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## Article

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## Article

# The Multiple Advantages of Self-Leadership in Higher Education: The Role of Health-Promoting Self-Leadership among Executive MBA Students

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**Abstract:** The purpose of this conceptual and explorative study is to document the advantages of health-promoting self-leadership practice. Professional certification programs are criticized due to a lack of practice among participants, involvement, and short duration. This study is based on self-leadership practices over several weeks of two executive MBA student classes from spring 2020 and 2021. A preliminary theoretical framework is developed suggesting that health-promoting self-leadership, which includes three orientations, has an impact on self-efficacy, mental fitness, and performance. Two different self-leadership classes with managers from the public and private sectors went through a self-development process as a semester project. The content analyses of 112 student reports unfolded students' self-development processes and results identified in diaries, notes, tables, training schedules, and reflections. The findings, based on two different samples and aggregated data, support the theoretical framework. Moreover, the processes of self-development and self-leadership seem to be advantageous for almost all managers. The health-promoting self-leadership practice improved managers' mental and physical fitness, energy balance, self-efficacy beliefs, and performance. These outcomes were achieved through physical activity, self-talk, meditative exercises, reward systems, visualizing, diet programs, and routines. The findings underscore the importance of self-development processes amongst managers, and that health-promoting self-leadership courses should last over several weeks.

**Keywords:** health promoting self-leadership; self-development process; value- and behavior-oriented self-leadership; self-efficacy- and energy-oriented self-leadership; mental fitness; performance



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## 1. Introduction

Ford et al. (2011) state that poor health can cause a significant reduction in work performance. Therefore, health promotion measures should have positive impacts on coping and performance, which are two essential aspects of self-leadership (Amundsen and Martinsen 2015; Neck and Houghton 2006; Stewart et al. 2011). Goldsby et al. (2021) argue that self-leadership should extend beyond merely completing tasks and achieving objectives. One suggested focus is on an individual's well-being. Thus, it could be argued that self-leadership serves as a self-development tool that can also be applied to improve people's health. One national measure to combat the COVID-19 pandemic was instructing organizations to implement home offices (Von Gaudecker et al. 2020), even though research on possible negative health effects was lacking (Fadinger and Schymik 2020). Preventive measures are defined as the most effective means of hindering the rise of lifestyle diseases (Sturm and An 2014). Additionally, preventive measures to develop health resilience represent a positive psychological approach (Gable and Haidt 2005).

Manz (2015) proposed a "self-leadership high road" with the intention of elevating self-leadership practice and self-influence processes to a higher level by focusing on improved authenticity, personal responsibility, and capacity. Authenticity concerns the why and what of self-influence. Responsibility is analogous to corporate social responsibility but

at an individual level. Capacity addresses how to harness self-leadership potential to enhance, among other things, authenticity, and responsibility, as well as self-influence over emotions, health, and fitness. Goldsby et al. (2021) review the self-leadership research published in recent decades and propose the Meta-Performance Model, which centers around self-leadership as a toolkit for enhancing the individual performance of leaders. They suggest integrating self-leadership training, which aims at improving skills and undertaking preventive measures to reduce stress, with other professional development programs offered by professional certification bodies.

In the educational sphere, self-leadership has been linked to improved stress coping and academic success among students. Houghton et al. (2024) referred to the recent self-leadership research and emphasized the importance of emotional intelligence and self-leadership in helping students manage stress more effectively, which is crucial for academic achievement, especially in challenging environments. Sampl et al. (2017) demonstrated through a randomized controlled trial that combining mindfulness with self-leadership strategies effectively reduces student test anxiety, stabilizes stress levels, and improves mood and academic performance. Furthermore, research by Maykrantz and Houghton (2020) revealed that self-leadership practices among college students can reduce stress, and they demonstrated that coping skills could function as a moderator on student stress.

To date, the literature on self-leadership in the education domain still lacks research on how managers address self-leadership aspects such as authenticity, responsibility, capacity, and in particular well-being and health issues. The existing studies suggest that self-leadership may enable students to enhance self-efficacy, performance, mood, well-being, and overall life mastery, as well as reduce stress. The purpose of this study is to document the multifaceted value creation of self-leadership practices among managers and to argue that self-leadership programs should be integrated into higher education curricula. As part of a course in self-leadership during the pandemic, managers participating in an executive MBA program were instructed to undertake a five-step self-development process as a semester project (home exam). At an aggregate level, the research aim is to investigate the managers' self-development processes and to seek support for the proposed conceptual model.

## 2. Literature Review

### 2.1. Self-Leadership

In this theoretical section, the essence of self-leadership is explained, particularly how we can use ourselves as a tool to influence our thoughts and actions. It is argued that self-leadership can be divided into three orientations, which together constitute health-promoting self-leadership. Furthermore, the theory links these three orientations to mental fitness and emphasizes the importance of physical activity.

Manz (1986) describes self-leadership as a process aimed at individuals controlling their own behavior by influencing and leading themselves. Coping and coping beliefs were early identified as central to self-leadership (Manz 1986; Neck and Houghton 2006), focusing on the belief in one's own ability to learn or perform (Bandura 1986, 1997). Self-leadership involves influencing oneself to enhance motivation, execution, performance, coping, achievement, and life direction (Amundsen and Martinsen 2015; D'Intino et al. 2007; Manz 1986; Neck and Houghton 2006; Stewart et al. 2011), where tools such as self-talk, visualization, and cognitive strategies are effective (Neck and Manz 1992). The concept of self-leadership was linked to managers and employees in the workplace starting from the 1990s and 2000s (Neck and Houghton 2006). Amundsen and Martinsen (2015) associate self-leadership in the workplace with job satisfaction, effort, and creativity. Personality traits can also play a significant role in an individual's predisposition to be a natural self-leader, although self-leadership skills can be learned and developed through practice (D'Intino et al. 2007).

There are essentially three strategy categories within self-leadership that are generally linked to achieving a self-defined goal (Neck and Houghton 2006). Behavioral strategies, such as self-observation and routine changes, can promote feelings of self-determination

and competence. Natural reward strategies involve providing oneself with rewards for achieving goals, which can strengthen feelings of meaning, competence, and self-control. Cognitive strategies, such as visualization, self-talk (Neck and Manz 1992), and the development of growth-oriented thinking (Tat and Zeitel-Bank 2013), are also critical. Sesen et al. (2017) conducted a field study involving 440 primary school teachers and found that self-leadership behaviors significantly impact job satisfaction, organizational commitment, and innovation, with self-observation and thought activities related to natural rewards being the most significant tools. Additionally, Houghton et al. (2024) refer to their previously developed conceptual model (Houghton et al. 2012), which is supported by empirical research in the last years. They highlight the importance of integrating emotional regulation and self-leadership interventions in management education. In this study, the existing theory is challenged by theorizing what health-promoting self-leadership might involve and whether the three underlying orientations, explained below, can be supported by collected empirical evidence.

