Finding Truth Within: Exploring the Importance of Reflective Practice in Deepening Self-Knowledge

Jason P. Miller¹

Executive Summary

Background Information (Organizational Context)

Healthcare as an industry is undergoing significant and rapid change with a paradigmatic shift from sick-care to preventive care for well-being (Goozner, 2019). This industry shift is demanding a new skill-set from healthcare leaders that is marked by the need to drive transformative change in the face of unprecedented uncertainty, ambiguity, and complexity. A meta-competency that is critical for success in this context that we are building in our leadership development efforts is emotional intelligence (EQ).

Statement of the Problem

Healthcare leaders are much more tuned to be successful in the old paradigm of healthcare than the new one. As healthcare transforms, leaders also need to transform the way they lead. The new leadership profile for success is characterized by a leader who is able to operate as an interdependent, learning-oriented driver of transformative change. To get there, healthcare leaders need to have the ability to self-reflect to gain deeper self-knowledge for purposes of accelerated development.

Guiding Questions

- How does the application of more consistent reflective practice affect the levels of an individual's self-knowledge?
- What are some of the barriers to engaging in reflective practice?
- What are the potential predictive indicators of the extent someone will engage in reflective practice?
- What are the opportunities to enhance reflective practices leveraging mindfulness and/or spirituality?

¹ **Jason Miller** is a coach, consultant, and leader who "creates spaces to unleash the soul." He holds a Master's in Organizational Development and Leadership from Fielding Graduate University, is a Professional Certified Coach (PCC) through the International Coach Federation, as well as a Certified Hudson Institute Coach. He has 25+ years of experience in coaching, talent development, and OD consulting, and has worked with numerous Fortune 500 clients across a dozen industries to support transformational change and a deeper, more trusting connection to natural creative essence. jpmiller@email.fielding.edu



Method of Inquiry

The method of inquiry used in the research is action inquiry, which is "a kind of behavior that is simultaneously productive and self-assessing" (Torbert, 2004). The framework helps to meet the needs to transform healthcare leaders for purposes of transforming their organization. To conduct the study, I taught a reflective practice exercise based on the action inquiry framework to a group of Director-level healthcare leaders as part of a high-potential development program within a large-scale health system (roughly 29,000 total associates) based in the United States Midwest. Components of mindfulness and spirituality were also integrated into the practice. The exercise was designed to deepen their self-knowledge of their personal "defensive routines", which are psychological coping strategies for dealing with stress situations (Boyatzis & McKee, 2005). At the end of eight weeks of participants engaging in the reflective practice exercise, I assessed their levels of self-knowledge gained from the reflective practice, and determine what the primary barriers were for those that did not deepen their self-knowledge.

Conclusions and Recommendations

The results of the study suggest that individuals who engage more consistently in reflective practice seems to have bigger gains in self-knowledge. Also, engaging in reflective practice seems to contribute to the gain of self-knowledge, regardless of the frequency. An individual's development level seems to play a role in the extent to which he/she engages in reflective practice, and also on the nature of what they reflect on. Barriers to reflective practice also seem to be shaped by development level, with informational being primary for earlier stage and motivation being a primary barrier for later stages. Also, individuals who reflect on emotional and physical stress patterns, and who practice mindfulness, seem more likely to engage in reflective practice more frequently. Spiritual practice was not identified as a primary contributor to gaining self-knowledge and requires further study. Additional research is also recommended on the impact of development level on how an individual engages in reflective practice, for purposes of individualizing the development experience.

Key References

- Boyatzis, R. E. & McKee, A. (2005). Resonant leadership: Renewing yourself and connecting with others through mindfulness, hope, and compassion. Cambridge, MA: Harvard Business Press.
- Carlson, E. N. (2013). Overcoming the barriers to self-knowledge: Mindfulness as a path to seeing yourself as you really are. *Perspectives on Psychological Science*, 8(2), 173-186.
- Cook-Greuter, S. (2013). Nine levels of increasing embrace in ego development: A full-spectrum theory of vertical development and meaning-making. Wayland, MA: Cook-Greuter & Associates.
- Eurich, T. (2017). Insight: Why we're not as self-aware as we think, and how seeing ourselves clearly helps us succeed at work and in life. New York, NY: Crown Business.
- Torbert, W. R. (2004). *Action inquiry: The secret of timely and transforming leadership*. Oakland, CA: Berrett-Koehler Publishers.
- Wigglesworth, C. (2014). SQ21: *The twenty-one skills of spiritual intelligence*. New York, NY: SelectBooks, Inc.

Table of Contents

Introduction	360
Background Information	360
Project Purpose	360
Problem Statement	361
Guiding Questions	361
Literature Review	362
Ego Development Theory	362
Emotional Intelligence and Leadership	363
Reflection, Introspection, and Metacognition	
Mindfulness	366
Spirituality	368
Insights and Considerations from the Literature Review	369
Intervention Method and Design	369
Theoretical Framework	369
Research Design	370
Results	372
Implications	377
Implications for Practice	377
Recommendations	378
References	379
Appendix A	382
Appendix B	383

Introduction

Background Information

I conducted my study as an action research project within the context of my workplace, a large-scale health provider based in the Midwest region of the United States. The organization is the largest healthcare system within the geographic central region of its state, with 29,000 associates providing care through over 200+ locations. The organization is also one of the most profitable and consistently-ranked high-quality healthcare systems in the country. And, the associate culture has been nationally recognized through Fortune magazine's "Best Places to Work" list for thirteen years in a row.

It is also a time of significant and rapid change in healthcare. The industry and reinforcing systems have been built around one common assumption, which is to take care of the sick. A new model of healthcare is already taking shape – one that is characterized by a preventative and more holistic approach to nurturing well-being (Goozner, 2019). The question has become one of how to keep people out of the hospitals to begin with, while educating patient communities on creating paths for a higher quality of life. This has clear implications for leadership. The new healthcare leader can no longer simply be a reactive fixer of problems of the sick but rather a proactive steward of well-being for the community. It is nothing less than a complete paradigm "flip" for healthcare leaders and clinicians, who require a whole new set of skills to be drive systemic change.

In the rapidly-changing context of healthcare, leaders have to make quick decisions in a time of increasing uncertainty, ambiguity, and complexity. And, they can no longer ignore the mission of the organization: to improve the health and well-being of those we serve. "Those we serve" includes not only patient communities, but also our own team members and associates, who are experiencing unprecedented levels of burnout. In addition, the leaders themselves have to role model the way by being in tune with and making decisions in support of their own health and well-being. A meta-competency for success in this new context – and one that we are heavily investing in developing - is emotional intelligence (EQ).

Project Purpose

A sampling of the literature from the fields of emotional intelligence (Gardner, 2011; Goleman, 1998; Goleman, Boyatzis, & McKee, 2013) and developmental psychology (Kegan, 1982; Cook-Greuter, 2013; Torbert, 2004) all suggest that reflection and introspection is a critical capability contributing to personal growth. The common theme suggests that the more disciplined an individual is at engaging in consistent self-reflection, the more likely they will develop higher levels of emotional intelligence (Goleman, 1998, p. 4) and progress on developmental levels (Cook-Greuter, 2013, p. 43, 60).

Emotional intelligence is frequently called a meta-competency because to be considered proficient in EQ, there are a number of capabilities and skills that one needs to master. Given the complexity of EQ as a whole, it was much too broad for the scope of my study. I was able to better focus my scope by drawing in particular off of the literature from the organizational

psychology spirituality in the workplace domains. Most notably, Eurich (2017, p. 98) and Wigglesworth (2014, p. 48) suggest that self-knowledge provides us with a deeper understanding of self; one that is achievable through reflective learning and self-inquiry. I therefore narrowed the frame of my research question to the following: how does the application of more consistent reflective practice affect the levels of an individual's self-knowledge?

The insights from this question are important because it will help to more fully inform the significance level of reflective skills and practices as a part of leadership effectiveness. This study has the potential to help me in determining the right levels of focus we should pay in our leadership development curriculum. In addition, participants in the study have the potential to benefit by gaining new insights on themselves, which should help them to be more impactful, develop more self-efficacy, and/or change inner and behavioral habits that are no longer serving them or others.

