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Leaders' Mental Health at Work: Empirical, Methodological, and Policy Directions

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While employees' mental health is the focus of considerable attention from researchers, the public, and policymakers, leaders' mental health has almost escaped attention. We start by considering several reasons for this, followed by discussions of the effects of leaders' mental health on their own leadership behaviors, the emotional toll of high-quality leadership, and interventions to enhance leaders' mental health. We offer 8 possible directions for future research on leaders' mental health. Finally, we discuss methodological obstacles encountered when investigating leaders' mental health, and policy dilemmas raised by leaders' mental health.

Keywords: leaders, mental health, leadership behavior, transformational leadership, abusive supervision

There is a long and robust history of research focusing on employees' mental health and well-being; indeed, the quality and quantity of research on this topic would be the envy of many disciplines aimed at understanding behavior at work more broadly. While it is always hazardous to identify the person or article that launched any field, what is clear is that the research on employee mental health largely developed in two parallel but separate streams in Europe and the United States (Barling & Griffiths, 2011; Christie & Barling, 2011), largely producing similar lessons.

Within Europe, research was certainly stimulated by Jahoda, Lazarsfeld, and Zeisel's (1933/2009) groundbreaking research on unemployment, and Jahoda's (1982, 1988) later theory on the nature and mental health effects of work and unemployment. In the interim, the Whitehall Studies led by Marmot (2004) established the beneficial health effects of job status, while the demand-control model (Karasek, 1979; Karasek & Thorell, 1990) and research at the Institute of Work Psychology at the University of Sheffield (e.g., Wall et al., 1990; Warr, 1987) advanced our understanding of the mental health effects of job control and autonomy. Within the United States, initial research within the automobile industry (Chinoy, 1955; Kornhauser, 1965) and among accountants (Herzberg, 1966) and in more broad-based samples (e.g., Kahn, Wolfe, Quinn,

Snoek, & Rosenthal, 1964) identified the role of workplace factors in employees' mental health; a little later, Hackman and Oldham's (1976) job characteristics model pointed to specific workplace factors. Throughout this period, research conducted at the University of Michigan's Institute for Social Research was instrumental in understanding workers' mental health (e.g., Quinn & Staines, 1977; Vinokur, Schul, Vuori, & Price, 2000).

And yet, despite this rich body of knowledge, or perhaps because of it, our focus will not be on employees' mental health. Instead, we turn our attention to one issue that is missing from this body of knowledge, and that is any meaningful consideration of leaders' mental health.¹ The fact that leaders are mostly absent from this research is puzzling; after all, there is an immense body of research on leaders, with hundreds of studies published each year by 2012, a number that is steadily increasing (Barling, 2014). In addition, embedded in all this research are findings across time and continents which demonstrate that leadership is associated with employees' overall well-being (e.g., Arnold, Turner, Barling, Kelloway, & McKee, 2007; Kelloway, Turner, Barling, & Loughlin, 2012), and specific indicators such as problem drinking (Bamberger & Bacharach, 2006), sickness absence (Nyberg et al., 2009), and cardiovascular health (Kivimäki et al., 2005). Our goal is to provide a platform for understanding leaders' mental health by considering potential implications of leaders' poor mental health for themselves and for others, discussing possible interventions to mitigate leaders' poor mental health and enhance good mental health, proposing a research agenda for future investigations on the topic, and considering methodological and policy issues. We start by asking why leaders' mental health at work has been so widely ignored.

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¹ Throughout this article, we use the term *mental health* (and in particular, "leaders' mental health") to represent a more inclusive set of behaviors, experiences, and outcomes associated with the full range of low-to-high mental well-being, rather than its more exclusive clinical definition.

Why Has Leaders' Mental Health at Work Been Ignored?

The consistency across researchers, continents, and decades with which leaders' mental health has been ignored, both as a topic in itself and in comparison to the interest in employees' mental health, is so stark that it raises the question of why this neglect has occurred. We offer several contrasting propositions that might account for this neglect.

One possibility is that leaders are viewed as morally responsible for the well-being of their employees, as a result of which they would not be worthy of our empirical attention. We see nothing in the literature that would directly sustain this view. However, a corollary of this could be higher levels of compassion experienced by researchers for employees, who do experience greater job stress levels than either managers or owners of businesses (e.g., [Marmot, 2004](#); [Sherman et al., 2012](#); [Tetrick, Slack, Sinclair, Da Silva, & Sinclair, 2000](#)).

A second possibility is that leaders enjoy positive psychological well-being, as a result of which any research would be redundant; in other words, they experience less job stress, they are more resilient, or they have access to more resources, ensuring that any job stress they do experience is buffered and therefore does not affect their leadership, their employees, or their organizations. There may be some support for this. As people move up the social hierarchy, leaders would have greater access to the status ([Marmot, 2004](#)), social and organizational resources ([Hobfoll, 2002](#)), and job control ([Christie & Barling, 2009](#)) that are critical for mental health. This would be consistent with [McDermott's \(2008\)](#) suggestion that some U.S. presidents (e.g., Woodrow Wilson) may have succumbed to their physical illnesses even earlier (e.g., [Olenski, Abola, & Jena, 2015](#)) had it not been for the buffering role inherent in the presidency. Indeed, [Gilbert \(1998\)](#) suggested that U.S. presidents who were rated as most accomplished in leading the country tended to live longer, whereas those less successful suffered from earlier deaths than average life expectancy at the time, further supporting the buffering function that role status serves.

However, we suggest that the most plausible reason for the neglect of leaders' mental health at work is not whether they actually do or do not experience better mental health, but rather how their well-being is perceived by others—researchers included. In this respect, two separate theories point to the way in which followers and the lay public perceive leaders and leadership. Implicit leadership theories organize the ways in which other people view leaders. Based on the research of [Epitropaki and Martin \(2005\)](#), the core attributes of prototypically positive leaders would be that they are sensitive, intelligent, motivated, and dynamic—all attributes that convey strength and well-being. This perspective is reflected further in the findings from research on the “romance of leadership” ([Meindl, Ehrlich, & Dukerich, 1985](#)): People generally search for meaning, and faced with unusual and inexplicable situations (e.g., extraordinary company success), they are likely to attribute any such successes (and to a lesser extent, failures) to the actions of their leaders. People are more likely to romanticize their leaders, and attribute charisma to them, when they are psychologically aroused ([Pastor, Mayo, & Shamir, 2007](#)). Recent qualitative evidence supports the idea that leaders are perceived as stronger and therefore mentally healthier, whereas

employees, coworkers, and subordinates are most frequently identified as vulnerable to mental and physical illness ([Cloutier & Barling, 2016](#)). Taken together, these beliefs may be shared by researchers in the field, providing some explanation for the dearth of empirical investigation into leaders' mental health.

