time, there is an inherent challenge in studying a concept that itself lies at the intersection of three other broad and sometimes ambiguous concepts: business, ethics, and leadership. This conceptual breadth and ambiguity raises some very important questions for us (Alex Newman and Mike Palanski) in our role as editors of the section for leadership and ethics (quantitative) at the *Journal of Business Ethics*. For example, what should the study of leadership in a business ethics journal encompass, and what should it not? Similarly, to what extent should the focus be on leadership in a business ethics context, or on the leadership aspects of business ethics? In addition, what type of studies both offer a substantive contribution *and* fit the aims and scope of the journal, and what types of studies, while potentially making a substantive contribution, are better suited to journals more focused on conventional leadership and organizational behavior studies?

This statement in the Aims and Scope of the *Journal of Business Ethics* helps to answer these questions to some degree: "The term `business' is understood in a wide sense to include all systems involved in the exchange of goods and services, while 'ethics' is circumscribed as all human action aimed at securing a good life." So far, so good. But the real challenge comes when leadership is added to the mix. As Ciulla (2004, p. 302) noted, "The study of ethics is about human relationships… Leadership is a particular type of human relationship." Thus, by definition, the study of leadership inherently and inescapably includes an

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ethical dimension. Similarly, given the ubiquity of leadership in business, and that the study of leadership is likely to have implications for business, it could be argued that most leadership studies are relevant to the business field even if they do not take place in a business context.

Given this state of affairs, one could plausibly argue that just about any leadership study can overlap with business and especially with ethics, particularly when the leadership construct itself has an ethical component (e.g., ethical, authentic, servant, or responsible leadership). However, opening the door to the publication of essentially all types of leadership studies holds the danger of negating the unique focus of the journal. More specifically, to do so would likely impinge on the overarching goal to create space for innovative, substantive, and boundary-pushing contributions to the quantitative study of leadership and business ethics.

To address the challenges highlighted above we have written the present article. Our hope is that this article will help authors in two primary ways. First, we aim to offer some practical guidance about how to structure their papers in order to improve their chances for publication. We attempt to do so by offering suggestions about what to include and what not to include. Specifically, we hope that this guidance will dissuade authors from submitting "usual (empirical) subjects" (Lemoine et al. 2019) papers that often end in a desk rejection. Second, with the help of our experts, we aim to stimulate thinking about forward-looking, relevant questions that will propel the journal and the field forward. Here, we try to focus squarely on the unique focus of the journal (creating knowledge about business ethics) as it pertains to leadership.

We begin with a brief review of the current state of the field as we see it, and highlight the challenges that we face as section editors for quantitative leadership studies in a business ethics journal. We spend most of our time, however, looking forward, considering the types of questions we should be asking, the types of theory we should be building, the types of models we should be testing, and the types of methods we should be using. At the end of each section, we provide some implications for authors in the form of relevant questions that authors might ask themselves as they craft their papers. To assist us in our task, we sought opinions from four noted experts in the area of leadership and business ethics: Deanne Den Hartog, Sean Hannah, Hannes Leroy, and Celia Moore. We asked these four scholars to share their thoughts on these themes because each of them is a well-established expert in the field of ethical leadership. Each of them has broad experience in conducting and publishing quantitative ethical leadership studies and in creating robust theory of the same. In the sections that follow, we integrate their responses along with our own perspectives.

Current State of the Literature and the Challenges It Represents

Leadership research in the business ethics field has burgeoned over the past 20 years, with the first decade marked by theoretical advancement and foundational measurement development, and the second decade marked by a proliferation of incremental studies that served to build the nomological networks surrounding the constructs of ethical leadership, authentic leadership, servant leadership, and responsible leadership. In addition to these constructs, the first decade (roughly 1999–2009) saw a surge in interest around the ethical implications of transformational leadership, spurred by Bass and Steidlmeier's (1999) seminal article that articulated and defended the ethical foundations of transformational leadership. In 2005, Avolio and Gardner (2005) guest-edited a special issue of *The Leadership Quarterly* on authentic leadership, a construct with a strong moral component. That same year, Brown et al. (2005) published the foundational paper for the construct of ethical leadership. In 2006, Maak and Pless published their seminal work on responsible leadership, which like ethical leadership, can also be considered a moral leadership style. Finally, in 2008, Liden et al. published a scale validation article for Greenleaf's (1977) concept of servant leadership, which also contained a strong moral component. These articles formed a foundation of sorts for embedding ethics into leadership theories themselves.