## 2.2. Value- and Behaviour-Oriented Self-Leadership

Personal values can be linked to authenticity and virtue (Manz 2015) and are often seen as the guiding principles in our lives (Schwartz 1992). Our attitudes, opinions, beliefs, and behaviors are frequently governed by these values, with which we may have a conscious or unconscious relationship (Ind and Bjerke 2007; Schwartz 1992). Shared values can also foster a sense of togetherness and common identity (Ind and Bjerke 2007). Zhao and Wang (2024) documented that students generally demonstrated strong self-leadership qualities, particularly in value selection and self-perception. Value selection is about value rationality, where a set of values function as a moral compass, crucial for guiding the development of students. Bryant and Kazan (2013) maintained that self-leadership encompasses a seamless integration of personal values with a greater sense of social responsibility.

“Healthy” is one of the fifty-six universal values identified in the study by Schwartz (1992), which is based on a cross-cultural investigation to identify terminal and instrumental universal values. Examples of instrumental values include being healthy, environmentally conscious, and influential. Living out these three values can support the terminal value of finding meaning in life. The value of health also encompasses taking responsibility for the well-being of the world and the surrounding environment (specific values include a beautiful world, peace in the world, and environmental consciousness) (Schwartz 1992), which can be linked to responsibility (Manz 2015). Thus, health-promoting self-leadership also involves the individual as a relationship builder and citizen with greater social responsibility, as emphasized by value- and behavior-oriented self-leadership. Values such as health, honesty, respect, and friendship (Schwartz 1992) can be utilized in a self-evaluation process aimed at becoming aware of one’s values and how they can be translated into value-based behavior. Furthermore, socialization is the most important explanatory variable behind longevity (Holt-Lunstad et al. 2015) and can be connected to values such as a sense of belonging, respect for traditions, a safe family life, social recognition, true friendship, and enjoying life (Schwartz 1992). The link between values and behavior supports the concept of value- and behavior-oriented self-leadership.

## 2.3. Self-Efficacy-Oriented Self-Leadership

According to Manz (1986), a primary goal of self-leadership strategies is to strengthen self-efficacy beliefs. Self-efficacy beliefs concern whether an individual believes they have the necessary capabilities to carry out a task (Neck and Houghton 2006). Neck and Houghton (2006) reference several contexts where the concept of self-leadership has been studied. For example, Neck and Manz (1996) found that in a workplace setting, the group that received training in self-leadership strategies became significantly more effective compared to the control group that did not receive such training. Therefore, the practice of self-leadership in the workplace may enhance self-efficacy, leading to improved performance (Prussia et al. 1998).

Amundsen and Martinsen (2015) explored the application of self-leadership among entrepreneurs and identified two main areas: (1) performance orientation, which includes self-objective setting, focus on new ideas, competence development, collaboration, coordination, self-observation, and positive internal dialog; (2) self-leadership, which involves task prioritization, facilitating working conditions, self-reward, practice, self-observation, and the visualization of outcomes. Rigotti et al. (2008) validated a short version of a scale that measures coping beliefs across five countries, consisting of six questions related to objective attainment, trust in one's abilities, and solution orientation. Şahin and Gülşen (2022) found that self-leadership serves as a partial mediator in the relationship between the satisfaction of basic psychological needs, academic self-efficacy, and career adaptability. Based on the data collected from 256 operational employees, Boonyarit (2023) revealed positive associations between self-leadership and factors such as taking charge, individual innovation, psychological empowerment, and self-efficacy. The literature emphasizes self-efficacy, particularly in relation to self-regulation and performance orientation, as a critical theme in self-leadership, thereby legitimizing a self-efficacy-oriented approach to self-leadership.

#### 2.4. Energy-Oriented Self-Leadership

Neck et al. (2023) examined the paradox of self-leadership strategies in the context of work pressure and its impact on stress, negative affect, and performance. The findings indicate that while behavioral self-leadership strategies are effective for improving task-based performance, they are less effective under high work pressure compared to cognitive strategies. Crayne and Brawley Newlin (2024) examined its impact on rideshare gig workers, finding that while self-leadership contributes to success and job satisfaction, it also raises the risk of burnout and turnover, especially under high-stress conditions. Similarly, Junça Silva et al. (2024) found that self-leadership enhances personal effectiveness and productivity by enabling individuals to regulate their behavioral and set specific goals. However, they also noted that at higher levels, self-leadership could lead to emotional exhaustion, thus becoming counterproductive and potentially detrimental to mental health. Therefore, there is a need to understand how self-leadership can be used to boost the energy level as an appropriate tool under high-stress conditions.

Employee stress depletes energy, making it difficult to engage in positive behaviors and maintain performance (Golparvar et al. 2012; Mitchell et al. 2019). Additionally, it becomes challenging to position oneself to participate in larger societal tasks that extend beyond the self, which Manz (2015) suggests is important. Goldsby et al. (2021) summarized the self-leadership literature by stating that self-leadership practices primarily function as pre-intervention, intervention, and coping processes that can reduce stress. Physical activity and exercise are undoubtedly vital sources of energy and can be linked to the value of health. Lovelace et al. (2007) highlighted several energy and health benefits that managers can achieve through physical activity: the development of good physical, psychological, and social resilience; strengthening of endurance and mental focus; and recovery of performance efficiency. Fritz et al. (2011) investigated how knowledge workers manage energizing strategies in the workplace. Of the non-work-related strategies, only meditation was found to be energizing. Work-related strategies linked to learning, enhancing the meaningfulness of work, and fostering positive workplace relationships (socialization) provided employees with vitality.

Positive relationships at work provide energy both physically and emotionally, creating immediate and lasting effects on an individual's heart, immune system, and neuroendocrine systems (Heaphy and Dutton 2008). Caring interactions with others are associated with increased energy at work (Shraga and Shirom 2009). Some of this energy can be shared with others, thereby enhancing one's own energy and job performance (Baker et al. 2003). Krampitz et al. (2023) highlighted the effectiveness of online self-leadership training in enhancing leaders' skills, leading to better recovery experiences and overall well-being, which



is vital for maintaining a healthy work–life balance in today’s high-pressure environments. The existing theory supports the orientation of an energy-oriented self-leadership.

### 2.5. Mental Fitness and Performance

The term “mental fitness” is used similarly to “physical fitness,” as explained by [Robinson et al. \(2015\)](#). The goal of achieving good mental shape can be attained through health-promoting exercises, physical activity, and life-enhancing socialization ([Holt-Lunstad et al. 2015](#)), which can include humor and laughter. Laughter increases the production of endorphins, which contribute to a sense of well-being ([Gray et al. 2015](#)). [Houghton et al. \(2012\)](#) suggest that emotional intelligence and self-leadership influence each other, which, in turn, affects positive emotions and coping beliefs. These connections and interactions can help individuals manage stress more effectively. [Manz et al.’s \(2016\)](#) conceptual model illustrates how emotion-based self-leadership, including the generation of positive emotions, emotional authenticity, and well-being, can lead to increased workplace effectiveness. The processes entrepreneurs undergo are also marked by emotions, such as optimism and joy ([D’Intino et al. 2007](#)). [Andrieieva et al. \(2024\)](#) documented that a significant proportion of female students initially reported psychological challenges, including mood swings, anxiety, and depressive states. However, after the implementation of mental fitness programs, 71.4% of the participants reported improved mood, 67.9% noted better physical condition, and 57.1% experienced reduced stress levels. These findings suggest that mental fitness programs can play a crucial role in enhancing both the psychological and physical well-being of students. Based on the theoretical reasoning above, it can be argued that the concept of mental fitness encompasses a mental state and strength characterized by positive emotions, good mood, laughter, and emotional authenticity, which can enhance performance, improve mood and physical condition, and reduce stress.

