Article

Self-Leadership: A Four Decade Review of the Literature and Trainings

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Abstract: This paper reviews the fourth decade of self-leadership research. Two previous reviews of self-leadership from 2006 and 2010 are summarized, and the paper applies categories from those reviews to examine recent research in the field. This paper also covers new topics and trends in self-leadership research. In previous review articles, new theoretical models for extending self-leadership models were proposed. Therefore, this paper continues that tradition by proposing a new model—the Meta-Performance Model—that offers self-leadership as a skillset for enhancing the individual performance of leaders who seek improvement through professional certification programs. Self-leadership and professional certification programs are often treated as a stand alone topics. However, this paper contends professionals would benefit from combining self-leadership training with other professional improvement programs.

Keywords: self-leadership; self-management; Meta-Performance Model

1. Introduction

Self-leadership, or the process of influencing one's self, has garnered its share of research in the management literature over the past four decades. And for good reason; after all, for leaders to influence others, they must first have their own motivation and actions to get started on their grand projects (Neck et al. 2019). In this paper, we review the latest research and self-leadership over the last 10 years. The first paper to review self-leadership was in 2006 (Neck and Houghton 2006). The second major review of self-leadership was in 2010 (Stewart et al. 2011). Thus, this paper covers the past decade of self-leadership research. This review will cover research articles over the last 10 years by utilizing topics from the previous two major reviews of self-leadership. The framework will enable the reader to see what the most popular topics were in self-leadership since 2010. We will also examine who the most popular writers were during this time, and also new trends in the field. We end the paper with an extension of how self-leadership can be further developed to work with other leadership improvement programs.

2. Self-Leadership

Self-leadership has been defined as a self-influence process by which people achieve the self-direction and self-motivation necessary to perform (Neck et al. 2019; Neck and Houghton 2006). It is an essential leadership for executives, managers, entrepreneurs, and vast array of other professionals in positions of authority. Leaders at the top of their profession often cite their own personal discipline and execution to the success they have found in their organizations. As Dan Cockerell, retired Vice-President of the Magic Kingdom at Walt Disney emphasized (Cockerell 2020, pp. 3–4):

"At the Magic Kingdom I led a team of 12,000 'cast members,' the term Disney uses employees—and a term that aptly reflects the collective commitment to creating a unique immersive show for all visitors . . . Be it personal or professional, life is much easier to navigate when we prepare for it, and we do have the ability to prepare for it. It means taking care of the basics and leading ourselves first. This is very simple—but not easy . . . I've learned the hard way the price of not taking care of myself first. It happens very easily when you work at a place that never closes, employs thousands of people, and hosts millions—like the Magic Kingdom."

Or consider the words of Nick Saban, head coach of six NCAA college football championship teams (Sabin 2007, p. 214):

"Underlying everything is a simple premise: To a significant degree, we *choose* how good we are. There is a difference between being good and being great, that there is something different about champions, and that we all get to decide every day if we have it in us. . . . It doesn't matter what your endeavor—salesperson, teacher, athlete—you must take advantage of the gifts you were given and make the decision to succeed."

Cockerell and Saban's words echo the most important theme throughout *Self-leadership: The Definitive Guide to Personal Excellence,* the leading textbook and professional resource on self-leadership (Neck et al. 2019, p. 90): *We choose.* Or as Neck, Manz, and Houghton more specifically explain:

"We can think of the things we choose to think about in different ways . . . What we choose to think about and how we to think about it. This might sound a little silly, but it is probably the most-important part of self-leadership."

Self-leadership consists of specific behavioral and cognitive strategies designed to positively influence personal effectiveness. Self-leadership strategies are typically partitioned into three primary categories including behavior-focused strategies, natural reward strategies and constructive thought pattern strategies (Neck et al. 2019; Neck and Houghton 2006).

Behavior-focused strategies attempt to increase an individual's self-awareness in order to facilitate behavioral management, especially the management of behaviors related to necessary but unpleasant tasks (Neck and Houghton 2006). Natural reward strategies are designed to foster situations in which a person is motivated or rewarded by inherently enjoyable aspects of the task or activity (Neck and Houghton 2006).

Constructive thought pattern strategies are designed to facilitate the formation of constructive thought patterns (habitual ways of thinking) that can impact performance in a positive manner (Neck and Houghton 2006). Constructive thought pattern strategies include identifying and replacing dysfunctional beliefs and assumptions, mental imagery and positive self-talk (Neck et al. 2019).

In the following sections, we summarize the most significant findings of the two previous major review papers on self-leadership published in 2006 and 2010.

3. 2006 Review of Self-Leadership

Self-leadership as a credible academic area of study can trace its beginnings to 1986, with the publication of "Self-leadership: Toward an Expanded Theory of Self-Influence Processes in Organizations," by Charles C. Manz, published in Volume 11 of the high impact journal *Academy of Management Review.* Manz conceptualizes self-leadership as an extension of the self-management literature. Manz introduced self-management, a subset of self-leadership, in a 1980 issue of *Academy of Management Review,* as a process for completing menial and unenjoyable tasks as well as pursuing activities that a person finds naturally rewarding. Based in Social Cognitive Theory (Bandura 1986), self-management instructed a person to consciously organize and manage their thoughts, behavior, and environment in a way to be more successful in their pursuits. Recognizing the emphasis self-

management has on completing tasks, Manz expanded the concept to focus on achieving a more positive state of existence by modifying the process to be more purposeful. In other words, self-management focuses on how to influence yourself to complete stated goals, while self-leadership embeds that pursuit with higher meaning and purpose. Thus, self-leadership might be said to be more grounded in positive psychology (Seligman and Csikszentmihalyi 2014), with attention on the "conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions" (Gable and Haidt 2005, p. 104), and not merely the completion of tasks, activities, and goals without regard for the overall well-being of the individual. As we shall see throughout this paper, Manz continues to be a leading scholar of self-leadership to this day.

The optimistic tone of self-leadership has generated a substantial stream of research literature in many applied fields. It could be said that in whatever line of work where people face daily hassles and tasks—which would basically include all lines of employment—self-leadership has been studied and applied to improve the nature of those professionals' work. In studying the previous two major reviews of self-leadership, as well as updating the literature for this article, the appeal of self-leadership can be found in its focus on the individual taking ownership of the subjective experience of the work they perform. While a person may feel less in control of how their organization or supervisor treats them, they can still improve their own satisfaction and performance in their work by taking ownership of the process by which they make the choices within their control. Thus, regardless of the quality of the organization or management for which a person works, their own subjective experience of their work can be enhanced with self-leadership.