The second decade led to a growing number of studies that have collectively helped to develop the current state of the science concerning leadership in business ethics. Lemoine et al. (2019) reviewed this literature and noted a high degree of similarity among ethical, authentic, and servant leadership styles concerning the underlying theoretical frameworks they have adopted (notably social learning, social exchange, and social identity), the mediating mechanisms associated with such frameworks that explain the outcomes of such leadership styles, and the general-interest organizational behavior outcomes such leadership styles predict. Lemoine et al. (2019, p. 150) refer to this state of affairs as "The Usual (Empirical) Subjects"—a characterization with which we would wholeheartedly agree based on our experiences as section editors of JBE.

The most common challenge we face as section editors is that although we receive manuscripts that are well-written, with reasonable study designs and defensible results, many of them make an incremental, "usual (empirical) subjects"-type of contribution in relation to examining the link between authentic, servant, responsible, or (most often) ethical leadership and general-interest organizational behavior outcomes, many of which are not necessarily ethics related (e.g., job performance, creativity, innovative behavior, citizenship behaviors, and wellbeing). Although these papers are not undeserving of eventual publication, they *do little or nothing to advance understanding about the intersection of business and ethics and leadership*, and are thus probably better suited for a more general organizational behavior or organizational psychology journal.

As our expert Den Hartog clearly states:

> Rather than repeating every moderated mediation model that has ever been tested for transformational or other styles now with ethical leadership, I think a clearer and in some ways more narrow focus on ethics and integrity of leaders is important, as well as focusing more specifically on outcomes and mechanisms in the ethical or moral domain rather than only (or mostly) on general outcomes and the same mechanisms as for other styles.

The bottom line is that we as editors end up desk-rejecting many papers that otherwise appear to have potential for publication, but are clearly of the "usual (empirical) subjects" variety and pay only cursory attention to the study of ethics. We do so out of a desire to protect the unique emphasis of the *Journal of Business Ethics*, as well as to show respect to both authors and reviewers—neither of whom desires to spend time and effort in a review process that is not likely to result in eventual publication. Thus, while the desk reject decision might be the best immediate decision, doing so repeatedly detracts from the ultimate goal of knowledge creation and dissemination that motivates authors, reviewers, and editors to participate in the publishing process.

Implications for Authors

- Does my paper make a direct, unique contribution to the study of leadership in a business ethics context? If so, how can I highlight this contribution?
- Could my paper be submitted in its present form to a journal with a more general focus? If so, why am I submitting to Journal of Business Ethics?
- Could the variables in my model be interchanged with similar variables and tell much the same story? If so, what is the truly unique contribution of my paper?

So, given the issues surrounding "usual (empirical) subjects" papers, one might ask what types of quantitative leadership research are better suited—perhaps even uniquely suited—for the *Journal of Business Ethics*? In the next sections, we provide some thoughts.

What Types of Research Questions Should We Be Asking?

Before proceeding to some ideas from our experts, we would like to pause to re-emphasize a lesson that all of us learned (or should have learned) very early in our careers: all worthwhile research proceeds from a good research question(s). We all tend to relegate the practical implications of our research (real or imagined) to the discussion section at the end of the paper, when in reality the practical implications should normally be apparent from the research questions we are asking. A keen question is of utmost importance—and thus we wholeheartedly urge authors to continue to use curiosity and creativity in seeking out new questions to ask. The suggestions below are but a small sample of questions that we could ask.

Does Ethical Leadership Always Lead to Positive Outcomes?