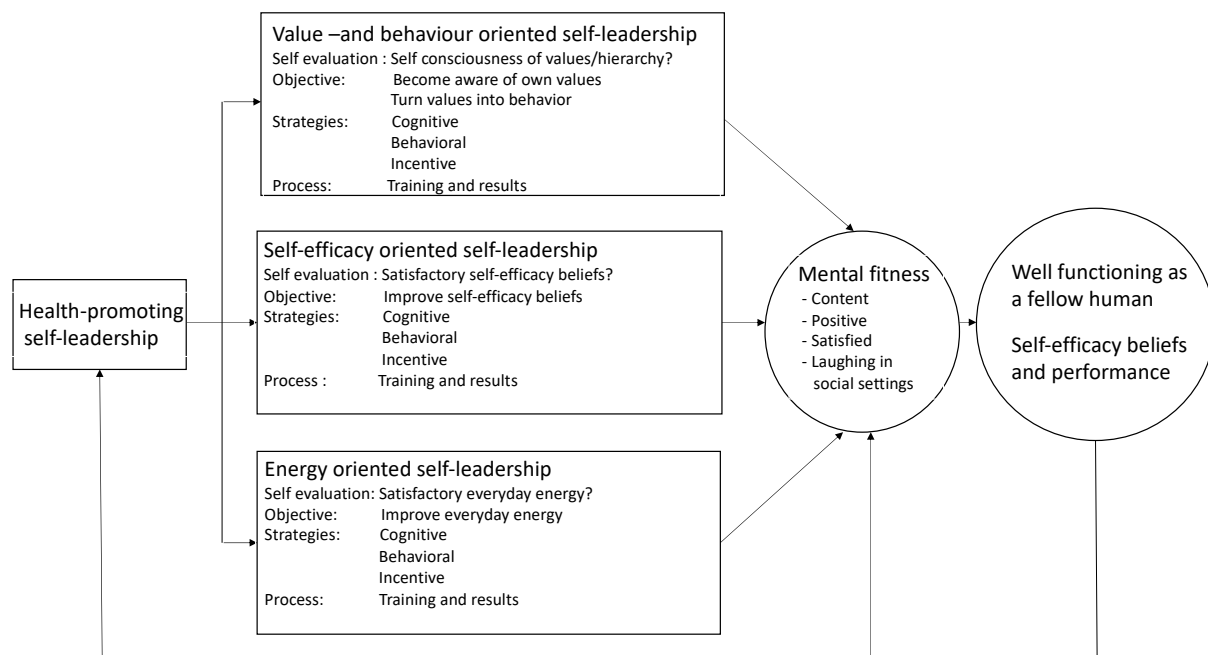
### 2.6. The Importance of Physical Exercise, Socialization, and Laughter for Mental Fitness

A review of the research spanning from the early 1980s to 2016 shows that the three most consistent cognitive and behavioral effects of an “ad hoc” training session are enhanced executive functions (e.g., task-solving and attention), improved mood, and reduced stress levels ([Basso and Suzuki 2017](#)). This positive effect can be attributed, among other factors, to the increased production of dopamine ([Winter et al. 2007](#)). Additionally, low-intensity exercise has been documented to reduce cortisol levels, which are produced in response to stress ([Hill et al. 2008](#)). Several studies have identified various sources of work stress, such as long working hours, overtime, time pressure, and role ambiguity ([Crawford et al. 2010](#); [Kamarck et al. 2005](#)). Cortisol weakens the immune system ([Nakata 2012](#)) and excessive amounts can inhibit learning ([Dinse et al. 2017](#)) and impair memory ([Wolf 2009](#)).

According to [Howrigan and MacDonald \(2008\)](#), humor is pervasive in human social interactions. Laughter leads to the increased production of endorphins ([Gray et al. 2015](#)). [Machin and Dunbar \(2011\)](#) also link endorphins to the positive development of social relationships. With socialization often comes humor and laughter, which lead to the production of endorphins ([Gray et al. 2015](#)), thereby contributing to the development of social relationships ([Machin and Dunbar 2011](#)). [Wilkins and Eisenbraun \(2009\)](#) suggest that humor is used to create close relationships and serves as a form of communication that can strengthen cooperative behavior. The opioid effect of endorphins makes people more relaxed in their communication, leading them to share more intimate information. The empirical study by [Kashive and Raina \(2024\)](#) revealed that self-enhancing leadership humor is linked to self-disclosure, which was found to contribute to social intimacy and thriving at work.

The conceptual model in [Figure 1](#) shows that health-promoting self-leadership consists of value- and behavior-oriented, energy-oriented, and self-efficacy-oriented self-leadership. These three orientations of self-leadership drive the self-development process. Each orientation involves sub-objectives, strategies, and processes to achieve these objectives through

exercises and training. These processes should strengthen mental fitness, ultimately leading to well-being, self-efficacy beliefs, and enhanced performance.



**Figure 1.** Health-promoting self-leadership.

### 3. The Cases and Research Questions

Two different classes comprising 59 and 53 executive MBA students at a Norwegian university (see Section 4.2 The MBA program, sample, and demographics) participated in two similar self-leadership courses in the spring of 2020 and 2021, spanning over 12 weeks. The first course took place during the winter and spring of 2020, at the onset of the COVID-19 pandemic. The second course occurred during the pandemic when remote work practices had been firmly established. Both courses consisted of five Zoom-based teaching days, each lasting six hours, divided into three sessions for both courses (two days in January, two in March, and one day in April, with the home exam deadline in mid-May).

The curriculum for both courses included one Norwegian textbook on self-leadership (“Til meg selv”, Karp, T.), nine international research articles (the articles/topics: Managing oneself and What makes an effective executive, Drucker, P.; Work stress and leadership development, Lovelace, K.J., Manz, C.C., and Alves, J.C.; The four ways of being that create the foundation for great leadership, a great organization, and a great personal life, Erhard, W.; Manage your energy, not your time, Schwartz, T.; Transcendent leadership, Crossan, M., Vera, D., and Nanjad, L.; Organizational culture and transformational leadership, Xenikou, A. and Simosi, M.; The influences of participative organizational climate and self-leadership, Tastan, S.B.; and Linking empowering leadership to job satisfaction, work effort, and creativity, Amundsen, S. and Martinsen, Oe.), and two Norwegian book chapters—one on self-leadership (Drake, I.) and one on health promotion at work (Bjerke, R.).

