



Vaasan yliopisto
UNIVERSITY OF VAASA

Daniel Front

**Self-directed approaches to adaptability
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Author: Daniel Front
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ABSTRACT :

Modern careers increasingly call for development of adaptability and flexibility skills in response to the continuous transformation of the business environment. Subsequently, development of adaptability resources and competencies is seen as important. Yet, there is still a scarcity of information regarding personal adaptability development.

The theoretical background of this study is based on related theories in the topics of adaptability, cognitive flexibility, and self-leadership. A specific focus of the research has been placed on examining the applicability of cognitive self-leadership as a method for developing adaptability resources or mental attitudes that lead to personal adaptability development. In addition to a wide theoretical background, the research features an empirical study that collected qualitative data from eleven semi-structured interviews. The sample of the empirical study consisted of workers and professionals across a variety of career sectors.

The results of the research demonstrate that self-leadership can be an effective tool for self-regulation and for gaining self-direction. Furthermore, the findings suggest that practicing self-leadership strategies in self-observation, goal setting, and thought patterns are especially effective for adaptability development when combined with development of openness, curiosity, and cognitive flexibility. Consequently, the research highlights that a) self-leadership and b) the cognitive qualities of openness, curiosity, and cognitive flexibility are significant predictors of adaptability development. As proposed by the research, the two predicting factors have a direct causal effect on personal adaptability, in addition, they positively moderate each other's influence on personal adaptability development.

Due to similarities in the conceptual frameworks, the secondary research objective examines the influence of self-awareness and self-efficacy on personal adaptability development. The research evidence validates that self-awareness and self-efficacy have an important influence on personal adaptability development. Self-awareness is suggested as having a moderating effect between development of self-leadership and developing the cognitive qualities of openness, curiosity, and cognitive flexibility. Self-efficacy, on the other hand, is proposed as having a bidirectional mediating effect on the relationship between self-leadership and personal adaptability development. The research concludes that increased self-awareness and self-efficacy will further accelerate personal adaptability development.

KEYWORDS: Personal adaptability, cognitive flexibility, self-leadership, self-regulation, self-efficacy

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1 INTRODUCTION

The future of jobs, according to World Economic Forum (2020), is being guided by technological developments, social changes, and changes in core work skills that initiate re-skilling requirements for many organizations. Consequently, modern employers are in search of active learners with critical thinking and problem-solving skills, mental flexibility, and perseverance or resilience to tolerate changing and stressful situations (Whiting, 2020).

Not only is adaptability required in capitalizing on opportunities and creating positive change, but the same skillset is also needed after experiencing setbacks or while working with challenging and difficult tasks that require orientation adjustments. In the workplace these orientation adjustments are typically caused by work pressures and occupational stress which may arise from work role ambiguity or time limitations (Neck et al., 2013, p. 466). Thus, personal adaptability can be considered as an indispensable psychological resource for adjusting and responding to different situations, new work roles, and new responsibilities.

To a certain degree adaptability or adaptiveness may be considered as a personal attribute or trait (Ployhart & Bliese, 2006). Nevertheless, a growing body of research indicates that personal adaptability can be developed in many learning environments (Neck & Manz, 1996, pp. 456–460; Griffin & Hesketh, 2003, p. 72; O’Connell et al., 2008, p. 256; Wojtczuk-Turek & Turek, 2015; Cunha et al., 2017; Leong, 2020). Research has additionally shown that past experiences related to different work and life contexts may serve as vital sources of personal adaptability (Pulakos et al., 2002; Chandra & Leong, 2016; Leong, 2020). Thus, employers and employees alike should actively seek for opportunities where adaptability skills can be applied and developed.

Since an individual’s ability for adaptation is both a prerequisite and an outcome of career advancement (Whiting, 2020; Spurk et. al., 2018), many organizations and academics have shown growing interest to understanding the relationship between self-

management approaches, psychological adaptability, and developmental readiness (Mendenhall et al., 2017). It is also commonly acknowledged that personal development, and development in the areas of social, cognitive, and psychological resources are some of the most significant career outcomes that increase employability (Spurk et. al., 2018; Fugate et al., 2004; Van der Heijde & Van der Heijden, 2006; Griffin et al., 2007). Thus, adaptability should not only be considered as a competency that is developed within the workplace as initiated by the employer but as a soft skill that can be developed in all areas of life.

A global study conducted by PricewaterhouseCoopers found that economic growth and productivity is largely driven by the alignment between adaptable talent and opportunity (Rendell et al., 2014). The worldwide concern over the availability of know-how and key skills is estimated to reduce as individuals, employers, educators, and governments develop ways to facilitate adaptability skill development (Rendell et al., 2014, p. 3; Shams et al., 2021). Consequently, there is an ever-increasing demand for increasing external and internal leadership that effectively reinforces development of adaptability and lifelong learning.

While course training is a major part of educating and training employees, organizations also train their employees by means of developmental assignments, mentoring, and coaching programs. In addition, as the complexity of the job environment increases, it is common to combine different learning methods. This further escalates the need for adaptable employees, and as such it is even more important to focus on retaining individuals who are intellectually curious, open to new experiences, and willing to embrace change (Rendell et al., 2014, pp. 4–7).

It is suggested that human resource professionals should focus on removing barriers for learning and facilitate the development of human capital by including opportunities for both formal and informal employee development (O'Connell et al., 2008, p. 257; Truss et al., 2012, pp. 178–179; Neck et al., 2013, p. 467). Accordingly, developmental job

assignments, group discussions, and coaching self-leadership techniques may function as effective strategies for increasing the adaptability of the employees and to further enhance organizational human resource development (see Manz, 1986; Stewart et al., 2011; Truss et al., 2012).

Meanwhile, it can also be understood that effective learning and occupational development requires a personalized approach in conjunction with self-initiated and self-directed learning activities. This is particularly the case when it comes to development of the most sought after skills of modern employees such as problem-solving and self-management skills (World Economic Forum 2020; Whiting, 2020). Likewise, increased information or training does not always guarantee deeper learning or adaptive performance since developmental processes are influenced by motivations, values, mental attitudes, and mindsets.

Thus, it becomes clear that cognitive self-development can contribute to development of adaptability resources and skillsets that are required by many professionals, and most notably by professionals with international careers. Moreover, due to protean and agile career paths, it is generally the responsibility of the individual to initiate development on self-knowledge, personal adaptability skills, and career competencies (Hall, 1996). Consequently, self-leadership, and cultivation of personal values in openness and continuous learning are recognized as imperative for career success and future employability (cf. Fugate et al., 2004, pp. 21–22; Alves et al., 2006, p. 346; Hall & Chandler, 2005, p. 164).

1.1 Justification for the study

The dynamic nature of business and social change results in a continued demand for researching the subject of adaptability. Accordingly, adaptability skills, adaptive leaders, and adaptable organizations have gained growing interest among researchers in the fields of management, leadership, and organizational studies (see Deloitte, 2018;

Villalobos et al., 2020; Whiting, 2020; Ramalingam et al., 2020; World Economic Forum 2020; Shams et al., 2021). Meanwhile, there is still a considerable research gap in understanding how adaptability is developed (Waldeck et al., 2021, p. 73).

Since many themes, such as self-regulation, have major overlaps across adaptability and self-leadership literature, it is convincing to believe that these research areas may offer complementary insights (see Manz, 1986; Stewart et al., 2011; Hamtiaux et al., 2013; Neck et al., 2020; Knotts et al., 2021; Waldeck et al., 2021). Likewise, considering the contextual nature of adaptation in the working life, the intersection between the research areas has potential for finding new discoveries in the subjects of leadership and self-development. Besides, self-leadership research may be able to answer to questions on how to effectively self-influence and direct individual growth in times of change. Given these points, it is unfortunate to see that self-leadership has been neglected as a research topic (Cunha et al., 2017, p. 473).

Analysis of co-words “self-leadership” together with either “personal adaptability” or “individual adaptability” across multiple databases (Elsevier, SAGE, Science Direct, Springer, Taylor & Francis, Web of Science) resulted in a mere five publications focusing on the self-developmental relationship between the two concepts. In a broader keyword analysis a total of nineteen publications were identified as having discussion combining the concepts of self-leadership and individual-level adaptability or flexibility development. Therefore, it can be concluded that at the present moment research connecting self-leadership with outcomes of adaptability and flexibility is still extremely sparse and integrative reviews are much needed.

What’s more, numerous academics have expressed that there is a demand in research that studies the antecedents, cognitive resources, and mediating mechanisms of self-leadership and self-development (Neck et al., 2013, p. 464; Mendenhall et al., 2017; Knotts et al., 2021, p. 13). Specifically, Knotts and colleagues (2021) make a note that most self-leadership studies have not researched patterns and relationships between a

multitude of corresponding attitudes and outcomes (p. 2). The authors conclude that future research should be conducted on describing causal and correlational effects between self-leadership skills and different efficiency outcomes in the organizational context (Knotts et al., 2021, pp. 12–13). In this thesis, the research gap is addressed by considering continued adaptability development as a relevant efficiency outcome and as a result of self-directed development.

1.2 Research questions and objectives of the study

In accordance with the title, the research focuses on self-directed approaches to adaptability development. Not only does this mean that the objective is on researching the development of intrinsic capabilities for adaptation, but it also means that the research will examine influences that develop the self-directedness of the individual. In particular, self-directed influence is researched by studying the concepts of self-control, self-regulation, and self-influence as presented in self-leadership and adaptability literature. In addition, the research examines adaptability resources, self-leadership strategies, and cognitive qualities that are expected to strengthen the ability to continuously select and perform adaptive behaviors.

To summarize, the objective of this study is to conduct research on how personal adaptability can be developed through the means of self-leadership and cognitive self-development. However, the study does not claim to present an all-inclusive explanation on personal adaptability development as emotions and many psycho-social variables are omitted from the research.

The main research question of the thesis is:

1. How can an individual's adaptability be enhanced through self-leadership and cognitive self-developmental measures?

As main points of interest, the study will cover theories on individual-level adaptability, cognitive flexibility, and cognitive self-leadership. The study acknowledges that development of cognitive resources and developing the ability to be flexible with cognitive resources can enhance personal adaptability development (Fugate et al., 2004; Savickas & Porfeli, 2012; Wojtczuk-Turek & Turek, 2015). Consequently, the research aims to understand adaptability development by researching approaches for increasing self-directedness in development of these personal resources that aid in adaptation. In addition, the study will research self-directed alignment towards values or mental attitudes that benefit adaptability development.

The secondary research question supports the direction of the research by examining the fundamental success factors of self-leadership and cognitive self-development:

2. What is the influence of self-awareness and self-efficacy perceptions on personal adaptability development?

The research identifies self-awareness and self-efficacy perceptions as some of the most substantial factors that lead to adaptability development and to effective self-leadership. It is common knowledge that self-awareness can be beneficial for identifying personal values and in directing developmental efforts towards personally meaningful areas. In addition, especially in team environments, awareness over personal strengths or weaknesses is critical for effective adaptation and for selecting complementary behaviors that support goal attainment (Cunha et al., 2017, p. 475). Hence, it is expected that self-awareness and the perceived or believed self-efficacy related to one's own capabilities has an influence on the individual's ability to respond adaptively and to further develop adaptability resources. Moreover, a closer investigation is warranted as the discussion on these topic areas have considerable overlaps in adaptability and self-leadership literature.

1.3 Definitions of the main concepts

Adaptability refers to the ability of adjusting to new or changing situations with effective and constructive responses. The American Psychological Association define adaptability as “the capacity to make appropriate responses to changed or changing situations” and as “the ability to modify or adjust one’s behaviour in meeting different circumstances or different people” (APA, n.d.).

Adaptability and adaptive performance in the workplace can be observed in the level of the individual, team, or organization. As a psychological quality, adaptability is the capability of responding to uncertainty and variability by having the necessary resources for cognitive, emotional, and behavioral self-regulation (Martin et al., 2013; Hamtiaux et al., 2013; Waldeck et al., 2021). This study specifically focuses on the cognitive and behavioural components of personal adaptability, i.e. on the individual’s ability to adjust mental processing and behaviour.

Cognitive flexibility or mental flexibility is defined as the ability to adjust mental processes and to think differently depending on situational changes. In broad terms cognitive flexibility is the capacity to practice open-mindedness (Snow, 2018), or the capacity to practice flexible thinking. Furthermore, cognitive flexibility can be defined as willingness to assess alternative points of view. This capacity for flexible thinking is accessed when one considers multiple concepts at once or in quick succession by switching attention, mental states, and focus of awareness (Diamond, 2013; Braem & Egner, 2018).

Self-leadership describes a broad set of forces and strategies that impact the process of initiating and applying influence on oneself (Knotts et al., 2021, p. 1; Neck et al., 2020). The primary self-influencing strategies in self-leadership are frequently divided to cognitive strategies and behavior focused strategies (Stewart et al., 2011; Knotts et al, 2021). In addition, self-leadership consists of self-assessment and self-regulatory processes that influence efficacy in achieving goals and developing personal competencies (Bandura,

1986; Stewart et al., 2011; Marques-Quinteiro & Curral, 2012; Neck et al., 2013; Knotts et al., 2021).

Leaders are defined as individuals with initiative to create collaborative and constructive movement forwards (Jackson & Parry, 2008, p. 15; Truss et al., 2012). In an organizational setting, leading involves interpersonal interaction between different levels of the organization by displaying problem-solving skills, and skills in creating vision, co-operation, and motivation (Jackson & Parry, 2008, pp. 12–15). Leadership literature often emphasizes that leaders act as engaging and inspiring role models, such as in the case of leadership theories on charismatic leadership, authentic leadership, and transformational leadership (Shamir et al., 1993; Bass, 1985; Bass & Riggio, 2006). Leaders utilize different sets of leadership skills depending on environmental- and situational factors (Paauwe & Farn-dale, 2017). In other words, the effectiveness of leading is contingent on flexibly selecting leadership strategies and styles to meet internal and external demands of the situation. While self-leadership is not necessarily only practiced by leaders, the concepts offer supportive insights to practitioners and researchers of either academic field.

Self-efficacy refers to the “belief that one has the personal capabilities and resources to meet the demands of a specific task or situation” (McCormick, 2001, p. 26). To sum up, self-efficacy is the collection of perceptions, judgements, and beliefs on our ability to cope with and overcome the challenges or changes that we may face in our lives (Bandura 1989; Wood & Bandura, 1989; Manz, 1989; Griffin & Hesketh, 2003, p. 67).