Several of our experts noted that much of the knowledge of leadership in business ethics proceeds from a normative assumption that ethical leadership always has a positive influence. But perhaps this assumption could be challenged and tested. For instance, Den Hartog highlights the notion that context matters:

> Can there be "too much of a good thing" when it comes to ethical leadership? For example, can one become too rigid or too moralistic in the eyes of others thereby diminishing the positive effects of ethical leader behavior? Might there in that sense be curvilinear effects?
>
> Also, we know little about the (emotional) costs of ethical leader behavior for the leader himself or herself. Ethical dilemmas involve making hard choices and ethical leaders who tend to be high on moral awareness are likely to see that the outcomes of such choices can benefit some, but simultaneously often come at the cost of others. Is that a stronger source of stress for them than for those who are less aware of this? Do ethical leaders worry more about work and leading others and perhaps even to a degree that it can harm their own well-being?

Similarly, Hannah reminds us that leaders face ethical dilemmas in that they owe ethical obligations to different stakeholders—obligations that may conflict:

> I would argue that the body of research has been somewhat Pollyanna in its characterization of leaders heroically guiding their followers and organi-

> zations to do ‘right’ and avoid doing ‘wrong’. Yet as Badaracco (1997) so well outlines, leaders, particularly senior leaders, have to navigate tough right vs. right issues—those in which they have ethical obligations to multiple stakeholders, where serving each is ‘right’ to do but cannot be done due to limited resources or interests that are in conflict. We need to better understand how and upon what criteria leaders resolve these ethical tensions, and what forms of resolution are in fact ‘ethical’. A fruitful approach may be to integrate paradox theory (Schad et al. 2016) into ethical leadership research. Further, these right vs. right tensions bring into question what it is to be ‘responsible’ as a leader—who should the leader be responsible to and for? What should be their hierarchy of values or ranks of stakeholder importance that drives their tradeoff calculus? These questions may be informed by a deeper integration of stakeholder theory (Freeman et al. 2004) into ethical leadership research, as well as the literature on what constitutes *responsible leadership* (Waldman and Siegel 2008).

Leroy warns us that the halo effect of ethical leadership has been over-emphasized:

> The study of leadership and ethics has a normative side to it (Mumford and Fried 2014) – this goes beyond what is ‘effective’ leadership to what is “good” or “moral” leadership. As such, in an attempt to capture what is “good”, we typically cover all bases with multiple components and our survey results are conflated with a “halo” of what we believe is moral. This is dangerous because sometimes the most ethical decision as a leader won’t be captured by such a halo, for instance when an ethical decision hurts a follower in the short run, only to benefit them in the long run.

Den Hartog suggests that the study of multiple leadership behaviors may help to overcome some of this situation:

> Over time of course people show many different behaviors and some of these might ‘mix’ better than others. For example, some leader behaviors might attenuate or strengthen each other’s effects. Some of our recent work on mixing ethical and passive leadership showed that leaders who score higher on both ethical and passive leadership were perceived to provide less role clarity compared to leaders who score high on ethical and low on passive leadership (Vullinghs et al. 2018). Thus, I feel looking in much more detail at patterns or multiple types of behavior together can be of interest.

What Does the Changing Nature of Leadership Mean for Business Ethics?

Another overarching question asked by our panel of experts concerns the evolving nature of leadership in the twenty-first century. Many of our extant theories were created to fit a more traditional notion of a supervisor leading a direct report in a hierarchical organization. But in an era of social media and the gig economy, how should we consider ethical leadership in business? How do we model leadership in business ethics as dynamic, complex processes? Further, how do these processes unfold over time and when combined with other leadership styles?

Moore prompts our thinking with both high-profile and everyday examples:

> I think we need to explore in much greater depth how individuals with less formal power resist complying with demands from authority figures that they perceive to be unethical. If the engineers tasked with creating the defeat device at Volkswagen had stood up to power and refused to do so, the company—and those implicated in its scandal—would be much better off. However, we don’t know nearly enough about who refuses to comply with leaders’ unethical requests, how they do so, or why. But if we are to design and support a future where massive ethical failures happen less, we need to spend a lot more time thinking about how individuals can effectively stand up to unethical leaders.