Overall, the syllabus represented an interdisciplinary collection of literature from the fields of self-leadership, management, organizational culture, and healthcare management. No changes were made to the literature over the two years. As part of their semester project and home exam, the students were instructed to practice self-leadership over a period of 8–10 weeks, attend lectures, and study the course literature. They were directed to follow and report on a five-step self-development process consisting of (1) the individual selection of self-evaluation areas; (2) prioritized development areas; (3) objectives for self-development; (4) self-selected methods/tools/exercises; and (5) results and reflections. Their reports (home exams) were to include descriptions of all the stages of the process, culminating in the results and reflections. The managers were given the option to choose their workspace,

home space, or both as their arena(s) for their self-leadership practices and potential self-development outcomes. The essence of the instructions for the leaders' /students' home exam was as follows:

The purpose of the assignment is to apply the literature and meta-cognition about how you should think and carry out a self-development process to "become" a better fellow human being and leader. Choose your arena(s) and situation (organization/company, business area, position, and/or your private life) and begin by writing your own "case" that describes your everyday life and experienced challenges. Follow this with a section on theoretical reflections, linking them to your challenges by highlighting their theoretical relevance. Then, define four to six self-selected development areas, connect them to relevant theoretical concepts, and evaluate yourself in these areas. The self-evaluation may include self-observation, results from questionnaires related to the theoretical concepts, and opinions from external sources such as colleagues, partners, and friends. Summarize the self-evaluation section by listing the challenges and strengths of each area/concept. Conclude by defining the challenges you will prioritize as your self-development areas, including objectives for the self-development process. In the section where you report on your self-development process, it is important to describe the methods/tools/exercises you use to achieve your objectives. It is recommended to maintain a training program and a diary with notes and reflections throughout the process. Conclude the report with a results section that includes reflections summarizing and concluding the self-development process.

The overarching research aim for this study was to examine the managers' self-leadership practices, focusing on their self-development processes, and at an aggregate level, possibly gain support for the health-promoting self-leadership conceptual model. The specific research questions (RQ) were as follows:

**Research question 1 (RQ1):** *What areas for individual self-evaluation and prioritized development areas are most often chosen?*

**Research question 2 (RQ2):** *What types of self-selected methods/tools/exercises are preferred to achieve their objectives?*

**Research question 3 (RQ3):** *What objectives for self-development are selected and what results are achieved?*

## 4. Methodology

### 4.1. Method

It is beneficial to have a theoretical framework even when using an exploratory design and qualitative methods, as applied in this study (Rocco and Plakhotnik 2009). The exploratory design (Creswell and Creswell 2017) with theorizing and qualitative methods used in this study is like the approaches in the research by Bjerke and Kirkesaether (2020) and Bjerke and Elvekrok (2021). The theoretical and interdisciplinary perspective is important to legitimize and provide insight into theoretical contexts (Glaser and Strauss 2017). The qualitative data were collected to support and strengthen the credibility of the proposed theoretical framework (Creswell et al. 2003; Bjerke and Kirkesaether 2020). Comparable data were collected through the content analyses of the reports from the executive MBA students in the 2020 and 2021 samples, which allows the approach to be seen as a multiple-case design (Creswell et al. 2003). The reports were the outcomes of the semester projects, with a maximum length of 15 pages, plus an unlimited number of attachments, such as training programs, diaries, observations, reflection notes, and self-leadership models.

A comparison approach is beneficial because it facilitates the discovery of differences and similarities between the responses (cases), leading to better insight into the data material (Yin 2017). Content analysis (Golafshani 2003; Morrow 2005) was used to compare



the managers' reports. Hopkins and King (2010) argue that within the social sciences, content analysis is well suited for analyzing unstructured texts such as blogs, speeches, government documents, newspapers, and similar sources. A challenge with content analysis can be comparability (Lacy et al. 2015), but comparison was enabled by the case design, with individual, separate responses from 59 and 53 managers. The sample can be described as a convenience sample because it was defined by availability (Riffe et al. 2014).

The content analysis of the 112 cases was conducted through a rigorous coding process, combining the elements of both pre-coding and axial coding to identify patterns and themes across the data. This approach allowed for a detailed and structured analysis, ensuring that the findings were both comprehensive and nuanced (Braun and Clarke 2006; Hsieh and Shannon 2005; Saldaña 2015). The coding process began with a pre-coding phase, where the data were carefully reviewed, and significant words and phrases were highlighted. The broad themes (categories) were provided in the home exam text and instructions. Therefore, while reading through the managers' reports, words and phrases were marked and coded as belonging to the following categories (see examples in Table 1): arenas/context, challenges/problems, prioritized development areas, objectives, methods/tools/exercises, self-leadership model, results/achievements, and reflections. Specific codes were then identified and related to the various categories (see Table 1) (Braun and Clarke 2006; Hsieh and Shannon 2005; Saldaña 2015). To reveal the findings, a base table was first created at the individual level for the two samples, which included the themes/categories mentioned above.

**Table 1.** Examples of codes.

Code	Category	Description	Example Quote
Work Home	Arenas/Context	Description of the physical and social work environment	"The transition to remote work has altered my daily routines significantly."
Time Management Issues	Challenges/Problems	Challenges related to managing time effectively.	"Balancing work and personal life have been more difficult during the pandemic."
Leadership Goals	Prioritized Development Areas	Specific goals set for improving leadership skills.	"My main objective is to enhance my decision-making abilities."
Mindfulness Practices	Methods/Tools/Exercises	Techniques used for stress reduction and focus.	"Incorporating daily mindfulness exercises has helped me stay calm under pressure."
Leadership Reflection	Results/Achievements	Reflections on leadership growth and development.	"Through this process, I've become more self-aware and empathetic."

Following pre-coding, the data were subjected to axial coding. In this phase, the initially identified categories and codes were analyzed in relation to each other. Axial coding was particularly useful in identifying relationships between the different aspects of the managers' self-leadership practices, such as how specific challenges were followed up by the choice of development areas or how certain methods/tools were linked to specific results. This step enabled grouping similar codes together, organized in categories, creating a structured framework that reflected the underlying themes and patterns in the data. To illustrate the coding process, examples of codes, categories, descriptions, and example quotes are displayed in Table 1.

A summary content analysis was then performed at the aggregate level, where the frequency of certain prioritized self-development areas, objectives, and results was tallied. This approach allowed for comparisons across different themes (Hsieh and Shannon 2005), enabling a deeper interpretation of the underlying context and supporting the study's conceptual model (see Figure 1). By analyzing the data at both individual and group levels, the coding process, combining pre-coding and axial coding, provided the base for a

systematic analysis of the qualitative data, resulting in a robust and insightful interpretation of the managers' self-leadership practices.

To limit bias during data collection and analysis using a convenience sample, a few strategies, also describing the sample in more detail, were implemented. First, the students represented a great variety of sectors, businesses, and management positions (see Section 4.2). Second, even though the reports varied a little in length and additional materials, the standardization of data collection was strengthened by clear guidelines for the structure and content of the reports. This strategy enabled comparable types of data, reducing variability that might bias the analysis. Third, a certain aspect of quantitative measures was undertaken as categories of focus areas for the students' self-evaluation, priorities, and results were counted and placed in tables. Fourth, a combination of pre-coding and axial coding was applied. A second researcher assisted in the coding process. The findings reported below are organized according to the research questions (RQ1, RQ2, and RQ3).