Given this popular approach to leadership in the research literature, Christopher P. Neck (one of Manz's former doctoral students) along with Jeffrey D. Houghton (a former doctoral student of Neck's), published "Two Decades of Self-Leadership Theory and Research: Past Developments, Present Trends, and Future Possibilities," with the stated purpose of "including a historical overview of how the concept was created and expanded as well as a detailed look at more recent self-leadership research trends and directions" (Neck and Houghton 2006, p. 270). This article effectively documents the lineage of the self-leadership literature via the linkage of leading scholars (Manz, Neck, and Houghton) on the topic. In the following sections, we provide an overview of the leading topics and trends, and authors Neck and Houghton discovered at the twenty-year mark of the self-leadership field.

3.1. Topics

The 2006 review paper reported the following concepts within a variety of contexts in self-leadership research over the first twenty years of the field:

- Spirituality in the workplace (Neck and Milliman 1994)
- Performance appraisals (Neck et al. 1995)
- Organizational change (Neck 1996)
- Total quality management (Neck and Manz 1996b)
- Self-leading teams (Neck et al. 1996)
- Entrepreneurship (Neck et al. 1997a)
- Diversity management (Neck et al. 1997b)
- Job satisfaction (Houghton and Jinkerson 2004)
- Non-profit management (Neck et al. 1998)
- Goal setting/goal performance (Neck et al. 2003)
- The United States Army (Neck Christopher P. 1999)
- Team performance (Stewart and Barrick 2000)
- Team sustainability (Houghton et al. 2003)
- Ethics (VanSandt and Neck 2003)

As can be seen from the compilation of topics above, the scope of self-leadership was defined by Manz, Neck, and Houghton. While other authors contributed to these topics over the earlier years of self-leadership, it was done predominantly within this framework.

Looking to expand the field with the article, Neck and Houghton (2006) proposed a model of self-leadership based on theoretical contexts (self-regulation theory, social cognitive theory, intrinsic motivation, and self-control theory) and self-leadership strategies (behavior focused, natural reward, and constructive thought); influencing outcomes of improved individual, team, and organizational performance; and mediated by predictable outcomes/performance mechanisms (commitment, independence, creativity/innovation, psychological empowerment, trust, team potency positive affect, job satisfaction, self-efficacy).

3.2. Trends

Neck and Houghton (2006) reported the new directions self-leadership appeared to be headed. Intercultural and international research was documented, and as we shall see in this paper's coverage of the last decade has indeed took place. They also noted studies examining the generalizability and contingency aspects of self-leadership, which are both common trends in fields as they seek further legitimacy as a research concept. The paper concluded with the proposal of further research on an expanded topic of self-leadership called SuperLeadership, in which good self-leaders help others to develop strong self-leadership skills and mindsets (Manz and Sims 1989; Houghton et al. 2003). While SuperLeadership seems a natural extension of self-leadership as a way of training and developing others in organizations, our overview of the last ten years does not find it researched as such. Perhaps emphasizing the self in self-leadership, SuperLeadership has not found its grounding as an organizational topic, which offers opportunities for future researchers to do so.

4. 2010 Review of Self-Leadership

Thirty years after Manz published on self-management (Manz and Sims 1980), a precursor to self-leadership research, he co-wrote a review of self-leadership with Stewart et al. (2011). While the 2006 Neck and Houghton review provided an overview of topics and trends in self-leadership, the 2010 Stewart, Courtright, and Manz review examined findings of the performance of self-leadership at the individual-level and team-level. In "Self-leadership: A Multilevel Review" published in the *Journal of Management*, they found, "At the individual level, studies consistently show that increased self-leadership corresponds with better affective responses and improved work performance. Findings are not as consistent at the team level" (Stewart et al. 2011, p. 185). The review also categorized research on internal and external forces that influence self-leadership. While some of the topics were similar to the 2006 review paper, the 2010 paper provided additional forces that affect self-leadership. In the following section we provide those additional categories, as well as observations of trends and concerns not identified in the 2006 review.

4.1. Topics

As would be expected of a review only four years after the previous one, Stewart et al. (2011) categorized their paper by a different set of variables with an emphasis on whether the findings were significant at an individual or team level. Examples of the findings had many authors, suggesting that self-leadership was indeed finding a wider audience of researchers as it entered its third decade. The categories examined were:

- Productivity quality;
- Creativity and self-efficacy;
- Psychological empowerment and job satisfaction;
- Organizational commitment;
- Absenteeism;
- Turnover;
- Stress/anxiety;
- Career success.

Stewart et al. (2011) also examined the internal forces of individual- and team-level self-leadership, emphasizing the cognitive and emotional aspects of the topic. The following categories were given for capturing the research in the field on the internal forces:

- Intrinsic (natural) rewards (individual level);
- Thought self-leadership (individual level);
- Emotional regulation (individual level);
- Personality (individual level);
- Team composition (team level): cognitive ability and personality;
- Task characteristics (team level);
- Shared mental models (team level);
- Cohesion (team level);
- Conflict (team level).

Given internal forces, external forces of self-leadership was then covered, specifically as a complement to more recognized approaches of traditional external leadership. The authors note that professionals who practice exemplary self-leadership will also have an influence on the external leadership one has with others. Additionally, organizational factors will influence the practice of self-leadership as well. Again, an extensive list of example studies was given, evidencing further that self-leadership has received much attention from the research community. Categories examined in this line of research follows:

- Training (individual level);
- Leadership (individual level);
- National culture (individual level);
- External team leadership (team level);
- Reward systems (team level);
- Organizational structure/culture (team level);
- National culture (team level).

4.2. Trends

In summarizing their multi-level review of self-leadership, Courtright, Stewart, and Manz conclude that a 30-year lineage of articles confirms self-leadership beneficial at an individual level, but not as significant at the team level. Given the multi-level attention, the authors suggest future research examine the interplay between the internal and external forces of self-leadership. More cross-disciplinary work reflecting self-leadership and external leadership is also encouraged. The long and varied lists of topics given above from the 2006 and 2010 reviews demonstrate the wide scope of research in self-leadership over its first 30-years. These lists are included in this paper to provide the reader with an overview of research in self-leadership, as well as informing the review of literature on the topic over the last 10-years. In the next section, we provide a review of the fourth decade of research in self-leadership, and structure it based on the topics from the 2006 and 2010 reviews.