> More generally, I believe that leadership research needs to broaden its understanding of what leadership is, given current economic and sociological realities. Leadership is changing. As more and more individuals work in the gig economy (Manyika et al. 2016) or on contracts as organizational hierarchies flatten (Rajan and Wulf 2006), and employees become more mobile (Bidwell 2013), leadership means different things. These major changes mean that our questions need to shift to include this new reality. Who is the “leader” of an Uber driver? In this new world, I think we need to pay much more attention to leadership as social influence, which can be exercised between peers, from external to internal organizational stakeholders, and from followers (traditionally defined) to leaders (traditionally defined). Leadership depends less now on formal authority and control over resources, and more on the simple ability to inspire others to behave the way you want. When our understanding of what leadership is and how it is exercised expands to accommodate new realities, research on leadership will have greater scholarly and practical impact.

Den Hartog helps us to remember that we are studying dynamic and complex processes:

> How do ethical and unethical decision-making of leaders develop and spread over time? But also, and importantly, how do variations in behavior or small ethical "slip-ups" affect perceptions of ethical leaders over time? Followers and onlookers may for example hold highly ethical leaders to higher (moral) standards than less ethical leaders, thereby paradoxically setting them up to fail more easily. Do followers understand that ethical leaders are "only human" and allow them some leeway as well or do they fall from grace much harder and faster than less ethical leaders if they slip up even slightly? Or does the Hollander credits idea apply here: once we see a leader as ethical, they have credit and are allowed a slip up? Does this vary across contexts?

Implications for Authors

- What is the important research question(s) I am seeking to address?
- Does this question(s) lie at the intersection of leadership, business, and ethics?

What Theoretical Perspectives Should We Be Adopting?

As we mentioned above, a number of the major leadership approaches have an inherent moral component (e.g., servant, responsible, or authentic leadership). As a result, we often see papers with almost no substantive theorizing above and beyond that which may be found in almost any leadership paper, with most papers relying on perspectives that can be used to explain the influence of almost every leadership style. As Leroy puts it:

> For the broader leadership styles, we often rely on broad mechanisms (e.g., social exchange, self-determination, social identification) to justify similar effects across leadership styles.

Den Hartog echoes this point:

> We see at the moment an overreliance I think on only social learning and social exchange for much of the work around ethical leader behavior and its effects.

If researchers want to make a contribution to the study of leadership and business ethics more specifically, then we strongly believe that our theorizing should normally be grounded in—and thus ultimately advance—theories which are inherently ethical or moral in nature. Our experts echo this point. Hannah calls on researchers to consider using theories from the moral psychology and moral philosophy literatures:

> Ethical leadership research to date has typically focused on leaders' effects on relatively mundane ethical outcome measures. I argue that we need to study how leaders can promote supererogatory ethical actions in organizations. Leader behaviors that influence followers to not steal office supplies, take credit for someone else's work, or perform general helping behaviors, for example, likely differ qualitatively from those actions that promote an employee to stand up to and confront an abusive supervisor to protect a coworker, blow the whistle when retribution for doing so is thought imminent, or rescue a coworker in a fire. We should also ask what makes the leader themselves perform such exemplary acts. Fuller (1969) distinguishes these two categories of behavior as entailing the morality of obligation (e.g., compliance) and the morality of aspiration. To study such phenomenon, we should more deeply integrate moral psychology and theories of the moral self into EL research as overviewed by Jennings et al. (2015). Specifically, the focus of EL research on social learning and social exchange theories has emphasized how followers may act ethically based on the modelling of the leader or their felt need to act ethically as a returned exchange to the leader, respectively. Little explored is how leaders can instill aspirations within followers such that they create a self-driven want to act ethically. While we should study whether such aspirations can become internalized over time through social learning if the leader is seen as a moral exemplar (Walker and Henning 2004), we should also determine whether leaders can do so through creating self-beliefs in the follower, or by attaching followers to an inspirational vision concerning ethics they seek to achieve. Similarly, if we are to study supererogatory ethical behaviors we should integrate deonance theory (Folger, Ganegoda, Rice, Taylor, and Wo, 2013) more into EL research. This may entail building on nascent research showing that leaders can drive follower ethicality through creating a sense of duty within them—not a duty based on social exchange with the leader, but duty to the team (loyalty), the mission, the mores of the group, etc. that may promote them to act 'above and beyond the call' (Hannah et al. 2014).