#### *4.2. The MBA Program, Sample, and Demographics*

To qualify for the MBA program at this well-known Norwegian university (similar requirements apply to other master's programs in Norway), applicants must have completed a bachelor's degree or equivalent education with at least 180 ECTS credits. Additionally, they are required to have a minimum of two years of relevant full-time work experience. Regarding the workload, the MBA program is structured as a part-time study over three years, with a total of 90 ECTS credits. This program is specifically designed for working professionals, with teaching conducted in three sessions per semester, allowing students to combine work and study.

The two samples consisted of executive students aged between 28 and 58 years who participated in the MBA program. Most of the students were older than 40 years, indicating that the length of their work experience varied between about 5 to 20 years. The students came from all regions of Norway, including the south, southeast, mid-Norway, west coast, and the northern part, during both years and semesters when the course in self-leadership was held. Furthermore, the executive students were managers from both the public and private sectors (approximately sixty percent and forty percent, respectively). The classes consisted of approximately 55 percent female and 45 percent male students. The age and gender distributions were similar across both years/semesters when the self-leadership course took place and when the data were collected. The executive students from the public sector represented various fields, including the health sector, public security, and emergency services, the judicial sector, environmental management, transport and infrastructure, social services, education, county authorities, municipalities, and institutions under the central government. Most of the students from private businesses worked for IT companies, food and retail firms, transportation services, telecom, and media companies.

#### *4.3. Research Ethics*

Maintaining high ethical standards throughout the research process was critical to ensure the integrity and validity of this qualitative study, as well as to protect the participants' rights. The following ethical considerations and strategies were implemented to uphold these standards:

**Informed consent:** All the participants were informed about the nature, purpose, and scope of the research before the data collection commenced. The study ensured that all the participants provided informed consent, with a clear understanding that their participation was voluntary and that they could withdraw at any time without any negative consequences.

**Anonymity and confidentiality:** To protect the participants' identities, all the data were anonymized during the content analysis process. The participants' reports were stripped of any identifying information, as the reports were assigned numbers by the exam department, and most of the results were reported in an aggregate form to prevent the identification of any individual participant. This approach ensured the confidentiality

of sensitive information, particularly given the personal and professional nature of the self-leadership exercises and reflections described in the reports.

**Transparency and participant involvement:** Transparency was a key ethical consideration, particularly regarding the use of the participants' work in the research. Twelve students consented to have their specific statements, remarks, and notes quoted in the research. To further protect these participants' rights and ensure the accurate representation of their contributions, those who requested to review the draft of the paper were given the opportunity to do so. A PDF version of the draft was provided, and the citations were used only after receiving their approval. This process helped maintain trust and respect between the researchers and participants.

**Avoidance of coercion:** Given the dual roles of the researcher as both educator and researcher, there was a potential risk of perceived coercion. To mitigate this, it was made clear to all the participants that their decision to participate in the study or to allow their work to be quoted would not affect their academic standing, as the content analysis took place after the grades had been released.

**Data integrity and accuracy:** Ethical research practice requires that data be collected, analyzed, and reported accurately and honestly. In this study, rigorous data analysis methods, including content analysis and thematic coding, were applied to ensure that the findings were based on the data without distortion. A second researcher was involved in the wording of the exam, instructions, and the coding process to enhance the reliability and validity of the analysis, thereby reducing the risk of researcher bias.

**Ethical approval:** Prior to the data collection, ethical approval was obtained from the institution and students. This approval mandated the students' informed consent, confidentiality, and the protection of participant welfare.

## 5. Findings

### 5.1. Areas for Self-Evaluation and Prioritized Self-Development (RQ1)

From the reports of the 2020 class (59 managers), it emerged that 20 executive MBA students had chosen to test out the practice of self-leadership, starting with self-evaluation, both in the workspace and the private arena. A total of 29 managers chose the work arena, and 9 selected the private one. In the 2021 class, 33 (out of 53 managers) chose both arenas, 15 chose only the job arena, and 5 the private one only. Well into the COVID-19 pandemic in spring 2021, with an established home office practice, we see that more managers wanted to practice self-leadership in both spaces relative to 2020 (33 vs. 20). The reflections of a manager about self-evaluation emphasize the importance of evaluation as a start of the self-development process:

“Negative self-talk, or what I have called ‘my inner critical voice’, is a topic I have consciously worked with as a manager but is a challenge that has become more prominent in the past year. Feedback from friends, colleagues and manager also illuminates this in that I am perceived as self-critical, sometimes have difficulty accepting bragging, am frugal and at times make too high demands on myself. I have experienced that this is often linked to feelings of inadequacy, inferiority, and a lack of faith in myself—I especially experience this as reinforcing in a context where one feels overwhelmed.”

And with respect to the students' chosen self-evaluation areas, thought activity is mentioned most times in the 2020 class (44), followed by physiology (33) (here: exercise/training, nutrition/diet, and sleep), energy balance (31), efficiency/productivity (29), and feelings (26). In 2021, thought activity was mentioned 31 times, followed by feelings (30), physiology (28), energy balance (25), and willpower (24). One manager wrote the following regarding feelings, thought activity, and self-evaluation: “I will accept positive feedback with gratitude, and not just say it is due to good employees. I will write down every time this happens, what feelings the positive responses give me, and what reflections I make about the situation.” And a few managers evaluate which values they should use as guiding principles for their thought activity and behavior. One writes the

following: “What is fundamentally important to me, which gives meaning and direction to choices and priorities, are the values of generosity, trust, honesty, professionalism, loyalty and reliability”.

As a follow-up of the students’ choice of self-evaluation areas and their actual evaluation process, they had been instructed in the exam test to prioritize areas prior to initiating their self-development process. From Table 2, from one year to the other, we see that there is a shift in the prioritized development areas. Physiology and energy balance were ranked fourth and third in 2020, whereas in 2021, those areas were ranked first and second. Feelings was ranked number 3 in 2021, but as low as 8 in 2020, and thought activity was less important in 2021 (from 1 to 4 in ranking). A manager wrote the following about the challenge of physiology as a development area: “The most basic thing I have to deal with is exercise and diet.” Another linked mental fitness to the influence of thoughts, feelings, and behavior and described a development area in this way: “For me, good mental fitness is the power I have to influence my own thoughts, feelings and behavior in order to achieve inner calm and security so that I handle everyday life in an emotionally satisfying way.” In total, over the two years, physiology, thought activity, and energy balance were the most mentioned prioritized development areas.

**Table 2.** Prioritized self-development areas.

Prioritized Development Areas	2020		2021	
	R *	N **	R *	N **
Physiology	4	24	1	29
Energy balance	3	26	2	24
Feelings	8	13	3	21
Thought activity	1	32	4	20
Efficiency, productivity, and priorities	2	31	5	12
Communication	7	13	6	11
Willpower	10	8	7	10
Stress	5	15	7	10
Boundary setting	12	4	8	9
Behavior	11	6	9	3
Management skills	6	14	9	3
Motivation	13	2	9	3
Self-esteem and self-confidence	9	8	10	2

\* ranking, \*\* number of times mentioned.