Effects of Leaders' Mental Health on Their Own Leadership Behaviors

Despite little empirical attention, leaders' mental health has attracted considerable interest as is reflected in several books written by authors with different backgrounds, and which focus on political, public, and military leaders. [L'Etang \(1969\)](#), a physician, provided a broad history of leaders' well-being from World War I onward; one factor that differentiates [L'Etang's](#) book from others is that he was one of the first to question whether physicians should ever reveal information about their patient's health. With a background in experimental social psychology and political science, [McDermott \(2008\)](#) speculated why compromised mental and physical health may bear greater impact for those in leadership positions, specifically by impacting their decision making resulting in far-reaching, social consequences. Furthermore, she provided some useful hypotheses about possible mediating mechanisms for why mental illness impacts leadership behaviors; for example, by weakening a leader's physical, cognitive, and emotional resistance to stress (depletion), resulting in the reallocation of resources away from positive leadership behaviors toward self-care. The combination of depleted resources and increased stress leads to poor, impulsive, or emotion-driven decisions. In a very popular book, [Babiak and Hare \(2006\)](#) focused on the effects of psychopaths in the workplace, especially those in leadership positions, and offer suggestions on how to confront such situations. [Nassir Ghaemi \(2011\)](#), an American psychiatrist, provided somewhat of a silver lining to this discussion of leader mental illness. In his examination of the impact of mood disorders (e.g., depression) on leadership behaviors (e.g., realism), he demonstrated how overcoming psychological illness can improve certain leadership practices, specifically in times of crisis. Last, [David Owen \(2012\)](#), a physician and former British politician and foreign secretary, also analyzed illnesses in political leaders over the past 100 years. Based on his review, he developed the “hubris syndrome” (i.e., a cluster of narcissistic, histrionic, and antisocial personality disorders developed and maintained after assuming power; [Owen & Davidson, 2009](#)) as a framework to understand the leadership behaviors of British Prime Minister Tony Blair and U.S. President George W. Bush.

As fascinating as all these books are—and stories of our leaders' vulnerabilities will perhaps always be fascinating because they run counter to romantic myths about strong and effective leaders ([Meindl et al., 1985](#))—they are of limited utility for both ethical and scientific reasons. First, ethical concerns have been documented with the practice of having psychiatrists (in particular) offering diagnoses of leaders whom they have never examined professionally, and the same might be true for clinical psychologists. Because of specific events in 1964 with presidential candidate Barry Goldwater, the American Psychiatric Association issued what is now referred to as the “Goldwater rule,” essentially ruling that passing public judgment without (a) conducting a professional examination and (b) obtaining proper authorization is

necessarily unethical for psychiatrists (Cooke, Goddard, Werner, Cooke, & Griffith, 2014). Second, third-party, retrospective accounts of primarily American, British, and European leaders (most of whom are deceased) provides an unreliable basis from which to draw credible hypotheses to guide research. Third, several of the authors discussed above consider the same cases (e.g., the same American presidential leaders) and come to very different conclusions, illustrating the subjectivity inherent in such retrospective speculation. For these reasons, it is instructive to turn to the small and mostly recent empirical research examining the effects of leaders' mental health.

Negative Effects of Mental Health Challenges

Subclinical depressive symptomatology and anxiety. Research among community samples has shown that subclinical levels of depressive symptoms are sufficient to interfere with social and interpersonal functioning, which might be expected given that depressive symptoms are manifested, for example, in difficulties in concentration and decision-making; feelings of sadness, pessimism, and worthlessness; and problems with sleeping (Judd, Rapaport, Paulus, & Brown, 1994). Turning their attention to leadership behaviors, Byrne et al. (2014) posited that these symptoms, which reflect resource depletion, would be incompatible with the energy and attention required of the idealized influence and individualized consideration components of transformational leadership. Similarly, the ego depletion characteristic of depressive symptoms would be ill-suited to the need for the self-regulatory resources that enable leaders to avoid destructive behaviors (Wang, Sinclair, & Deese, 2010). Supporting their hypotheses, depressive symptoms predicted lower transformational leadership, and higher levels of abusive supervision (Byrne et al., 2014). In addition, Tepper, Duffy, Henle, and Lambert (2006) showed subclinical levels of depression mediated any effects of supervisors' feelings of procedural unfairness on abusive supervision, but only when the supervisors reported high levels of negative affect.

Other studies have examined the effects of subclinical levels of anxiety on leaders' behaviors from different perspectives. Byrne et al. (2014) again conceptualized anxiety as a proxy for resource depletion, and showed that leaders' anxiety was associated with subordinates' reports of higher levels of abusive supervision. In addition, the effects of anxiety on leaders' transformational leadership was moderated by both leader depression and alcohol use; in both cases, effects of anxiety were greater when leaders reported higher levels of depression or workplace alcohol consumption, providing additional support for the damaging role of resource depletion on leadership quality.

Mawritz, Folger, and Latham (2014) focused on the mediating role of anxiety on the effects of unrealistically difficult goals on leadership quality, limiting their focus to abusive supervision. Their results showed that supervisor anxiety fully mediated the effects of unrealistically difficult goals (and hindrance stressors) on subordinate reports of abusive supervision. Their findings gain added importance, as they showed that supervisor anger also mediated this effect.

Li, Wang, Yang, and Liu (2016) investigated the effects of leaders' psychological distress, a global construct comprised of depression, anxiety, and somatization. As predicted, leaders' self-reported psychological distress predicted subordinate ratings of

abusive supervision. In addition, leaders' abusive supervision mediated the effects of their psychological distress on subordinates' psychological distress. Importantly from a preventive perspective, higher levels of team effectiveness buffered the effects of leaders' distress on their enactment of abusive supervision.