Den Hartog makes a similar point, calling for more work to integrate key ethical theories:

> To me it would also be interesting to work out in more detail than we have done to date whether following

> different types of ethics (e.g., consequence-based, duty-based, contracts-based, virtue-based) yields different leader and follower behavior and expectations of each other (and of course, how these ways might be consistent and inconsistent is interesting as well as what cross-cultural differences might be seen in this).

And Moore calls on researchers to draw upon a number of alternative theoretical perspectives:

> I am particularly interested in how leaders, or those who influence us (regardless of their formal authority or power over us), affect how we construe the choices ahead of us. I have studied this under the rubric of moral disengagement theory, and find it particularly interesting that our leaders can affect the extent to which we morally disengage, and through this morally problematic cognitive orientation, affect our behaviour (Moore et al. 2019). Since individuals generally do not make choices they do not believe to be morally right, the capacity of those around us to change how we understand the morality of our choices plays a critical role in our ethical behaviour. To this end, the "Approach-Ability-Aftermath" framework of Moore and Gino (2015) provides one lens through which we can think about how and when leaders influence the moral behaviour of those around them.

Implications for Authors

- What are the theories supporting my paper? Do they have an explicit moral/ethical focus?
- Does my paper explicitly serve to advance theory of business ethics as it pertains to leadership and/or leadership in a business ethics context?

What Types of Models Should We Be Building and Testing?

Sound testable theoretical models should proceed from interesting and relevant research questions that are explicated through sound extant theory. But what should our theoretical models look like? Put more bluntly, when we create "Figure 1" for our papers, what should go in the little boxes, and where should the arrows be pointing? Our experts have several ideas involving exploring multi-level and cross-level relationships. For instance, Den Hartog and Hannah both believe that it is important to examine how higher level constructs shape individuals' expectations and responses to ethical leadership. For example, Den Hartog discusses the need to examine the role of national and organizational culture:

> It would be of interest to see how cultural differences play a role in shaping the ethical expectations of leaders and how this plays out in multi-cultural teams. Also, what are the organizational controls that can stimulate ethical leader behavior and curb unethical behavior? Can one rely on a strong ethical climate alone or does one need other controls in place? For example, do stricter norms and rules or more active monitoring help or does this form a sign of distrust that harms ethical intentions more than it helps them?

In support, Hannah calls for more research on how leaders can help shape ethical culture within the organization:

> We know little about what specific leader behaviors drive changes in, or embed and reinforce, ethical climate and culture. Yet Schaubroeck et al. (2012) showed that a significant amount of the trickle down effects of EL flow through ethical culture across multiple organizational levels. Further, we need to determine what specific actions leaders can take to create or alter systems and processes (e.g., criteria for reward and promotion systems), procedures (e.g., ethical risk assessments during strategic planning), and norms (e.g., group moral approbation norms) that promote morality. In sum, a broader understanding is needed of the manifold discrete actions leaders can enact in concert to directly affect ethicality in followers and teams, coupled with actions that indirectly effect followers and teams through climate, culture, processes, procedures, and norms.

Although the primary entity under consideration in the following suggestions remains the individual leader, both Leroy and Hannah suggest that identifying and explicating more discreet behaviors of the ethical leader is an important area of inquiry. Leroy states the problem well:

> There is an overreliance in prior research on examining the influence of multi-component leadership styles. These multi-facetted constructs serve an important purpose in trying to capture a complex reality of effective leadership (though note the problem: we conflate leadership with effective leadership). While these styles are of practical value in our efforts to teach students and/or corporate clients one guiding model of leadership, their breadth hinders the precision of academic research that allows us to draw more exact and nuanced conclusions. We need more fine-grained measures, with supporting fine-grained theory, preferably from the realm of ethics, to come to more nuanced findings. Those nuanced findings could then be summarized in reviews that integrate the different findings for practitioners. However, we have to avoid

> the "shortcuts" of multi-component approaches that directly appeal to a practitioner audience.