Problem Statement

Perhaps the best way to sum up the problem is to borrow a quote from Kegan and Lahey:

We're already the most over-informed, under-reflective people in the history of civilization" and that "true development is about transforming the operating system itself, not just increasing your fund of knowledge or your behavioral repertoire. (Kegan & Lahey, 2009, p.6)

As the rules of healthcare change, provider organizations have to transform how they deliver care to patients, and need to evolve to be much more nimble, adaptive, and predictive than the old healthcare paradigm. This requires a transformation in how our leaders lead. The vision, strategy, operating procedures, and how they engage their people needs to be radically different. To get there, we need to accelerate our leaders' ability to shift from what Kegan & Lahey (2016) call the "socialized mind" (a faithful follower who seeks direction) to the "self-authoring mind" (an independent agenda-driving problem-solver) and further on to the "self-transforming mind" (an interdependent, learning-oriented problem-finder) (p. 62). Boyatzis's Theory of Self-Directed Learning shows that leaders intentionally change only by engaging in an honest and open self-assessment of who their "real self" is against the "ideal self" (Goleman, Boyatzis, & McKee, 2013, p. 109-113). By this account, leaders' ability to self-reflect to gain deeper self-knowledge serves as the critical ingredient to transforming healthcare organizations.

Guiding Questions

In leading my research, I am leveraging the following questions to guide my focus:

- How does the application of more consistent reflective practice affect the levels of an individual's self-knowledge?
- What are some of the barriers to engaging in reflective practice?
- What are the potential predictive indicators of the extent someone will engage in reflective practice?

What are the opportunities to enhance reflective practices leveraging mindfulness and/or spirituality?

Literature Review

The guiding questions shaped the literature review across five primary domains coming largely from fields of study in the psychology, management, leadership, and spiritual disciplines. Below is a summary of insights relative to the research questions.

Ego Development Theory

Since the development of leaders is the primary task this research project serves, the literature review will start with a brief review of ego development theory. It is important to understand how reflection and self-knowledge contributes toward developmental progression. The following is a sampling of key contributors to how adults develop and progress over time.

Kegan (1982) points out that movement from simpler levels of meaning making to more complex levels requires individuals to dialogue with themselves. They must be self-reflective and able to isolate their motivations, as well as integrate perceptions of their own needs with the needs of others. Individuals with meaning making systems in which they can differentiate between themselves and others indicates the presence of a reorganized interior life in which the individual can internally consider the other when thinking, feeling, and acting. It is both an internal transformation and reconstitution of the self that leads to more complex ways of meaning making, by which individuals are able to identify their impulses and consider the interactions that could result from their actions.

Cook-Greuter (2013), in building off of the work of developmental psychologists Loevinger (1976), Graves (1974), Kegan (1982), and Commons & Richards (1984) in particular, show how the ability to self-reflect on broader dimensions of self, society, the world, and the universe is a critical capability in developing cognitive, emotional, and behavioral aptitude. "As healthy development unfolds, autonomy, freedom, tolerance for difference and ambiguity, as well as flexibility, self-awareness, and skill in interacting with the environment increase while defenses decrease" (Cook-Greuter, 2013, p. 3). While all stages of development require a greater ability to self-reflect to gain self-knowledge, two stages in particular seem to evolve largely from a leap in this capability. For the stage called the "Achiever", which is where a large majority of leaders reside today (Torbert, 2004, p. 79), "personality tests, asking others for feedback, taking educational and professional courses and retreats as well as a new level of introspection lead to increasing self-knowledge" (Cook-Greuter, 2013, p. 43). Going to the next stage beyond Achiever, known as the "Individualist" stage, there is also a momentous shift that occurs in moving from the "Conventional" to the "Postconventional" tier of development (Cook-Greuter, 2013, p. 6). "The very heightened capacity to contact the self and to introspect leads to a greater capacity to empathize with others and to tolerate different ideas, behaviors, and reactions" (Cook-Greuter, 2013, p. 60).

Beck and Cowan (1996) build off of the work of Graves (1974) in the use of a human evolutionary model called spiral dynamics (Beck and Cowan, 1996; Graves, 1974). To evolve,

Beck and Cowan argue that "sufficient human cognitive capacity is needed to enable man to obtain the necessary insight into, and understanding and comprehension of, the complexity and nature of the life conditions. When man was finally able to see himself and the world around him with clear cognition, he would find a picture that is far from pleasant" (p. 112).

Torbert (2004) proposes that "self-transformation...is a long, lifetime path" that sees us passing through major stages called an "action-logic: an overall strategy that so thoroughly informs our experience that we cannot see it" (p. 66). Through the iterative use of action and reflection (Torbert's "action inquiry" framework) an individual can develop through action-logics of increasing levels of self-awareness, complexity of thought, and abilities to self-transform (p. 68).

Emotional Intelligence and Leadership

How critical is reflection to building emotional intelligence? In the Theory of Personal Intelligences, Gardner divides personal intelligence into the intrapersonal (involved chiefly in an individual's examination and knowledge of his own feelings) and interpersonal (looks outward toward the behavior, feelings, and motivations of others) (Gardner, 2011, p. 255). He believes that these two forms of knowledge are intimately intermingled in any culture. Neither form of intelligence can develop without the other (Gardner, 2011, p. 255).

Goleman (1998) talks about the importance of the "inner rudder" as the basis for all emotional intelligence (chapter 4). "People who follow their inner sense of what is worthwhile minimize emotional static for themselves" (p. 58). Goleman goes on to emphasize "intuition and gut feeling bespeak the capacity to sense messages from our internal store of emotional memory – our own reservoir of wisdom and judgment. This ability lies at the heart of self-awareness, and self-awareness is the vital foundation skill for emotional awareness, accurate self-assessment, and self-confidence" (p. 61).

Goleman, Boyatzis, & McKee (2013) say that the "most telling sign of self-awareness is a propensity for self-reflection and thoughtfulness. Self-aware people typically find time to reflect quietly, often off by themselves, which allows them to think things over rather than react impulsively. Many outstanding leaders, in fact, bring to their work like the thoughtful mode of self-reflection that they cultivate in their spiritual lives. For some this means prayer or meditation; for others it's a more philosophical quest for self-understanding" (p. 40). Further, "to connect with a vision that can move a culture toward resonance, emotionally intelligent leaders start by looking inside – at what they feel, think, and sense about their organizations. Tapping into insight can come more easily if a leader makes a habit of reflecting on a regular basis. Reaching into the wisdom of the unconscious mind is like trying to pump water from a deep well – it helps to keep the pump primed (by regularly spending time in reflection)" (p. 205).

Cashman (2017) makes the case that "With no reflection, there is no vision. With no vision, there is no leadership" (p. 170-171), and throughout his text stresses the importance of "taking time to reflect – taking time to be... as the still point that everything else (resilience, actions, vision) revolves around" (p. 164).

In looking specifically at the field of healthcare, the literature consistently points to the importance of emotional intelligence as a critical competency for leaders, with reflection being one of the key dimensions to cultivate. Freshman & Rubino (2002) define the self-management component of emotional intelligence as the "propensity for reflection, ability to adapt to changes, saying no to impulsive urges", citing how "EI skills of self-awareness, reflection, intuition, and compassion for yourself and others will be of great service toward using energy stirred up by emotional events in productive ways" (p. 8). In a review of literature on the importance of emotional intelligence in nursing leadership, Feather (2009) mentions a study by Segal (2002) which identifies "tuning inward" (p. 379) as a suggested competency that makes a person a good leader. And, in a review of leadership education occurring in medical education of physicians, Mintz & Stoller (2014) found that "models of professionalism have been constructed around EI as a leadership skill" (p. 26). In citing one example, the authors note the important inclusion of "structured reflection, which aligns well with the EI competency of self-awareness" (p. 26).

Reflection, Introspection, and Metacognition

Reflection has a long history in the field of organization development. OD researchers recognized the importance of reflection for better decision-making. In a classic organization development publication, Argyris & Schon (1974) introduced the notion of differences between "espoused theories" and actual "theories-in-use" (p. 6-7). They argued that to help someone get to see actual theories-in-use requires self-examination of assumptions through "double-loop learning." Through double-loop learning, an individual can engage in two kinds of behavioral learning at the same time through reflection. The first learning centers on the adoption of new action strategies to achieve governing variables, and the second learning centers on changing the governing variables themselves (p. 18). They say that "the theory-builder becomes a prisoner of his programs if he allows them to continue unexamined indefinitely. Double-loop learning changes the governing variables (the "settings") of ones' programs and causes ripples of change to fan out over one's whole system of theories-in-use" (p. 19).