1.4 Structure of the study

This study consists of six main chapters. The first chapter is the introduction to the thesis, which describes the background, justifications, research objectives, research questions, and key concepts of the research. The second chapter is a literature review that presents the relevant theories and findings from literature by examining theories on adaptability, cognitive flexibility, and self-leadership. Specifically, the theoretical chapter examines

different tools and theoretical frameworks that can be useful in self-influencing and self-directing the development of personal resources needed for adaptation. The third chapter presents the research design by describing the methodological approaches to data collection and analysis as well as the limitations of the chosen research method. The fourth chapter consists of the gathered findings from eleven qualitative semi-structured interviews that were conducted as part of the empirical data collection for this study. The fifth chapter analyses and discusses the collected empirical and theoretical data while answering to the research questions. Moreover, the discussions chapter presents a model based on the research. Finally, the sixth chapter describes the conclusions of the study in addition to giving practical implications and suggestions for future research.

2 THEORETICAL BACKGROUND

The predominant focus of the literature review is on understanding how it may be possible to self-direct towards personal adaptability development. Considering the primary research question of the research, the concept of self-leadership and specifically cognitive self-leadership emerges as a highly relevant theoretical framework. However, it is beneficial to first understand what adaptability is and what is the relationship between cognitions and adaptability.

Therefore, the theoretical background of the research is divided into two main themes. The first theme examines the concepts of adaptability and individual-level adaptability in addition to researching conceptual frameworks on cognitive flexibility. Subsequently, the second main theme researches self-leadership, different practical approaches to demonstrating self-leadership, and the outcomes of self-leadership.

2.1 Adaptability

Adaptability is the application of creativity, proactivity, and knowledge from past experiences in creation of context aware changes and adjustments (cf. Leong, 2020; Waldeck et al., 2021; Hamtiaux et al, 2013; Wojtczuk-Turek & Turek, 2015; Pulakos et al., 2002)¹. Marques-Quinteiro & Curral (2012) define adaptability in the workplace as the personal capacity to effectively cope with changes such as new work processes, work roles, or other forms of change that involves the individual, team, or organization (p. 560). Consequently, across literature the different elements of adaptability seem to be affiliated with many concepts such as resilience, thriving, and flexibility (Griffin & Hesketh, 2003; van den Berg & van der Velde, 2005, p. 455; Ployhart & Bliese, 2006; O'Connell et al.,

¹ Note that references are generally placed in order of relevance, or in a chronological order. Page numbers in the citations are used to highlight the most relevant section within the work.

2008; Hamtiaux et al., 2013; Wojtczuk-Turek & Turek, 2015, pp. 405–406; Jiang, 2017; Leong, 2020; Waldeck et al., 2021).

Adaptability can be considered as a skill or competence that is developed through life experience and effort. Diversified portfolio model of adaptability states that “a diversified portfolio of activities, roles, and experiences will lead to greater adaptability in life” (Leong, 2020, p. 609). In the model, diversity is considered as a central predictor of developing adaptiveness seeing that diversity contributes to resilience, self-efficacy, and self-esteem (Chandra & Leong, 2016; Leong, 2020). Moreover, having awareness over the different aspects of self-identity and having personal experiences of acting in multiple social or work roles is proposed to result in adaptive responses and improved mental coping skills in different situations (Chandra & Shadel, 2007; Leong, 2020, pp. 610–611).

To illustrate, we can consider how a hardworking construction manager could benefit from their earlier life experience being an affectionate parent and a spouse, active basketball player, bartender, and a lifeguard. Each of the varied experiences have contributed to building different career skills, self-leadership skills, and social skills with different groups of people. Accordingly, past experiences and perceptions over one’s own competencies may result in self-confidence and self-efficacy to prepare us for times where adjustment is required or as work situations change (Wood & Bandura, 1989, p. 374; O’Connell et al., 2008, p. 251; McCormick, 2001; Pulakos et al., 2002; Griffin & Hesketh, 2003).

Self-efficacy is a closely associated concept of self-confidence and courage (Bass, 1990, p. 153; McCormick, 2001, p. 24; Luthans et al., 2007, p. 196). Congruent with a wide body of research, self-efficacy has a great deal of influence on effectiveness, performance, behavior (e.g. Bandura, 1989; Manz, 1989; Godwin et al., 1999; Neck et al., 2020), and on the ability to adjust to changes (van den Berg & van der Velde, 2005; Leong, 2020). Moreover, self-efficacy can mediate adaptability by increasing or decreasing motivation and determination in taking steps for accomplishing goals (Leong, 2020, p. 611;

Wojtczuk-Turek & Turek, 2015, p. 403; Fugate et al., 2004, p. 23; Bandura, 1989). As a consequence, perceived self-efficacy is also implied to impact the way we recognize and capitalize on opportunities or alternative means of action (Neck et al., 2020, p. 16).

According to Leong (2020), diverse experiences create self-efficacy beliefs and personal confidence for performing a broad-spectrum of challenging tasks. Furthermore, it is anticipated that diversity in experiences, social networks, and social or work roles promotes learning by producing versatile feedback for the construction of self-efficacy beliefs (Leong, 2020, pp. 611–612; van den Berg & van der Velde, 2005). The concept of self-efficacy will be examined at a greater detail in the following chapters since the concept has been widely studied in self-leadership theory and is suggested as one of the primary influences that guide self-directed development and constructive behavioral change (Neck et al., 2020, p. 16; Knotts et al., 2021, p. 12; McCormick, 2001).

To resume the conversation on the positive effects of diversity, effective adaptation is dependent on having the necessary cognitive resources and expertise to implement behavioral and psychological adjustments. For example, proficiency to speak in multiple languages builds the capacity to act with greater adaptivity in multilingual environments (Gándara, 2015). Similarly, a software developer typically benefits from having wide experience across multiple programming languages. In addition, the same principle is applicable to learning as prior knowledge is strongly connected to learning engagement and effective use of knowledge-seeking activities (Dong et al., 2020, p. 8).

Diversity, and more specifically cognitive diversity, results in a versatile set of thought patterns, perspectives, and problem-solving methods which is theorised to produce adaptive outcomes and novelty in changing environments (see Leong, 2020). However, cognitive diversity alone may not produce optimal results. Awareness, resilience, and mental flexibility in accessing and applying these varied cognitive resources is required.

Masten (2001) defines resilience as the ability to create positive outcomes despite facing threats in the process of adapting or developing. It is the “capacity of a dynamic system to withstand and recover from significant challenges that threaten its stability, viability, or development” (Masten, 2011, p. 494). While the personal quality of resilience and the associated coping skills have been largely studied in psychiatry and treatment of mental health, research related to the concept may additionally offer valuable insights that are applicable to cognitive self-development and adaptability development (c.f. Connor & Davidson, 2003; Fernandez, 2016).

Resilience and mental toughness are particularly relevant during stressful times. In a recent study Waldeck and colleagues (2021) found that psychological distress is a negative factor which predicts hindrances to adaptability development (p. 75). Meanwhile, positive lifestyle changes, various stress management techniques, mindfulness, and social well-being seem to have a positive effect on personal resilience and adaptability (O’Connell, 2008, p. 249; Harvard Medical School, 2018; Waldeck et al., 2021; Spreitzer et al., 2005; Langer, 1989; Besser et al., 2020). Likewise, frequently experiencing positive self-efficacy beliefs can lead to perceiving stressful situations as less stressful (Orkibi, 2021, p. 10).

Generally, resilience is associated with the ability to be buoyant and to bounce back from adversity (Spreitzer et al., 2005, p. 538; Ledesma, 2014, pp. 1–2; Besser et al., 2020, pp. 19–20; Orkibi, 2021, p. 3). However, contradictory perspectives propose that the capacity to recover from challenges does not appropriately describe the entire extent of resilience, and consequently other definitions of the concept seem to include a component of change or transformation (see Hart et al., 2016, p. 3).

Notably, some research makes a connection between the related concepts of resilience and thriving (Connor & Davidson, 2003, p. 76; Ledesma, 2014). Spreitzer et al. (2005) states that thriving is a self-adaptive process where self-regulatory resources are used in creation of sustained positive development. In contrast, according to Brooks the focus

of resilience is on personal control with the goal to “expend our time and energy on situations over which we have influence” (Harvard Medical School, 2018).

It becomes evident that the conceptual frameworks on development of resilience and thriving have similar elements to frameworks on self-control and self-regulation as seen across self-leadership literature (Carver & Scheier, 1982; Manz, 1986; Neck et al., 2013; Stewart et al., 2011). By the same token, literature on personal adaptability suggests that self-regulation, learning, and actively engaging in relevant developmental activities is essential for effective adaptation (Ployhart & Bliese, 2006, p. 27; Hamtiaux et al., 2013; Waldeck et al., 2021), resulting in yet another connection between the fields of research.

Since the concept of thriving is characterized by “growth and momentum marked by a sense of feeling energized and alive” (Porath et al., 2012, p. 250), it is possible that thriving may lead to adaptability development. If adaptation is an evolving learning process, then having mental attitudes and experiences of thriving can be highly beneficial. Porath, Spreitzer & Garnett (2012) additionally note that self-development and specifically development of psychological resources can aid in overcoming career obstacles and may subsequently enhance the means for adaptation in different career environments. Thus, learning orientation and self-development are consistently characterized as essential enablers of thriving and adaptation (e.g. Marques-Quinteiro et al., 2016, p. 112; Jiang, 2017, p. 93; Porath et al., 2012; Spreitzer et al., 2005; Ployhart & Bliese, 2006).

Interestingly thriving and adaptation can also be dependent on optimism (Ledesma, 2014, p. 5; Wojtczuk-Turek & Turek, 2015, p. 401) and more importantly, on proactiveness and personal orientations toward change (Chen et al., 2020, pp. 10–11; Villalobos et al., 2020; Porath et al., 2012; Tolentino et al., 2014; Wojtczuk-Turek & Turek, 2015). Porath and colleagues (2012) propose that thriving is positively correlated with proactivity as proactive individuals frequently initiate intentional changes and capitalize on opportunities for self-development. In addition, proactive individuals may be better equipped to develop their social resources and learning orientation since they actively

participate in proactive work behaviors such as frequently asking questions, seeking assignments outside current job responsibilities, and taking formal or informal leadership roles (Griffin et al., 2007; Fuller & Marler, 2009; Truxillo et al., 2012). Lastly, it is generally suggested that proactive work behaviors are likely to lead to development of various adaptability resources (Jiang, 2017, p. 93).

The next subchapter examines interrelated theories and models on individual-level adaptability by proposing three frameworks as having significant theoretical implications for adaptability development. Granted that this research advocates the use of multiple models and theories in illuminating adaptability development, the terms individual-level adaptability, personal adaptability, and adaptability are used interchangeably in the latter stages of the research.

2.1.1 Frameworks on individual-level adaptability

An individual's personal capability for being adaptable is describable as a psychological characteristic, trait, or quality that governs the ability and motivation for rapid learning and adjustment (Fugate et al., 2004, p. 22; O'Connell et al., 2008, pp. 251–252; Ployhart & Bliese, 2006). Across literature, three theoretical frameworks emerge with similar qualities indicating an explicit focus on individual-level adaptability. These are theories on individual adaptability, career adaptability, and personal adaptability (Chen et al., 2020; Hamtiaux et al., 2013; Ployhart & Bliese, 2006; Savickas, 1997; Savickas & Porfeli, 2012; O'Connell et al., 2008).

Interestingly the selected theories emerged in the literature during the same time period, in the turn of the century. It can be argued that the theories are competing, yet it can also be said that the theoretical foundation of the theories seem to have both resemblances and dissimilarities (see Table 1). Thus, the following chapter will focus on examining the interrelated theories.

Table 1. Theories on individual-level adaptability

Theoretical framework	Description
Individual adaptability	"Ability, skill, disposition, willingness, and/or motivation, to change or fit different task, social, and environmental features" (Ployhart & Bliese, 2006, p. 13) Self-perceived ability to adjust oneself in general and situation specific circumstances (Ployhart & Bliese, 2006; Hamtiaux et al., 2013)
Career adaptability	The combination of a) self-control and self-discipline towards one's work role and responsibilities, b) readiness to apply and develop various career skills and adaptability resources, and c) mental attitudes such as willingness, openness, and curiosity to explore opportunities within one's career (Savickas, 1997; Savickas & Porfeli, 2012)
Personal adaptability	Willingness and capability to adjust personal factors (O'Connell et al., 2008) Ability that is accessed by having self-control over one's developmental processes, by being both open and willing to acquire new skills, abilities, and knowledge, and by having self-efficacy beliefs that allow for recognizing and actualizing opportunities within one's job and career (Fugate et al., 2004, pp. 21-23)

Individual adaptability is both a general and situation specific performance factor that leads to differences in individual's responses to situations (Ployhart & Bliese, 2006, pp. 13, 26). Individual adaptability theory approaches adaptability by considering how task-related adaptability requirements are met by adjusting cognitive processes, utilizing coping strategies, and selecting either proactive or reactive approaches depending on how dynamic the work situation is (Ployhart & Bliese, 2006, pp. 6–12). Accordingly, individual adaptability has a predictive and generalized characteristic, in other words it is a skill or ability that can be applied to multiple contexts to produce adaptive performance (Ployhart & Bliese, 2006).

One of the central theories that have attempted to categorize adaptive performance across occupations is offered by Pulakos and colleagues (2000). The researchers argue that adaptive performance in the workplace can be categorized by using an eight dimensional taxonomy: 1) managing emergencies or crisis situations, 2) managing work stress, 3) managing unpredictable work situations and uncertainty, 4) demonstrating interpersonal adaptability, 5) demonstrating cultural adaptability, 6) demonstrating willingness

and the ability to learn new skills, technologies, and work tasks, 7) demonstrating creative problem solving and the ability to manage complexity, and 8) demonstrating physically-oriented adaptation (Pulakos et al., 2000).

Admittedly, some researchers have insisted that the last dimension of the taxonomy, physical adaptation, is not a valid measure unless the work environment is physically demanding (Griffin & Hesketh, 2003, p. 71; Hamtiaux, 2013, pp. 137–139; Johnstone & Wilson-Prangley, 2021, p. 5). Furthermore, over the years other scholars have also reached similar conclusions and expanded the knowledge on the interplay between different dimensions of the taxonomy, e.g. by highlighting the importance of adaptive processes in cultural and interpersonal adjustment, and in production of creative responses during stressful or challenging circumstances (Corritore et al., 2020; Orkibi, 2021; Sutton et al., 2006).