Hannah expands on this same point:

> We in fact know little about the actual discrete behaviors those leaders who effectively promote ethical outcomes in organizations enact in practice. As such, we currently offer insufficient behavioral guidance to practicing leaders. Instead, many measures of ethical leadership tend to ask general questions such as "When making decisions, asks "what is the right thing to do?"" or "Makes fair and balanced decisions" (Brown et al. 2005); or "Cares about his/her followers" or "Can be trusted to do the things he/she says" (Kalshoven et al. 2011). Such items appear to call for the respondent to make either an overall attribution of the leader or general perception of the leader's average behaviors as opposed to rating discrete behaviors. What specific behaviors are we talking about? What behaviors are 'right', 'fair', etc.? Despite this lack of clarity, we tend to develop theories that relate ethical leadership constructs to other constructs as if ethical leadership is being operationalized as a set of discrete behaviors. Our vagueness in measurement is perhaps due in part to the field having largely surrendered the pursuit of normative ethics – we instead force each respondent to use their idiosyncratic implicit theories to judge leaders' actions. We need to identify the discrete leader behaviors that are 'good/right' or create 'good/right' (at least in certain situations), and assess through what mechanisms those behaviors determine positive organizational outcomes.

In response to this problem, Leroy offers an exemplary suggestion for how to proceed:

> So what is a potential alternative to the normative, multi-component theorizing and measurement around leadership ethics? As a nice exemplar of more fine-grained theorizing and measurement, we refer to theory and research on behavioral integrity (Simons 2002). Leader behavioral integrity was defined as the extent to which a leader 'walks his or her talk' or 'practices what he or she preaches' (Simons 2002). There is clarity that comes with the singularity of this definition, both in terms of the construct understanding but also in terms of how to measure it: Were the words and deeds of the leader aligned or misaligned? Such precision allows for alternative methods to the survey method for instance where words and deeds are either manipulated in an experiment or observed in real time or coded through document analysis. Beyond clarity and opportunities for measurement, there is also theoretical precision aligned with this singularity of definition. For instance, behavioral integrity theory highlights the subjective nature of perceived integrity, including potential biases as halo-effects (Simons 2002).
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> Furthermore, Simons (2002) made a note of it to state that behavioral integrity is not normative in and of itself. In contrast to other conceptualizations of integrity, Simons (2002) argued that one can be a jerk and have high behavioral integrity. Just think of the mafia boss who promises to kill someone and then systemically does what he or she says – high behavioral integrity. Does this still fit in the realm of leadership and ethics then? The response is yes because the question is not whether leader behavioral integrity is inherently ethical, it is whether and when leader behavioral integrity leads to more or less ethical outcomes. And of course saying you will kill someone and then doing is less ethical than saying you will donate to charity and then doing it. Important here is that research on leadership and ethics should be less influenced by normatively defining its independent variable (i.e., what is ethical leadership) and more by its dependent variable of ethical outcomes. In that sense, we need less of a either a good news show in terms of ethical leadership and good performance or bad news show in terms of how dark leadership styles hurt performance. Instead, I advocate for nuance in how a myriad of leadership approaches influences a wide variety of ethical outcomes.

To be clear, we do not require that a paper study any particular level of analysis or take any particular multi-level design. We do ask, however, that authors be clear to explicate levels of analysis dynamics in their models, even when model testing proceeds with less-than-optimal levels of analysis testing.

Implications for Authors

- Have I clearly explained the operative levels of analysis in my model? Have I adequately tested for effects at multiple levels of analysis where needed?
- To the extent possible, does my model explicate finer-grained actions, or is it more general in nature?

What Type of Methods Should We Be Using?