Schon (1983) extended the notion of reflection for effective applied practice by pointing out that "the process of reflection-in-action is central to how well people deal with situations of uncertainty, instability, uniqueness, and value conflict" (p. 50). He proposes that "through reflection, a practitioner can surface and criticize the tacit understandings that have grown up around the repetitive experiences of a specialized practice, and can make sense of the situations of uncertainty or uniqueness which he may allow himself to experience" (p. 61). When applied to the practice of leadership, this would take the form of reflecting in-the-moment on strategies and schema that directs actions. In an article that applies Schon's work to a healthcare setting, Fransson-Sellgren, Wahlstrom, & Sandahl (2009) state that "part of leadership education involves professional and personal development. The role of reflection is central for professional development." (p. 162)

Torbert (2004) took reflection-in-action a step further with "action inquiry", which he defines as "a kind of behavior that is simultaneously productive and self-assessing" (p. 13). Torbert proposes to be truly effective, you need to choose "timely action" (p. 13) which relies on our capacity to engage in single (behaviors/operations), double (strategy/structure/goals), and triple (attention/vision)-loop feedback (p 18-19). Triple-loop feedback is described as a

"super-vision", which refers to a higher quality of awareness – a more "sinuous, just-in-time awareness that generates the exercise of vulnerable, mutuality-enhancing, transforming power under real-time pressures" (p 21). To develop "super-vision", Torbert offers the primary vehicle of self-reflection by "beginning to recognize how limited our ordinary attention and awareness is... and beginning to exercise our awareness in new ways in the midst of challenging situations. A good way to begin recognizing the limits of our ordinary attention is to take a moment right now to reflect" (p. 21).

In review of common competencies for healthcare managers, Stefl (2008) leverages a "skill acquisition model developed by Stuart Dreyfus and Hubert Dreyfus (1986)" (p. 365). As a part of this model that has been extensively leveraged in healthcare leadership development, Dreyfus and Dreyfus point out that "progressing from one skill level to another, especially from novice to competent, typically requires experience coupled with guided reflection" (p. 366).

Csikszentmihalyi (1990) argues that we are ultimately the agents of our own experience, regardless of what is happening around us. "We create ourselves by how we invest this energy. And it is an energy under our control, to do with as we please; hence, attention is our most important tool in the task of improving the quality of experience" (p. 33). He goes on to describe what he calls the "autotelic personality", which are "people who need only a few external cues to represent events in consciousness...[and] have a more flexible attention that allows them to restructure experience more easily, and therefore to achieve optimal experiences more frequently" (p. 87).

Interestingly, it seems that action may be preferred over reflection for most. In examining the impacts of thinking over action for learning, Di Stefano, et. al, (2015) found that individuals who are given time to reflect on a task improve their performance at a greater rate than those who are given the same amount of time to practice with the same task. However, they also found that if those same individuals are given the choice to either reflect or practice the task, they prefer to allocate their time to gaining more experience with the task—to the detriment of their learning (p. 25).

The case for reflection for self-knowledge up to this point seems fairly sound. However, more recent research on reflection, introspection, and pursuit of self-knowledge suggests it is not so clear-cut. As mentioned earlier in this paper, Eurich (2017) found from meta-analyses and her own research that "thinking about ourselves [isn't] correlated with knowing ourselves. We can spend endless amounts of time in self-reflection but emerge with no more self-insight then when we started" (p. 98). Wilson and Dunn (2004) point out some of the inherent challenges of relying too much on introspection for building self-knowledge: "because of personal motives and the architecture of the mind, it may be difficult for people to know themselves. People often attempt to block out unwanted thoughts and feelings through conscious suppression and perhaps through unconscious repression, though whether such attempts are successful is controversial. Introspection cannot provide a direct pipeline to these mental processes; though some types of introspection may help people construct beneficial personal narratives" (p. 493).

Stein and Grant (2014) seem to support this when they found that dysfunctional attitudes (negatively biased assumptions and beliefs regarding oneself, the world, and the future) suppress

the relationship between self-reflection and self-insight (p. 505). And, in a study from an earlier year, Grant (2001) focused on the relationship between an individual's psychological mindedness (their predisposition to engage in reflection on why one and/or others behave, think, and feel in the way that they do) and their ability to gain self-insight (p. 12). He suggested that the predisposition is comprised of both abilities and motivations, and that an individual's psychological mindedness could be seen by the extent in which they engage in reflective acts and their level of insights that they gained (p. 16).

If reflection and introspection in themselves are not such clear-cut paths to self-knowledge, what are? Eurich (2017) contends that "the problem with introspection, it turns out, isn't that it's categorically ineffective, but that many people are doing it completely wrong" (p. 100). She goes on to offer some tools that will help to ensure that introspection is more productive including various forms of mindfulness (p. 137-151) and receiving, reflecting, and responding to feedback from others (p. 196-197). Grant, Franklin, and Langford (2002) offer that "conscious and purposeful self-reflection lead to greater self-insight" (p. 831). Stein and Grant (2014) found that facilitating a "positive core self-evaluation" had a mediating effect on dysfunctional attitudes (p. 505). And, Wilson and Dunn (2004) suggest that observing our own behavior and looking at ourselves through the eyes of others can contribute to self-knowledge (p. 493).

Mindfulness

Interest in mindfulness has significantly grown in the past few decades. Increasingly it is the point of study as a tool for building self-knowledge (Eurich, 2017; Boyatzis & McKee, 2005; Carlson, 2013). Boyatzis and McKee (2005) connect mindfulness cleanly to becoming an emotionally intelligent leader – what they call the "resonant leader". They define mindfulness as "the capacity to be fully aware of all that one experiences inside the self – body, mind, heart, spirit – and to pay full attention to what is happening around us – people, the natural world, our surroundings, and events" (p. 112). They argue that mindfulness and self-knowledge are inseparable: "knowing yourself enables you to make choices about how you respond to people and situations. Deep knowledge about yourself enables you to be consistent, to present yourself authentically, as you are" (p. 120). Incorporating mindfulness, they argue, happens only through a process of "reflection, practice, and supportive relationships" (p. 137). They emphasize the importance of prioritizing reflective practice "whether through meditation, spiritual practice, walking in natural, beautiful surroundings, or writing one's personal thoughts and feelings in a journal" (p. 138).

There is an abundance of literature in the psychology field showing how mindfulness can help to lower inner emotional defenses and improve cognitive functioning, which can clear a path for individuals to learn more about self. In reviewing just a few of these studies, Ghasemipour and Ghorbani (2013) offer mindfulness as a pre-reflective activity, rather than reflective itself, calling it an "aspect of experiential self-awareness" that supports mental health by "disengaging individuals from automatic thoughts, habits and unhealthy behavior patterns" (p. 1031). Zeidan, Diamond, and Goolkasian (2010) showed how mindfulness meditation improved cognitive functions such as visuospatial processing, working memory, and executive functioning (p. 597). In leveraging a mindfulness-based approach to cognitive therapy, Britton, et al., (2012) were able to reduce emotional reactivity to social stress in their subjects (p. 365).

In a study that is highly relevant to the primary research question at hand, Carlson (2013) directly explored how mindfulness serves as a path to overcoming barriers to self-knowledge (defined as "the accurate perception of one's thinking, feeling, and behaving", p. 174). He argues that in order to achieve self-knowledge, "people must observe themselves engaging in a behavior that is relevant to a specific trait and then accurately infer the meaning of that behavior with respect to the trait" (p. 174). Further, he reinforces the notion that introspection and reflection are a faulty path toward self-knowledge, saying "people tend to place a great degree of trust in their introspections, but generating explanations for one's tendencies seems to make self-perceptions less accurate" (p. 175). This is due, he claims, to people inherently having two primary inner barriers to self-knowledge: informational (the individual literally does not have access to all needed information) and motivational (the individual does not have the desire to learn) (p. 174-175). In a meta-analysis, he finds compelling evidence that mindfulness appears to directly address these barriers (p. 177-179). He reasons that "introspections are often wrong, and introspecting about the causes of negative emotions seems to have negative mental health outcomes. The key difference is that [introspection] involves analyzing, explaining, or interpreting what is observed whereas mindfulness involves observation of one's experience without telling a story" (p. 176). Therefore, "paying more attention to one's current experience may help a person to overcome many informational barriers, and nonevaluative observation may help one to overcome motivational barriers to self-knowledge" (p. 176).