Last, the idea that the ambiguity and uncertainty characteristic of anxiety make unethical behavior likely is by no means new (Bazerman & Tenbrunsel, 2011). Given this, Kouchaki and Desai (2015) investigated whether and how leaders' anxiety might affect their unethical behavior. Their first two experimental studies showed that induced anxiety resulted in unethical choices by students. They extended these findings in the next two studies, showing that as hypothesized, anxiety led to unethical behaviors in the extent to which it elevated perceptions of threat, and this indirect effect was then replicated on a group of supervisors and their subordinates.

Taken together, these studies offer several lessons. First, these findings highlight the direct, indirect, and mediating effects of leaders' depression and anxiety on the quality of their leadership behaviors. Second, these findings show that even nonclinical levels of depression and anxiety could be sufficient to influence the quality of leadership. Third, the findings from these studies point to the role of resource depletion in understanding the development of leadership quality (Byrne et al., 2014). Additional evidence for the role of resource depletion can be found in Dóci and Hofmans' (2015) laboratory-based study showing that the negative effects of task complexity on transformational leadership were partially mediated by resource depletion (in the form of lowered state-level core self-evaluations).

Sleep problems. Interest in the possible effects of sleep on leadership behaviors is by no means new. In considering the origins of major world events, Lord Horder, a physician to several British monarchs, prime ministers, and senior politicians was moved to ask, "Who knows how much turns on whether . . . the head of the Foreign Office has had a sufficiency of sleep?" (L'Etang, 1969, p. 8). Empirical findings suggest this concern is not misplaced: short sleep duration (i.e., <6 hr per night) is greatest among managers (Luckhaupt, Tak, & Calvert, 2010), and U.S. army officers sleep only about 4 hr per night when involved in combat operations—precisely when they might benefit most from adequate sleep (Miller, Shattuck, & Matsangas, 2011). What is new is that the interdependence of work and sleep has now begun to attract the attention of occupational health psychology (OHP) scholars (e.g., Barling, Barnes, Carleton, & Wagner, 2016).

Two separate studies by Barnes and his colleagues (2015, 2016) investigated the effects of leaders' sleep deprivation on their own leadership behaviors. In the first of these studies, Barnes et al. (2016) manipulated the quantity of sleep of a group of students, who were then required to act out the behavior of a student leader delivering a commencement speech. Sleep deprivation was a significant predictor of the charismatic leadership content of the speech, and this effect was mediated by followers' positive state affect. Similar effects emerged in Olsen, Pallesen, Torsheim, and Espevik's (2016) simulation study using a double counterbalanced, repeated-measures design: Cadet officers who suffered limited sleep (<3 hr per night for five consecutive nights) were rated as less transformational than under conditions of normal sleep.

A separate study by Barnes, Lucianetti, Bhave, and Christian (2015) extends our understanding of the importance of leaders'

sleep by focusing on its effects on abusive supervision. Using a within-person daily diary methodology, [Barnes et al. \(2015\)](#) showed that poor sleep quality predicted higher levels of abusive supervision; in turn, abusive supervision was negatively associated with subordinates' engagement with their units. The results of this study are important because (a) the sleep quality data were obtained from leaders, and ratings of abusive supervision were provided by their followers, and (b) the indirect effects of leaders' sleep on work outcomes measures is highlighted. In addition, [Olsen et al.'s \(2016\)](#) extended their focus to laissez faire (or passive) leadership behaviors in their laboratory simulation. They showed that the sleep-deprived group engaged in higher levels of laissez faire leadership.

Last, a series of studies that did not involve leaders suggests the potential breadth of effects of sleep deprivation on leadership behaviors. [Barnes, Schaubroeck, Huth, and Ghumman \(2011\)](#) investigated the effects of limited sleep quantity on unethical behavior. Poor sleep quantity predicted unethical behaviors (e.g., cheating by students, self-reported unethical behaviors by employees), and these effects were both direct and mediated by self-regulatory failures as a result of ego depletion. Their findings achieve considerable validity as they were based on four separate laboratory and field studies, using between-groups and within-person designs. Taken together, these studies show that sleep quantity and quality predicts positive (i.e., transformational leadership) and negative (i.e., abusive supervision, laissez faire, and unethical) leadership behaviors, and together point to the role of ego depletion in understanding the antecedents of leadership behaviors.

Alcohol use. Before considering any possible effects of alcohol use on leadership behaviors, one finding regarding the prevalence of alcohol use at work warrants mention. [Frone \(2006\)](#) conducted a prevalence study of alcohol use and impairment in the United States; his findings achieve considerable importance given that they are derived from a random survey, and based on a national probability sample of 2,805 employed adults. What Frone found was that as a group, management were more likely to consume alcohol than other high-risk groups. What makes these findings particularly important is that Frone's primary focus was not simply whether managers consumed more alcohol than other groups in general. Instead, he showed that managers self-reported (a) consuming more alcohol while at work, (b) working under the influence of alcohol during the workday, and (c) working with a hangover.

[Streufert and his colleagues \(1994\)](#) have conducted rigorous experimental studies using management simulation games in an attempt to understand the effects of alcohol consumption on management behavior. Using a double-blind crossover placebo-control group design, their first study ([Streufert et al., 1994](#)) investigated the effects of different blood alcohol levels (BAL) on some aspects of managerial performance. They found that planning and strategy were both affected at .05 BAL level. In contrast, the speed with which managers responded to events, and the number of such responses, were only affected once BAL reached .10; no effects emerged at .05 BAL. Using a similar design, their second study ([Streufert et al., 1995](#)) focused on the effects of a hangover over managerial performance. While experiencing a hangover was associated with considerable personal discomfort and negative subjective ratings of performance, objective ratings of performance were not affected in any way by a hangover.

Returning to the research of [Byrne et al. \(2014\)](#), their findings point to the role of alcohol consumption at work on leadership behavior. Even though the amount of alcohol that leaders reported consuming was low, alcohol consumption at work had a negative impact on both transformational leadership and abusive supervision. Highlighting the importance of alcohol consumption for leadership, alcohol consumption at work also served to exacerbate the negative effects of subclinical depression on transformational leadership.