In prior studies, researchers have tended to use survey methodologies drawing on data collected in single or multiple waves from employees and their supervisors. Although such research designs are commonplace in leadership research, researchers should consider adopting designs drawing on alternative sources of data to answer different research questions and strengthen the inferences obtained from survey research. We purposefully do not specify any particular methodological approach, but rather implore authors to be both thoughtful and explicit about why they decided to use a particular approach. For example, Hannah stresses the need for research to engage in more episodic and immersive research where data are collected over an extended period of time:

> Identifying the most effective ethical leadership behaviors will entail more than common survey research that assesses how ethical leaders behave in general over time, or that assesses general attributions of such leaders. As debated by Hannah et al. (2014), with such methods researchers have tended to measure and theorize 'types' of *leaders* (i.e., low or high ethical leadership 'types' of leaders) as opposed to *leadership* (i.e., as a set of behaviors that leaders may enact within situations, perhaps along with transactional, transformational, servant, or other behaviors as thought needed). Instead of categorizing leaders, we need to determine what leaders who are effective in promoting ethicality actually do. A model for this research may be the set of observational *real manager* studies run over four years by Luthans and colleagues (for overview see Luthans et al. 1988). Qualitative interviews, experience sampling may also help illuminate these discrete behaviors.

Hannah also urges researchers to adopt methods from neuroscience in the study of ethical leadership:

> Colleagues and I have called strongly for new research to determine the locus of ethical leadership – the individual antecedents that promote leader ethical decisions and actions (Hannah and Avolio 2011a, b; Sumanth and Hannah 2014). One way we have sought to do so is through the use of neuroscientific methods. An initial study 'brain mapping' leaders found that the brain functioning of leaders rated higher on ethical leadership by peers and followers differ significantly in areas of the brain associated with moral processing as compared to leaders rated lower on ethical leadership (Waldman et al. 2017). This study also found that ethical ideology (the interaction of relativism and idealism; Forsyth 1992; Forsyth et al. 2008) mediated the effects of brain functioning on ethical leadership, suggesting that ideology (a psychological or 'mind' factor) is also an antecedent to ethical leadership. Also relevant, another empirical study showed that the brain functioning of abusive supervisors (in some ways the antithesis to ethical leadership) can be distinguished from those less abusive, yet based on different theorized parts of the brain (e.g., emotional and executive control centers) than those related to ethical leadership (Waldman et al. 2018). Much further research based on neuroscience and other methods that allow us to understand not only the *brain* but the *mind* of ethical leaders is paramount if we are to understand how to develop ethical leaders, and/or measure changes in their development over time.

Access to big data has the potential to how we examine how people react to the unethical behavior of leaders. Moore highlights the opportunities that big data provides for the study of ethical leadership:

> Burgeoning access to different kinds of rich and large data provides many novel opportunities for leadership at the intersection of leadership and ethics. For example, one might analyse Twitter data to understand how corporate leader caught in a scandal is understood by different stakeholders (cf., Bruns and Stieglitz 2012). The sheer volume of text, in many, many forms, that is now (relatively) easily available to access and analyse with natural language processing techniques (Evans and Aceves 2016) opens many opportunities for future research. NLP techniques have almost never been applied to questions within leadership and ethics to date (Eckhaus 2017, is one exception).

Moore also highlights how we might undertake quantitative analyses on archival data to explore how leaders deal with situations in which they have to make moral judgements:

> I also believe we need to be more creative in how we think about, explore, and analyse archival data. Some of the most important insights we have about leadership comes from qualitative analysis of historical examples. However, applying new methods to interesting archival data opens up new opportunities. As an example, qualitative analysis of Senate testimony and other public statements in the Nixon Watergate era helped us understand what level of moral reasoning those leaders exhibited during the scandal (Candee 1975). More recent analysis of similar transcripts from the same scandal deepened our knowledge of how it was executed, by quantitatively documenting how the dance of leadership unfolded in real time between Richard Nixon and his inner circle (Niederhoffer and Pennebaker 2002).

Finally, Leroy calls for more intervention research which use quasi-experimental designs in the study of leadership and ethics:

> Most of the research we have is descriptive by design, often survey-based and cross-sectional, looking at how a wide variety of leadership variables interrelate with a

wide variety of follower outcomes. This approach however leads to some of the well-known problems with leadership research, many of which are highlighted in this paper. But what is the alternative? One method that maintains the benefits of the survey approach in terms of investigating actual leaders and organizations but heightens the theoretical/methodological standards is intervention research. Similar to an experimental design, intervention studies manipulate precise leadership variables to establish causal effects within an ecologically valid context. Here researchers can't afford to use a broad stroke of the variables they include in their design but have to be more precise in both research question and design.