5. 2021 Review of Self-Leadership

The 2006 and 2010 reviews of self-leadership offered thorough overview of what had been researched on self-leadership in its first 30 years of study. We now turn our attention to the research covered on self-leadership since the 2010 review. If, as Stewart et al. (2011) claim, self-leadership has been reviewed up to its first thirty years of existence, the next section provides an overview of research on the subject up to its fourth decade. We utilize a combination of the categories studied in the previous reviews to examine the self-leadership literature over the last ten years. Considering that the self-leadership concept has been widely addressed over the past forty years, our systematic literature review was thorough and comprehensive. The databases for the identification of the studies included: (a) Business Source Complete (EBSCO); (b) Econlit; (c) ISI Web of Science; (d) Scopus; (e) ProQuest's ABI/Inform; (f) Elsevier Science Direct. We also reviewed various academic search outlets including Google Scholar and ResearchGate. Only peer-reviewed journal

articles published in English were included. We also provide a summary of recent trends we found in the research literature.

5.1. Previous Review Topics

Utilizing the categories for review of the self-leadership literature from the Neck and Houghton (2006) and Stewart et al. (2011), the following topics were covered in at least two publications:

5.1.1. Creativity/Innovation and Self-Efficacy

Thirteen articles were published on creativity/innovation and self-efficacy, with three of those publications having been cited over 50 times by other articles. The leading articles with 194 citations (Amundsen and Martinsen 2014), 77 citations (Pratoom and Savatsomboon 2012), and 58 citations (Ghosh 2015) present self-leadership as a factor in influencing creativity and innovation. Given that creative breakthroughs require persistence to endure the discovery and development process, which can include many iterations of trial and error, self-leadership skills and mindset can improve innovation performance. The importance of this theme to creativity and innovation is also reflected in having the highest count of articles in this current review. As such, self-leadership may become an explicit factor to be trained and taught to future creative professionals and innovators.

5.1.2. External Leadership

Eleven articles were published on external leadership topics, with two of those publications having been cited over 50 times by other articles. Self-leadership articles related to external leadership were devoted mainly to comparing and contrasting it with other forms of leadership. For example, the leading articles with 125 citations (Andressen et al. 2012) examined the relationship between self-leadership and transformational leadership and 140 citations (Furtner et al. 2013) expressed self-leadership as a complement to transformational, transactional, and laissez-faire leadership approaches. Essentially this category of articles addresses utilizing self-leadership as a way of improving overall leadership capability combining a balance of individual and larger organizational performance. This theme is to be expected at this stage of self-leadership's research tradition. The first decades were focused on establishing the concept, and as thus the theoretical foundations, definitional components, and training protocols are predominant in the early literature. As self-leadership has become more accepted in the research literature, the natural next step is to harmonize it with other more established and practiced leadership theories. Self-leadership as such is not a replacement for these approaches, according to the eleven articles in this topic area, but an enhancement to a professional's already existing leadership style.

5.1.3. Ethics

Seven articles were published on ethics-related topics, with four of those publications having been cited over 50 times by other articles. The leading articles with 144 citations (Steinbauer et al. 2014), 141 citations (Dion 2012), 118 citations (Pearce and Manz 2011), and 110 citations (Furtner et al. 2015), present self-leadership as a factor in improving ethical behavior and decision-making. The articles range from self-leadership as beneficial to the overall corporate social performance of a company, to addressing the "dark triad" that is sometimes present in executives, and to general better ethical decision-making. All three themes pertain to the individual focus of self-leadership, and how a process that considers the interaction of thought, behavior, and environment can lead to better contemplation of ethical dilemmas and decisions. Given the number of citations of these articles, we expect future researchers to explore the role self-leadership can play in ethics.

5.1.4. Psychological Empowerment and Job Satisfaction

Seven articles were published on psychological empowerment and job satisfaction, with none of those publications having been cited over 50 times by other articles. Psycho-

logical empowerment and job satisfaction were popular organizational behavior subjects for study in the previous reviews, but given the low number of citations of these current articles, researchers may be exploring self-leadership in new domains. In other words, psychological empowerment and job satisfaction may be generally accepted outcomes of self-leadership.

5.1.5. Stress/Anxiety

Seven articles were published on stress and anxiety, with three of those publications having been cited over 50 times by other articles. The leading articles with 142 citations (Houghton et al. 2012b), and 88 citations (Unsworth and Mason 2012) present self-leadership as a valuable process for preventing and managing stress. While environmental factors can place stress on a professional, recent literature confirms self-leadership as a pre-intervention, intervention, and coping process that can lessen stress and strain. In other words, self-leadership can serve as preventative to stress, an intervention when high stress occurs, and then as an ongoing practice for mitigating stress as it occurs. As we will cover later in this paper, many of the contexts of self-leadership studies are in high stress professions. Therefore, we expect stress to continue to be a relevant topic for future self-leadership research.

5.1.6. Emotional Regulation

Six articles were published on emotional regulation, with one of those publications having been cited over 50 times by other articles. Furtner et al. (2011) article was cited 63 times, and studied self-leadership as a process for improving socioemotional intelligence. Awareness and regulation of one's emotional state is better enhanced by a person who takes accountability of their thoughts and behaviors. Since self-leadership emphasizes that we can choose our thoughts and behaviors, emotions can be treated as a manageable phenomenon in a person's internal world.

5.1.7. Career Success

Four articles were published on career success, with none of those publications having been cited over 50 times by other articles. Again, a common theme as mentioned above, is the ownership a person who practices self-leadership takes with their life. Within that mindset and employing self-leadership practices, the articles propose that better career tracks are self-guided as well as based on outside opportunities. Also, given the stress of pursuing career opportunities, better stress management can improve a person's performance in interviews, new job orientation, and work performance—all of which contribute to better careers.

5.1.8. Entrepreneurship

Three articles were published on entrepreneurship, with none of those publications having been cited over 50 times by other articles. Perhaps the inclusion of entrepreneurship in the literature is due to its inclusion as a high stress profession. We would expect further study of self-leadership and entrepreneurship to be dependent on the growth of small business, startup, and entrepreneurship research. However, it should be noted that Christopher Neck and Mike Goldsby, two prominent researchers in self-leadership, have each published entrepreneurship textbooks and include self-leadership as an important process for entrepreneurs to master. We might expect the exposure of self-leadership in those textbooks to influence future papers in the fields.