In spite of this, the original taxonomy for adaptive performance has been validated and applied by numerous researchers (Pulakos et al., 2002; Griffin & Hesketh, 2003; Ployhart & Bliese, 2006, p. 14–18; Hamtiaux et al., 2013; Johnstone & Wilson-Prangley, 2021). In particular, the taxonomy functions as a vital part of Ployhart & Bliese's (2006) individual adaptability theory and measurement system (I-ADAPT-M), which according to multiple scholars creates a "valid measure of the persons self-perceived capacity to adapt or change" since it allows for measurement of both generalized and work context specific adaptability (Hamtiaux et al., 2013, pp. 139–140).

It becomes evident that there are many correlations between theories on individual adaptability and career adaptability. Savickas (1997) describes career adaptability as the "readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions" (p. 254). Consequently, career adaptability theory implies that adaptability development arises from the combination of having willingness and openness as a personal characteristic or trait, as well as having the necessary skills or

adaptability resources to effectively participate in adaptive behaviors (Savickas 1997; Savickas & Porfeli, 2012; Chen et al., 2020, pp. 14–15). Moreover, career adaptability is demonstrated by applying self-regulatory resources to cope with and guide one's work tasks, work-related activities, and career development (Savickas & Porfeli, 2012, p. 662; Jiang, 2017, p. 86; Hamtiaux et al., 2013, p. 139).

In addition to being validated cross-culturally, the theory of career adaptability has also led to the development of a measurement scale for evaluating individuals' career adaptability (Savickas & Porfeli, 2012). Career-Adapt-Abilities-Scale (CAAS) argues that career adaptability consists of four aspects: concern, control, curiosity, and confidence (Savickas & Porfeli, 2012). The first dimension is described as concern towards one's career and future (Savickas & Porfeli, 2012, p. 667). The second is described as personal control, determination, and self-discipline towards one's responsibilities (Savickas & Porfeli, 2012, p. 663). The third is described as curiosity in discovering career options and as willingness to capitalize on career related opportunities (Jiang, 2017, p. 86). Lastly, the fourth aspect of career adaptability is confidence consisting of a belief in the capability to overcome obstacles and as a faith in the ability to make effective career related decisions (Hamtiaux et al., 2013, pp. 137–139).

The theory on career adaptability initially included a fifth factor, cooperation (Savickas, 1997). However, the last dimension was removed from the framework in the author's following work (Savickas & Porfeli, 2012). Nevertheless, other researchers have argued that there is enough support to suggest that cooperation should be part of the CAAS framework (Nye et al., 2018; Prasad et al., 2021).

The CAAS-5 dimension of cooperation is conceptualized as an interpersonal skill to work successfully and flexibly with other people (Prasad et al., 2021, pp. 252–253; Nye et al., 2018, p. 551). In consideration of this, it appears that the CAAS-5 framework has overlaps with frameworks on adaptive performance and individual adaptability (Pulakos et al., 2000; Pulakos et al., 2002; Ployhart & Bliese, 2006). In particular, both the dimensions of

cultural and interpersonal adaptability in individual adaptability theory would correspond to the dimension of cooperation in the CAAS model (Prasad et al., 2021; Ployhart & Bliese, 2006). In addition, according to research that compared the measures of I-ADAPT-M and CAAS, it is suggested that the two models have convergent validity meaning they more or less measure the same adaptive capacities (Hamtaux et al., 2013, p. 139).

Contrary to the aforementioned models, theories on personal adaptability do not seem to have an associated measure or scale. Rather, the theories address and discuss general guidelines and qualities which are beneficial for development of individual-level adaptability. In short, personal adaptability is described as the willingness and capability to adjust personal factors such as mental attitudes, behaviors, and KSAO's (Fugate et al., 2004, p. 21; O'Connell et al., 2008). KSAO stands for knowledge, skills, abilities, and other characteristics, thus, it encompasses for example cognitive abilities, personal preferences, and coping skills and strategies (Krumm et al., 2016).

According to Fugate and colleagues (2004), the most crucial personal adaptability resources are optimism, openness, willingness to learn, having an "internal locus of control", and overall having frequent experiences of self-efficacy (Fugate et al., 2004, p. 22). Further, the authors note that the synergy of the said qualities is directly linked to the ability to identify and capitalize on opportunities in the workplace (Fugate et al., 2004, p. 22).

Having an internal locus of control implies that the person believes in their actions and intrinsic abilities to influence and control outcomes towards desired results (Fugate et al., 2004, p. 23; Neck et al., 2020, p. 168), in other words, people with internal locus of control generally believe that hard work and effort will lead to success. Consequently, the belief is heavily related with confidence and self-efficacy, which seem to be necessary for applying effective influence on one's own work performance and career development (Fugate et al., 2004). To conclude, most if not all of the theories on developing

individual-level adaptability appear to emphasize the importance of continuous learning, self-regulation, and self-control (Fugate et al., 2004; Ployhart & Bliese, 2006; Savickas & Porfeli, 2012; Hamtiaux et al., 2013).

However, as an irregularity, the general presumption of personal control having a positive influence on adaptation has been challenged in quantitative research studying the personal adaptability of employees working in U.S. nuclear production and maintenance facilities (O'Connell et al., 2008). The original hypothesis of the researchers was disapproved based on responses to 604 surveys, as a result the researchers concluded that independently personal control or job demands do not encourage individuals towards adaptability development (O'Connell et al., 2008, pp. 253–257).

Instead, the findings of the research indicated that both managerial support and perceived employability, i.e. the employees' perceptions regarding the extent of their own unique human capital, have a very significant influence on development of personal adaptability (O'Connell et al., 2008, p. 256). Similarly, Griffin & Hesketh (2003) found that managerial support and exposure to work assignments that are challenging may assist employees in developing their adaptability (p. 71). Admittedly, the findings from both of these researches suggest that personal adaptability development is dependent on the contexts of work and organization (Griffin & Hesketh, 2003; O'Connell et al., 2008).

Nevertheless, it may not be coincidental that adaptability resources which lead to developing unique human capital are gaining emphasis across the literature. Many researchers specifically claim that people who are open to change and have the willingness to engage in learning or training activities are significantly more prepared for career development opportunities (e.g. Marques-Quinteiro & Curral, 2012, pp. 567–568; Hamtiaux et al., 2013, p. 137; Miller et al., 1994; Hall & Mirvis, 1995; Fugate et al., 2004; Hall & Chandler, 2005; Taylor, 2006). Hence, it is not surprising that the personal characteristic or quality of openness is considered fundamental in situations where the individual is expected to continuously adjust to new situations and environments (Christensen et al.,

2019). Consequently, developing positive mental attitudes towards new experiences, change, learning, and growth is expected to be valuable for adaptability development.

2.1.2 Cognitive flexibility

Adaptability is proposed to consist of three types of flexibility: cognitive flexibility, functional flexibility, and regulatory flexibility (Wojtczuk-Turek & Turek, 2015). To summarize, cognitive flexibility consists of a) having awareness of options, b) having the mental attitude and willingness to be change-oriented, and c) being able to adjust mental processes and goals to fit the needs of a given situation (Martin & Anderson, 1998; Griffin & Hesketh, 2003, p. 67; Braem & Egner, 2018, pp. 470–471). Functional flexibility, on the other hand, consists of having a broad set of skills and professional expertise which allows the individual to adjust to different work tasks and assignments (Wojtczuk-Turek & Turek, 2015, pp. 400, 409). Lastly, regulatory flexibility consists of having the necessary regulatory strategies for constructively coping with different situations and critical feedback (Bonanno & Burton, 2013). Similarly to the previously discussed literature, balancing between different types of flexibility is exceedingly advantageous for adaptability development as the different types of flexibility may have synergistic effects towards one another.

Especially when approaching adaptability development by means of cognitive self-development, it is noteworthy to discuss the concept of cognitive flexibility. Since cognitions influence problem recognition and development of solutions (Martin & Andersson, 1998), flexible control over cognitive processes may predict adaptive action. Cognitive flexibility is conventionally referred to as a task- or set-switching skill (Diamond, 2013). However, recent findings indicate that the capacity to be cognitively flexible is related to attitudes and motivations which lead to creative processes and adaptive performance in dynamic environments (Ionescu, 2012; Braem & Egner, 2018, pp. 471, 473; Yu et al., 2019, p. 570). In other words, cognitive flexibility is not only a skill that is needed in evaluating and comparing different perspectives or types of logic, but it is also the personal tendency of regularly practicing open-mindedness and adaptive thinking.

Moreover, it may be essential to have cognitive flexibility in order to develop sustainable adaptive behaviors since personal interpretations, mental attitudes, and the perceived or believed need for adaptation may persuade a person to change or adapt their behaviors, emotions, and cognitions (Pulakos et al., 2002; Wojtczuk-Turek & Turek, 2015, p. 400; Orkibi, 2021, p. 2). One could assume that cognitive flexibility is especially required by knowledge workers. Although, prior research has proposed that cognitive flexibility may not be predictive of adaptive performance for employees that work in accounting-, legal-, or information technology-based industries (Griffin & Hesketh, 2003, p. 71). Thus, there is controversy surrounding the findings regarding occupations that benefit the most from development of cognitive flexibility.

Indeed, cognitive flexibility may be exceptionally susceptible to the environment and to any possible rewards inherent in “the choice to be cognitively flexible” (Braem & Egner, 2018, pp. 472–473). In other words, it may not be natural to demonstrate cognitive flexibility unless the work task or environment demands it. On the other hand, it is also argued that cognitive flexibility can be conditioned with rewarding strategies and cues that are associated with rewards (Braem & Egner, 2018, pp. 473–474). Thus, the general readiness or motivation to assess alternative perspectives and to regularly apply different thinking approaches may be developed via exposure to cognitive job demands (Meyer & Hünefeld, 2018, p. 3; Braem & Egner, 2018, p. 473) and by utilizing appropriate self-leadership strategies.

2.2 Self-leadership

As positioned by the research, self-leadership is examined as a potential influence on personal adaptability development. Self-leadership may be defined as the process of influencing oneself to establish the needed self-direction and self-motivation for bringing about positive change and effective performance (Manz, 1986; Neck et al., 2013; Stewart et al., 2011). At the centre of this literature is the concept of self-influence (Manz & Sims,

1980), which refers to the notion that fundamentally our actions are guided by internal forces rather than by external forces (Manz, 1986). In short, self-leadership literature considers multiple levels of self-influence to produce an extensive framework on behavioral and cognitive self-influencing strategies (Neck & Manz, 1992; Stewart et al., 2011, p. 188).

Many of the practices and strategies of self-leadership are highly applicable in entrepreneurial and organizational contexts or while working in self-managed work teams (Marques-Quintero & Curral, 2012; Klösel, 2021; Neck et al., 2013; Neck & Manz, 1996; Neck et al., 2020, pp. 176–177; Marques-Quinteiro et al., 2016). It is widely acknowledged that self-leadership is not a substitute to traditional leadership, although the theory surrounding the concept offers multiple insights on how to increase performance, learning, engagement, and teamwork (Godwin et al., 1999; Neck & Manz, 1996; Knotts et al., 2021; Marques-Quinteiro et al., 2016).

The field of self-leadership has benefited from multidisciplinary studies in organizational behavior, psychological sciences, and leadership and management research during the past forty years (Manz & Sims, 1980; Manz, 1986; Godwin et al., 1999; Stewart et al., 2011; Marques-Quinteiro & Curral, 2012; Neck et al., 2013; Neck et al., 2020; Knotts et al., 2021). Hence, it can be summarized that self-leadership is a constantly evolving and novel study area of integrative self-development.

Self-leadership is characterized by the intention of creating conscious internal change on the level of behaviors, thoughts, and emotions in an attempt to guide towards adaptive outcomes and productivity. Correspondingly, the theory offers a broad perspective on strategies and self-initiated approaches that allow for constructive behavioral or cognitive change. The literature implies that habitual engagement in self-evaluative and self-regulative behaviors contribute to making positive adjustments, however, it is also stated that effective setting of personal goals is needed (Manz, 1986; Godwin et al., 1999; Stewart et al., 2011; Neck et al., 2020; Knotts et al., 2021).

2.2.1 Theoretical foundation of self-leadership and self-management

Self-leadership and self-management are frequently used to refer to a similar set of approaches or practices. The concept of self-leadership was originally introduced by Manz (1986) as an expansive continuation to previous theoretical framework on self-management and self-control (Manz & Sims, 1980; Andrasik & Heimberg, 1982; Thoresen & Mahoney, 1974). That being said, important similarities and differences exist between the two conceptual frameworks (Manz, 1986, pp. 589–590; Knotts et al., 2021, pp. 2–3).

Control theories and theories related to social learning and socio-cognitive behavior form the foundations of self-leadership and self-management literature. Behavioral self-control theory (Thoresen & Mahoney, 1974) proposes an early definition of self-control by stating that self-control is based on an individual's own choice to participate in beneficial behavior despite having more tempting options. Shortly afterwards Carver & Scheier (1982, 1998) expanded the literature on control theory by presenting a model for self-regulation.

The authors propose that the dynamic process of self-regulation occurs through a negative feedback loop which is composed of behavioral and cognitive influences that systematically lead to managing deviations from expected outcomes (Carver & Scheier, 1982, pp. 112, 120–122). According to the model, the feedback loop is negative as the self-regulatory process functions by contrasting and adjusting the present behavior based on a comparative value (Carver & Scheier, 1982, p. 112). While Carver & Scheier's model (1982) implies a strong focus on self-imposed behavioral and cognitive strategies, it also suggests that parts of this process may be automatic and outside our conscious awareness (p. 113).

To clarify, Carver & Scheier (1982) propose that behavioral adjustment is largely influenced by our expectations, standards, and alternative points of comparison which signal desired behaviors and desired outcomes. Likewise, academics in self-management have described self-regulation as the combination of internal control, self-assessment, and

self-influencing that aims to reduce “discrepancies from standards” (Manz, 1986, p. 591). That is to say, consistency over the outcomes of one’s behaviors and reactions is seen as the primary objective of self-regulation.

Self-management literature often suggests that this concordance or congruence is mostly achieved through behavior-focused strategies (Unsworth & Mason, 2016; Neck et al., 2020, p. 59) and by strategies that are control-oriented (Stewart et al., 2011, p. 187). However, as later recognized in cognitive self-leadership research, thoughts and other mental processes also have an influence on behavior (Neck & Manz, 1996; Stewart et al., 2011). Furthermore, setting standards and making comparisons between values is deeply influenced by cognitive perceptions and assessments (Carver & Schier, 1982, p. 112). Thus, it can be argued that the sole use of behavioral strategies in behavioral adjustment may lead to maladaptive outcomes as they rarely address personal values and personal goals (Unsworth & Mason, 2016).