While further research is needed to disentangle the broad group of "management" that Frone studied, and more research is needed to understand the effects of alcohol consumption on leadership (as opposed to management behavior), policy challenges from Frone's prevalence data loom large. Might the willingness of senior management to enact policies limiting alcohol use during the workday, or being willing to provide treatment programs, be compromised if as a group they are more likely to consume alcohol at work?

Personality disorders. Personality disorders (PDs) are generally described as extreme, or abnormal, patterns of behavior, mood, and social orientation that cause distress to those experiencing them, and is the most observed psychosocial disorder present in no fewer than 16% of the general population ([Cloninger & Svrakic, 2008](#)). One shared characteristic of all personality disorders is that they consistently hinder one's ability to work with others, and leaders with these traits are often labeled as pathological ([Bostock, 2010](#)) or toxic ([Goldman, 2006](#)) leaders.

There is some research focusing on leaders' personality disorders, with much of this research focusing on narcissism: a cluster of traits including grandiosity, arrogance, self-absorption, entitlement, fragile self-esteem, and hostility. Leaders' narcissism is positively related to self-ratings of transformational leadership, yet negatively related to subordinates' ratings of transformational leadership ([Judge, LePine, & Rich, 2006](#)). A study of chief executive officers (CEOs) of major league baseball teams between 1903 and 2002 clarifies this effect: CEO narcissism was negatively associated with the individualized consideration component of transformational leadership ([Resick, Whitman, Weingarden, & Hiller, 2009](#)). But the effects of leaders' narcissism go further: While the organizational consequences of CEO's narcissism can be positive or negative ([Reina, Zhang, & Peterson, 2014](#)), narcissistic CEOs produce outcomes that are more likely to attract attention to themselves ([Chatterjee & Hambrick, 2007](#)). Indeed, narcissistic leaders are generally motivated by their needs for power and admiration rather than driven by concern for their constituents and the organizations they lead ([Rosenthal & Pittinsky, 2006](#)).

Researchers have examined other clusters of PDs and their impact on leadership behaviors. [Khoo and Burch \(2008\)](#) examined the effects of borderline, antisocial, and histrionic PD in a sample of 80 CEOs and senior managers. The colorful (histrionic: excessive emotionality and attention seeking) dimension of the Hogan Development Scale ([Hogan & Hogan, 1997](#)) was positively associated with transformational leadership, while the cautious (avoidant: social inhibition, feelings of inadequacy) and bold (narcissistic: arrogance and grandiosity) dimensions were negatively associated with transformational leadership.

Insecure and anxious attachment. One stream of research has extended our understanding of the role of mental health in the development of leadership by investigating the effects of early

attachment styles (Bowlby, 1969, 1973). Attachment theory posits that attachment styles develop early in childhood based on the quality of relationships with important caregivers, and influence lifelong relationships. Avoidance attachment is associated with task-oriented leadership (Doverspike, Hollis, Justice, & Polomsky, 1997), socialized leadership orientation (Davidovitz, Mikulincer, Shaver, Izsak, & Popper, 2007), and poor-quality leader-member exchange (LMX; Richards & Hackett, 2012). Similarly, anxiously attached leaders are more likely to exhibit a personalized leadership orientation, and lower levels of transformational leadership. Finally, Richards and Hackett (2012) found that both leaders' and subordinates' attachment anxiety was negatively related to LMX quality; importantly, this relationship was lower for leaders who scored higher on emotional regulation.

Early exposure to aggression. Social learning theory (Bandura, 1973) explains how personal and vicarious experiences in childhood impact learning of aggression, which research now shows could be instrumental in later leadership. Several studies have investigated the effects of early childhood experiences within the family on later abusive supervision. In a series of four studies, Garcia, Restubog, Kiewitz, Scott, and Tang (2014) demonstrated that observing psychological and physical aggression between one's parents predicted later reports of abusive supervision by subordinates. Garcia et al. (2014) also highlighted the (a) exacerbating role of hostile cognitions and affect, and (b) moderating role of rumination. Extending the focus on early within-family experiences, Kiewitz et al. (2012) showed a link between being undermined by one's parents as a child and subsequent abusive supervision rated by one's subordinates; this finding gains in credibility because it was replicated across two separate samples, one of which used self-reports and reports by the leaders' siblings of family undermining.

Taken together, the studies on attachment theory and early exposure to aggression are important for two reasons. First, they highlight the role of the quality of early family relationships in the development of subsequent leadership. Second, in doing so, these studies reiterate the role of distal, nonwork influence on the quality of leaders' behaviors.

Positive Effects of Mental Health

Without minimizing the importance of any of the findings just discussed, it would be a mistake to interpret this body of research in isolation; there are also studies—albeit far fewer in number—that point to the benefits of mental health for positive leadership behaviors.

We concluded the last section by discussing how negative family experiences can impede the development of positive leadership. The role of early family experiences is further highlighted by studies that have identified how positive early family experiences can influence the development of high-quality leadership behaviors. In perhaps the first such study, Bronfenbrenner (1961) showed a link between the perceptions of the quality of parent-child relationships among a group of randomly selected 10th-grade schoolchildren and teacher ratings of the schoolchildren's leadership behaviors.

Several decades later, researchers have again examined this question through the lens of attachment theory. Secure attachment predicted a relational leadership style (Doverspike et al., 1997),

socialized charismatic leadership and transformational leadership (Popper, 2000, 2002; Towler, 2005), and LMX quality (Richards & Hackett, 2012). Last, framed within transformational leadership, one study showed how adolescents' reports of their parents transformational parenting behaviors predicted peer and coach ratings of the adolescents' own transformational leadership behaviors (Zacharatos, Barling, & Kelloway, 2000).

More recently, Schaumberg and Flynn (2012) focused on the effects of trait-like guilt-proneness on various aspects of leadership in a series of three studies. They hypothesized that unlike feelings of shame and embarrassment which could motivate some leaders to deny responsibility for mistakes they have made, feelings of guilt would motivate leaders to choose to take responsibility and actively engage in positive leadership behaviors. Their findings confirmed that guilt proneness was seen as reflecting leadership potential, and that guilt-proneness predicted greater involvement in leadership behaviors. In addition, based on 360-degree feedback, guilt-prone leaders were rated as more effective, a relationship that was mediated by leaders' sense of responsibility for others.