## 5.2. Types of Methods, Tools, and Exercises (RQ2)

The existing theory cannot point to concrete methods, tools, and exercises, which managers use to achieve self-development objectives. A manager commented on her/his development plan as follows: “I will use the calendar more to sort and prioritize tasks. I will set aside time to carry them out without delay, and I will ensure that I am not disturbed unnecessarily when they are carried out.” Another wrote the following: “I will write down every time I use Pomodoro if it helps or hinders my efficiency. I will evaluate after a month whether I should continue with this method or consider other methods for focus and efficiency.” Of a total of 47 types of methods/tools/exercises that the students reported having used, physical training and exercise stood out as the most used method (84 out of 112 students) in both classes (40 and 44, respectively). A quote exemplifies how the students planned and carried out the physical training: “I will establish a training diary that I sign according to the planned activity. In addition, I will have a column for “plus” activities, where I give positive remarks to myself if I do more than planned.”

Physical activity was followed by meditation and relaxation exercises (“mindfulness”, yoga, meditation, and breathing techniques), which were mentioned by 21 students in 2020 (out of 59) but increased to 26 the year after (out of 53). One manager noted the following: “I honestly didn’t think this would be something for me with self-talk, mindfulness, and so on. I feel that my self-leadership model has given me a better insight into who I am,

but most importantly the practice has given me more energy both mentally and physically, and I am looking forward to the continuation, and I feel motivated.” The relative figures (2020/2021) for the following important methods were as follows: fixed bedtimes and sleep routines (10/20), self-talk (12/19), physical breaks (3/15), planning, structure and routines (21/13), diet program (6/13), prioritization matrix (21/13), and time for reflection (23/11). A manager described her/his method as follows: “In order to achieve the objective of being able to run 5 km continuously, I had to acquire knowledge, and did this by starting a 12-week running program from ‘Löplabbet’ intended for beginners.” Another noted referring to the pandemic and its consequences: “All my challenges became clearer to me overnight when Norway went into lockdown. It was not just a wish to improve anymore, but what was totally necessary to get us through this with the health intact.”

### 5.3. Objectives and Achieved Results (RQ3)

From Table 3, we see that the four most important objective areas are energy balance, efficiency/productivity/priorities, physiology, and thought activity. One example of a manager’s formulation is as follows: “Exercise strength/fitness at least once a week and go for a minimum 45-min walk on the other days. Cut sugary snacking during the weekdays.” Another manager stated the following: “Increase fitness and endurance through more physical activity, so that I have better mental strength for demanding tasks. Reduce sugar in the diet so that I get more surplus and energy. At the same time, committing to the goals to a greater extent, especially about the goal of physical fitness, could have helped to create a stronger psychological contract.” Also, based on the number of objectives, we see that there is a change from 2020 to 2021 with a much more emphasis on improving energy balance, physiology, and aspects of emotions.

From Table 4, displaying in what areas the managers have achieved results, we see that in total, strengthened self-awareness and self-insight are described most times in their reports. In relative numbers, there is an increase in experienced results in the area of energy balance and mental and physical fitness, which is ranked as number one in 2021. Moreover, we see a substantial growth in sensed inner peace. Over the two years, the feeling of self-efficacy is stable, and efficiency/productivity/priorities and thought activity are reduced by almost fifty percent (based on different class sizes).

**Table 3.** Objectives.

Goals (Including Descriptive Words/Themes)	2020		2021	
	R *	N **	R *	N **
Strengthen energy balance (develop mental strength and capacity, manageable workload, avoid too many challenges, avoid conflicts, avoid bad decisions, stay calm, be patient, avoid energy thieves, have more free time, more socialization, and avoid being burned out)	2	25	1	34
Improve efficiency, productivity, and priorities (better habits and routines, effective meetings, better decisions, strengthen action, perform better, better quality, avoid ineffective meetings, prioritize tasks, manage own calendar, role clarification, find better solutions, action, implement plans, and find a balance between freedom and work)	2	25	2	29
Physiology (exercise and get in better physical shape, better diet, and sleep, and prevent injuries/pain)	9	9	3	21



Table 3. Cont.

Goals (Including Descriptive Words/Themes)	2020		2021	
	R *	N **	R *	N **
Emotions (strengthen self-esteem, self-confidence, and independence; avoid conflicts; not too strict with oneself; let go of control; self-efficacy; belonging; well-being; process hurt feelings; become less worried; cope with adversity; regulate emotions; get rid of shame; strength relationship to own feelings; avoid being negatively affected; accept compliments; proud of own achievements; do not take the role of a victim; get inner peace; and do not have a bad conscience)	4	17	4	14
Thought activity (think positive, think opportunities, think we and not I, become more constructive, growth-oriented mindset, less self-critical, plan, find and develop motivation, think before action, and regulate negative thoughts)	1	27	4	14
Stress (managing hectic periods, avoiding periods of stress, and coping with stress)	6	15	5	13
Strengthening relationships (emphasizing interpersonal consideration, more presence, shorter working days to free up time for others, building relationships, and available to employees)	5	17	6	12
Communication (say we and not I, reduce conflicts, be heard, influence internal dialog, motivate others, strengthen listening skills, strengthen communication skills, strengthen information flow, more open, better dialogue with colleagues, and strengthen internal dialogue)	11	6	7	11
Willpower (go out of the comfort zone, stand up for one's own opinions, want to be independent, use willpower in the face of great opposition, challenge oneself, cope with opposition, and say no)	12	5	8	10
Focus and concentration (avoid thoughts wandering and avoid procrastination)	9	9	9	7
Boundary setting (limiting and managing work tasks and getting better at saying no)	12	5	10	6
More time for family and friends (separation between work and private life and less available for work in private time)	8	12	10	6
Values, attitude, and behavior (find your own values to understand patterns of action, stand for attitudes and opinions, and strengthen identity)	10	7	11	7
Become a better manager (delegate more, gain more trust, and provide guidance and support)	3	18	12	4
Take control of your own life	7	10	13	3

R \* = ranking, N \*\* = number of times mentioned.

The following quote indicates the connections between self-insight, exercises and training, energy balance, and mindset: “The biggest insight this process has given me is that a good energy balance is crucial for me to be successful with my other challenges. Self-observation has given me the insight that I often assume a victim role. In periods when I have little energy and a poor energy balance, I more easily assume the role of victim in my life than the role of actor. I am motivated to carry out physical activity, so this has gone very well. I have mostly had at least one activity session every day.” It seems that the result areas to some extent overlap and are connected. Three managers describe the results and indicate links between the areas in the following way:

“By working on this assignment, I have come to the conclusion that choosing a lifestyle that improves mental and physical surplus is in itself a self-leadership strategy, as well as an important premise for getting the surplus needed to better manage myself. At the same time, the concept of self-leadership can be seen as a

project of liberation, where it is about recognizing that you have opportunities for influence in all contexts.”