5.1.9. Personality

Two articles were published on personality, with none of those publications having been cited over 50 times by other articles. These articles test for whether self-leadership varies by the personalities of the people practicing it. Based in the methodologies of indi-

vidual differences, the authors find results that suggest people will differ in how responsive they are to self-leadership, but that more research is needed to confirm the findings.

5.1.10. Spirituality in the Workplace

Two articles were published on self-leadership and spirituality in the workplace, with one of those publications having been cited over 50 times by other articles. One article had 113 citations by Houghton et al. (2016), and follow-up on research they had undertaken in a 2002 article. In the 2002 article, Krishnakumar and Neck proposed examining workplace spirituality from the individual and organizational levels. In doing so, they examined definitions and related organizational behavior subjects that emphasize well-being. In the 2016 article, they conclude that significant research had taken place on the topic in other fields, but that more examination of workplace spirituality is warranted in self-leadership studies.

5.1.11. Team Performance

Two articles were published on self-leadership and team performance, with none of those publications having been cited over 50 times by other articles. Perhaps, as with some of the other topics in our review that were more popular in the first three decades of study of entrepreneurship, application of self-leadership to team performance was one of the most heavily researched areas in the literature. It is possible that the link between self-leadership and team performance has been firmly established and scholars are examining new topics in the field.

5.1.12. Previous Topics with One Article

Productivity quality, organizational commitment, turnover, organizational change, self-leading teams, non-profit management, goal setting/goal performance, The United States Army, intrinsic (natural) rewards, training, managerial decision making, and individual leadership were topics that were featured in one self-leadership article each. Of those articles, only the topics of self-leading teams, individual leadership, and goal setting/goal performance were cited over 50 times by other publications. The higher frequency of citations of these three articles builds on their foundation as three of the most foundational principles of self-leadership. So, while the number of articles were not high, when those topics are published, they appear to be read and sourced by the field. In particular, the article on individual leadership performance (Breevaart et al. 2016) was cited by 173 publications, making it one of the more influential papers in this review. One major contribution of the article is the use of diaries to study the self-leadership practices of the participants, which enabled the researchers to examine more closely just how and when the self-leadership process was applied. Future researchers may find the use of diaries in studies worthwhile as well.

5.1.13. Previous Topics with No Articles

Absenteeism, psychological empowerment and job satisfaction, performance appraisals, total quality management, diversity management, team sustainability, succession planning, team composition: cognitive ability and personality, task characteristics, shared mental models, cohesion, conflict, reward systems, organizational structure/culture, and national culture were topics not found in a review of the last decade of research in self-leadership. Many of these topics were quite popular in the previous two reviews and may warrant re-examination by researchers in future research. However, new waves of interest occur in any field over time. In the following section we provide an overview of new topics in self-leadership that were published in articles over the last decade.

5.2. New Review Topics

Several new topics entered the research stream of self-leadership over the last decade. We utilize the previous typology to summarize these articles: topics covered by at least

two articles and topics that were only published in one article. The following new topics appeared in at least two articles:

5.2.1. Education-Specific

Thirteen articles were published specifically with the focus on applying self-leadership within an educational setting. None of these publications were cited over 50 times by other articles, but the frequency of these articles suggests that self-leadership is finding its way into classrooms and learning environments. The contexts of the papers ranged from undergraduate college students, nursing students, the U.S. Coast Guard Academy, and engineering students. Educators are utilizing self-leadership as a useful skillset and mindset for students to excel in the classroom and prepare them for their future careers.

5.2.2. Scale/Measurement

Ten articles were published on scale/measurement topics, with two of those publications having been cited over 50 times by other articles. Scale and measurement refinement is a sign of a concept that is entering a mature stage of its development. As more fields use self-leadership as an important process, adaptions in scales enable researchers to better (and often more easily) test new theories and contexts. One article of note is "The Abbreviated Self-Leadership Questionnaire (ASLQ): A More Concise Measure of Self-Leadership" by Houghton et al. (2012a), which has been cited 134 times since its publication. Shortening and validating the well-tested Revised Self-Leadership Questionnaire (Houghton and Neck 2002) with 801 citations is a major advancement in the self-leadership literature. The original SLQ was a powerful assessment, and now the ASLQ enables the scale to fit more concisely in surveys with other measures. Although not specifically a self-leadership subject, leadership empowerment is related in that it has the same theme of leadership skills of an individual's approach to their work. "Empowering Leadership: Construct Clarification, Conceptualization, and Validation of a New Scale" by Amundsen and Martinsen (2014) was cited by 274 publications. Leadership empowerment can assist self-leadership development by emphasizing the authority people within an organization can have over their work. As such, leadership empowerment, like self-leadership, is based on giving choice to individuals in how they decide to pursue their work goals.

5.2.3. Sales/Service Leadership

Four articles were published on sales/service leadership topics, with none of those publications having been cited over 50 times by other articles. With an emphasis on making sales and serving customers, we are not surprised to find this topic finding its way into the self-leadership, as these professionals face many of the same challenges as entrepreneurs who are in this review. This subject as a future research topic will vary by the activity in sales, entrepreneurship, and service professions in society and academia.

5.2.4. New Topics with One Article

Role rotation, work engagement, mindfulness, psychological capital, flow, experiential exercises, physical vitality, capacity building, childhood development, individualism/collectivism, engineering, language-related, project leadership, proactive personality, virtual R&D teams, and work/family conflict were topics that were featured in one self-leadership article each. Of those articles, none were cited over 50 times by other publications. Of course, given this is a review of articles over the last decade of self-leadership, many of these topics may be novel and receive more attention in the future by researchers.

5.3. Trends and Future Directions for Self-Leadership Research

In summary, the leading areas of research in self-leadership over the last decade are creativity/innovation, education, external leadership, scale/measurement, ethics, psychological empowerment and job satisfaction, stress/anxiety, and emotional regulation. We categorized topics and made conclusions and predictions of trends and future directions

based on the number count in these areas. These counts show increased attention on some topics that the 2006 and 2010 reviews did not predict. In this section we provide details of our observations and conclusions on those topics. The 2021 list evidences a research topic in its fourth decade. Scale refinement improves the scope and rigor of self-leadership studies. Articles incorporating and differentiating self-leadership with other leadership approaches advances the theoretical nature of the field. Application in educational settings encourages future practitioners and scholars to continue the practice and development of the subject. Finally, self-leadership brings benefit to important quality of life/work topics such as ethics, psychological empowerment and job satisfaction, stress/anxiety, and emotional regulation, and we expect that trend to continue in future research.