Mohapel (2018) leverages neurobiology research to make a strong case for using mindfulness as vehicle for building leadership effectiveness in healthcare. In his review of research, he summarizes that "researchers have studied the impact of interruptions and distractions in healthcare settings and have concluded that they interfere with various kinds of higher order thinking tasks, many associated with effective leadership" (p. 87). From a neurobiology perspective, "excessive multitasking appears to...diminish our focus and concentration. In contrast, mindfulness practice is shown to have the opposite effect by...enhancing leadership focus that can lead to greater flexibility, foresight, regulation, and creativity" (p. 87). Therefore, he argues that mindfulness is critical to leadership effectiveness in healthcare in particular because "healthcare environments are increasingly hectic, demanding, and time constrained, with managers and professionals experiencing constant interruptions" (p. 87).

Finally, Wasylkiw, Holton, Azar, & Cook (2015) conducted a pilot study of 11 mid-level healthcare managers on the impact of mindfulness on leadership effectiveness in a health care setting. Participants showed significant positive changes in their leadership effectiveness that was corroborated by informants. However, they also found that the constant activity and change that the mid-level managers face on a daily basis presents significant challenges to sustain a mindfulness practice (p. 893).

Given the evidence from a brief review of literature, it seems that the incorporation of mindfulness practice is an important consideration as a means to deepening self-knowledge. Special considerations should be made in how to make it impactful in the healthcare setting.

Spirituality

Like mindfulness, spirituality has been increasingly making its way into the workplace in recent decades. There is a growing body of literature on how organizations are benefitting by cultivating soul and spirit in their leaders and employees.

The review of workplace spirituality starts with Wigglesworth (2012), a text that is referenced in the introduction of this paper on building spiritual intelligence. Firstly, Wigglesworth defines spirituality as the "innate human need to be connected to something larger than ourselves, something we consider to be divine or of exceptional nobility" (p. 8). As mentioned earlier, Wigglesworth identifies self-knowledge as "the foundation for becoming the wise, compassionate, and peaceful person you have the capacity to become" (p. 48). She suggests that an individual can increase self-knowledge by tending to one's awareness of five specific skills: (1) worldview; (2) life purpose; (3) values hierarchy; (4) complexity of inner thought; and (5) the difference between ego self and higher self (p. 48). She says that "a spiritually intelligent person learns to shift in the midst of the challenging moment to prevent the ego from driving her reactions" (p. 132). To cultivate this, Wigglesworth offers an extensive reflective practice that integrates techniques in mindfulness, prayer, selfobservation, mental reframing, and gratitude to "choose a spiritually intelligent response" (p. 132-133). While she does not say it overtly, Wigglesworth is suggesting that the path to self-knowledge is through inner work marked by a deep reflective practice that also incorporates a connection to a "Higher Self" (p. 47).

In reviewing a sample of other spirituality literature, while each saying it differently, they all seem to suggest the same as Wigglesworth. Briskin (1998) talks about how "the soul seeks logos, which is associated with qualities such as meaning, understanding, voice, language, and expression" (p. 139). To get there, "Individuals require both reflective time and dialogue with others to achieve logos. The notion of logos suggests that without reflective time our worldview becomes fragmented and chaotic" (p. 139). Dreaver (2000) discusses how gaining inner clarity and paying attention to be the foundation of what he calls obtaining the "core insight - knowing yourself at the deepest level of being" (p. 3). Ashmos and Duchon (2000) offer that "the inner life, for many, is about coming to understand one's own divine power and how to use that divine power to live a more satisfying and more full outer life" (p. 135-136). They suggest that practices such as meditation, self-reflection, and prayer are the ways to cultivate this divine power (p. 137). In applying spirituality to transformational leadership, Scharmer (2018) discusses the importance of "presencing", which is a deeper state of "presence and sensing". He says that "this requires a reflective, meditative capability to effectively access" (p. 10-11). Finally, in separate but related articles, Delbecq (2000) and Levy (2000) draw from an experience in a pilot course on spirituality for business leaders to provide a compelling case for teaching executives deeper reflective practices, such as contemplative prayer. Delbecq, who was the instructor, mentions how "introduction of contemplative practice learning module into the course for MBAs and CEOs led to realizations that entering into a contemplative space led to insights that issues of ego and intellect tied to power and wealth could be addressed" (p. 122). Levy, a participant and a CEO of a notable corporation, shares his personal learning: "The bottom line is that our effectiveness as business leaders is shaped by how well we are able to find

inner quiet, how good we are at listening to the inner voice, and how accomplished we become at understanding its message" (p. 131).

In a meta-study on the impact of spirituality in leadership effectiveness within healthcare, Strack, Fottler, Wheatley, & Sodomka (2002) found that "conceptual and empirical research show a strong link between actualized spirituality and effective leadership; effective leaders use their spiritual wisdom, intelligence, and power to benefit others and achieve outstanding results for their organizations" (p. 16). Reimer-Kirkham, Pesut, Sawatzky, Cochrane, & Redmond, (2012) found that spirituality in nursing leadership is a "relatively understudied field" and suggest that more research in this area needs to be done because of the "unprecedented plurality that global migration has brought to modern societies, and spirituality and religion into the purview of nurse leaders" (p. 1029).

The spirituality literature review suggests consideration of cultivating a deeper reflective practice to access something bigger/higher that the self is connected to. There is also a gap in the literature within healthcare, calling for more work to be done in this space.

Insights and Considerations from the Literature Review

Overall, the literature suggests that reflection and introspection does help to facilitate self-knowledge in service of developmental growth. However, measures need to be taken to counter some of the limitations of reflection and introspection. In particular, it seems people need to be taught the skills to reflect properly for purposes of working through ego inner defenses that all people possess. The incorporation of mindfulness, feedback, and spirituality show distinct promise in helping this cause.

Intervention Method and Design

Theoretical Framework

In selecting a theoretical framework as the basis of my intervention design, I wanted to choose a framework that would help to test the basic research question: how does the application of more consistent reflective practice affect the levels of an individual's self-knowledge? I also wanted to choose a framework that would facilitate a thoughtful connection between individual improvement in self-knowledge and the broader system change needs. Torbert's action inquiry framework met these criteria.

Torbert (2004) calls action inquiry "a kind of behavior that is simultaneously productive and self-assessing" (p. 13). As referenced earlier, perhaps the most critical shift that we can help our leaders and organization to make is to become more "self-authoring" and/or "self-transforming" (Kegan & Lahey, 2016). Therefore, this definition meets our needs to transform our leaders to enable transformation of the organization. Torbert reinforces this potential of action inquiry, saying that "such action helps individuals, teams, organizations, and still larger institutions become more capable of self-transformation" (p. 1). Going further, and more directly connecting this to the primary research question, action inquiry enables self-transformation by "carefully attend(ing) from the inside-out to the experiences we have, hoping to learn from them and

modify our actions and even our way of thinking as a result" (p.4). With the "promise of transforming power... emanat(ing) from a willingness to be vulnerable to transformation of oneself" (p. 8) as the backdrop, action inquiry provides an ideal framework to leverage for my intervention.