As noted earlier, Kiewitz et al. (2012) identified a link between earlier experiences of family undermining, and the subsequent use of abusive supervision. As important as those findings are, they also isolated the preventive role of leaders' self-control in this relationship with their second sample. Specifically, after controlling for a host of covariates (e.g., supervisor gender, procedural and interactional justice, subordinate neuroticism), supervisor self-control fully buffered the negative effects of prior family undermining: Specifically, under conditions of high self-control, there was no significant relationship between prior family undermining and reports of abusive supervision by subordinates.

One final study is worthy of discussion—and not because it dealt directly with mental health. Several studies discussed so far have dealt with the mental health challenges that can result in abusive supervision, for example, poor sleep (Barnes et al., 2015), family undermining (Kiewitz et al., 2012), and a history of family aggression (Garcia et al., 2014). However, like Kiewitz et al. (2012), Burton, Hoobler, and Scheuer (2012) demonstrated that such links are not inevitable. Instead, Burton et al. showed that while job stress experienced by supervisors predicted employee ratings of abusive supervision, this relationship was not significant when supervisors engaged in moderate levels of physical exercise ($M = 2.76$ days per week).

Taken together with Kiewitz et al.'s (2012) findings on the buffering role of leaders' self-control, Burton and colleagues' (2012) findings are important, as they suggest it is possible for leaders to take active steps to prevent at least some mental health challenges from negatively affecting their leadership behaviors.

Changing Direction: The Emotional Toll of High-Quality Leadership

As is evident both in traditional and social media, organizations are crying out for high-quality leaders; and regardless of the theoretical framework (e.g., transformational leadership, LMX), high-quality leadership is associated with leadership effectiveness (e.g., Barling, 2014). Stated somewhat differently, high-quality leadership benefits others, including others' well-being (e.g., Kelloway et al., 2012). Given the benefits of high-quality leadership for others' well-being, it might seem somewhat puzzling to suggest

that high-quality leadership could exact a personal cost on such leaders. After all, leadership offers social status, access to resources, and job/personal control, all of which should benefit leaders' well-being (Marmot, 2004).

Yet there are many reasons why high-quality leadership might exert a personal cost on leaders. First, the cognitive complexity (Hambrick, Finkelstein, & Mooney, 2005) and responsibility inherent in senior leadership positions might be sufficient to tax the well-being of even the most resilient; as noted earlier, unrealistically difficult goals placed on supervisors results in anger and anxiety, both of which predict abusive supervision (Mawritz et al., 2014). Second, one characteristic of leaders' jobs, especially senior leadership, is social isolation and loneliness (Quick, Gavin, Cooper, & Quick, 2000), which would be antithetical to fulfilment of the belongingness needs that are critical to mental health. Third, many leaders carry the burden of employees' negative emotions (e.g., sadness, anger) and behaviors (e.g., aggression, undermining), becoming what Frost and Robinson (1999) referred to as "toxic handlers." Last, while not focused on leaders, Baer and colleagues (2015) showed in a sample of transit bus drivers that feeling trusted—a desired goal for many leaders—is a responsibility that indirectly predicts emotional exhaustion and poor performance. In a similar vein, Koval, vanDellen, Fitzsimons, and Ranby (2015) showed in a series of studies how people have much higher expectations of those who manifest high self-control, who then feel the burden of coworkers' trust and confidence. As a result, the absence from the general leadership literature of any consideration on the effects of leading on the leaders themselves is a significant omission.

There would appear to be only two studies that have directly investigated the effects of high-quality leadership on leaders' well-being. In the first study which was based on a sample of 2,324 employees and their 76 supervisors, Zwingmann, Wolf, and Richter (2016) showed that transformational leadership predicted leaders' own emotional exhaustion both simultaneously and 2 years later. This effect gains in importance because (a) transformational leadership exerted increasing negative effects on emotional exhaustion over the 2-year period of their study, (b) this effect was greatest for leaders higher in organizationally based self-esteem, and (c) laissez faire leadership worsened the experience of emotional exhaustion.

The second study on the emotional toll of high-quality leadership focused on the effects of leading in an ethical manner (Lin, Ma, & Johnson, 2016). Tracking leaders' behavior over consecutive days, Lin et al. (2016) demonstrated that higher levels of ethical behavior were followed by feelings reflecting ego depletion (e.g., a loss of will power) which in turn predicted subsequent abusive supervision (whether rated by the leaders or their subordinates). However, conclusions concerning the emotional toll of high-quality leadership remain to be replicated given the paucity of research, and questions need to be asked about possible negative effects on leaders of engaging in destructive leadership. Nonetheless, the available findings are sufficient to highlight this as an issue of concern for leadership and OHP scholars, as well as management practitioners and organizational decision makers.

Organizational Interventions Targeting Leaders' Mental Health

Given the importance of leaders' mental health to themselves, their employees, and the organization (Quick, Macik-Frey, & Cooper, 2007), a reasonable question is what initiatives organizations have implemented. After all, there is no shortage of organizational policies, procedures, and interventions designed to enhance employees' mental health. Equally, there has been no shortage of empirical demonstrations of the effectiveness of such programs, targeting broad outcomes such as work stress (Richardson & Rothstein, 2008) or more specific outcomes such as burnout (Le Blanc, Hox, Schaufeli, Taris, & Peeters, 2007) and sleep quality (Atlantis, Chow, Kirby, & Singh, 2006). Kelloway and Barling (2010) reviewed the existing literature, and concluded that leadership development initiatives play a causal role in employees' well-being.

Again, limited attention has been devoted to leader development and mental health, and an examination of the existing research shows that when this has attracted empirical scrutiny, leaders' development and mental health is deemed worthy of study in the extent to which it could be instrumental in enhancing employee well-being. Two relatively recent initiatives exemplify this approach. In the first, interventions have focused successfully on teaching leaders to be more supportive of their employees with respect to family supportive behavior, with positive effects of employees' family-to-work conflict, job satisfaction, and physical health (e.g., Hammer, Kossek, Anger, Bodner, & Zimmerman, 2011). In the second, interventions have been implemented which effectively teach leaders to identify when their employees are experiencing mental health challenges (Dimoff, Kelloway, & Burnstein, 2016); and the importance of this second approach is evident from data showing that most organizational leaders have had to manage workplace situations in which mental health was a significant issue (Shann, Martin, & Chester, 2014). What is now needed are interventions focusing on leaders' own mental health, a topic to which we return later.