With regard to contexts, helping professions based on an ethic of care (Noddings 2013)—in which a professional places the quality of the relationships with customers, clients/patients, and students as the focus of their work—are popular in the current literature. Over the last decade 11 articles examined self-leadership within an educational setting, 4 articles within a sales/service leadership, and 13 articles within nursing. Helping occupations also often take place within stressful environments, where professionals can be under-resourced, face pressing deadlines and timelines, handle job-related expectations that may conflict with each other, and balance the demands of patients, clients, and students with administrations and upper management. We expect these fields to continue to publish on self-leadership, and we would expect other helping professions with demanding expectations such as police and firefighters, among many others, to adapt self-leadership to their jobs as well.

However, helping professions are not the only fields that can benefit from self-leadership. Self-leadership in its first two decades was established as an alternative and complement to other leadership styles. Yet, a concern for Stewart et al. (2019) is the ongoing practice of self-leadership by individuals with support from their organizations once training is completed. In other words, while studies may show positive pre-and post-results after leadership training, the longitudinal application of self-leadership must be given more emphasis in the literature. In "Self-Leadership: A Paradoxical Core of Organizational Behavior" published in the *Annual Review of Organizational Psychology and Organizational Behavior* and cited in 393 articles, Stewart et al. (2019, p. 415) state that, "Another critical factor related to self-leadership is the acknowledgement that facilitation is an ongoing process. One-shot training programs for either teams or individuals will almost always fail."

In the previous 2006 and 2010 review articles of self-leadership, the authors provided new models for furthering the success of the process. Heeding Stewart, Courtright, and Manz's call for approaches to facilitate ongoing development of self-leadership in organizations, we extend self-leadership in a new direction that we contend will expand the reach of the topic in management and leadership application. This review article for the special issue on self-leadership for *Administrative Sciences* proposes a model for enhancing the power of the topic. In the next section, we offer a new model we call "The Meta-Performance Model," which places self-leadership as a prominent process for improving performance outcomes with other popular professional training and methodologies. We believe by complementing existing performance programs with self-leadership, professionals can better the outcomes of those programs while also cementing self-leadership skills over time.

6. The Meta-Performance Model

The Meta-Performance Model (MPM) endeavors to enhance professional development by introducing self-leadership as a critical component for success application of the learnings from these programs. The authors of this paper have certifications in all the professional programs listed in this paper. We have observed that a major gap in these trainings are the final instructions on maintaining and developing what is taught in the multi-day workshops. A common wrap-up phrase in the final session is, "Now it's up to you to use this." However, while some follow-up is given with trainees, most of the

organizations turn their attention to the next class rosters going through the training. The training organizations to their credit hold additional higher-level training, but even in these groups there are participants who seem more practiced than others in the frequency of their application between workshops. We conclude that what the training organizations' instructions are hinting at is self-leadership, although it is not expressed as such. In other words, leading oneself to practice and develop skills taught in the workshops. We contend that those who complete professional training programs would benefit from also being skilled in the best practices of self-leadership. Consider the impact on workplaces if the millions of professionals who attend such workshops also were trained in self-leadership. For example, 20,000,000 people have assessed their talents with Gallup StrengthsFinder, 100,000 have been trained in the Basadur Creative Problem Solving Process, and 100,000 have been trained in FourSight Innovation. As certified professionals of Gallup, Basadur, FourSight, and the other programs in Table 1, we have recognized the difference training in self-leadership (and time management) have on performance outcomes. For that reason, MPM places self-leadership as a moderator to other professional improvement programs and their intended outcomes (see Figure 1). In other words, as a professional enhances their self-leadership skills, they also maintain and develop the learnings in the other professional programs.
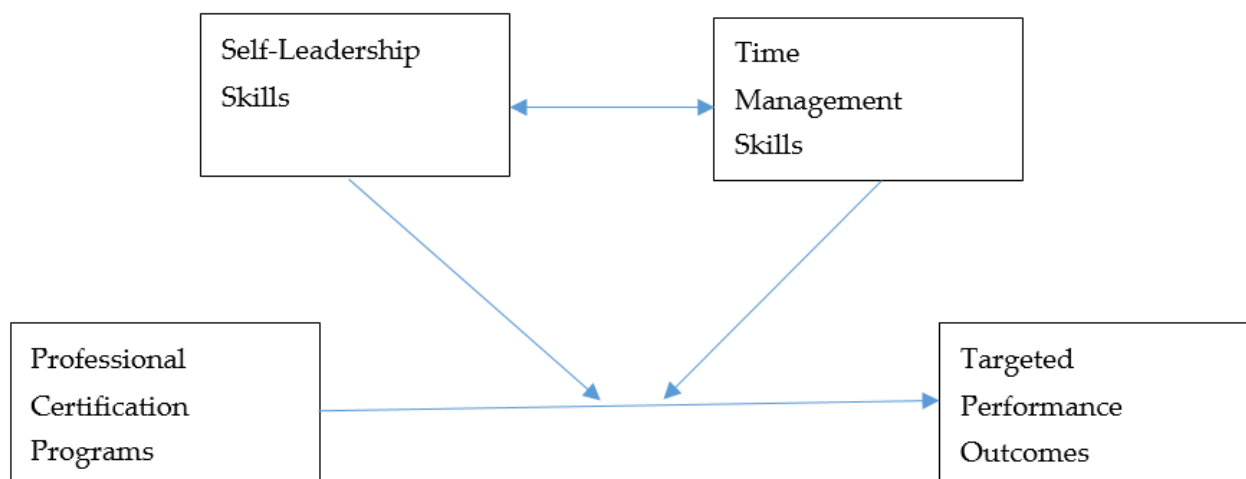

Figure 1. The Meta-Performance Model (MPM).

Professional improvement programs, by nature tend to be stand alone. They also often lack long-term influence over the individual unless they are part of a more involved self-leadership regimen and/or combined with organizational reinforcement. Individuals who focus on a holistic, meta-performance approach using a variety of the leading training and enrichment programs not only enhance their self-leadership development, but also their overall leadership performance across all levels, including individual, team, organizational, and societal. Furthermore, those who add the discipline of revisiting and reinforcing the collective principles learned in such training programs (whether individually and/or organizationally induced) to their already-existing self-leadership practices can realize strong gains in key leadership performance metrics. This meta-performance model asserts that individuals need a variety of inputs and disciplines to better inform their self-leadership growth, and, thus, their overall leadership performance. Professional improvement training programs can have a significant influence on an individual's self-leadership efforts by offering more opportunities to improve individual performance.