“I have therefore set myself a new goal to become even better at focusing. Developing my inner dialogue and improving my physiology. I have set myself the objective of losing the 10 kilos that I have put on since 2016. I will practice 15 min of mindfulness to train my attention. I should aim to get a minimum of 7 h of sleep each night.”

“What I am left with is not something I can show on paper or through any statistics, but a feeling, a sense of ease when I go to work and know that I am contributing to the positive.”

**Table 4.** Results.

Results	2020		2021	
	R *	N **	R *	N **
Strengthened energy balance and mental and physical fitness	3	19	1	20
Strengthened inner calm	9	1	2	19
Strengthened self-awareness and self-insight	1	37	3	17
Feeling of self-efficacy	4	11	4	13
Improved efficiency, productivity, and priorities	2	21	5	11
Improved motivation	8	12	5	11
Improved temporal focus (less mind-wandering)	7	11	6	8
Positive thought activity	3	19	6	8
Reduced feeling of stress	7	4	6	8
Improved structure, habits, and routines	5	8	7	7
Improved mood	6	7	8	6
Improved sleeping patterns	7	4	8	6

R \* = ranking, N \*\* = number of times mentioned.

## 6. Discussion and Implications

### 6.1. Discussion

This study is based on two executive MBA self-leadership classes, a semester project, and 112 managers’ reports on self-leadership practice during the COVID-19 pandemic. The findings suggest that self-evaluation and the prioritization of development areas are crucial initial stages in the self-development process. The increasing importance of physiology and energy balance as priority areas over the two years indicates a growing emphasis on the value of “health”, which [Schwartz \(1992\)](#) identifies as an instrumental value and a behavioral guiding principle. Here, the managers’ intentions toward health-promoting behavior appear to be driven by improved self-awareness, self-insight, and positive attitudes rooted in healthy values ([Homer and Kahle 1988](#); [Schwartz 1992](#)). Additionally, the attainment of inner calm, which corresponds to [Schwartz’s \(1992\)](#) concept of inner harmony (peace with oneself/free from inner conflicts), and detachment from worries are the outcomes of the managers’ physical and mental activities. These findings support the concept of value- and behavior-oriented self-leadership.

The connection between physical exercise, a healthy lifestyle, and a balanced energy level, all highly prioritized by the managers, is explained by [Lovelace et al. \(2007\)](#). Furthermore, the benefits of physical exercise extend to enhancing health span, longevity, and overall resilience ([Gable and Haidt 2005](#); [Holt-Lunstad et al. 2015](#)). Several factors may explain the managers’ experiences of improved energy balance, mental and physical surplus, and inner calm. One possible explanation is that physical activity increases the production of serotonin, a neurotransmitter crucial for sleep, memory, mood, and various cognitive functions ([Chen and Nakagawa 2023](#); [Strasser and Fuchs 2015](#)). Strengthened executive functions, improved mood, and reduced stress can also be attributed to increased dopamine production ([Winter et al. 2007](#)) and decreased cortisol levels ([Hill et al. 2008](#)).

The peptide endorphin, produced during and after physical activity, provides a well-being effect like that of morphine, which may explain the managers' experience of inner calm as a significant result of their self-development processes and focus on physiology, particularly physical training (Nguyen et al. 2021).

The essence of health-promoting self-leadership among the managers lies in prioritizing physiology to strengthen energy balance and mental and physical fitness. Physical training, exercises, and relaxation sessions were the commonly used methods in both classes, addressing both physical and emotional aspects. Emotional regulation and self-leadership through behavioral and cognitive strategies can foster positive emotions and coping beliefs (Houghton et al. 2012). The generation of positive emotions and well-being can further enhance workplace effectiveness (Manz et al. 2016). Strengthened self-awareness and self-insight were among the most significant outcomes achieved by the managers (ranked first and third). Tat and Zeitel-Bank (2013) suggested that developing additional self-leadership skills, such as empathy, is crucial. A better understanding of one's own needs, feelings, and limitations can lead to a greater appreciation of these areas in others. Thus, managers who engage in such self-leadership training programs are likely to develop the prerequisites for empathy and respect for others.

The concrete methods, tools, and exercises most frequently used by the managers in this study have not been identified in previous self-leadership research. Current research shows that meditation training significantly improves work efficiency by enhancing attention and impulse control (Kozasa et al. 2012). Mindfulness interventions can help reduce stress and burnout in the workplace and improve coping and well-being (Burton et al. 2017). Additionally, the positive effects of mindfulness practice include improved sleep and lower cortisol levels, which contribute to a state of well-being (Brand et al. 2012). The managers' physical training likely improved their mood (an element of mental fitness), reduced stress, and strengthened executive functions (Basso and Suzuki 2017). These findings support the relevance of mental fitness in health-promoting self-leadership and its connection to thought activity, emotions, and energy balance. Consequently, energy-oriented self-leadership is sufficiently supported, particularly in relation to thought activity, emotions, and mental fitness. Emotional regulation should, therefore, be considered an essential component of health-promoting self-leadership, serving as both a source of energy and an element of mental fitness, as theorized above.

Physical activity has also been documented to positively affect brain networks and connections (Douw et al. 2014). Based on an extensive literature review of Festa et al. (2023), physical activity was found to enhance attention, working memory, and executive function across all age groups. The reported feelings of inner calm and self-efficacy of this study can likely be explained by students' focus on physiology and physical activity. According to a study by Deng et al. (2023), engaging in physical activity not only directly improved the life satisfaction of college students but also indirectly contributed to it by fostering higher levels of self-efficacy and resilience. They suggest that physical activity promotes both well-being and the personal resources needed to cope with challenges. Excessive cortisol levels can temporarily impair learning (Dinse et al. 2017) and memory (Wolf 2009), which could negatively impact coping beliefs. Human stress management, facilitated by the "social nervous system", can be enhanced through group relaxation sessions, mindfulness exercises, physical sessions with Pilates and tai chi, and access to healthy food (Kozłowska 2013; Kozłowska et al. 2015; Porges 2001). Group exercises and training also promote life-prolonging socialization (Holt-Lunstad et al. 2015) and can lead to healthy laughter (Gray et al. 2015). The findings and related theory support the concept of self-efficacy-oriented self-leadership as part of health-promoting self-leadership and its connection to energy-oriented self-leadership, mental fitness, and performance.

The shifts in the prioritized development areas between 2020 and 2021 can be attributed to several underlying factors related to the evolving context of the COVID-19 pandemic and its impact on work-life dynamics. The significant increase in managers prioritizing self-leadership practices in both work and private arenas in 2021 suggests a

heightened awareness of the blurred boundaries between these spaces due to the established home office practices. This shift indicates that the managers may have recognized the need to balance their professional and personal lives more effectively, particularly as prolonged remote work introduced new stressors and challenges. The implications of these shifts for self-leadership practice are profound. The managers who actively integrate self-leadership strategies across different life domains are likely better equipped to manage the complexities of modern work environments, especially those characterized by remote or hybrid work models. This comprehensive approach to self-leadership fosters resilience, enabling managers to maintain high levels of performance and well-being despite external pressures. Moreover, the increased focus on areas such as physiology and energy balance reflect a broader understanding of the holistic nature of self-leadership, where physical health and mental fitness are seen as critical components of effective leadership.