Such intervention research however is not easy, and there are practical reasons why descriptive research is often preferred: From the effort of getting such data all the way to finding meaningful and publishable results – not exactly the antidote to the 'publish or perish'-idea. It needs journal editors and tenure or award committees to value the inherent difficulty with these type of designs and data collection efforts. This is important because intervention research does not only hold promise to enrich the theoretical and methodological rigor, it aligns with two other values typical to the researcher in terms of leadership ethics: (1) practical relevance and (2) making a difference. The leadership development industry is always in search for the latest model or style on the market to sell to clients. While we typically have evidence that these models "work" (i.e., lead to important follower outcomes), we typically have little to no evidence which suggests that we can change this behaviour. As a result, we often go look for the next model that will make a difference. Coming up with a well thought-out intervention would not only serve the purpose of being practically relevant, but would also allow many of us to achieve what we signed up for research on leadership and ethics in the first place: To make a difference in the world.

Implications for Authors

- How can I enhance my study to extend beyond cross-sectional survey data of employees and supervisors?
- Do my methods themselves happen to make a contribution to the study of leadership in a business ethics context? If so, how can I highlight this contribution?

Concluding Thoughts

We conclude with a few reflective thoughts. First, in line with recent research that has highlighted the ethical issues involved in conducting quantitative research, we call on researchers to take ethics into account when designing research projects, and in collecting and analyzing research data. In particular, building on the recommendations of Zyphur and Pierides (2017), we call on researchers to undertake research that addresses real world problems in line with the remit of the *Journal of Business Ethics* to 'improve the human condition,' rather than undertake research simply for the sake of undertaking research, and reflect on the inherent limitations of quantitative research in that it does not fully reflect reality. In addition, when conducting quantitative research on leadership and ethics, researchers should avoid undertaking suspect research practices such as HARKing (hypothesizing after the results are known) and data-mining to find significant p values. They should also ensure they abide by ethical standards when designing, conducting, and publishing their work such as ensuring they reveal any conflicts of interest, and ensure study participants are treated respectfully and have voluntarily consented to participate in the research (Edwards 2019).

Second, although the focus of this article is on quantitative approaches to leadership and business ethics, such approaches are not always best suited to addressing the research questions at hand. Qualitative and, especially, mixed-method approaches continue to have power to uncover phenomena of interest, to explicate that which is sometimes obscured by numeric data, and to translate our findings into forms which may have greater potential for practical action. In addition, other types of quantitative studies that have gained traction in the broader leadership field could be applied to leadership and business ethics—for example, work on complex adaptive systems in leadership (Uhl-Bien et al. 2007). For further thought, we again point readers to Zyphur and Pierides (2017) and Edwards (2019) for a vibrant discussion about the promise and peril of conducting quantitative business ethics research.

Finally, our call to go beyond "usual (empirical) subject" approaches places a responsibility on us as section co-editors. Specifically, we need to continue to encourage submission of forward-looking papers, and to develop our own expertise in recognizing the value in papers whose focus and methods are somewhat different. We also need to continue to find and help develop reviewers who are thoughtful and confident in offering constructive and rigorous reviews concerning material that may be outside of recent norms. Fortunately, we have a pool of talented experts who regularly review for this journal section, but as innovative papers are submitted we will need to expand the breadth and depth of this pool. Most importantly, just as we are asking authors to take a risk by writing outside of a traditional "safe zone," we also need to take some risks by balancing relevance and rigor.

As editors of the quantitative section on leadership and ethics at the Journal of Business Ethics, we wrote the present article with the aim of guiding researchers as to how they might improve their chances of publishing in our section. In doing so, we not only presented a brief review of the literature on leadership and business ethics, but also highlighted the fact that many authors only paid cursory attention to the study of ethics when submitting to our section. We then drew on the opinions of four experts in the field of leadership and ethics to highlight what kinds of questions quantitative researchers on leadership and business ethics should be answering, what kinds of models they should be testing, what kinds of theories they might draw upon, and what kinds of methods they might apply in order to advance the field.

Compliance with Ethical Standards

Conflict of interest All authors have certified that they have no conflicts of interest.

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