Table 1. Professional certification programs.

Program	Provider	Offerings	Philosophy	Certifications	Outcomes	Ongoing Commitment
CliftonStrengths (formerly StrengthsFinder)	Gallup	2-day, 3-day, or 5-day certifications	Positive psychology around psychological talent development	• Successful strengths coaching • Coaching for individuals, managers, and teams • Global Strengths Coach • Advanced Strengths Coaching	• Understanding talent personal development • Pointing talent towards goals • Coaching talent in others	• Deliberate practice of talents • Talent spotting in others • Recertification every two years
Builder Profile-10	Gallup	2-day certification	Builder or entrepreneurial talent development	Coaching Builder Talents	• Understanding builder and entrepreneurial talents • Personal development • Hiring and placement • Pointing talent towards business goals • Coaching talent in others	• Deliberate practice of talents • Talent spotting in others
Q12 Engagement	Gallup	2-day certification		• Leading High Performance Teams • Engagement Champions	• Understanding of the 12 elements of engagement • Critical examination of leadership practices around engagement	• Deliberate practice of engagement practices • Self-assessment of personal engagement
Basadur Innovation	Basadur Applied Innovation	Self-paced online, 4-hour, 2-day, 3-day, or 5-day certifications	Innovation styles and process	• Basadur Profile • Simplexity Process Level 1 • Simplexity Process Level 2 • Simplexity Process Level 3 • Simplexity Process Level 4 • Professional Innovation Advisor	• Understanding creative style differences • Understanding creative process • Executing creative process • Aspirational language	• Profile use • Following the process • Use of aspirational language • Use of process tools

Table 1. *Cont.*

Program	Provider	Offerings	Philosophy	Certifications	Outcomes	Ongoing Commitment
FourSight	FourSight Innovation	Self-paced, 2-day, or 4-day certifications	Innovation preferences, tools, and process	• FourSight Mindset • FourSight Tools	• Understanding creative preferences • Understanding the basic creative process • Executing basic creative process	• Profile use • Process use • Tools use
Everything DiSC	Wiley	2-day certification	Communication and conflict style	Everything DiSC	• Understanding communication and conflict differences • Understanding potential conflicts based on style	• Analysis of personal conflicts • Analysis of differences among relationships
Myers Briggs Type Indicator	Myers Briggs Foundation	5-day certification	Personality dimensions	Myers Briggs (other related trainings available as well)	• Understanding personal your personality decision-making • Understand personal behaviors • Relate your personality to others	• Analysis of personal conflicts • Analysis of differences among relationships
IDEO	IDEOU	Self-paced and 5-week courses	Design thinking	15 online courses and 6 certifications	• Applied creativity tools • Market feedback techniques • Design principles	• Use of tools • Use of processes • User engagement
LEGO® Serious Play®	LEGO® Strategic Play	2-day, 3-day, and 4-day certifications	Design Process and Visual Storytelling	Several applied (i.e., strategy, design thinking, problem solving, communication) and custom certifications	• Design process • Virtual storytelling • Experiential/tactile learning	• Follow session guidelines • Build and storytell

It should be noted that the authors hold certifications in all these programs and can attest that little guidance is given to trainees in developing habits to practice and develop learnings over the long term. The professional certification programs typically hold an afternoon session on the final day of a multi-day schedule with a general message of: "Now it's up to you to continue your development." Although short-term coaching and website support are often provided on the topics of the courses, little guidance is given for *how* to continue applying the learnings over time. Our observation of people who complete these professional improvement programs is that most people do not continue practicing what they learn after they go back to their jobs. However, those who practice strong self-leadership ability incorporate the training better into their work and lives. Therefore, we propose self-leadership training is a natural complement to other professional improvement programs, in order that more leaders actually develop the skills taught in those workshops. In the following section, we cover the leading professional improvement programs that confer certifications to participants who complete official training (see Table 1). Then, we describe self-leadership training approaches.

6.1. Professional Certifications Program

6.1.1. Gallup Suite of Talent Development and Performance Management Tools

The Gallup Corporation offers a variety of proven talent development, employee engagement, performance management, hiring, and placement tools. This integrated suite of assessments, surveys, research, and coaching tools provide leaders with the opportunity to better understand themselves and those with whom they work.

1. Gallup's CliftonStrengths; Donald Clifton developed CliftonStrengths (formerly StrengthsFinder) after decades of intense grounded theory research with tens of thousands of subjects on psychological talent. Gallup migrated the assessment to an online in 2003 and has refined the tool, which measures and ranks 34 talents (Rath 2007), over the last 18 years. Today more than 24 million people have taken the online assessment (Gallup 2021). CliftonStrengths measures how individuals naturally think, feel, and behave, and gives those trained in the philosophy insights on how to leverage and further develop their psychological talents and manage or work around their weaknesses (lesser talents). The Gallup strengths training program and paradigm strongly aligns with the positive psychology approach of self-leadership. Gallup strengths training helps the individual discover, own, and point the ways in which they naturally think, feel, and behave towards their goals. This approach can positively contribute to key areas of self-leadership development, such as creativity and innovation, external leadership, psychological empowerment and job satisfaction, stress and anxiety, and emotional regulation. When people live and work in the ways best suited to them, they are more fulfilled, lead better, and enjoy stronger relationships (Rath and Conchie 2008). Participants in Gallup strengths training are encouraged to own, develop, and aim their top talents toward their goals. Finally, Gallup (2017) has also aggressively addressed the education facet of self-leadership research by providing education-specific tools that can be used by school systems and educators to drive self-leadership in middle school, high school, and college students.

2. Gallup's Builder Profile-10; Gallup's Builder Profile-10 (BP-10) measures and ranks one's builder talents. Gallup scientists validated the instrument in multiple studies of entrepreneurs and corporate builders. It can be a strong predictor of role performance, as certified coaches can request an insight report that provides an individual's score in each of the 10 talent areas, role type, and overall against the general population and alpha (top quartile) builders/entrepreneurs. Those trained in this science develop a deep understanding of the best roles to pursue and what duties they should strongly consider delegating to others. Thus, BP-10 pairs well with self-leadership efforts, as it enhances external leadership, scale and measurement, psychological empowerment and job satisfaction, stress and anxiety, and emotional regulation efforts. Participants

       are encouraged to own and develop their top builder talents and apply them towards their role responsibilities and career goals (Clifton and Badal 2018).