There is no similar longitudinal self-leadership research conducted over an extended period in a COVID-19 context for comparison. However, research by [Lovelace et al. \(2007\)](#) highlights the importance of physical fitness and energy management as vital components of leadership development, particularly in high-stress environments. The increased emphasis on physiology and energy balance in the 2021 cohort aligns with these findings, suggesting that managers are increasingly aware of the need to prioritize their physical and mental health as a foundation for effective leadership. Additionally, the studies on remote work and its effects on well-being (e.g., [Wang et al. 2021](#)) corroborate the observed shift toward integrating self-leadership practices across work and private spaces. The challenges of remote work, such as isolation and the blurring of work–life boundaries, have led many professionals to adopt more holistic self-care strategies, as reflected in the 2021 cohort's data.

The long-term impact of these shifts in prioritized development areas on managers' overall effectiveness and well-being could be substantial. By focusing more on areas like physiology and energy balance, managers are likely to experience sustained improvements in their physical and mental health, which are critical for maintaining high performance over time. As suggested by self-leadership theory, these improvements in personal well-being can lead to enhanced self-efficacy, better decision making, and more effective leadership. Moreover, the increased attention to emotional regulation and mental fitness in 2021 suggests that managers are developing adaptive coping mechanisms that will serve them well in future crises or high-pressure situations. Over the long term, these practices can contribute to a more resilient and adaptable leadership style, characterized by the ability to navigate complex and unpredictable environments with confidence and composure.

## 6.2. Theoretical Implications

The findings of this study offer significant contributions to the theoretical understanding of self-leadership, particularly in the context of crisis management and remote work environments. The observed shifts in the prioritized development areas, such as the increased focus on physiology and energy balance, suggest that the self-leadership theory must adapt to include a more integrated approach that encompasses both physical and mental health as essential components of effective leadership. This study reinforces the idea that self-leadership is not merely a cognitive or behavioral construct but also deeply intertwined with physiological well-being, echoing the holistic perspectives suggested by previous scholars ([Lovelace et al. 2007](#)).

Furthermore, the research highlights the dynamic nature of self-leadership, showing that it evolves in response to external pressures, such as the COVID-19 pandemic. This finding suggests that the theoretical models of self-leadership should account for contextual and environmental factors that may influence the prioritization of certain self-leadership practices over others. By incorporating these factors, future research can develop more robust models that better reflect the realities of modern leadership challenges.

Based on the conceptual framework depicted in the theoretical model and the study's findings, the theoretical implications strongly support a holistic approach to self-leadership

that integrates value- and behavior-oriented strategies, self-efficacy enhancement, and energy-oriented self-leadership. The model proposes that self-leadership is most effective when it encompasses these three dimensions, each contributing uniquely to an individual's mental fitness, performance, and overall, well-functioning. By aligning personal values with behavior, enhancing self-efficacy, and maintaining energy balance, individuals can cultivate a well-rounded form of self-leadership that not only promotes personal well-being but also enhances professional performance.

This framework aligns with the existing research suggesting that self-leadership is not a singular construct but a multifaceted process that requires the integration of cognitive, behavioral, and emotional strategies (Manz 2015; Houghton et al. 2012). The inclusion of mental fitness as a mediating factor in the model further underscores the importance of emotional and psychological well-being in the practice of self-leadership, echoing findings from the studies that link positive emotions and mental resilience to effective leadership outcomes (Lovelace et al. 2007; Kozasa et al. 2012). The model also emphasizes the cyclical nature of self-leadership, where continuous self-evaluation and adaptation lead to sustained personal and professional growth, aligning with the dynamic and iterative nature of leadership development described in contemporary leadership theories (Neck and Houghton 2006).

### 6.3. Practical Implications

The practical implications of this study are equally significant, offering actionable insights for managers, educators, and organizational leaders. The shift towards greater emphasis on physiology and energy balance indicates that organizations should consider integrating physical and mental health initiatives into leadership development programs. Such initiatives could include structured exercise programs, mindfulness training, and stress management workshops, all of which have been shown to enhance both personal well-being and leadership effectiveness. For educational institutions, the findings suggest that self-leadership interventions should be introduced early in academic programs, particularly in courses or orientations for new students. By equipping students with self-leadership skills that address both cognitive and physical aspects, institutions can help mitigate stress and improve overall student well-being, potentially leading to higher retention and success rates.

From an organizational perspective, the study underscores the importance of supporting managers in practicing self-leadership across different life domains, especially in hybrid or remote work settings. Companies may consider offering flexible work arrangements that allow employees to better balance their personal and professional responsibilities, thereby reducing stress and enhancing productivity. Overall, the study highlights the need for a more comprehensive approach to self-leadership that integrates physical, mental, and emotional well-being, providing a framework that can be applied across various sectors and disciplines to improve leadership outcomes and support personal development.

## 7. Conclusions

Practicing health-promoting self-leadership by implementing methods, tools, and exercises to achieve short-term and long-term objectives is demanding and time-consuming. One manager explained it this way: "Being aware of changing thought patterns little by little, not rushing through the process, but learning from things takes time. In any case, don't stress yourself through the process, but do it gradually at a comfortable pace." Another manager summarized the self-development process as follows: "This journey has been challenging, but also very exciting and rewarding. Self-leadership is something I will continue to work on, as change does not happen overnight. I will continue to train both consciously and unconsciously."

The concrete findings of this research in the categories of self-development, prioritized development areas, objectives, training (through self-selected methods, tools, and exercises), and obtained results support the theoretical framework (see Figure 1). The explicit



findings legitimize both energy- and self-efficacy-oriented self-leadership as two of the three subcomponents (directions) of health-promoting self-leadership. The objectives and results, particularly those linked to energy balance, mental and physical fitness, and inner calm, are based on changes in routines, habits, and behavior. The process the managers have undergone clearly indicates that it is rooted in healthy values. The managers' shifts toward healthier habits and routines from 2020 to 2021, with convincing health-promoting effects, support value- and behavior-oriented self-leadership as the third component of health-promoting self-leadership.

Goldsby et al. (2021) argue that the authors of the article "Self-leadership: A Four-Decade Review of the Literature and Trainings" hold certifications in the professional programs listed in their paper. They critique the weaknesses of these professional programs, noting that multi-day workshops with short time spans often end with meaningless final instructions, such as common wrap-up phrases like, "Now it's up to you to use this" (Goldsby et al. 2021, p. 10). Therefore, higher education has a significant opportunity to better educate managers in self-leadership, as courses in higher education typically last several weeks, providing the necessary time to practice and develop self-leadership skills. This extended time frame allows managers to take full advantage of the multiple beneficial outcomes documented in this study.

In conclusion, the findings from this study not only highlight important shifts in self-leadership practices among managers during the COVID-19 pandemic but also underscore the potential for these practices to yield significant long-term benefits. By comparing these findings with the existing literature and considering their implications for future leadership development, this study contributes valuable insights into the evolving nature of self-leadership in the modern workplace.

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