Self-leadership, on the other hand, includes self-regulatory strategies for meeting existing and higher-order standards while addressing the reasons behind the behavioral choices (Manz, 1986, pp. 590–591). In particular, self-leadership considers the importance of personal values and how they impact the direction of the self-directed influence (Manz 1986; Neck et al., 2020). Hence, self-leadership places more emphasis on self-influencing processes that align personal objectives with one’s cognitions and behaviors (Knotts et al., 2021, pp. 2–3).

In other words, both self-management and self-leadership answer to the questions of how to change, but self-leadership also produces answers to the questions of what needs to change and why it needs to change (Manz, 1986). Therefore, “self-management represents only a moderate level of self-influence” (Godwin et al., 1999, p. 155), whereas self-leadership approaches are theorized to be more self-influential as they strive to achieve a greater internal congruence between decision-making and behaviors.

Cunha et al. (2017) proposes that there are four dualities of self-leadership that need to be balanced in order to achieve effective self-leadership and to avoid negative consequences (pp. 473–478, 486):

- Balancing challenge and routine. Which involves not only creating goals and developing curiosity to take on new challenges or work projects but also creating predictability by establishing a routine for work tasks and self-development.
- Balancing self and others. In other words, allocating time between self-development and building of social relationships.
- Balancing non-work and work. That is, achieving work-life balance by setting boundaries between the demands of personal life and professional life.
- Balancing mind and body, i.e. balancing well-being on the physiological and psychological levels by adopting adequate means for recovery.

The balance between the different dimensions can be regarded as one of the main goals of self-leadership due to the fact that imbalances may result in decreased performance or to other problems (Cunha et al., 2017). Hence, demonstrating self-regulation is essential for effective self-leadership. Provided that subjective well-being can be improved by effective approaches to behavioral, cognitive, and emotional self-regulation (Cunha et al., 2017; Judge & Locke, 1993; Martin et al., 2013), it is not surprising that the ability to practice self-regulation has also been connected to adaptability development (Waldeck et al., 2021).

One of the objectives of social learning theories has been to expand understanding on how social and cognitive factors influence self-regulatory processes. Arguably the most well-known theory on social learning is the social learning theory by Albert Bandura (1977) which suggests that behavior can be learned by observation. According to the theory, observational learning is the result of four cognitive and behavioral mediational processes: 1) Attention, consisting of observation and creation of mental representations, 2) Retention, consisting of remembering, restructuring, and organizing

information, 3) Reproduction, consisting of imitation of behavior based on created models or mental representations, and 4) Intrinsic and extrinsic motivational processes, consisting of personal fulfilment and rewards in the pursuit of objectives and goals (Bandura, 1977; Wood & Bandura, 1989, pp. 362–363).

At the core of social learning theory is the idea that intrinsic reinforcement and cognitive modelling of behavior improves our capability to be more receptive to learning and to select more adaptive behaviors. Furthermore, it is implied that cognitive models serve as representations of performance standards, and that self-regulation is also based on attitudinal and motivational factors (cf. Bandura, 1977; Carver & Schier, 1982).

Interestingly, the mediational process of modelling could also partly explain why e.g. learning in social environments such as libraries and study groups may help learners to direct attention and focus towards progressing on their studies. Even though learning is an individualized activity, modelling may help in creating associations between the social and physical environment, personal motivations, and the activity (see Bandura, 1977; Wood & Bandura, 1989). As a consequence, modelling creates role clarity – a clearer understanding on what are the effective actions in aligning task requirements, responsibilities, expectations, and processes.

Social learning theory was later developed and renamed to Social Cognitive Theory (SCT), the esteemed theory has since then been applied and adapted across academic disciplines and management research (Wood & Bandura, 1989; Knotts et al., 2021). Similarly to the social learning theory, SCT asserts that internal reinforcement, modelling, and self-regulation through mediational processes function as determinants of self-influence and learning (Bandura, 1977; Bandura, 1989). Yet, the theory also recognizes that personal competencies, analytic thinking, self-reflective processes, self-evaluation, approaches to setting goals, and perceptions such as self-efficacy function as major cognitive components in self-influencing (Bandura, 1989; Wood & Bandura, 1989, pp. 362, 368).

In contrast to the control theory where self-regulation is described as an attempt of minimizing discrepancies from standards (Carver & Schier, 1982), the social cognitive theory presents a broader view on self-regulation. Wood & Bandura (1989, p. 367) suggest that self-regulatory capabilities are influenced by self-motivation, which is dependent on discrepancy reduction (i.e. active self-control) and on discrepancy production (i.e. setting challenging goals). Thus, for example in achievement oriented individuals, it is convincing that growth and productivity can be enhanced by participating in constructive goal-setting strategies. According to the theory, the source of this motivational influence can be external or self-influenced, or even a combination of both (Bandura, 1989; Wood & Bandura, 1989).

Since personal standards can generate motivation (Wood & Bandura, 1989, p. 363), it would seem that personal development can be enhanced through recognizing and adjusting standards. Additionally, commitment towards goals and the confidence or self-efficacy that is gained from successfully exceeding previous expectations can promote future behavioral modification (Bandura, 1989; Wood & Bandura, 1989). These claims are also supported by recent research in self-leadership, asserting the notion that new standards created on the basis of earlier experiences can motivate to produce discrepancies resulting in elevated personal standards and elevated levels of performance (Knotts et al., 2021, p. 3).

Above all, the most significant argument of social cognitive theory in regard to human behavior is that cognitive processes and behavior both influence and are influenced by the physical and social environment (Bandura, 1989). Social cognitive theory proposes that the interrelated causation between a variety of personal factors, environmental factors, and behavioral factors is explained by reciprocal determinism (Bandura, 1989). In other words, the influence between the three factors operates bidirectionally, however, the influence may not necessarily occur simultaneously or at equal strength (Bandura, 1989, p. 362).

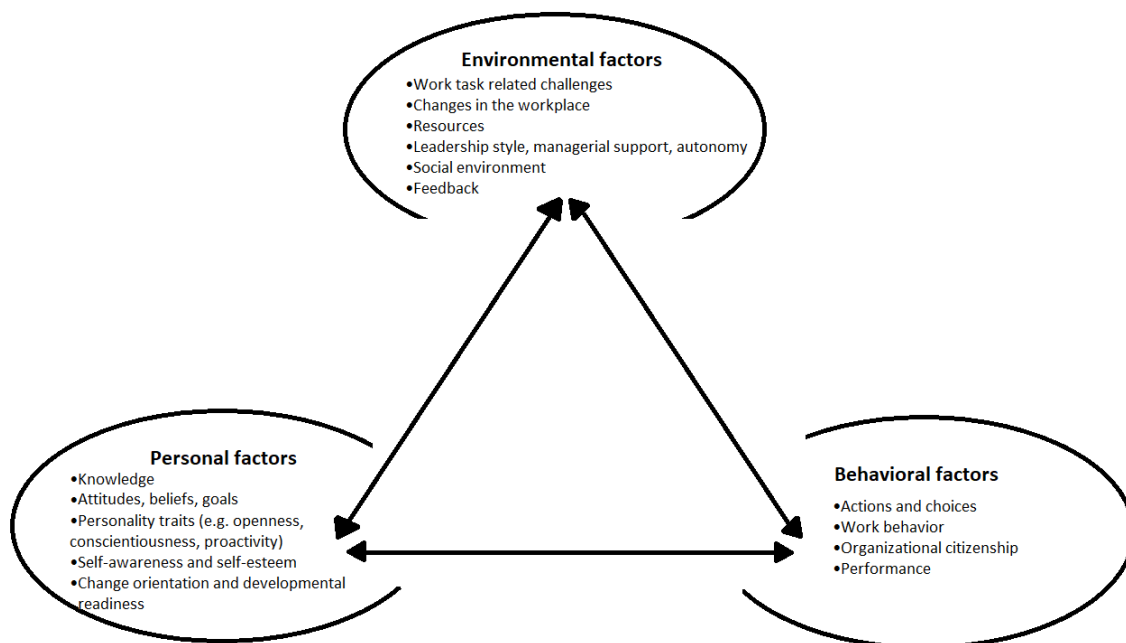


Figure 1. Bandura's triadic reciprocity adapted to the context of organizational change

The model on triadic reciprocity in Figure 1 has been adapted to the context of organizational change. In the following example the concept of triadic reciprocity is illustrated by considering maladaptive outcomes during organizational change. If the task assignment of an employee changes so that the employee is required to answer to e-mails at late hours, the negative perception of seeing this change as an inconvenience may bring irritability and subtle forms of neglect that contribute to an unhealthy work environment. Thus, the cognitive perception or belief of a responsibility being a nuisance can affect personal behavior and even the physical and social work environment surrounding the employee. Furthermore, due to the bidirectionality of the influence, receiving feedback on the employee's irritability can contribute to increasingly negative perceptions, cognitions, emotions, and behaviors.

On the other hand, positive perceptions may lead to similar series of events in the opposite direction. Under both of these circumstances it may be advantageous to become more aware of the causal relationships. Furthermore, better understanding or self-

awareness over personal factors can lead to self-confidence regarding the ability to create constructive change (McCormick, 2001).

Accordingly, beliefs, perceptions, and judgements on self-efficacy and personal competence are one of the most significant personal factors that influence the way we approach new situations and adjust our actions or behaviors (Bandura, 1989; Wood & Bandura, 1989; Neck et al., 2020, p. 16). “Available evidence indicates that our self-efficacy judgement influences the activities we choose to undertake or avoid, how much effort we expend, and how long we persist in the face of difficult situations” (Neck et al., 2020, p. 16). Similar convictions are also shared by Wood and Bandura (1989, p. 366):

If people’s self-efficacy beliefs are firmly established, they remain resilient to adversity. In contrast, individuals with weakly held self-beliefs are highly vulnerable to change, and negative experiences readily reinstate their disbelief in their capabilities (Wood & Bandura, 1989, p. 366)

Subsequently, self-efficacy beliefs may also partly explain why some individuals are change-oriented or mentally tough and resilient. Although it is inconclusive whether the positive effects of self-efficacy regarding change and resilience are transferrable between different work roles or work tasks, especially since self-efficacy may vary on a task-by-task basis (Bandura, 1986; Neck et al., 2020, p. 201). Nevertheless, it is not surprising that self-efficacy is identified as a major resource for personal effectiveness and adaptation (see Fugate et al., 2004, p. 23; Wojtczuk-Turek & Turek, 2015, p. 403).

Self-efficacy perceptions can be gained from multiple sources, for example from observation of behavior and responses in different situations or from conversations and self-talk that convinces us that we either have or do not have the adequate means to deal with a problem or situation (Neck et al., 2020, p. 17; Neck & Manz, 1996, pp. 458, 460). In addition, past achievements and successfully meeting previous goals may give self-efficacy for reaching future goals and objectives (Bandura, 1989; Wood & Bandura, 1989; Godwin et al., 1999; McCormick, 2001). “Self-efficacy plays a key role in goal setting

theory — It predicts goal choice, goal commitment, performance, and response to feedback” (Locke & Latham, 1990, p. 348).

Coincidentally, research studying the mediational relationships between self-leadership and performance claims that self-leadership influences performance through first enhancing perceptions on self-efficacy (Prussia et al., 1998; Knotts et al., 2021, p. 12). In conclusion, self-efficacy is with good reason an important personal resource while being one of the most meaningful developmental outcomes of self-leadership approaches.

2.2.2 Strategies for self-leadership

There are various ways to measure proficiency in self-leadership. Anderson and Prussia’s (1997) self-leadership questionnaire, which was also later revised by Houghton and Neck in 2002, provides a reasonably reliable and validated assessment scale for self-leadership (Houghton & Neck, 2002; Stewart et al., 2011, p. 191). To this day, revised and adapted versions of the self-leadership questionnaire are frequently used in assessment of self-leadership competence (Knotts et al., 2021, p. 11; Neck et al., 2020).

Originally, self-management and self-leadership literature identified strategies of self-observation, personal goal-setting, self-cueing, self-punishment, and strategies related to building extrinsic and intrinsic motivations (Manz, 1986; Stewart et al., 2011, p. 191). Most of these original strategies continue to remain in the discussion of present day self-leadership research due to recurring positive support and extensive practical applicability (see Neck et al., 2020; Knotts et al., 2021). With that said, strategies related to self-punishment are predominantly omitted from discourse as they have received negative support (Stewart et al., 2011, p. 188; Marques-Quinteiro & Curral, 2012, p. 566).

In the nineties and thereafter the field of research has shifted to focus more on the cognitive components of self-leadership. According to literature, it seems that the shift was caused by cognitive self-leadership strategies receiving abundant empirical support in

sports psychology, counselling psychology, clinical psychology, and communication (Neck & Manz, 1996, p. 446–447; Godwin et al., 1999, p. 156).

Self-observation, goal-setting, self-cueing, and extrinsic reward strategies are conventionally associated as behavioral self-leadership strategies (Manz, 1986; Stewart et al., 2011). By contrast, natural reward strategies, self-talk, visualization, and thought pattern strategies are generally considered as cognitive self-leadership strategies (Neck & Manz, 1996; Neck et al., 2013). In addition, more recently researchers have also expanded knowledge on emotional self-leadership (e.g. Manz et al., 2016). With that said, the traditional taxonomy that separates behavioral, cognitive, and emotional self-leadership strategies is controversial as self-leadership strategies often include interrelated elements.

The following table contains the selected self-leadership strategies that are relevant in development of personal adaptability (see Table 2). These include self-observation strategies, goal-setting and goal orientation strategies, self-cueing strategies, extrinsic and intrinsic reward strategies, thought pattern strategies, self-talk strategies, and strategies for visualisation and mental imagery (Stewart et al., 2011; Neck et al., 2020; Knotts et al., 2021).

Self-leadership strategies	
Behavioral	Self-observation
	Goal-setting and goal orientation strategies
	Self-cueing
	Extrinsic reward strategies
Cognitive	Natural reward strategies
	Thought pattern strategies
	Self-talk
	Visualization and mental imagery

Table 2. Self-leadership strategies for personal adaptability development

Note that the indentation of the table indicates that some of the strategies are complementary of one another. In particular, goal-setting and goal orientation strategies are typically supplemented by self-cueing and rewards-based strategies (Knotts et al., 2021, p. 3). Moreover, strategies for self-talk and visualization are frequently grouped under thought pattern strategies as they are frequently approached in a similar manner. In any case, each of the self-leadership strategies can also be practiced on their own.