An Agenda for Future Research

The fact that leaders' mental health remains largely unexplored presents an unusual opportunity to lay out an agenda for empirical research on the topic. In doing so, however, we recognize that the suggestions we offer are in no ways exhaustive. Instead, our goal is to offer a basis to stimulate new thinking and research on an important topic.

First, while we consistently refer to leaders' mental health throughout this article, we note the limitations of doing so because most of the focus remains on the absence of leaders' mental health, or the presence of mental health problems. A better appreciation of the nature of leaders' mental health might come from focusing on positive attributes such as optimism, hope, vigor, and self-efficacy; the presence of such attributes may be more important than the absence of mental health challenges. Some empirical support for this derives from research showing that CEOs higher in humility are more engaged in empowering others, which resulted in greater integration among top management teams (Ou et al., 2014).

Second, even when empirical research has investigated leaders' mental health problems, all of this research has been directed at

subclinical levels of the phenomena of interest. Thus, while we know for example that subclinical levels of depressive symptoms and anxiety are associated with higher levels of abusive supervision and lower levels of transformational leadership (Byrne et al., 2014), and that blood alcohol levels of .05 are sufficient to impede managerial performance on simulation games (Streufert et al., 1994), we need to go further and understand how clinical levels of depression and anxiety, or substance abuse disorders, affect the quality of leadership. Similarly, while one night of sleep deprivation is sufficient to indirectly hurt charismatic leadership (Barnes et al., 2016) and make abusive supervision more likely to occur (Barnes et al., 2015), chronic clinically diagnosed disorders such as sleep apnea might exert more negative or systematic effects. Understanding the effects on leadership of clinically diagnosed disorders is important, as there is no reason to suspect that the manifestation of any of these problems would be lower among leaders. Indeed, as will be discussed, the fear of being stigmatized for looking weak might be sufficient to keep leaders from seeking assistance for such problems, exacerbating their importance.

Third, while organizations justifiably seek high-quality leaders because of their effects on subordinates' well-being (e.g., Arnold et al., 2007; Kelloway et al., 2012) and performance more generally (Barling, 2014), we need a better understanding of the emotional toll exerted on the leaders themselves. The argument has already been made that high-quality leadership is cognitively taxing (e.g., Frost & Robinson, 1999; Hambrick et al., 2005; Zwingmann et al., 2016). Taken together, far more empirical attention needs to be given to the largely unexplored emotional toll triggered by the demands of high-quality leadership, what Zwingmann and colleagues' (2016) appropriately refer to as the "dark side" of leadership.

Fourth, we need to know more about the transitions into and out of leadership positions. Assuming a position of leadership brings with it considerable psychological changes, for example, increases in personal control with its potential benefits for mental health (e.g., Tetrick et al., 2000), but also increases in responsibility (e.g., gaining followers' trust) and cognitive load (Hambrick et al., 2005) and their potential threat to well-being (e.g., Baer et al., 2015). Anecdotal evidence for the complexity of transitions into leadership are obvious in the challenges faced by U.S. President Lyndon Johnson in his first few days in office after President John F. Kennedy's (J. F. K.) assassination (Caro, 2012). Experimental evidence of the complexities involved in transitions into leadership can be seen from research on sudden status and power gains: Individuals overreact to recent power gains when compared with counterparts who held similarly high levels of power over time (e.g., Sivanathan, Pillutla, & Murnighan, 2008).

Losing a leadership position is no less complicated, but equally important to understand: While not all individuals will transition into positions of leadership, virtually all will transition out of their leadership positions. Jahoda's (1982) decades of research on unemployment helps to understand why these exits could threaten mental health. While senior leaders will likely be financially secure in retirement, the latent (or psychological) benefits provided by their employment in general, and their leadership position more specifically, can no longer be taken for granted. Foremost is the time structure (Jahoda, 1982) imposed by employment and leadership responsibilities. As an example, reflecting on his voluntary retirement, former Chrysler CEO Lee Iacocca said, "I wasn't ready

for it. Most people aren't, especially CEOs. Your life is so structured." (A. Taylor & Iacocca, 1996). Second, employment brings with it important social contacts that allow for the networks and support that enhance mental health. As Iacocca reflected, "I'm alone too much. It's difficult." Third, employment provides social status, a sense of purpose, and a personal identity which are altered or lost upon retirement, and suffering status loss affects high-status individuals more than their lower-status counterparts (Carson & Thau, 2014). Taken together, the importance of loss of status, social contacts, and time structure can be seen in research findings showing that following retirement, CEOs are significantly less likely to find themselves on organizations' governing boards (Lee, 2011). Carson and Thau's (2014) finding that self-affirmation interventions buffer the negative effects of status loss points to the possible role of personal identity following the loss of a leadership position.

Complicating any transitions out of leadership is the fact that they are not always voluntary, and the perceived lack of control involved in involuntary exits might well exacerbate any negative effects. Thus, transitions into and out of leadership positions are complicated, with the potential to help and hurt leaders' mental health; not surprisingly, Jahoda, Lazarsfeld, and Zeisel (1933/2009, p. 66) referred to the newly available leisure as a "tragic gift." We need a better understanding of the nature and any positive or negative consequences for leaders' well-being, and Jahoda's (1982) theory of the manifest and latent functions fulfilled by employment, based on decades-old research (Jahoda et al., 1933/2009), might be an appropriate framework for such research.

Fifth, the fact that leaders can expect to deal with employees with mental health problems raises several interesting issues. In their research, Parr, Hunter, and Ligon (2013) questioned whether traditional leadership theories, such as transformational leadership, would be equally appropriate for followers with autism spectrum disorder. Their results showed that while inspirational motivation was associated with followers' anxiety, individualized consideration directly affected organizational commitment, and indirectly affected job performance. Taken together with Johnson and Joshi's (2016) findings that employed adults reported both positive and negative effects upon receiving a clinical diagnosis of autism, the complexity of leading employees with mental health issues becomes evident. Some research has addressed this. Dimoff et al. (2016) developed a training program that successfully enhanced leaders' abilities to deal with employees' experiencing mental health issues. At the same time, both McDermott (2008) and Ghaemi (2011) suggested that leaders who have experienced physical or psychological adversity will be more aware of, and possibly more empathic toward, their own followers who might be suffering from mental illness themselves, and future research might assess whether specific experiences predispose them in this way.