Action inquiry incorporates a whole-systems approach by leveraging a complex interrelationship between three foundational components: perspectives (p. 19); levels of awareness and feedback (p. 18-19); and territories of experience (p. 21-22). For the first foundational component of perspectives, action inquiry takes into account three different perspectives for three different aims: (1) a first-person, subjective perspective, which has the aim to generate *integrity* in ourselves; (2) a second-person, interpersonal perspective, which has the aim to generate mutuality; and (3) a third-person, organization, society, and environment perspective, which has the aim to generate sustainability (p. 7). For the second component of levels of awareness, an individual can have three different levels of awareness in relation to observed outcomes in the external world: (1) single-loop awareness & feedback, which deals with making choices in behavior; (2) double-loop awareness & feedback, which deals with making choices in setting strategy, structure, and/or goals; and (3) triple-loop awareness & feedback, which deals with what the individual's attention, intention, and/or vision is set on (p. 18-19). For the third and final component of territories of experience, an individual can experience the external world in four ways: (1) first territory, which is neutral observation, inquiring, and assessing of outside events; (2) second territory, which is the individual's own sensed performance of behaviors, skills, and illustrated patterns of activity; (3) third territory, which is the individual's action-logics, or their chosen strategies, schemas, thinking/feeling patterns, and reflection on experience; and (4) fourth territory, which is the individual's intentional attention, presencing awareness, framing, and vision (p. 22). A summary of how the action inquiry components manifest together can be found below in table 1.

Table 1. How the Levels of Awareness and Four Territories of Experience Manifest Themselves in First-, Second-, and Third-Person Perspectives (Torbert, 2004, p. 39).

Territory of Experience	First-Person	Second-Person	Third-Person
	Attention	Speaking	Organizing
Fourth Territory Third Territory Second Territory First Territory	Intending Thinking/Feeling Sensing/Behaving Effecting/Perceiving	Framing Advocating Illustrating Inquiring and Listening	Visioning Strategizing Performing Assessing

Research Design

The intervention design began by clarifying intended outcomes. With the scope of research focused on leveraging reflective practice for increasing self-knowledge, it was important be more specific in what it looks and feels like to have gained self-knowledge. While the literature review shows that self-knowledge can include many components, this intervention had a focus on helping individuals to raise their knowledge of mental, emotional, physical, and behavioral patterns in service of understanding what it looks and feels like when the ego self is activated

(Eurich, 2017, p. 32-42; Wigglesworth, 2015, p. 57-65). This is important because the "ego's primary goal is to keep us safe" (Wigglesworth, 2014, p. 60-61) and while that is certainly an important function, "excessive fear activation robs us of joy as well as leadership capacities" (Wigglesworth, 2014, p. 61). Also, given the insights gained from the literature review on mindfulness and spirituality, these elements were incorporated into the intervention as well.

To conduct the study, a reflective practice exercise based on the action inquiry framework (Torbert, 2004) was introduced to a group of eighteen Director-level leaders within the Midwest-based healthcare system who are participating in a high-potential leadership development program. Informed consent of the participants was obtained as part of their onboarding agreement into the program. In addition, the appropriate permission from the internal research organization was secured for the study.

The reflective practice exercise integrated components from Torbert (2004), Wigglesworth (2014), Bolman and Deal (2011), and Boyatzis and McKee (2005). Torbert offers three useful sets of exercises that the design was based upon: (1) practice noticing (p. 56-57); (2) practice naming (p. 57-59); and (3) practice action inquiry (p. 59). To add mindfulness and spiritual components to the practice, the activity incorporated a technique offered by Wigglesworth (2014) to "stop and breathe" in the moment prior to engaging in reflective activities (p. 133-136). A technique offered by Bolman and Deal (2011) to "summon spirit" through "art, ritual, stories, music, and icons" (p. 171) was also included. Finally, Boyatzis and McKee (2005) provided the content foundation for learning about "defensive routines", which they define as "ineffective habits of mind and behavior" serve as "coping mechanisms...to protect or distract us from the discomfort of our current emotional state" (p. 44). See "Appendix A" to see more details on the in-session exercise built to teach this content through a reflective and interactive way.

The exercise asked them to pause shortly after an incident or event in which they experience a stress response or defensive routine to reflect on what is happening within their inner territory (practice noticing). The exercise then asked them to do a brief centering technique first (practice mindfulness), followed by describing as accurately as possible what they are/were thinking, feeling, and physically experiencing in that moment (practice naming). Participants were also asked to share stories and name an image, song, or metaphor that captures the essence of their experience (practice spirituality). To help them, participants received a form to prompt their reflections more consistently. See "Appendix B" for a view the reflective activity.

Table 2. Intervention Timeline.

Phase	Timing	Key Activities
Intervention Design	3/11 – 3/18	Scoped and proposed Designed approach Produced deliverables
Intervention Implementation	3/19 – 5/26	Taught supporting content and instructed participants in the activity at LEAD on 3/19 Observed and monitored progress Assessed outcomes at LEAD 5/21

Intervention Analysis & Findings	5/27-6/9	Analyzed and synthesized data Documented insights and observations Reviewed outcomes relative to research questions
Implications for Practice & Recommendations	6/10-6/16	Formulated recommendations Proposed future research

Participants were asked to conduct the reflective practice exercise three times per week over a period of eight weeks, documenting what they noticed in a journal. At the end of that time, participants were asked to complete an assessment to gauge how well they could accurately describe their internal thought, feeling, body sensations, spirit, and behavioral patterns, which would offer an evaluation of how much self-knowledge they gained from the reflective activities. Additional inquiries were made as to what barriers might have prevented them from completing the activity as asked, and components of self-knowledge that they found most valuable to explore. Finally, participants were asked to reflect on how their specific attention to and perspective on the entire eight-week exercise affected their experience with it (to practice action inquiry on the process itself). Assessments were collected during the LEAD session in May and served as the primary data to analyze findings.

Results

I will walk through the analysis of my findings by following the basic structure of addressing each of my research questions.

Research Question 1: How does the application of more consistent reflective practice affect the levels of an individual's self-knowledge?

I broke this question down into a two-part analysis. For the first part, I focused simply on evaluating the overall impact that the reflective exercise had on the self-knowledge of participants. I leveraged a question that asked participants to choose from a 5-point Likert scale rating the impact that the reflective exercise had on them, regardless of how many times they completed it. A full 100% of the participants reported gains in self-knowledge from the exercise, with some varying degrees of the extent of impact. Below is a breakdown of these results.

Table 3. Participant responses to question "To what degree would you say that the reflective activity increased your self-knowledge?"

Answer Choices	Response %	Response #
A great deal	29%	5
A lot	29%	5
A moderate amount	41%	7

A little	0%	0
None at all	0%	0
TOTAL	100%	17

To obtain additional insights on the responses above, I evaluated comments that were provided by the participants around two questions: (1) What is your overall perspective on the reflective activity that you completed?; and (2) What difference will this reflective experience make in your life going forward? The most common themes that emerged across participants were learning about emotional responses to stress; increased self-awareness; and overall learning about self.

For the second part, I analyzed the relationship between the frequency of practice and relative gains in self-knowledge. When I introduced the reflective exercise to participants, I asked them to complete it an average of three times per week for a period of eight weeks. I purposely suggested that participants complete the activity on a high-frequency basis to explore potential variability across an expected range of engagement. I asked participants to estimate the number of times that he/she was able to complete the practice over the eight weeks by making one selection from a list of five range options. The ranges were created in a way in which I could assign their frequency performance using percentile rankings. Four of the seventeen participants (24%) met or exceeded the target number of reflection points (high frequency). Another six (35%) completed it at least half of the time (moderate frequency). Seven participants (41%) completed less than half of the time (low frequency). The below table summarizes the results.

Table 4. Participant responses and percentile rankings to question "Approximately how many times were you able to complete the practice over the past eight weeks?"

Answer Choices	Response %	Response #	Percentile
Over 24	12%	2	125 th
19-24	12%	2	100 th
13-18	35%	6	75 th
7-12	29%	5	50 th
0-6	12%	2	25 th
TOTAL	100%	17	

I cross-referenced the percentile rankings to the self-reported gains outlined in part one above to determine if there was any correlation between frequency of practice and gains of self-knowledge. The analysis showed that those participants who completed the exercise with the highest degree of frequency reported the most gains in self-knowledge. This was true for the group of participants reporting the highest gains (indicated by "A great deal"), but there was not

a significant difference between those participants reporting gains of "A lot" and "A moderate amount." The below table summarizes these results.

The final part of my analysis for the first research question was to review comments of participants in response to the question "If you were to do this activity over again, what would you do differently (if anything)?" The common themes across participants were that they started to "gain more when they gave more" and that they would complete the exercise more frequently if they were to do it over again.