Self-observation is the process of raising awareness by observing, assessing, and self-evaluating behaviors or processes (Manz, 1986, p. 593; Wood & Bandura, 1989, p. 363). As an example, self-observation can be practiced by tracking progress on work tasks. This process of appraising and assessing behaviors functions as an important part of self-regulation as it enhances understanding on how behavior should be adjusted in order to meet existing standards and to create adaptive responses.

Moreover, by practicing self-observation, the individual may identify reasons and conditions for choosing to perform specific behaviors (Stewart et al., 2011, p. 187). To illustrate, Neck & Milliman (1994) suggest that self-observation is pivotal for adjustment of thought patterns (p. 13). The first step in changing thought patterns is to recognize and confront negative habitual thoughts, such as restrictive thoughts and thinking that is excessively focused on obstacles (Neck & Milliman, 1994, pp. 13–14). Subsequently, by analysing the thoughts, one can confirm that the thoughts are either biased or untrue resulting in an opportunity to adjust towards more functional and constructive thoughts (Neck & Milliman, 1994, pp. 13–14; Godwin et al., 1999, p. 157). Coincidentally, self-observation should not only be considered as a behavioral approach in raising awareness but also as a metacognitive practice where thought processes are observed and reflected upon (Marques-Quinteiro, 2012, p. 562).

The premise is that self-monitoring or self-observation may lead to improved awareness, and consequently, to making more effective decisions that result in adaptive behaviors (Yu et al., 2019, pp. 565, 569). According to Cunha et al. (2017), enhancement of self-

awareness through reflexive practices such as self-observation leads to gaining a better balance between different personal competencies and resources (pp. 473–475). Reflexivity is especially important for leaders and self-leaders as developing vision and direction requires the leader to reflect on their leadership styles (Cunha et al., 2017, p. 473; Rant, 2020, p. 8).

Similar findings regarding the importance of reflection for managers and leaders are also supported by another research which emphasizes the importance of self-directed reflection (Nesbit, 2012, p. 207). Reflection is the active noticing and analysis of e.g. behaviors, thoughts, and interpretations based on one's past and/or current experiences. Asking questions and thinking about personal goals, values, and behaviors are examples of reflective practices. However, ultimately the purpose of reflection is to challenge assumptions, and acknowledge personal biases or preconceived beliefs (Kiersch & Gullekson, 2021, p. 5). Thus, self-reflection and guided self-reflection can be used to develop self-awareness (Kiersch & Gullekson, 2021, p. 4).

Developing self-awareness can be a highly complicated matter since by definition we are not consciously aware of what we do not know or understand about ourselves. Moreover, there are two kinds of self-awareness that need to be developed, consequently, self-awareness is deemed a rare personal quality that can always be refined upon (Eurich, 2018). Internal self-awareness can be developed through constructive introspection where one asks the right questions which lead to gaining understanding on how personal beliefs and values align with the environmental impact that one's reactions and responses cause (Eurich, 2018). By contrast, external self-awareness is described as the understanding of how others may view us and our actions (Eurich, 2018). As stated in Eurich's research (2018), it is vital to seek for opportunities and activities where one can develop a balanced sense of self-awareness.

The quality and degree of self-awareness is often indicative of personal capability to practice self-leadership strategies such as goal-setting strategies (see Kiersch &

Gullekson, 2021, p. 6; Manz & Sims, 1980; Manz, 1986). Considering that productivity is often measured as performance in achieving goals (Godwin et al., 1999, pp. 160–161; Marques-Quinteiro & Curral, 2012, pp. 560–561) and as success in adjusting one's behavior to meet self-determined standards (Stewart et al., 2011, p. 205; Knotts et al., 2021, pp. 3–4), the topic of setting and orienting towards goals or objectives is identified as yet another critical area of self-leadership.

“Goals can be personal, reflecting individual needs, motives, and values, as well as assigned, reflecting environmental demands. Further, they can take the form of performance standards or valued outcomes” (McCormick, 2001, p. 26). In self-leadership literature, the discussion on goal-setting and achievement is mostly concerned with setting and progressing towards personal goals and goals that are relevant for the organization or teamwork (Marques-Quinteiro & Curral, 2012, p. 562).

Effective self-set goals are both challenging and achievable (Neck et al., 2020, p. 174), moreover, research has demonstrated that performance is enhanced by setting specific goals that are both challenging and achievable (Locke & Latham, 1990). Performance in reaching goals may be additionally improved with the approach of first dividing ambitious or large goals into smaller goals since that has been associated with building positive and sustainable habits (Nawaz, 2020; Neck et al., 2020). Subsequently, daily successes in reaching smaller goals are likely to enhance self-efficacy for goal attainment.

Furthermore, self-leadership does not only discuss how to set effective goals, but the literature is also interested in understanding how behaviors and performance changes after establishing goals (Godwin et al., 1999, p. 154). Namely, according to theory, goal-setting becomes more effective when paired with other self-leadership strategies such as self-reward and self-cueing strategies (Knotts et al., 2021, p. 3).

Self-cueing relates to making environmental reminders that keep the individual on track of tasks that should be done. The primary intention behind self-cueing is to habitually

signal and remind oneself to maintain focus on a specific task or objective. Most commonly, self-cues can be verbal prompts or to-do lists (Knotts et al., 2021, p. 3). In many offices, it is also common to see drawing boards and sticky notes as forms of self-cueing. Likewise, digital tools in note taking, personal task management, and focus management are frequently used as effective means of self-cueing. Regardless of the approach, repeated and consistent use of self-cueing that matches the objectives of the work assignment can lead to enhanced performance (Knotts et al., 2021; Neck et al., 2020; Alves et al., 2006).

Reward strategies can be divided to extrinsic- and natural reward strategies. Both of the strategies are used as self-reinforcement after behaving in an appropriate way or after reaching a desired goal. Hence, the main idea behind using reward strategies is that they can encourage and motivate towards positive behaviors in the future (Neck et al., 2020; Marques-Quinteiro & Curral, 2012, p. 562).

A person who is using extrinsic rewards to motivate themselves would self-reward with physical items and activities, for example by going out to eat at a nice restaurant or by buying clothes after a successful business meeting (Knotts et al., 2021, p. 3; Neck et al., 2020, p. 52). On the other hand, a person who is using natural rewarding strategies would reward themselves with self-praising internal speech and imagination or by having encouraging thoughts (Neck et al., 2020, p. 53).

Nevertheless, it is also clear that rewarding strategies are not mutually exclusive meaning they can be used either individually or together. Granted, some individuals may benefit more from one or the other. In spite of this, recent research seems to emphasize the positive effects of natural reward strategies in improving efficacy and performance (Stewart, 2011, p. 198). Namely, research has theorized that this approach has a positive influence on self-esteem and thus self-criticizing individuals may benefit a great deal from natural reward strategies (Neck et al., 2020, p. 53).

Evaluating extrinsic and intrinsic motivations before selecting self-reward strategies can benefit the effectiveness of the approach. Natural reward strategies may be easier to implement by people that have high intrinsic motivations towards the work tasks as they are already engaged with the work while finding both enjoyment and satisfaction from the challenges in the work activities (see Ryan & Deci, 2000, p. 56; Knotts et al., 2021, p. 3). By contrast, employees with low intrinsic motivation may be more encouraged by extrinsic rewards (Ryan & Deci, 2000, p. 60), and subsequently under these circumstances extrinsic reward strategies may be more effective (Stewart et al., 2011, p. 212).

Self-punishment strategies are another related concept of rewarding strategies, however, the theory on self-punishment strategies is not discussed in this research as studies in the past disapprove its efficacy in applying self-influence. According to Neck and colleagues (2020), negative behaviors can be changed by reducing rewards associated with the behavior, furthermore, increased self-observation and use of self-cueing strategies to direct behavior towards positive behaviors seems to result in better outcomes (pp. 55–56). That is to say, through a combination of self-leadership strategies it may be possible to remind ourselves to direct our attention and resources towards more productive matters (Neck et al., 2020, p. 148; Neck & Manz, 1996, p. 463).

Cognitive self-leadership strategies are sometimes grouped together under the term thought self-leadership (Neck & Manz, 1992; Neck & Milliman, 1994; Neck & Manz, 1996; Godwin et al., 1999; Marques-Quinteiro et al., 2016). In this definition, thought self-leadership consists of managing self-dialogue, mental imagery, and beliefs and assumptions to create thought patterns or ways of thinking that are constructive and habitual (Godwin et al., 1999, p. 156; Neck & Milliman, 1994, p. 13; Manz, 1986).

It is worth bearing in mind that there is no one-size-fits-all approach to thought self-leadership since there are huge differences in thinking styles and ways of processing information. Some may prefer to organize thoughts in a verbal or narrative style, whereas others may prefer visual thinking. Hence, recent research often discusses the themes of

self-talk and visualization separately to reflect individual differences in thinking styles and cognitions (see Neck et al., 2020; Knotts et al., 2021). Likewise, thought pattern strategies are frequently discussed under the term constructive thought pattern strategies to indicate the core premise of the approach.

An important part of constructive thought pattern strategies is the management of beliefs, values, and assumptions. Specifically, management of beliefs and assumptions means that dysfunctional thought processes are first identified and then replaced with more rational or positive thoughts, and with thoughts or self-statements that direct towards learning and growth (Neck & Manz, 1996, p. 450; Godwin et al., 1999, pp. 157–158; Neck et al., 2020, p. 103; Neck et al., 2013). Moreover, according to Neck et al. (2020), negative thoughts can become “self-fulfilling prophecies”, meaning they can start as false expectations that ultimately lead to confirming the initial predictions based on a belief (p. 98). Thus, the significant premise surrounding the theory on constructive thought pattern strategies is the recognition that thoughts and mental processes can be shaped through observation, deliberate effort, and strategic practice.

If employees succeed in repeatedly reversing the tone of their cognitions over time, a more constructive way of thinking should become habitual, ultimately enhancing work performance and improving perceptions of challenging situations. (Godwin et al., 1999, p. 159)

Self-leadership researchers regularly emphasize the existence of two opposing thinking styles. The first thinking style is obstacle thinking, and the second thinking style is opportunity thinking. To summarize, obstacle thinking consists of thoughts that focus on the negative aspects of work, whereas opportunity thinking consists of actively identifying solutions for any emerging problems (Neck et al. 2020, pp. 114–115; Neck & Manz, 1992; Godwin et al., 1999).

Needless to say, it becomes clear that dysfunctional thought patterns can lead to adverse effects. Namely, research has shown that focusing on obstacles can result in negative behaviors such as avoidance of conflict and avoidance of responsibility (Neck et al., 2013,

p. 473; Neck & Manz, 1992; Godwin et al., 1999; Ployhart & Bliese, 2006, pp. 9–10). Yet, it should also be recognized that there are many other dysfunctional thought patterns that cause rigid thought processes, and subsequently, have a negative influence on our ability to produce adaptive responses (see Neck et al., 2020, pp. 103–104; Tolle, 2001).

Self-talk strategies consist of creating empowering language patterns while limiting disempowering or self-deprecating talk. In other words, self-talk strategies have the aim of self-regulating self-dialogue (Neck et al., 2013, p. 469). Since many self-leadership researchers agree that optimism, positivism and having an overall positive outlook leads to detecting and emphasizing the opportunities in a given situation (Godwin et al., 1999, p. 159; Stewart et al., 2011, pp. 197–198; Neck et al., 2020), it is often argued that irrational or pessimistic self-dialogues should be replaced with more rational or optimistic self-talk (Knotts et al., 2021, p. 3). It is also generally endorsed that cognitive explanatory styles and mental attitudes consisting of positivity, hope, and optimism as opposed to negativity and pessimism may lead to increased performance and morale (Neck & Manz, 1996, pp. 461–463; Neck et al., 2013, p. 468; Godwin et al., 1999; Stewart et al., 2011).

Self-talk often emerges as a response to a stressful situation. Thus, effort should be placed on adjusting towards more constructive self-talk before, during, and after a stressful event (Neck et al., 2013, pp. 470–471). Moreover, as previously discussed, encouraging self-talk after accomplishing a task can be an effective natural reward strategy and a source of positive self-influence. Through repeated practice, one can develop a habit of constructive self-talk that empowers beliefs, self-efficacy, and mental and affective states related to handling situations that are stressful, challenging, or new (Neck et al., 2013, p. 471; Stewart et al., 2011, p. 198; Neck et al., 2020).

Many of the approaches in creating constructive self-dialogue are also applicable to mental imagery and visualization. In addition, there are similarities in outcomes. Positive visualizations of desired results and mental imaginations of successfully performing work tasks before actually acting can lead to enhanced confidence and performance (Neck &

Manz, 1996, p. 446; Godwin et al., 1999, pp. 158–159; Neck et al., 2013, p. 472; Neck et al., 2020, pp. 106–107), and to engagement and motivation (Knotts & Houghton, 2021, p. 751).

One of the strengths of visualization is that it can be used in imagination of expected work processes and behaviors, or in imagination of needed competencies related to one's future (Hamtiaux et al., 2013). Furthermore, by exploring “adaptive behavioral responses” visualization may lead to altering behaviors (Orkibi, 2021, p. 11), and subsequently, to personal adaptability.

Most importantly, mental imagery is used as a tool for memorizing important details and as a method of training and learning which may be used regardless of the physical environment (Neck & Manz 1996; Colombo, 2012; Marre, 2021). Contrary to popular belief, visualization and mental imagery combines mental imaginations of different sensory perceptions including visual, auditory, and tactile perceptions. Thus, imagery is frequently used in preparation for sports competitions, work presentations, and creative work tasks (Neck et al., 2020).

Although not often discussed, prompts or scripts that shift attention can also be used as a focus orienting strategy that combines elements from different cognitive self-leadership strategies. As an example one Olympic alpine skier, Mikaela Shiffrin, has seen success with thought self-leadership that combines visualization and self-cueing:

Whenever fear surfaced, she would picture herself pricking a big red balloon with a pin. “That sound and that immediate switch would kind of snap me out of it,” she said, adding, “The last couple years, I’ve definitely gotten to a point where when I’m on the hill, it’s very quick for me to switch from a negative thought to a positive one. (Clarey, 2014)

Ultimately, the collection of self-leadership strategies should be considered as a toolbox that aids in self-directing towards effective actions and towards achieving personal goals in life and career. Knotts and colleagues (2021) state that “self-leadership including both

behavior-focused and cognitive-focused strategies has a greater influence on individual outcomes than behavior-focused self-leadership alone” (p. 2). Hence, applying a combination of different self-leadership strategies is expected to lead to better results (Marques-Quinteiro & Curral, 2012, p. 573).