Sixth, while the causes and consequences of employees' physical health has been a very substantial topic of research for at least 50 years (e.g., Katz & Kahn, 1966; Kahn, 1981), little is known about leaders' physical health. There is some focus on how prominent political leaders confronted and dealt with major physical illnesses (e.g., U.S. Presidents Franklin Delano Roosevelt's [F. D. R.] paralysis and Dwight D. Eisenhower's chronic heart disease; the Shah of Iran's cancer; McDermott, 2008; Owen, 2007). While caution is always advisable in extracting any lessons

or hypotheses from post hoc, anecdotal insights, McDermott suggested that terminal illnesses of those close to leaders can influence their subsequent leadership decisions, pointing to the death of J. F. K.'s days-old infant as the possible cause of his commitment to neonatal research and medicine. The fact that not everyone responds to significant illnesses in the same way is reinforced by Westaby, Versenyi, and Hausmann's (2005) research showing that intrinsic work motivation predicts whether people will quit working upon receiving a terminal diagnosis of amyotrophic lateral sclerosis disease.

As with mental illness, leaders suffer more than major physical illnesses; they are also afflicted with minor physical illnesses and ailments (e.g., migraines, respiratory tracts infections) that are worthy of concern. Barnes et al. (2015) pointed to the importance of understanding the effects of minor illnesses, as they showed that daily variations in sleep quality were sufficient to predict leaders abusive supervision.

In addition, it is also important to consider the impact of positive physical health. Maintaining positive physical health, for example, by the adherence to health promoting behaviors such as eating a healthy diet or engaging in regular exercise, may better position leaders to engage in positive leadership behaviors (Neck & Cooper, 2000). Specifically, healthy leaders may have access to self-regulatory resources such as energy, vigor, and self-control (Murraven, Tice, & Baumeister, 1998) that are critical for the enactment of positive leadership (Barnes et al., 2016) and the suppression or avoidance of negative leadership behaviors. Some evidence suggests that executives who engage in regular exercise are objectively rated as higher on positive leadership indices (e.g., visionary thinking) than those who do not (McDowell-Larsen, Kearney, & Campbell, 2002).

Seventh, while there is very little research relating specifically to the stigma experienced by leaders with mental health issues, there are several reasons why leaders might be more stigmatized than employees faced with similar mental health issues. First, leaders are expected to display strength and resilience; any indication that they do not do so would be perceived as role incongruent, and research on bias against female leaders underlines how perceived role incongruence forms a basis for stigma (Barling, 2014). Second, the fact the leaders with diagnosed learning disabilities are less likely to emerge as leaders than their counterparts without a similar diagnosis, despite the fact that they are no less effective if they do emerge as leaders (Luria, Kalish, & Weinstein, 2014), is compatible with a stigmatizing effect. Third, although a physical challenge, King et al. (2016) demonstrated that CEOs, executives, and senior managers are equally affected by the negative stigma associated with being clinically overweight, and that their status in such positions does not buffer against stigmatized expectations of their workplace performance. We need to understand more about the stigma faced by leaders with mental illness (and physical illness), as the existence of any stigma would plausibly decrease the likelihood of their seeking any form of assistance or counseling. This would be a significant missed opportunity, because workplace interventions to reduce stigma associated with mental illness are effective, and even cost effective (Hanisch et al., 2016), and research should investigate whether interventions can be designed for leaders that are not only effective, but also encourage leaders to seek treatment in the first place.

Last, organizations have been forthcoming in their support of employees' physical and psychological well-being as is witnessed in the proliferation of employee assistance programs (EAPs); estimates suggest that 75% of employers in the United States offer some form of EAP (Society for Human Resource Management, 2013). Organizations have also been involved in interventions designed to care for the mental health of those whose jobs require them to care for the well-being of others (e.g., Le Blanc et al., 2007). What is missing to date, however, is a concerted effort by organizations to take care of those who bear responsibility for the well-being of the organization and its employees. Even when researchers have focused on leadership interventions and well-being, the focus has been on implementing leadership interventions to benefit employees' well-being (Hammer et al., 2011; Kelloway & Barling, 2010).

Nonetheless, existing research offers several promising avenues for research on enhancing leaders' mental health. At a general level, a meta-analysis of 55 interventions showed that cognitive-behavioral interventions were the most effective of all occupational stress management techniques, and programs of shorter duration (1–4 weeks) were the most effective (Richardson & Rothstein, 2008), perhaps making such interventions more attractive to time-pressured leaders. In somewhat different research, Hülshager and her colleagues have shown how low-dose, unobtrusive mindfulness interventions reduce emotional exhaustion (Hülshager, Alberts, Feinholdt, & Lang, 2013) and problems with sleep quality and duration (Hülshager, Feinholdt, & Nübold, 2015), all of which affect leadership quality. Both the unobtrusive and short-term duration of these interventions may make them more attractive to senior leaders given the time pressures and possible stigmata they face. More specifically, Dimoff et al. (2016) demonstrated that interventions for managers can help them identify signs that their employees might be experiencing mental health issues, and how to support them. This research could be extended to help managers understand when their own leaders are experiencing mental health issues, and how they might be supported.

Methodological Obstacles

Like all areas of research, studying leaders' mental health requires that we overcome several obstacles. However, the very nature of leaders' mental health presents two unique, interrelated obstacles that must be confronted and overcome in any research.