An overall interpretation of the findings for the first research question suggests that for this group of seventeen leaders, engaging in the reflective practice exercise in itself contributed to gains in self-knowledge. And, it appears that those individuals who engaged in the reflective exercise the most frequently over an extended period of time experienced the largest gains. These findings imply that there may be a connection between frequency of reflective practice and self-knowledge.

Table 5. Analysis	of frequency	y of practice an	d degree of gains	s in self-knowledge.
2	1 2		0	\mathcal{L}

Answer Choices	Response #	Average Frequency Percentile
A great deal	5	75 th
A lot	5	65 th
A moderate amount	7	64th
TOTAL	17	

Research Question 2: What are the potential predictive indicators of the extent someone will engage in reflective practice?

To address this question, I defined three primary categories to analyze in my study. The first category is components of self-knowledge, which in my research design I mention as being mental, emotional, physical, and behavioral patterns. The second category is the special practice focus areas of mindfulness and spirituality. The third category is developmental level. I will walk through my analysis of results that were collected relative to all three categories of potential predictors.

For the first (self-knowledge components) and second (mindfulness and spirituality) categories, the reflective practice exercise was intentionally constructed to engage participants in all components of self-knowledge, as well as a mindfulness and spirituality practice. I leveraged results from a question on the assessment in which I asked participants to rank order the degree of influence that each part of the practice had on their gains in self-knowledge. There were eight total practice steps to rank, each of which represented one of the components to self-knowledge. Since I was interested in determining predictors of frequency of practice, I analyzed each practice step / component separately across all participants. I sorted each step / component from highest to lowest rank (1 being highest, 8 being lowest), then split into a top half (representing a

ranking of 1-4) and a bottom half (representing a ranking of 5-8). I then cross-referenced practice frequency percentiles (as assigned in the previous step), noting the numerical spread between the average percentiles between top half and bottom half rankings. This approach showed that participants who ranked emotional and physical practices the highest in influence tended to practice the reflective exercise more frequently. The data also showed that the mindfulness practice was ranked highly amongst high-frequency reflective practitioners. On the reverse side, participants who ranked consideration of impact of actions, mental patterns, and observations of their behaviors as more influential tended to practice the reflective exercise less frequently. Also worth noting is that not one participant ranked the spiritual practice in the top half, so there was no basis to analyze this component. See the below table for a summary of the results.

Table 6. Analysis of reflective practice / self-knowledge components with strongest correlation to frequency of practice.

Practice / Component	Average Frequency Percentile for Top Half	Average Frequency Percentile for Bottom Half	Frequency Percentile Spread
Noticing and naming the specific emotion I feel (emotional)	75 th	63rd	+12
Noticing and locating the place in my body that I experience tension (physical)	75 th	68 th	+7
Pausing and taking deep breaths (mindfulness)	73 rd	67 th	+6
Examining the overall pattern over longer period of time (meta reflection)	71 st	70 th	+1
Noticing the actions / behaviors that I demonstrate (behavioral)	$70^{ m th}$	71 st	-1
Noticing what I am thinking / the story I am telling myself (mental)	70 th	75 th	-5
Considering the impact of my actions / behaviors on others (impact)	61 st	81 st	-20
Identifying a song, image, metaphor, and/or story that captures the essence of my experience (spirituality)	N/A	N/A	N/A

For the third (developmental level) category, I leveraged a brief developmental assessment designed by STAGES International (O'Fallon & Barta, 2018) to capture an estimated developmental level of each participant. The assessment is based on an ego development theory model created by Terri O'Fallon, which builds upon previous models mentioned in the literature review (Cook-Greuter, 2013; Loevinger, 1976; Graves, 1974; Kegan, 1982; Commons &

Richards, 1984). The assessment required each participant to complete six sentence stems with a free-form response. I then partnered with trained language and grammar assessors from STAGES who evaluated anonymous responses to each sentence for indicators of developmental level. The assessors assigned a probable developmental level from which each response is most likely associated by assigning it a numerical score. The higher the score, the higher level of development. I was instructed by O'Fallon to simply average the six sentence scores to arrive at an overall probable developmental level of the participant. I then cross-referenced developmental level scores with frequency of practice percentiles to explore the relationship between the two. I found those participants who were between Achiever and Individualist levels, as well as one participant who is between Individualist and Strategist level, to engage in the reflective exercise most frequently. Participants between Expert and Achiever levels were less likely to engage in the reflective exercise as frequently, and those solidly at Achiever level were the least likely. Below is a summary of these results.

Table 7. Analysis of developmental level and strongest correlation to frequency of practice.

Developmental Level	Average STAGES Score	Average Frequency Percentile
Achiever-Individualist	3.64	79 th
Individualist-Strategist	4.42	75 th
Expert-Achiever	3.25	69 th
Achiever	3.47	60 th

An overall interpretation of the findings for the second research question suggests that for this group of seventeen leaders, Achiever-Individualists who practice mindfulness while learning about their emotional and physical response patterns to stress are most likely to engage in consistent reflective practice. On the contrary, Achievers and Experts who do not prioritize mindfulness and focus primarily on their behavior and mental patterns are least likely to engage in consistent reflective practice. Additionally, it does not appear that practicing spirituality as designed in this intervention had much of a factor on frequency of reflective practice.

Research Question 3: What are some of the barriers to engaging in reflective practice?

I examined this research question through two perspectives: (1) Carlson's primary barriers to self-knowledge; and (2) developmental level. For the first perspective, I asked participants to explain what the primary reason(s) were for their inability to complete the reflective exercise less than 24 times (the total one would achieve if fully completing the assignment). Participants could choose up to three reasons why they could not meet the full goal, all of which are tied to Carlson's (2013) theory of barriers being either motivational (lack of desire) or informational (cannot access parts of themselves). The overwhelming reason that participants did not complete

the reflective activity was not finding the time to prioritize and/or fully complete, which is a motivational barrier. See below a summary of the responses.

Table 8. Analysis of barriers to engaging in reflective practice.

Reason	Barrier Type	# Responses
Could not find the time to prioritize and/or fully complete	Motivational	13
Difficulty in accurately completing activity	Informational	2
Gap in reflection skills	Informational	2
Attempted but was not gaining any value from the exercise	Motivational	1

For the second perspective (developmental level), I cross-referenced the developmental level numeric scores provided by STAGES International with the reasons provided by participants for not completing the exercise. I found that Achievers primarily experienced motivational barriers while Expert-Achievers primarily experienced informational barriers.

An overall interpretation of the findings for the third research question suggests that for this group of seventeen leaders, the primary barrier to engaging in reflective practice tends to be motivation. The data also suggests that developmental level may potentially play a role in the type of barriers that one experiences to reflective practice.

Implications

Implications for Practice

For me, the biggest surprise of the intervention was the extent that participants engaged in the reflective activity. In my checkpoint with the group at the half-way point, I posted that I was not feeling very confident that people were actually engaging in the activity as designed. There was not a lot of enthusiasm for the activity in our discussions, and those that shared how it was going for them were few. At that time I drew one conclusion that people were not engaging in the activity, and possibly even not seeing it as valuable. However, the data analysis has proven these hunches wrong. Rather, everyone did, indeed, engage in the activity and ALL found it useful in building self-knowledge. And, the more frequently participants reflected, the more they reported gains in self-knowledge and learning (the opposite was true as well, with the theme of participants reporting that they would engage more frequently if they were to do it over again.) This experience has changed my perception of the readiness and willingness of our leaders to engage in deeper, more reflective inner work, and the meaningful impacts this has on them. It also suggests a connection between frequency of reflective practice and self-knowledge, which implies a greater focus on reflective capabilities in leadership development.

Additional insights that I gained on predictors and barriers to reflective practice were also highly useful. The initial findings of this study point to several components that are worth exploring further. Development level, in particular, seems to play a factor in the extent and how an individual practices reflection. The findings that those who are either moving into or are already at Individualist stage reflect more frequently is consistent with the literature on ego development theory and poses some exciting opportunities to more accurately assess the unique development needs of individuals. Also, what participants tend to focus and not focus on, and what barriers tend to be present, is potentially telling. The findings that those who prioritize mindfulness, as well as reflect on emotional and physical patterns, are more motivated to practice more frequently suggest that individuals may use different prioritizing schema and/or hold a differing readiness for reflecting. All of this points to the need to conduct more research for purposes of informing a more individualized approach to developing our leaders.