3.   Gallup's Q12 employee engagement tools; Finally, Gallup's Q12 survey measures employee engagement. The Q12 tool has been used by over 100 million people, as many leading corporations and non-profit organizations in the U.S. and abroad use the tool. Leaders trained in Gallup's engagement science learn not only what motivates them to be engaged in their work, but also how to better engage their employees. This complements self-leadership areas of creativity and innovation, external leadership, scale/measurement, ethics, psychological empowerment and job satisfaction, stress and anxiety, and emotional regulation. High Schools and universities also use BP-10 in team building and talent development (Gallup 2016; Clifton and Harter 2019). Participants are asked to consider their relationships and behaviors as a leader, and how those behaviors impact personal and employee engagement. Gallup (2017) also offers a student engagement survey to high schools and higher education institutions, which addresses the education aspect of self-leadership.

6.1.2. Creativity, Innovation, and Problem Solving Assessments and Process Training Tools

Two of the leading creativity, innovation, and problem solving programs come from Basadur Applied Innovation and FourSight Innovation. With a strong empirical foundation, both organizations offer an assessment tool and various levels of creative process training. Both programs are strong influencers of the creativity and innovation, external leadership, psychological empowerment and job satisfaction, stress and anxiety, and emotional regulation facets of self-leadership. In addition, both tools are widely used in higher education and by many leading companies in the U.S. and globally. Participants in these programs are encouraged to improve the steps they take to solve problems and pursue opportunities, and to own and understand their unique creative styles.

1.   Basadur Applied Innovation; The Basadur Profile is a four-quadrant model that graphs an individual's preferences in how they acquire information (direct experiencing versus detached abstract thinking) and what they do (ideate versus evaluate) with that information to determine one of four styles: Generator, conceptualizer, optimizer, and implementer. Team preferences can be plotted on the same graph, providing useful team analysis (Basadur and Finkbeiner 1985; Basadur et al. 1990; Basadur and Gelade 2003; Basadur et al. 2016). Basadur also offers a team Innovation Quotient (InQ) survey tool that provides insights into individual and team strengths and deficiencies related to creativity, innovation, and problem-solving skills and behaviors. Basadur Applied Innovation offers four levels training and certification in its 8-step creative process (Basadur et al. 2013).

2.   FourSight Innovation; FourSight Innovation offers the FourSight Profile, which measures one's preference for each of the four universal creative process steps (clarifier, ideator, developer, or implementer) plotted on a horizontal line in the categories of high preference, neutral, or low preference (Puccio and Acar 2015). FourSight offers training and certification on the profile (mindset) and process (toolset). Educators use FourSight principles in their classrooms as well (e.g., Guark-Ozdemir et al. 2019).

6.1.3. Personality Assessments and Training Programs

There are a variety of assessment tools on the market that offer training and certification programs. DISC and Myers Briggs Type Indicator (MBTI) are two of the most popular and widely used of those assessment tools. While there are many variants of DISC and MBTI, the most common are Everything DiSC offered by the Wiley Corporation and MBTI by the Myers Briggs Foundation and Elevate. Training and certification in these tools help individuals enhance their self-leadership journey by addressing creativity and innovation, external leadership, psychological empowerment and job satisfaction, stress and anxiety, and emotional regulation. Participants are asked to consider their own personalities and how those affect their decisions, behaviors, and relationships.

1. Everything DiSC Assessment and Training; The Wiley Corporation offers assessment training and certification on its version of DiSC. It is a four-quadrant model that measures active versus thoughtful and accepting versus questioning to arrive at four communication and conflict styles: Dominance, influence, steadiness, and conscientiousness (e.g., Sugerman 2009).

2. MBTI Assessment and Training; The Myers Briggs Foundation conducts training and certification on the MBTI assessment and suite of tools. MBTI is a personality assessment that measures the four aspect of personality in dichotomies: How one receives energy, how one takes in information, how one makes decisions, and how one responds to the outside world. This results in one of 16 personality types that are expressed by a combination of four letters (e.g., Sethuraman and Suresh 2014).

6.1.4. Design Thinking Training

Several universities and companies offer design thinking or related training and certifications. These programs help participants learn to design anything in their work or personal lives. Top design firm, IDEO, and LEGO® SERIOUS PLAY® offer some of the most robust training programs in this area that include a variety of stackable courses towards certifications. Design courses like these empower participants to learn the particulars of imagining, prototyping, garnering feedback on, and selling their own life adventures as well as their work-related projects. These programs address the creativity and innovation, education, external leadership, scale and measurement, ethics, psychological empowerment and job satisfaction, and stress and anxiety aspects of self-leadership.

1. IDEO; IDEO offers 15 online courses and six certificate programs in design thinking, as well as onsite programs. These offerings promote an immersive, experiential learning journey that is both flexible and stackable. IDEO's overarching promise is that participants will move from simply learning design principles to practicing and executing them. IDEO principles are also readily used in the top design thinking programs in higher education. Participant are tasked with rethinking how they approach the design of new ideas, how they involve other people, and how they validate their creative endeavors (Kelly 2016).

2. LEGO; Aspiring leaders can earn certification in LEGO® SERIOUS PLAY® facilitation methods from global master trainers in a variety of applications. This training focuses on authentic storytelling through objects (LEGO). Participants learn to remove design barriers and focus on what stories they want to tell. In addition, educators use LEGO® SERIOUS PLAY® in their classrooms for a variety of purposes, including leadership development, creativity, design, storytelling, and entrepreneurship, among others. Participant are encouraged to use object in storytelling to enhance their authenticity and remove traditional social barriers associated with leader vulnerability (e.g., Dann 2018; James 2013; McCusker 2014).

While the above is not by any means an exhaustive list of self-help programs available, it is a strong representation of some of the more widely used options. These programs and others can strongly enhance and influence the key tenets of effective self-leadership practices.

6.2. Self-Leadership Training

In the MPM, we propose self-leadership training as a process for enhancing individual performance of those taking professional improvement programs. In other words, we contend that self-leadership is a moderator of professional improvement programs and individual performance. Without strong self-leadership skills, a personal cannot take full advantage of what is taught in certified professional training programs. As with other individual performance areas, self-leadership skills can also be enhanced with training. A plethora of studies have used a training-based research design to study the efficacy of self-leadership training. Specifically, these studies have examined how self- leadership training involving various self-leadership processes influences employees. These studies

(Frayne and Geringer 2000; Frayne and Latham 1987; Godat and Brigham 1999; Latham and Frayne 1989; Neck and Manz 1996a) provide empirical evidence for self-leadership "as a set of control strategies that can be taught to increase self-leadership practice and subsequent employee productivity" (Stewart et al. 2011).