It is also important to note that the effectiveness of self-leadership strategies may depend on personality factors. For example, literature has shown that specific trait qualities such as conscientiousness and proactivity are linked with more effective self-leadership (Stewart et. al., 2011; Marques-Quintero & Curral, 2012). While personal characteristics and traits may be difficult to develop, research also suggests that priming individuals on the importance and benefits of specific values or beliefs may contribute to future development (Marques-Quinteiro & Curral, 2012). Accordingly, self-leadership can lead to the recognition and adjustment of personal values and orientations that support continued self-development, learning (Neck et al., 2020), and adaptability development.

2.2.3 Outcomes of self-leadership

This subchapter presents research on the outcomes of self-leadership. Namely, findings from literature are presented on outcomes that correspond with personal adaptability development. Considering that self-leadership has been connected with many valuable organizational and individual-level outcomes (see Stewart et al., 2011, p. 194; Knotts et al., 2021), it is surprising to notice that there is a scarcity of literature that specifically connects self-leadership to the outcome of adaptability development. Thus, the literature review has focused on reviewing comparable and closely resembling outcomes.

Firstly, it is important to repeat that multiple researchers have concluded self-efficacy to be the “primary mediating mechanism between self-leadership and outcomes” (Knotts et al., 2021, p. 2). Hence, since self-efficacy was also recognized as an important antecedent of adaptability (Leong, 2020), it may be argued that self-leadership influences adaptability development by first developing positive perceptions and beliefs on one’s

own competence to respond to challenging situations (cf. Fugate et al., 2004; Savickas & Porfeli, 2012; Orkibi, 2021).

Secondly, research has shown that specific strategies of self-leadership may lead to developing personal resources that are helpful for adaptation. Self-talk has been shown to enhance the ability to learn complicated knowledge and skills (Kanfer & Ackerman, 1996), whereas goal-orientation has been connected with innovation (Marques-Quinteiro & Curral, 2012, p. 571). Marques-Quinteiro & Curral (2012) additionally state that adaptive and proactive behaviors can emerge if self-leadership strategies are combined with the mental quality of being learning oriented (p. 573). Thus, it can be concluded that some self-leadership approaches may have a greater impact on adaptability development than others. Moreover, there seems to be evidence to suggest that the influence of self-leadership on adaptability-related outcomes is impacted by attitudes, beliefs, and personal orientations.

In a short summary, self-leadership has been connected to other outcomes such as performance and productivity (Stewart et al., 2011), mental performance and enthusiasm (Neck & Manz, 1996), increased empowerment, creativity, and commitment (Houghton & Yoho, 2005), and to innovation and engagement (Knotts et al., 2021, p. 12). Granted, the most researched outcome of self-leadership seems to be the outcome of performance (e.g. Prussia, 1998; Godwin et al., 1999; Neck et al., 2013; Marques-Quintero et al., 2016; Knotts et al., 2021). This finding is not surprising considering that there exists various metrics for measuring performance. By way of contrast, it may also suggest that one of the reasons why the outcome of adaptability development has not been researched as much is that it may be difficult to quantify or measure adaptability development.

3 RESEARCH DESIGN

This section presents the research design of the thesis. The chapter includes explanations on research methodology, philosophy, and approaches to data collection and data analysis processes. Furthermore, the reliability, validity, and limitations of the study are discussed.

3.1 Research philosophy and methodology

The cohesion and accuracy of the research increases if the philosophical assumptions of the study are clarified before conducting the research (Eriksson & Kovalainen, 2015). The research follows an interpretive approach as the purpose of the empirical study is to collect information on individuals' beliefs, motivations, and subjective experiences that lead to effective self-leadership and ultimately to the development of personal adaptability. The results from interpreting a relatively small collection of data may not be generalizable, nonetheless the intention of the research is to analyse the collected dataset meticulously and comprehensively (Saunders et al., 2016, pp. 140, 175).

Furthermore, the study follows a pragmatic approach as the primary intention is to clarify and explain the nature of the causal relationships that are in the focus of the study. Pragmatic research acknowledges that "there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture and that there may be multiple realities" (Saunders et al., 2016, p. 144). In line with the interpretive and pragmatic approaches, the research recognizes that a single objective truth is not found in subjective experiences as experiences may vary between individuals.

It is also expected that effective means of adaptation and self-leadership are dependent on many individual level variables such as past experiences and personal orientations, characteristics, and traits. Moreover, work roles and set of responsibilities in an

occupation may result in different external needs for adaptation and self-leadership. Thus, the research methodology follows a constructive approach where different perspectives are inspected and interpreted individually as valid truths from a specific point of view (Alvesson, 2003, p. 13).

More accurately, the underlying research methodology is social constructivism. Social constructivism recognizes that multiple meanings can exist simultaneously, and that knowledge is developed through social interaction and language use. Consequently, social constructivism is often a valid approach in the study of organisational behavior since many occupations require employees to constantly interact with a social network and to learn by sharing information with other professionals or organisational members (Carmargo-Borges & Rasera, 2013). In such environments it is also expected that self-leadership strategies and approaches to developing personal adaptability skills are shared. In summarization, the interpretivist and social constructivist approach is supportive of the intention of the study and of the selected qualitative data collection method.

3.2 Data collection and sample

Qualitative semi-structured interviews were selected as the empirical data collection method. As opposed to quantitative research that focuses on numerical data or statistical analysis (Eriksson & Kovalainen, 2015), the quantitative research method allows the researchers to gain in-depth understanding on subjective and socially constructed experiences, perspectives, and meanings (Saunders et al., 2016, p. 168). Qualitative data is typically gathered directly from the participants, and it can include visual or textual material, spoken personal experiences or life stories, or even direct observations of behavior (Saunders et al., 2009, pp. 106, 480).

Qualitative semi-structured interviews as a data collection method fits the purpose of the research since it allows for flexibility in researching a diverse set of self-directed approaches that the interviewees perceived as positive for adaptability development.

Furthermore, as the sample may have variations in their preferred and utilized approaches, it is important to have flexibility in customizing the questions based on the experiences of the interviewees.

The collected data consists of narratives and personal experiences of the interviewees. As the nature of the questions may require self-reflection, it is important to give the participants an opportunity for recalling relevant experiences on the topic of the discussion before participating in the interviews. Thus, the primary questions of the interview were sent to the interviewees in advance (see Appendix 1). The structure of the interview questions was piloted beforehand to test for validity in measuring the objectives of the research. Additional follow up questions were also asked during the interviews to better target the narrative towards understanding personal experiences (see Appendix 2). Understandably, not all follow-up questions were asked of all the interviews.

The majority of the questions prompt discussion on approaches to setting and reaching personal goals, practicing self-regulation, and adjusting thoughts and mental attitudes in order to better adapt in a given work situation. Although, the narratives often extended to examining the perceived value of the used approaches. The phrasing and order of the primary interview questions may have contributed to centered responses on goal-setting and thought pattern strategies. However, these approaches were determined as significant for adaptability development based on the theoretical background (Marques-Quintero & Curral, 2012, p. 562; Neck et al., 2020, p. 174; Knotts et al., 2021, p. 3).

The study selected interviewees based on a single criterion. The interviewees were selected based on their past work or life experiences that had required the individuals to self-initiate adaptability development in one or more areas. Previous knowledge or expertise of specific self-leadership strategies was not deemed a necessary criterion as the research recognizes that many variables such as work environment and personality factors play a part in determining effective self-leadership techniques for adaptation.

The initial sample of the study consisted of the interviewer's social connections, and of the social connections of extended family members. Later, additional interview participants were found with the use of snowball sampling. Snowball sampling refers to a sampling method where additional participants are found through recommendations of the earlier interviewees (Parker et al., 2019). The total sample size of the study is eleven, and the interviews were conducted between February and March of 2022.

The interviewees were first contacted through phone calls to set a time for an interview. All of the interviews were conducted through internet mediated services. Four of the interviews were held over WhatsApp video calls, three over Microsoft Teams meetings, and four over Zoom meetings. The online interviews were synchronous, meaning the interviewer and interviewee were present at the same time (Saunders et al., 2016, p. 424). Two of the interviews, interview 2 and interview 9, were conducted in English language. Rest of the interviews were held in Finnish language.

The length of the interviews varied between 27 and 99 minutes, with an average length of 55 minutes. All of the interviews were audio recorded and the audio recordings were later reviewed. Even though the interviews were not fully transcribed, a detailed written record of each interview was created and analysed as part of the empirical study.

The sample consisted of a fairly diverse group (see Table 3). Six males and five females participated in the interviews consisting of the whole sample group. The average age of the interviewees was 51 years, which means that the sample group was above-average in age as compared to the population structure of Finland in 2021 (Official Statistics of Finland, 2022).

Educational background varied between secondary education, bachelor's degree, and vocational qualifications. Vocational qualifications in this case refer to knowledge and practical expertise that is gained through years of work, education, and training in a

specific career sector or job. The majority of the interviewees were marked as vocationally qualified since their job qualifications were heavily influenced by the expertise gained in the job. With this in mind, interviewees with vocational qualifications tended to have a background with some form of secondary education.

No.	Age	Gender	Education	Description of work roles and tasks	Location
1	75	Male	Vocational	Export project manager in the power cable industry	Finland
2	28	Male	Bachelor	Billing clerk, miscellaneous responsibilities of an accountant	Finland
3	32	Female	Vocational	Supervisor and instructor in the transportation industry, HRM	Finland
4	63	Male	Vocational	Marketing, sales, and coordination in food retail and manufacturing	Finland
5	60	Female	Bachelor	IT consultant, various tasks with different consultation groups	Finland
6	56	Female	Vocational	Small business entrepreneur in the beautician industry, instructing	Finland
7	58	Female	Vocational	Steward, customer service and supervision of safety	Finland
8	28	Male	Bachelor	Social worker in social services	Finland
9	48	Male	Secondary	Small business entrepreneur as a handyman and carpenter	Finland
10	52	Female	Vocational	Small business entrepreneur as a masseuse & café worker	Finland
11	60	Male	Vocational	Reporting analyst, project manager, and instructor in the IT industry	Finland

Table 3. Background information of the interviewees

The sample had high variability in professions and work roles. Provided that the interviews explored experiences in current and previous occupational work roles, the information on the table is not representative of all the interviewees' current occupational roles. The majority of the participants currently worked for small- and medium sized enterprises, although some of the interviewees had experiences of working for large enterprises either currently or in their past. Furthermore, three of the interviewees were entrepreneurs (Interviewees 6, 9, and 10). Lastly, it should also be noted that interviewees 2–11 were currently located and working in Finland, and Interviewee 1 was retired from work due to reaching the retirement age.

At the beginning of the interviews the participants were asked for their experiences working in a leadership position. Leadership experience was categorized based on the length of stay in a role where the interviewees had responsibilities supervising or instructing others. Interviewees 3, 6, and 10 reported having some leadership experience, in other words less than three years of work experience in a leadership role. Interviewees

1, 4, 9 and 11 reported having extensive experience, meaning they each had more than six years of work experience in a leadership position. The remaining interviewees reported having no experiences of working in a leadership role at their current or past occupation.

Furthermore, the interviewees were also asked if they had any international work experience. Interviewee 1 reported having over 36 years of international work experience working as a project manager in multiple countries across Western Asia, Africa, Russia, and Europe. Interviewee 9 reported having work experience in two countries, his country of nationality Gambia and Finland, mainly working as a business owner of various small- and medium sized enterprises. The remaining interviewees reported having no international work experience.

3.3 Data analysis

The analysis of the interview data consisted of multiple phases. Firstly, the collected data was sorted to recognize similarities and differences. Afterwards, the relevant stories and narratives were rearranged and organized into themes for thematic analysis. During this process the interview data was reviewed multiple times to detect meanings and recurring patterns in the research evidence. Consequently, the data was carefully interpreted and tested by comparing different sets of empirical and theoretical data to identify valid and reasonable relationships for the purposes of the study (Saunders et al., 2016, pp. 580–586).

The research could be described as partly deductive and partly abductive. Deductive approaches were used since the interview questions were based on emerging themes in the literature which led to questioning whether or not a significant relationship exists between different theories. Secondly, the research is abductive since the study had the aim of creating new theories and new understandings based on thorough methodological analysis of the research data (Timmermans & Tavory, 2012). This approach of using

both deductive and abductive elements in research is supported by literature. As a matter of fact, numerous inductive researches tend to include deductive approaches and vice versa (Ghauri et al., 2020, pp. 15–22; Saunders et al., 2016).

3.4 Reliability, validity, and limitations of the empirical study

Collecting scientific data on the studied research area is challenging. Even though many of the researched phenomenon such as self-talk can be observed in daily work life, there are many difficulties in measuring subjective experiences and cognitive functions (Alderson-Day & Fernyhough, 2015, p. 957). In addition, researching adaptability development presents further challenges in observation and interpretation of relevant experiences since adapting in a particular work situation with the use of specific approaches does not necessarily mean that the use of the approaches resulted in adaptability development.

In qualitative interviews both the participant and the researcher are liable to errors in interpretation (Saunders et al., 2009, pp. 156–157). Particularly for this study it may not be easy to identify how self-directed approaches or intentional self-initiated effort has influenced adaptability development. Furthermore, the nature of the studied phenomenon can result in discussions that continue to many interrelated topic areas which are just barely outside the scope of the study. With that said, quantitative studies may also run into similar challenges in correctly framing questions and creating relevant interpretations based on the collected data.

The interviewees' narratives and interpretations of experiences may also change based on subject bias. In other words, the interviewees may respond to the questions differently based on the fact that they know they are being interviewed on the topic of self-leadership, self-development, and adaptability development (Saunders et al., 2009, pp. 156–157). Moreover, participation bias and social-desirability bias may gravitate the narratives towards reporting on socially acceptable behaviors (Lavrakas, 2008; Saunders et

al., 2009, pp. 156–157). Considering this, the reliability of future studies can possibly be increased by creating questions that indirectly assess adaptability development and self-leadership. It is additionally suggested that a hybrid research method is applied where quantitative and qualitative empirical data is gathered from multiple sources.