On the topic of spirituality practice, the data that I collected did not point to any particular compelling insights. This does not mean that this is not an important component of predicting reflective practice frequency, but rather could be an element that was too unique to include as part of this study. When comparing the degree of exposure and learning that we have given this component relative to others in our LEAD program, we have given it far less attention in our curriculum. It could be that it was just too much to ask them to reflect on at this point, which further points to the topic of readiness. This suggests that some element of content coverage is necessary to help participants make meaning out of inner territory.

For my practice, our leadership development programs need: (1) to more fully incorporate reflection as an element of learning; (2) to work on a more individualized approach to development; (3) to include content and frameworks for making meaning out of inner territory; and (4) to work on creating a safe environment for discussing inner territory more openly. It has been easier to create this in our hi-potential programs, which uses an intimate cohort-based approach to learning over a period of time. The bigger challenge will be to create this experience for the masses, which tends to engage in learning on a more episodic level.

Recommendations

This study had a very large scope, and in essence served as a starting point for me to gauge where I need to go further with deeper study. Each of the research questions that I posed could be a study in itself, and in fact could be narrowed even further. Going forward I will take a more focused approach to action research, with a few dimensions in particular calling for further study. This study just touched on the impact that development level has on the extent and nature of reflective practice. There is a lot of opportunity to explore this territory to better understand how individuals learn to reflect, what motivates them to do so, and how this differs (or not) at different development levels.

The special interest areas of mindfulness and spirituality both offer promise of additional research, in different strands. For mindfulness, the results of this study were consistent with other studies cited in the literature review that this could play a key role in helping people to gain more self-knowledge. What are the specific conditions in which a mindfulness practice contributes? What conditions may it not contribute? What are different ways in which individuals could

practice mindfulness? What are potential barriers to an individual adopting mindfulness practice? There a many other questions to explore in this rich topic.

For spirituality, this study did not even begin to explore the topic in any meaningful depth. As mentioned in the next steps, I would like to give this topic a bit more due in exploring different ways to research this as an element of building self-knowledge. It starts with getting more defined in my research question, and in designing an intervention that more directly defines and assesses spiritual practice. With the promise offered by the literature review, and the continuing growth in the body of research on spirituality in the workplace, there is a significant opportunity to dive deeper into this dimension.

Additionally, there is a lot of opportunity to further explore how other variables might be shaping an individual's experience with reflection. For example, how does being a part of a hipotential program like LEAD shape the way an individual experiences reflection and reflective exercises? How much influence does this construct have on an individual's engagement level? Is it different for individuals who are not a part of a unique program like LEAD? One can assume there are other factors involved here that were beyond the scope of this study, but could shed further light on variables predicting reflection.

Finally, I would like to continue to refine my action research methods for future studies. The broad scope of this study, coupled with the narrow scope of the audience, created some inevitable constraints that limit my research and conclusions. The small sample of 17 high-potential director-level leaders is indeed narrow, and I cannot assume that it is representative of the broader population of leaders across the organization. Also, I surveyed a wide range of topics at a higher level, and mostly I gathered data from self-reported insights. The result is that I can only generate curious hunches versus deeper, more definitive conclusions. This suggests that I adopt more focused and sophisticated research methods over time.

References

- Argyris, C. & Schon, D.A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco, CA: Jossey-Bass.
- Ashmos, D., & Duchon, D. (2000). Spirituality at Work: A Conceptualization and Measure. Journal of Management Inquiry, 9(2), 134-145.
- Beck, D. E., & Cowan, C. C. (1996). *Spiral dynamics: Mastering values, leadership and change*. West Sussex, UK: John Wiley & Sons.
- Bergman, D., Fransson-Sellgren, S., Wahlström, R., & Sandahl, C. (2009). Healthcare leadership: impact of short-term intensive and long-term less intensive training programmes. *Leadership in Health Services*, 22(2), 161-175.
- Bolman, L. G., & Deal, T. E. (2011). Leading with soul: An uncommon journey of spirit. San Franciso, CA: Jossey-Bass.
- Boyatzis, R. E. & McKee, A. (2005). Resonant leadership: Renewing yourself and connecting with others through mindfulness, hope, and compassion. Cambridge, MA: Harvard Business Press.
- Briskin, A. (1998). *The stirring of soul in the workplace*. Oakland, CA: Berrett-Koehler Publishers.

- Britton, W. B., Shahar, B., Szepsenwol, O., & Jacobs, W. J. (2012). Mindfulness-based cognitive therapy improves emotional reactivity to social stress: results from a randomized controlled trial. *Behavior therapy*, 43(2), 365-380.
- Carlson, E. N. (2013). Overcoming the barriers to self-knowledge: Mindfulness as a path to seeing yourself as you really are. *Perspectives on Psychological Science*, 8(2), 173-186.
- Cashman, K. (2017). *Leadership from the inside out. Becoming a leader for life*. San Francisco, CA: Berrett-Koehler.
- Commons, M. L., Richards, F. A., Ruf, F. J., & Armstrong-Roche, M. (1984). A general model of stage theory. *Beyond formal operations*, *1*, 120-140.
- Cook-Greuter, S. (2013). Nine levels of increasing embrace in ego development: A full-spectrum theory of vertical development and meaning-making. Wayland, MA: Cook-Greuter & Associates.
- Csikszentmihalyi, M. (1990). Flow: the psychology of optimal experience. New York, NY: Harper Perennial.
- Delbecq, Andre L. (2000). Spirituality for Business Leadership: Reporting on a Pilot Course for MBAs and CEOs. *Journal of Management Inquiry*, 9(2), 117-128
- Di Stefano, G., Gino, F., Pisano, G. P., & Staats, B. (2015). *Learning by thinking: Overcoming the bias for action through reflection*. Cambridge, MA: Harvard Business School.
- Dreaver, Jim (2000). The Way of Harmony. New York, NY: Avon Books.
- Dreyfus, H., and Dreyfus, S. (1986). Mind over machine. New York, NY: Free Press.
- Eurich, T. (2017). *Insight: Why we're not as self-aware as we think, and how seeing ourselves clearly helps us succeed at work and in life.* New York, NY: Crown Business.
- Feather, R. (2009). Emotional intelligence in relation to nursing leadership: does it matter?. *Journal of Nursing Management*, 17(3), 376-382.
- Freshman, B., & Rubino, L. (2002). Emotional intelligence: a core competency for health care administrators. *The health care manager*, 20(4), 1-9.
- Gardner, H. (2011). Frames of Mind: The Theory of Multiple Intelligences. New York, NY: Basic Books.
- Ghasemipour, Y., Robinson, J. A., & Ghorbani, N. (2013). Mindfulness and integrative self-knowledge: Relationships with health-related variables. *International Journal of Psychology*, 48(6), 1030-1037.
- Goleman, D. (1998). Working with emotional intelligence. New York, NY: Bantam.
- Goleman, D., Boyatzis, R. E., & McKee, A. (2013). *Primal leadership: Unleashing the power of emotional intelligence*. Cambridge, MA: Harvard Business Press.
- Goozner, M. (2019). *Editorial: The paradigm is shifting*. Retrieved June 30, 2019, from https://www.modernhealthcare.com/opinion-editorial/editorial-paradigm-shifting
- Grant, A. M. (2001). Rethinking psychological mindedness: Metacognition, self-reflection, and insight. *Behaviour Change*, 18(1), 8-17.
- Grant, A. M., Franklin, J., & Langford, P. (2002). The self-reflection and insight scale: A new measure of private self-consciousness. *Social Behavior and Personality: an international journal*, 30(8), 821-835.
- Graves, C. W. (1974). Human nature prepares for a momentous leap. *The futurist*, 8(2), 72-85.
- Kegan, R. (1982). *The evolving self: problem and process in human development.* Cambridge, MA: Harvard University Press.
- Kegan, R., & Lahey, L. L. (2009). *Immunity to change: How to overcome it and unlock potential in yourself and your organization*. Cambridge, MA: Harvard Business Press.