Self-leadership training encompasses pre- and post-testing of participants with the Self-Leadership Questionnaire or Abbreviated Self-Leadership Questionnaire. Individuals and organizations can also complement the SLQ/ASLQ with other performance measures of interest, in order to further study the impact of self-leadership training. Training includes exercises for developing self-leadership skills in participants, such as a Cues Exercise (reminders, attention focusers, and negative cue removal), Self-Observation Checklist (frequency and duration of behaviors participant wants to increase or decrease, conditions, record keeping), Self-Goal Setting Exercise (long-term goals, goals for developing abilities to reach long-term goals, and short-term goals), Self-Reward Checklist (positive rewards that support self-motivation), Self-Punishment Checklist (identification and removal of self-punitive tendencies and actions), Natural Rewards Exercise (building naturally enjoyable activities into tasks), Majestic Moments Exercise (naturally rewarding work), Negative Self-Talk Exercise (identifying and changing negative self-talk), Beliefs Exercise (identifying and changing destructive beliefs), Imagined Experience Exercise (positive mental practice), and Thinking Patterns Exercise (opportunity thinking versus obstacle thinking) (Neck et al. 2019).

6.3. Time Management Training Program

In the MPM, we propose time management correlates with self-leadership ability as well as serving as another moderator to the professional certification programs and their outcomes. In other words, strong self-leadership skills enhance time management and time management enhances the application of self-leadership. Correspondingly, time management will also enhance the efficacy of professional certification programs. Thus, those holding certifications in a professional program will maintain and practice training better with the development of self-leadership and time management skills.

Based on a review of time management literature Claessens et al. (2007) suggest the definition "behaviors that aim at achieving an effective use of time while performing certain goal-directed activities" pg. 262. Since the focus is on goal-directed activities that are accomplished in a manner that implies successful use of time, the following behaviors are included in their definition: (1) Time Assessment Behaviors-focusing on mindfulness of the past, present and future with self-awareness of time usage that are to be accomplished within the boundaries of one's abilities (Kaufman et al. 1991) and self-awareness of time handling which aid to take on tasks that suitably fit into one's abilities; (2) Planning Behaviors-with the goal of effective use of time, that include goal setting, development, prioritizing, formulating a to-do-list, and arranging tasks (Macan 1996); and (3) Monitoring Behaviors-with the objective of attending to how time is allotted, engaging in undertakings, and formulating a feedback loop that limits the impact of the disturbances by others (Fox and Dwyer 1996). Many of these practices complement and reflect self-leadership well.

A good starting point for professionals new to time management is the book, *Getting Things Done: The Art of Stress-Free Productivity*, by Allen (2015). Allen observes that most people struggle with achieving their goals because of cluttered minds. Most people have too much going on in their minds, and as a result, they are not able to put their attention on what needs to be done. He likens the condition to a computer with multiple applications and windows open on the desktop. The more programs open on a computer, the slower the computer. Sometimes it even locks up. He contends it happens to people too. Allen warns that any undone task that you wish were done is lying in the subconscious waiting to be addressed. As long as it remains undone, it operates like an open loop, which takes attention away from the task at hand. This lack of focus, in turn, leads to work taking longer to accomplish and with less effectiveness. The best work occurs when the mind is clear and focused on what it is doing. So how do we close those loops operating under the

surface of our consciousness? Allen instructs a person to take a sheet of paper and set aside 15 min to write down everything they can think of that they would like to get done. It does not matter if it is a big life-changing goal or a tiny task. Write it down. Allen's point is that if something came to your mind over that 15-min period that means it was an open loop in your subconscious waiting to be closed. It is an item that you are concerned enough about that your brain does not want you to forget it. Therefore, your brain is not operating at its full capacity because it is spending some of its bandwidth keeping track of all these undone tasks and goals. Allen provides weekly exercises for better prioritizing, organizing, and completing tasks and making progress toward completion of critical work and goals. We contend that a time management program such as Allen's brings an even higher level of self-leadership efficacy by refining the time dimension of the practice. In turn, with the growth of professional certifications and licenses, participants will better achieve their desired outcomes and goals by developing self-leadership and time management ability.

7. Discussion

This paper reviewed the last decade of self-leadership research. Marking the fourth decade of self-leadership (including the subset of self-management research), we utilized categories from the two previous reviews of the field. "Two Decades of Self-Leadership Theory and Research: Past Developments, Present Trends, and Future Possibilities" by Neck and Houghton (2006) examined the theoretical and contextual work in self-leadership. "Self-Leadership: A Multilevel Review" by Stewart et al. (2011) concentrated on the work of most of the Neck and Houghton categorization with the added dimension of individual versus team foci. In summary, we observed that categories of study in self-leadership evolved over the four decades of research, as would be expected as a domain matures and society changes. We discovered the most researched categories over the last decade are creativity/innovation, education, external leadership, scale/measurement, ethics, psychological empowerment and job satisfaction, stress/anxiety, and emotional regulation. With regard to contexts, studies on customers, clients/patients, and students were most prevalent in the self-leadership literature.

In keeping with the practice of the 2006 and 2010 review papers, we offered a new model, the Meta-Performance Model, as a framework for future research and practice in self-leadership in concert with existing professional development certification programs. Taking our lead from "Self-Leadership: A Paradoxical Core of Organizational Behavior" by Stewart et al. (2019), we extend self-leadership to other management and leadership applications. We believe by complementing existing performance programs with self-leadership, professionals can better the outcomes of those programs while also cementing self-leadership and time management skills over time. Future researchers and practitioners will determine the efficacy of MPM. Limitations of this paper are confined to our judgment of what constitutes new categories in the self-leadership literature, as well as our proposal that MPM will improve the performance outcomes of professional training programs that have been completed by millions of workshop attendees. We contend that categorizing with a similar approach as the 2006 and 2010 reviews were undertaken increases the validity of the review in this paper. Additionally, as participants who have completed and been certified in the listed professional programs and also as scholars and teachers of self-leadership, we maintain that future attendees would benefit from systematic application of MPM. Given that the 2006 and 2010 reviews proposed models for new directions in self-leadership, we believe our experience and research warrants consideration of MPM. However, regardless of the accuracy of this prediction, we are confident that given the findings we offer in this review of the fourth decade of self-leadership research, the field will continue to have a prominent role in improving individual, team, and organizational performance.

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