Due to time constraints, the time horizon of the study is cross-sectional. Cross-sectional studies analyse data that is gathered from the sample group at a given point in time (Saunders et al., 2016, p. 200). By contrast, longitudinal studies repeatedly observe and collect data from the same group of people over a period of time (Payne & Payne, 2004). Needless to say, a longitudinal research design would have been more favourable in the context of self-leadership and cognitive self-development (Marques-Quinteiro et al., 2016, p. 122), and in the context of adaptability development (Waldeck et al., 2021, p. 76; Kelloway & Francis, 2013).

Another limitation of the study is its broad scope of research. Although, to the author's knowledge, there has not been many empirical studies that seek to understand development of personal adaptability through self-leadership and cognitive self-development. Correspondingly, there is a call for studies that focus on the outline and mapping of the conceptual relationships. Nevertheless, the main implication of the broad scope is that since the sample group consists of only eleven respondents the findings of the empirical research may not represent the views of the general population (Saunders et al., 2009, p. 158; Saunders et al., 2016, p. 140).

4 FINDINGS

This chapter presents the findings from the interview data. The chapter is structured based on key topics that were identified as relevant for answering to the research questions of the study. The first theme of the findings focuses on understanding what situational background factors may have influenced the interviewees' personal adaptability development. The second theme is structured around findings on the topic of building positive orientations towards change, openness, and cognitive flexibility. Lastly, the third theme examines self-leadership approaches.

4.1 Adaptability development in different work environments

The necessary adaptability skills and the frequency in needing to adapt within an occupation depend on the job description, used technologies, business environment, and on the organization's business model.

In the IT industry there is a lot learning, and a lot of changes happen very quickly. Having the mindset of not being afraid of change can be helpful (Interviewee 5)

At our organization [large retailer and manufacturer of food items] we take a systemic approach to solving problems. When a problematic situation occurs, we immediately start seeking alternative means of action and alternative channels to solve the problem in question (Interviewee 4)

The ability to change and to quickly reorientate has been important — Working in social services requires you to constantly think what is relevant. You also need to be able to tolerate disappointments, and you need to learn how to not take things too personally in customer service (Interviewee 8)

To summarize, the sample group consisted of workers and professionals in various IT and knowledge-based jobs, retail and manufacturing jobs, and jobs described as having a focus on customer service. The following table presents the main categories of needed adaptability skills as perceived by the interviewees' (see Table 4). It should be pointed

out that it is possible that the order of the interview questions (Appendix 1) caused clustered responses around continuous learning, prioritization and focus management, and on reframing thoughts. Nevertheless, the five themes presented in the table were consistently regarded as the most relevant adaptability dimensions in the interviewees' work lives. Moreover, it could also be observed that some of the occupations in the sample had considerably less job based requirements regarding social adaptation or the ability to be flexible in solving problems.

Table 4. The interviewees' descriptions of the relevant adaptability skills or abilities in their work environment

Ability, skill, or competence	Description and examples	No. of responses
Ability to continuously learn in different environments	Developing knowledge and know-how needed for a trade skill, developing skills and knowledge needed in a profession, developing knowledge needed for various personal skills and job competencies for one's career and work role	9
Flexibility with managing time and priorities	Being able to organize and coordinate work tasks or projects, being able to shift between routine work and urgent tasks, having a flexible work schedule when needed, ability to allocate time for personal development	8
Flexibility in problem-solving	Approaching problem-solving with a flexible and creative mindset, practicing critical thinking skills, considering alternative interpretations	4
Mental adjustment and cognitive self-regulation	The ability to shift or reframe negative thoughts, managing thoughts and emotions, maintaining calmness and composure while under pressure or stress	9
Social adaptability	Being able to take on another person's point of view, being able to demonstrate teamworking skills in a diverse work environments, being able to monitor and self-regulate reactions and responses in face-to-face interactions	6

One of the most common findings regarding adaptation was that there is a constant need to accumulate more knowledge and know-how to function effectively in different job situations. Many work tasks required the interviewees to regularly learn new information or new technology. In particular, studying laws and regulations as part of daily work activities was a recurring theme (Interviewees 1, 2 & 8). "The laws and directives between job tasks changes a lot, you must realize that in different environments there

are different guiding processes, and you need to develop understanding to conform with the law” (Interviewee 2). “I had to study matters related to security issues and regulatory differences between our home country and the target country” (Interviewee 1).

By the same token, the interviewees reported experiences where their career development had benefited from personal development. In addition, provided that professionals can benefit from development in a broad category of skills, the interviewees perceived that self-development and learning took place both inside and outside the workplace. “There is always a shortage of time because there is so many self-developmental areas. It is hard to make enough time for everything” (Interviewee 10). Even if the “normal work routines take a lot of time — you have to make time for self-leadership and self-development” (Interviewee 4).

From the sample, a number of occupations were characterized by habitual changes in the day-to-day work tasks. In some cases, the job description even changed during job tenure.

There have been several times with my current employer where a business department has been let go of — as a matter of fact, my job description for the company has changed three times (Interviewee 11)

At my job [in air transport], we have a saying that change is constant. The job description has changed dozens of times (Interviewee 7)

Being selected as a new manager to instruct other colleagues on a completely new part of our business was a really tough spot. Especially since the job description was constantly modified while the training was still on-going (Interviewee 3)

One interviewee reported that his earlier job as a bookkeeper required monthly adaptation between different bookkeeping methods and bookkeeping programs depending on the client (Interviewee 2). In addition, sometimes it can be easier to cope with one area of a simultaneously ongoing change. “Learning new programs was not as big of a

challenge as learning and adapting to the inner workings of different companies”, years of experience working with computers and with different accounting software made it easier to understand “how the programs worked in different situations” (Interviewee 2).

Interviewee 4 also reports that the job description of his managerial position was changed due to organizational restructuring. “It took a very long time until all of the parts came together”, work tasks and work roles had to be allocated and coordinated to different employees and to different stores (Interviewee 4). Having clear plans and frequent discussions with the management group made it possible to delegate important responsibility areas to individuals who would be willing and enthusiastic to take care them, furthermore, the discussions allowed for reducing any overlaps between the work tasks (Interviewee 4).

If the employee’s job description changes rapidly, it can be advantageous to have a clear understanding of the core work activities and areas of responsibility. One of the interviewees observed that it is effortless to switch between different tasks within your own work role (Interviewee 7). Likewise, it is easier to orientate yourself to changes when you have a clear understanding of your role in the organization (Interviewee 10 & 11). In other words, clarity over work roles and areas of responsibility contributes to change orientation (Interviewee 7) and to the organizational capacity for capitalizing on opportunities (Interviewee 11).

In the same manner, the ability to tolerate and adapt to changes is a valuable resource for entrepreneurs and employees of smaller organizations. Interviewees 6 and 9 provided insights on challenges that business owners may face. “In the beginning it was like walking on a tightrope, I lost a lot of sleep”, the stress levels eventually decreased as time went on and as the business became more organized through finding better procedures (Interviewee 6). “Building a company is like growing a child” (Interviewee 9). The workload is huge, especially in the beginning of launching a new business, and you need to be able to make both short-term and long-term goals (Interviewees 6 & 9). “In the

first five years if you don't spend double time hours then there is a very good chance of failure" (Interviewee 9).

On top of managing and allocating time between different work tasks, employees and business owners alike are frequently required to prioritize their focus inside the workplace. The ability to shift prioritization between routine work tasks and unexpected work assignments was repeatedly thought of as a vital adaptability skill. Although it can be frustrating to experience interruptions to your work, "it is not wise to stick with a rigid work plan that you have set for yourself, evaluate if you are able to create a solution immediately, and take care of it" (Interviewee 11).

Unpredictable work tasks are usually the ones that are most urgent. Sometimes you may be able to prioritize finishing your current task, but typically ad-hoc requests need to be done promptly in between the other work tasks — At our workplace we are very careful in identifying tasks that need to be done urgently. Personally, I find it very helpful to also identify activities that take resources away from your ability to focus on doing the most essential work tasks (Interviewee 5)

The nature of my work requires me to focus on routine work and important tasks. When there is slack time, then it is easier for me to focus on implementing new changes or to develop the processes (Interviewee 2)

We are currently undergoing a decade of change at our workplace. There hasn't been a stable time period for some time, changes are happening all the time. Recruitment projects and other unpredictable work tasks are constantly emerging and as a result there isn't enough time to do all of the important routine work tasks (Interviewee 3)

The majority of the interviewees reported similar experiences with continuous change in their work life, oftentimes the change required the interviewees to adjust their previous plans. Personal flexibility shows in spontaneity to work overtime when additional problems arise on top of ordinary work (Interviewee 4). In addition, some professions may require the employees to be prepared for business travels on a very short notice (Interviewees 1 & 4).

Interviewee 10 states that self-directed initiative to do work tasks can come from taking responsibly in other areas of life. Furthermore, family life and being healthy have an influence on our adaptive capacity – thus, it is important to “balance work and life as best you can” (Interviewee 9). Working too much can influence mental well-being and cause negative spill-overs to private life (Interviewee 11). Accordingly, it is important to have adequate rest and learn to cope with stress and work-related pressure (Interviewee 3). “The better I am feeling, the easier it is for me to adapt to change — mental well-being reflects to everything” (Interviewee 7). Consequently, the findings seem to affirm that a balance between work-life and personal life contributes to sustainable development of adaptability.

There is a synergy between leisure and working time — The same amount of effort and care that you put forward in your ordinary life is directly comparable to how much effort you make in your work life (Interviewee 7)

It is easy to work too much outside working hours, especially when you get excited about advancing changes [in the workplace] — you have to set a clear line between leisure and work (Interviewee 3)

One interviewee also points out that having responsibilities, such as working two jobs at the same time, can lead to limitations in the ability to remain flexible. “Sudden changes within the working hours are usually not too problematic, but when the situation extends over working time then the situation becomes difficult as it influences my other job” (Interviewee 10). Under these circumstances where adaptation is dependent on other people, development of personal adaptability may only offer partial solutions.

Another commonly reported area of adaptability was related to adaptation in social situations. Socialization in the workplace frequently leads to situations where you need to be flexible and to learn how to handle diversity (Interviewee 11). “Good communication skills are vital” (Interviewee 10). In addition to communication skills, conflict resolution

skills, and teamwork skills, it would also seem that skills in self-regulation and resilience can assist in adjusting to new social situations and interactions.

Work tasks often require me to deal with other people. My job has more social interaction than I would have expected (Interviewee 11)

Dangerous work situations and some social interactions at work have required me to change the way I behave. For example I really need to pay attention and think about how I should adjust my demeanour or manner of speaking when meeting a person with a psychiatric disability or someone who has had traumatic experiences in the past (Interviewee 8)

I encountered a lot of adversities in my job as a project lead. Difficult negotiations and all kinds of conflicts of interest were a recurring theme — I had to learn how to coordinate and accommodate different opinions — As I got older, step-by-step, I became more aligned with my job as a manager of international business projects (Interviewee 1)

4.2 Perceptions on the value of developing change orientation, openness, and cognitive flexibility

The theoretical background of the research identified that perceptions, beliefs, and mental attitudes may significantly contribute to personal adaptability development. Thus, interview data was collected on mental attitudes that have helped the respondents to adapt in various work settings. Because of the fact that cognitive flexibility is difficult to assess in an interview setting and that it may not be a familiar topic for the interviewees, the findings on this cognitive quality are fairly limited. However, based on the research evidence, it appears that seeing value in developing openness leads to somewhat comparable outcomes.

Based on the interviews it would seem that different people and different personalities have different orientations towards change. The personality of an employee together with their unique values, beliefs and attitudes may have a great deal of influence on how the individual is thinking and relating towards personal or organizational change.

Moreover, similarly to Bandura's theory (1977 & 1989), the interviewees' self-efficacy perceptions during change seem to be influenced by social perceptions or personal perceptions of other people in the work environment.

It is self-evident to me that changes at the workplace have to happen (Interviewee 7)

To some, changing or facing changes seems to be very difficult. But there are also others who become easily bored if there is not enough change (Interviewee 5)

Internalizing new knowledge is hard for people who believe that they already know everything there is to know (Interviewee 3)

Some people do things one way and don't want to change that at all (Interviewee 9)

Needless to say, this leads to the interpretation that the social work environment may have an important influence on self-initiating personal adaptability development. Granted the findings are inconclusive, but it appears that development of adaptability skills varies depending on the size of the work environment. "The bigger the organization or work group, the easier it is to hide away and escape taking responsibility" (Interviewee 7). Hence, it may be more natural to focus on personal development and self-leadership in a smaller work environment as self-initiating action and actively managing or expanding your areas of responsibility is crucial for success (Interviewees 6 & 7).

On the other hand, the interviewees' voiced that working in a big organization brings the benefit of having a large work environment with diversity in co-workers, and frequent changes in co-workers can be perceived as beneficial for developing openness to new ideas. "When you have a tremendous amount of work experience you tend to circle around in your own thoughts and do things as you best see fit", exposing yourself to new ideas and thoughts by having formal and informal discussions with colleagues expedites personal- and business development (Interviewee 4).

Social support from co-workers, learning together, and “accepting that you don’t know everything” have been important in my working life (Interviewee 3). Likewise, all three of the participating entrepreneurs (Interviewees 6, 9 & 10) pointed out that networking and seeking advices from other people helped in finding better ways to develop their main business functions. Having conversations with experienced people and listening to others’ life experiences teaches you a lot (Interviewee 10). Hence, it can be said that the majority of the interviewees perceived social adaptation and the willingness or curiosity to learn from other people as beneficial for personal development.

Overwhelmingly, without being asked, the majority of the interviewees spoke of valuing openness and intellectual curiosity. “The mindset that I have is that we all keep on learning. It is important to constantly keep on learning and to be openminded” (Interviewee 9). Openness to new things and desire to learn are important personality characteristics (Interviewees 2, 6, 10 & 11). Accordingly, the findings indicate that adaptability development is greatly impacted by social skills and by values in openness and curiosity.

Open mindedness is the key. You should learn to see the other people’s side since we mostly see mistakes only on one side. Understanding and trying to understand should be your main purpose (Interviewee 9)

There is no single one way to learn new things. I make sure that I am prepared to listen to and learn from all kinds of people (Interviewee 8)

It is easier to relate to personal feedback when you are aware of the need to develop in that area, on the other hand, it is much harder when you believe that the feedback does not relate to your current situation (Interviewee 5)

The personality characteristics of curiosity and interest to know more often leads to the desire to develop — Openness to change is a decisive factor for success (Interviewee 11)

Openness towards learning new knowledge and having new experiences have been an important adaptability resource for Interviewee 11. “Employers notice who are the ones that are open and receptive for taking on new areas of responsibility, and who have the courage to participate and take on new challenges” (Interviewee 11). He continues by speaking from experience that corporate restructuring processes such as mergers and closing down of business departments frequently leads to situations where inflexible workers are let go of, on the other hand, flexible employees and quick learners are often rewarded (Interviewee 11).