First, from a practical perspective, the pyramidal shape of most organizations means that the higher you go in the organization, the fewer the people, as a result of which there will be a limited pool of senior leaders and CEOs available for research of this nature. The effects of the limited availability are exacerbated, because the pressures inherent in their work, and the multiple demands upon their time make it likely that top level executives might be less willing to respond to invitations to participate in research, and more specifically to complete surveys. Meta-analyses support this concern, showing a significant decline in research participation by CEOs between 1992 and 2003 (Cycyota & Harrison, 2006). Compounding this is the fact that traditional techniques used to enhance response rates (e.g., incentives, advance notice, follow-up, and making the invitation more personal) do not necessarily work with senior leaders (Cycyota & Harrison, 2002). If research on leaders' mental health is to flourish, innovative techniques will be required

to enhance participation rates. Based on findings on the effects on one's own happiness of spending money on others (Dunn, Akinin, & Norton, 2008), response rates might be enhanced by giving leaders the opportunity to donate their token payment for participation in the recent to others instead of offering them minimal financial incentives to participate. Similarly, future research could also investigate whether the powerful motivating effects of descriptive and "provincial" norms (Goldstein, Cialdini, & Griskevicius, 2008) rather than appealing to the personal magnanimity, might enhance leaders' participation rates.

Second, and exacerbating the issue of insufficient response rates, the stigma associated with mental illness might discourage the most vulnerable leaders from participating, for example, because of the fear of being publicly exposed, or subjecting themselves to uncomfortable material in interviews or surveys. If this was the case, a selection bias could further threaten any inferences made from research on leaders' mental health by increasing the probability that primarily healthy leaders predominate in our research samples. Unobtrusive measures might be especially useful in avoiding any selection biases (as well as problems of inadequate response rate). As one example, in studying CEOs' narcissism, Chatterjee and Hambrick (2007) used the prominence of CEOs' pictures in the annual report as a proxy for narcissism. Like most corporate annual reports, Enron Corporation's 1997 annual report had a picture of CEO Ken Lay, who eventually was fired and convicted of fraud. While a single case is never sufficient to establish the validity or utility of a method, Lay's picture was notable as it was spread over an entire page (Chatterjee & Hambrick, 2007).

Last, considerable insights into the nature, consequences, and antecedents of leaders' mental health might derive from research based on qualitative data, and two studies show the potential usefulness of qualitative data. First, Johnson and Joshi (2016) conducted interviews with 30 employed adults, all of whom were on the high-functioning end of the autism spectrum. Their interviews enabled them to uncover the complexities involved in receiving a diagnosis of autism spectrum disorder while employed, highlighting its advantages (e.g., the relief at understanding one's own behavior) and disadvantages (e.g., regret at not receiving a diagnosis earlier that would have enabled career and personal guidance). Second, Robinson, Kocum, Loughlin, Bryson, and Dimoff (2015) interviewed 19 women who received a diagnosis of breast cancer while they were employed; these interviews provided critical information as to how breast cancer survivors can best communicate with others about their illness and treatment, how organizations can accommodate and colleagues can support women with breast cancer, and what breast cancer survivors can do to control how their illness impacts their work. Qualitative data may be as useful in providing comprehensive information about leaders' mental illness, and be especially useful given the difficulties in motivating senior leaders to participate in research (Cycyota & Harrison, 2002).

A Policy Dilemma

One complex issue that deserves discussion is whether there is a collective "right" to know about leaders' mental health challenges. At one level, the answer to this seemingly simple question

would be an emphatic "no!" After all, leaders do not sacrifice their right to privacy upon assuming a leadership position, not even an executive-level position. Even accepting that certain medical or psychological information might never be shared because of ethical concerns and scientific ambiguity about the meaning of any results (e.g., genetic tests; Annas, 1995), this remains a fraught issue.

Looking within the political realm, it is now generally agreed in the United States that individuals seeking the highest levels of political leadership have a duty to share intimate details of their physical (and presumably, mental) health with the public at large, who are assumed to have a right to know this information (i.e., the Twenty-Fifth Amendment). And this is not a new situation: While serving as Governor of New York state in 1931, F. D. R. voluntarily released the results of a medical examination to assure the voting public of his fitness to hold the highest leadership position in the country (L'Etang, 1969). Might similar rights and responsibilities hold in comparable roles in a nonpolitical environment? Several factors might suggest that they do.

The integrity of a market-based economy is based on all actors within the system having full access to any and all information that would reasonably be expected to influence their decisions or behaviors. If we accept that leaders', executives', and CEOs' mental health challenges affect their behaviors and effectiveness, do leaders have an obligation to share such information, and do investors have a right to such information to guide their decisions? This is indeed a fraught issue, and one response is to call for more research focused specifically on the effects of CEOs' mental health on the market performance of for-profit organizations.

There are also several potential benefits that would result from leaders sharing any information about a personal mental illness. Unless leaders choose to share or reveal relevant information about mental health challenges, it becomes increasingly difficult for employees, peers, or others who care to assist or be supportive in any way, or for any organizational resources such as EAP programs to be accessed. In this respect, we reiterate a suggestion offered earlier: Specifically, interventions that have shown that managers can be trained to identify employees who are suffering mental health issues and respond accordingly (Dimoff et al., 2016) should now be extended to help individuals at all levels of the organization identify when their leaders are experiencing psychological difficulties—and help them.

Added to this, as long as leaders continue to conceal any personal mental illness, the stigma associated with mental illness will be reinforced. In contrast, when senior leaders and CEOs choose to share information about mental health challenges, they explicitly challenge any prevailing stigma, act as role models, and help to create an environment in which it is easier and more acceptable for others to do the same. Nonetheless, we do not underestimate the personal difficulties of doing so. As McDermott (2008) noted, the fear of having to disclose such information upon seeking political office may be sufficient to persuade eminently qualified people not to seek those positions, or from seeking treatment or support when facing psychological distress once in office (Annas, 1995).

Conclusion

Taking a long-term historical view, the role of mental health in the workplace has changed 180°. Just over a century ago, Frederick Taylor (1911) argued that maximal productivity required the de-skilling of work, limiting any influence of emotional factors, and removing worker control and discretion. While Taylor's influence endured for decades, there is almost universal agreement that maximal productivity will only be achieved by psychologically healthy employees; moreover, attaining mental health for employees is also seen by many as a worthy goal in itself. What remains missing, however, is a substantive understanding of leaders' mental health, and not just in terms of its effects on important others (e.g., employees) and external outcomes (e.g., organizational effectiveness). Instead, leaders' mental health deserves no less than equal attention in the comprehensive research on employees' and workplace well-being.

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