- Kegan, R., & Lahey, L. L. (2016). *An everyone culture: Becoming a deliberately developmental organization*. Cambridge, MA: Harvard Business Review Press.
- Levy, Ricardo (2000). My experience as participant in the course on spirituality for executive leadership. *Journal of Management Inquiry*, 9(2), 129-130
- Loevinger, J. (1976). Ego development: Conceptions and theories. San Francisco, CA: Jossey-Bass.
- Mintz, L. J., & Stoller, J. K. (2014). A systematic review of physician leadership and emotional intelligence. *Journal of Graduate Medical Education*, 6(1), 21-31.
- Mohapel, P. (2018). The neurobiology of focus and distraction: The case for incorporating mindfulness into leadership. *Healthcare Management Forum*, 31(3), 87–91.
- O'Fallon, T., & Barta, K. (2018). *The STAGES Matrix Roadmap: A Contemporary Model of Development Perspectives*. (Available from STAGES International at https://www.stagesinternational.com/contact/).
- Park, J. J., & Millora, M. L. (2012). The relevance of reflection: An empirical examination of the role of reflection in ethic of caring, leadership, and psychological well-being. *Journal of College Student Development*, 53(2), 221-242.
- Reimer-Kirkham, S., Pesut, B., Sawatzky, R., Cochrane, M., & Redmond, A. (2012). Discourses of spirituality and leadership in nursing: A mixed methods analysis. *Journal of nursing management*, 20(8), 1029-1038.
- Scharmer, O. (2018). *The essentials of Theory U: Core principles and applications*. Oakland, CA: Berrett-Koehler Publishers.
- Schon, D. A. (1983). The reflective practitioner: how professionals think in action. New York, NY: Basic Books.
- Segal, J. (2002). Good leaders use 'emotional intelligence'. Emotionally intelligent leadership is a skill that can be learned and taught throughout life. *Health Progress* 83 (3), 44-46, 66.
- Stefl, M. E. (2008). Common competencies for all healthcare managers: the Healthcare Leadership Alliance model. *Journal of healthcare management*, 53(6).
- Stein, D., & Grant, A. M. (2014). Disentangling the relationships among self-reflection, insight, and subjective well-being: The role of dysfunctional attitudes and core self-evaluations. *The Journal of psychology*, 148(5), 505-522.
- Strack, G., Fottler, M. D., Wheatley, M. J., & Sodomka, P. (2002). Spirituality and effective leadership in healthcare: Is there a connection?/commentaries/replies. *Frontiers of health services management*, 18(4), 3.
- Torbert, W. R. (2004). *Action inquiry: The secret of timely and transforming leadership*. Oakland, CA: Berrett-Koehler Publishers.
- Wasylkiw, L., Holton, J., Azar, R., & Cook, W. (2015). The impact of mindfulness on leadership effectiveness in a health care setting: a pilot study. *Journal of health organization and management*, 29(7), 893-911.
- Wigglesworth, C. (2014). SQ21: The twenty-one skills of spiritual intelligence. New York, NY: SelectBooks, Inc.
- Wilson, T. D., & Dunn, E. W. (2004). Self-knowledge: Its limits, value, and potential for improvement. *Annual review of psychology*, 55.
- Zeidan, F., Johnson, S. K., Diamond, B. J., David, Z., & Goolkasian, P. (2010). Mindfulness meditation improves cognition: Evidence of brief mental training. *Consciousness and cognition*, 19(2), 597-605.

Appendix A

Identifying Defensive Routines – In-Session Content Exercise

Step 1: Recall High Pressure Situations. Take a moment and think about 3-4 situations or events in your past in which you were experiencing a significant amount of pressure or higher-than-normal stress. Try to select situations that span your whole life – both professional and personal. Write those down here.

Step 2: Identify your Typical Routines. Check all that apply below. When under stress:

I Approach and Internalize
I get to work earlier and stay at work later
I continue to add new projects or take on more roles despite a realistic shortage of time or results
I expect everyone to perform at my high standards
I can never say "no"
I feel a sense of personal obligation to fix everything myself
I constantly remind myself of my own or other's high standards for me I expect everyone to perform at my high standards I can never say "no" I feel a sense of personal obligation to fix everything myself I put others' needs ahead of my own to keep the peace
I Avoid and Internalize
Move further inside: my office, my projects, my thoughts and concerns
Become detached from relationships with colleagues, friends, and family
Communicate in short and direct statements about only "essential" information
Only my mission and goals seem important
I don't feel I need input from others
Move further inside: my office, my projects, my thoughts and concerns Become detached from relationships with colleagues, friends, and family Communicate in short and direct statements about only "essential" information Only my mission and goals seem important I don't feel I need input from others Other people just get in the way
I Approach and Externalize
I am the only one who knows the answer and can fix this
If anyone disagrees with me I will disregard them or make them sorry for disagreeing
My closest friends and advisors always agree with me
I never waiver on decisions
I believe that I must win others over
I Avoid and Externalize
Focus on negative aspects of situation
Wear anger and disappointment on my sleeve
Criticize or become cynical, with those who want things to change or have hope
Blame my mood/circumstances on situation or someone else
Gather and drink with like-minded people and talk about what I think is wrong
Wear anger and disappointment on my sleeve Criticize or become cynical, with those who want things to change or have hope Blame my mood/circumstances on situation or someone else Gather and drink with like-minded people and talk about what I think is wrong I move on to better things elsewhere

Appendix B

Self Check-In Activity

10-15 minutes

Directions: Each of us has developed unconscious responses to situations that invoke a higher-than-normal stress response. These are known as "defensive routines", because our ego perceives the situation has some sort of threat, and this leads us to react in a more protective manner. The purpose of this self-reflective activity is to build awareness and knowledge of what your unique defensive routines look and feel like in greater detail, and the situations and/or people that tend to trigger them.

Take a brief pause while experiencing a higher-than-normal stress response, or shortly after you experience it, and check-in with yourself by answering the questions provided below. You are free to document your responses in this form or a journal, whichever works best for you. Try to complete this activity at least three times per week for the next eight weeks.

Step 1: Pause and Breathe. Take three deep breaths, each one deeper than the previous, and let the air out with large exhales. Or, conduct a brief meditation, whichever you need to shift yourself to a more reflective state.

Step 2: Notice it.

What I am thinking about right now is... [openly write whatever comes to your mind]

Where I am experiencing escalated tension and/or tightness in my body is... [muscle tension, depth of breath, blood pressure / heart rate levels, etc.]

The story that I am telling myself at this moment is... [free-write in an unfiltered way]

Step 3: Name it.

I feel... [use the table below and circle the most accurate descriptor(s)]

Anger	Anxiety	Fear	Joy	Love	Peace	Sadness	Shame
Agitated	Anxious	Alarmed	Alive	Attention	Comfortable	Crushed	Ashamed
Anger	Confused	Defensive	Bold	Caring	Confident	Disappointed	Burdened
Annoyed	Distant	Doubtful	Brave	Comforting	Peaceful	Discouraged	Condemned
Appalled	Distressed	Dread	Capable	Compassion	Relaxed	Distraught	Culpable
Disgusted	Dulled	Fearful	Curious	Concerned	Safe	Empty	Despised
Frustrated	Frantic	Frightened	Delighted	Encouraged	Secure	Grief	Disgraced
Irritated	Helpless	Reluctant	Dynamic	Engaged	Self-	Lonely	Dread
Outraged	Impatient	Startled	Eager	Gentle	Assured	Lost	Embarrassed
Rage	Intense	Suspicious	Elated	Honored		Miserable	Guilty
Spiteful	Nervous	Tense	Energized	Open		Mournful	Harassed
Upset	Overwhelmed	Worried	Excited	Respected		Remorseful	Humiliated
Vindictive	Paralyzed		Glad	Tender		Resigned	Inept
	Perplexed		Gleeful			Sad	Inadequate
	Queasy		Hopeful			Sorry	Regretful
	Skeptical		Joyful			Terrible	Shameful
	Stressed		Optimistic				
	Uneasy		Passionate				
			Surprised				

The specific event, incident, and/or experience that is evolving this feeling is... [describe it in vivid detail, as though you are there]

The actions I took / behaviors I expressed during that event were... [be observant of self and describe in detail]

The impact these actions / behaviors seemed to make on other(s) was... [be descriptive] The most important thing to me that this event affects is...

A song, image, metaphor, or story that comes to mind that captures the essence of experience is... [write down whatever comes to mind, regardless of how much "sense" it makes]