4.3 Self-leadership towards personal adaptability

It is important to remember that self-leadership is not only about adopting different strategies with the intention of creating beneficial self-influence, but it is also about understanding personal standards and developing ways to effectively self-regulate behavior towards constructive ends. Namely, the empirical research focused on identifying how self-leadership can aid in adaptation.

If you become aware of the fact that you could have acted differently, then you need to recognize that and show what you are capable of the next time you get an opportunity (Interviewee 3)

Sometimes you might be tired, or you might not feel like doing work, but those are the times when you just need to try and go develop your tolerance — When you have enough strength to develop tolerance to be outside your comfort zone, you start to create this inner confirmation that you are capable. And things no longer feel as challenging as they used to (Interviewee 7)

Some of the interviewees specifically contributed self-observation, self-regulation, and cultural adaptation for their success in business negotiations. “I had to develop communication styles and ways of behavior that would be effective in Arabic countries” (Interviewee 1). The interviewee continues by noting that it was essential for him to recognize that complimenting and saving face was an important part of the local culture, thus,

maintaining self-control and giving the impression that the other party has all the initiative and power on the project led to successful outcomes in the negotiations (Interviewee 1). Similarly, another interviewee reported that self-observation of behaviors and personal tendencies is important for approaching negotiations wisely, furthermore, you need to be able to adjust yourself accordingly to the situation and to the negotiating parties (Interviewee 4).

The findings appear to affirm that self-efficacy perceptions are built as a by-product of work challenges and through the self-observation and reflection of behaviors and responses.

Self-confidence comes from being able to act and proceed in different sectors of life by taking responsibility, and by keeping a certain level of standard in things (Interviewee 7)

Through experience I have become aware that I can survive from difficult situations. I have plenty of experiences where I have been thrown in at the deep end (Interviewee 11)

The more I have worked in difficult jobs, the more self-confident and capable I have become (Interviewee 6)

Self-confidence and self-efficacy can be built stronger through therapy and introspection (Interviewee 3)

In line with the narratives of other respondents, Interviewees 3 and 7 reported that knowledge and memories of past experiences can lead to identifying personal strengths which accordingly have an influence on perceptions related to self-efficacy and self-confidence. Interviewee 7 specifically reported that personal characteristics which have been helpful for her since her childhood, such as the ability to work independently and responsibly, has greatly benefitted the development of her self-directedness and ability to act quickly in various work circumstances. Similarly, Interviewee 3 notes that it is much easier to utilize your strengths in change processes and to focus on meaningful objectives and goals after you have first recognized your personality traits and strengths.

Next, the findings on self-leadership strategies are presented. The empirical research gathered data on most of the self-leadership strategies which were discussed as part of the theoretical background of this study. However, many of the findings on the self-leadership strategies prove to be inconclusive in determining whether these strategies allowed for personal adaptability development or simply provided the means to adapt in a particular situation. With that said, based on the interviews, self-leadership strategies on self-observation, goal-setting, and constructive thought patterns were perceived as having a positive influence on adaptability development.

The Interviewees reported using a variety of different self-observational strategies, however, in practice many of these strategies also contain elements of self-cueing. Common behavioral strategies on self-observation included calendar notes, excel spreadsheets, and to-do-lists that were used to track progress on work tasks. Multiple interviewees described that especially to-do-lists and sticky notes have been of assistance in tracking progress on work related tasks (Interviewees 4, 5, 7 & 11).

Interviewee 4 states that scheduling work tasks and meeting the assigned deadlines is very important in his job, "I sometimes make up to three calendar entries for different phases of the task". In addition, the interviewee adds that it can be beneficial to set the deadline on days such as Mondays as that gives flexibility for working overtime during the weekend.

On a work task basis, Interviewee 5 described making notes as reminders of the contents of the work assignments since her consulting job required her to work on different types of projects. Similarly, at the start of the year Interviewee 4 reportedly makes a notebook of important tasks that need to be done on a monthly or even on a weekly basis, later throughout the year he crosses over the tasks that have been accomplished (Interviewee 4).

Interviewee 11 describes an even more systematic and disciplined approach to tracking progress on work tasks. By his own initiative, he keeps an excel spreadsheet on a 15 to 60 minute basis describing in detail the tasks and work processes that he has done during that time period. Moreover, his excel spreadsheet contains information on the tasks that need to be completed and of a list of goals that he has set for himself (Interviewee 11).

Reportedly, the spreadsheet has led to enhancing personal effectiveness and upkeep of work routines (Interviewee 11). Besides, this approach in combination with different systems offered by the company to manage and document work processes has also benefited the organization and his work colleagues as he has been able to share the step-by-step processes that underwent during a previous problem solving event (Interviewee 11).

In addition, self-observational strategies can give motivation towards work. Interviewee 7 reported that accomplishing tasks and goals on a to-do-list resulted in positive thoughts and feelings – “crossing over tasks that I have done is rewarding to me” (Interviewee 7). Similarly, Interviewee 3 found that frequently using a calendar allowed her to focus on personal goals and rewards such as upcoming holidays which gave enthusiasm and motivation towards work. According to Interviewees 4 & 11, making to-do-lists and notes can also aid in being more organized with your thoughts since you do not need to remember every single detail.

Moving to the topic of goal-setting strategies, Interviewee 8 states that there may be a connection between self-confidence, self-efficacy, and approaches to goal-setting – “when you have no self-confidence you start to incrementally build it by setting tiny goals, experiences of success are important” (Interviewee 8). Moreover, short-term goals can create clarity for the long-term. To put it simply, you need to “figure out what you need to do and make a clear path” (Interviewee 6).

Similarly, Interviewees 7 and 9 advocate for the approach of first setting goals and then dividing the objectives to more manageable parts that can be accomplished along the way of working towards the goal.

It is helpful to divide the tasks or goals. Big challenges are usually too much, and they tend to give anxiety (Interviewee 7).

You may not be able to fix it all at once, but there is always that one step that you are able to take. From that step, if you are brave enough to take it, there will always be another step that you are able to see (Interviewee 9)

At any rate, it would also seem that resilience is needed in managing goal expectations and outcomes. “You should aim high, but also be ready to stand firm regardless of if the situation actually meets your expectations” (Interviewee 8). The same interviewee also warned about being too optimistic or pessimistic when initially setting goals as that may lead to non-desired outcomes.

You don’t run a marathon every day. Some people are over enthusiastic and create a lot of new commitments during an upturn. But it is important to recognize what your boundaries and limits are, because otherwise there will be setbacks — Goals should not be set on a bad day or on a good day (Interviewee 8).

It is important to briefly return to the subject of standards since approaches to setting standards and goals can be relatively similar. According to Interviewee 10, standards can and should fluctuate since consistently striving for high performance through constant mental analysis of behaviors is tiresome, in short, it severely affects well-being (Interviewee 10). Interviewee 8 notes that prioritization of work objectives is best practiced through continuous setting of goals and adjustment of standards by always focusing on “identifying what is relevant”.

Awareness for setting personal standards can also come from outside influences. Moreover, it can be difficult to reliably assess the current quality of your work without performance indicators or feedback received from the organization (Interviewee 11). Likewise,

perceptions on the standards of work colleagues can lead to adjusting personal standards and goals. “It’s good to have individuals with different standards in the work environment, you become more compassionate towards yourself” — furthermore, you learn and “recognize that others may approach work in widely different ways” (Interviewee 7). Besides, competitive work environments can also lead to establishing higher performance standards for the job (Interviewee 7).

But there are also professions that externally provide the employees with instructions and guidance on what is relevant, what the standards should be, and what are the accepted job behaviors. Notably, low autonomy jobs or jobs that exist in organizations with rigid process structures have an influence on prioritization of work tasks and subsequently may simplify work related goal-setting. As Interviewee 3 notes, “The prioritization of projects usually comes from higher up [in the hierarchy]”. Thus, in some cases, employees may not have much say in adjusting their work tasks or goals based on work outcomes.

As another recurring theme, the interviewees reported that finding intrinsic motivation for a job or task is beneficial for sustainable self-directed development. Luckily, intrinsic motivation can be derived from multiple sources.

Intrinsic motivation comes from selecting workplaces where you want to work and where you want to develop the specific skills that you identify as important to you (Interviewee 6)

You start to be self-directed about your competency development after you identify that you like doing certain types of work tasks. However, it is also important to have intrinsic enthusiasm towards learning new things (Interviewee 5)

Other interviewees also shared similar beliefs regarding the importance of being motivated and enthusiastic towards self-development and career development. In fact, one interviewee shared that motivation can also rise from recognizing that the learned knowledge has a purpose in the future (Interviewee 2).

Challenging work tasks and the experience of learning within the job can be a highly motivating factor for future self-development. “I enjoy the creative and innovative process of developing [work] practices” (Interviewee 2). In addition, celebrating work related successes and celebrating progress in your own competency development can be an important source of joy (Interviewee 10 & 11). Interviewee 11 notes that it is often satisfying to know that you are able to solve a problem, moreover, new challenges lead to less monotonous work. Thus, the research evidence seems to argue that challenging work tasks and tasks that develop personal competencies provide opportunities for building self-efficacy which in turn can create positive thoughts and self-perceptions.

When you have been working for a client for six years, even if the work tasks are alternating, you start to think if you should change the client. New client brings new enthusiasm (Interviewee 5)

One thing [about challenges at work] I like is that it keeps the think tank running at full capacity. The reward is not the money, it’s the feeling that when I get it done, I know I did it right — I am proud of myself mentally in that moment, and money can’t even fill it (Interviewee 9)

One interviewee reminds us that development and adaptation do not necessarily happen instantaneously – during a situation you are mostly concerned about acting, whereas after the situation you are able to self-reflect and contemplate on how the situation went and think about how you could adjust your behavior in the future (Interviewee 10). After a workday, Interviewee 11 goes on a walk to wind down and review what has happened during the day and how he will continue his work the next time — “when I have reached a balance [with work related thoughts] it becomes easier to focus my thoughts on other things” (Interviewee 11).

As was mentioned earlier, the interviews suggest that constructive thought patterns are essential for personal adaptability development. Firstly, these strategies help in dealing with disappointments and with negative thoughts that may arise in different circumstances. But perhaps more importantly, constructive thought patterns help in shifting

mental processes from thinking about obstacles and negativity to thinking about opportunities and positivity.

Occasional disappointments are a natural part of life experiences. However, it is up to the individual to self-regulate and adjust their mindset accordingly, and to choose how to respond to the situation.

In the working life, you constantly run into situations where either you or someone else is not able to meet the standards that have been set (Interviewee 7)

There is still room for development. I have very high standards for myself, and as a result it is quite difficult to accept failures — dealing with misfortunes becomes easier when there isn't any guilt, when the shortcoming is caused by outside influences (Interviewee 11)

Be realistic, and don't be too demanding — accept that there will sometimes be failures — doing your best is enough (Interviewee 2)

You will eventually get over disappointments (Interviewee 5)

A personal disappointment or failure may feel unpleasant in the situation — Competing in wrestling has taught me that in situations when things don't go my way, the thinking style I should apply is 'well, in the worst case I will get a bad mood from this, but that is of no real importance to me' — It [managing your mindset] requires active reorientation (Interviewee 8)

As situations change, you have to make the decision of seeking alternative solutions. You can't continue with your old ways (Interviewee 6)

When unfortunate things come across, I allow myself to cry and complain, but I don't spend my life on it. I take a few days or maximum a week, and then I come back — I hate to be living in the past. What has happened has happened, and now you need to start thinking how you can fix it and what is the next step you need to take (Interviewee 9)

Reflecting on his experiences in construction and carpentry, Interviewee 9 expresses that it is important to quickly let go of worry. "I can't spend whole time on worrying about a

single problem, because there will be hundreds of other problems coming” — I always try to develop the ability to learn from these experiences and to keep it in my mind that these sorts of problems can happen (Interviewee 9).

In addition, humour in difficult times can be a strong mental coping tool. “Having fun and laughing is important, it helps you to calm down” (Interviewee 9). You need to have a “healthy humour” when faced with adversity (Interviewee 8).

In some professions, years of experience with success and failure can lead to detecting surfacing issues much faster and subsequently disasters can be avoided by acting quickly. Although, as an anomaly, one interviewee claimed that you should not aim to seek lessons in every single failure, “there are also failures that don’t necessarily have any lessons into them – the situation simply doesn’t categorize into any sort of pattern” (Interviewee 8). Nonetheless, the research data seems to suggest that in the right circumstances making mistakes can also be educational.

If you make mistakes, you will learn from them to not make the same mistake twice. And I believe that you should be allowed to make small mistakes in the work environment as working in an environment where mistakes are not allowed feels extremely distressing (Interviewee 5)

Disappointments are a part of life. They are learning experiences — The more I have understood that my whole life is a learning experience, the better equipped I have become to take on the challenges of work life (Interviewee 7)

You learn from making mistakes. Looking back you can see that the experience has taught you.. or made you aware of something new (Interviewee 6)

As a central theme in constructive thought patterns, the interviewees reported how it is very important to limit the influence of negative thinking by practicing self-control and cognitive self-regulation.

After facing a disappointment I am not judgemental towards myself. If you find yourself being judgemental towards yourself then you should quickly try to re-orientate yourself (Interviewee 8)

Thoughts and feelings should not be at defiance or act as obstacles against change (Interviewee 7)

Negative thinking is not constructive, by thinking negatively you are just making things much harder on yourself — Negatives should be acknowledged, for example a job task might not be pleasant to do, but you should not dwell on it. In every job there is going to be some hard tasks. It has to be done by someone, so start working on it, and get on with it (Interviewee 2)

The way I see it is that negative self-talk holds you back — I always try to find a way to not beat myself mentally. Having thoughts of ‘that is too difficult, I can’t do it, that is ridiculous, who is going to do that I am not going to do that’ is never helpful (Interviewee 9)

According to one interviewee, in most cases you need to work on removing “the part of self-talk” that is “non-constructively complaining about the state of the situation or about not wanting to do something” (Interviewee 6). The interviewee continues by stating that negative self-talk can also indicate that you need have enough courage to leave the situation. However, there is a fine line between avoidance and creation of distance.

Avoidance is generally seen as a negative coping mechanism since avoidance of conflicts and responsibilities tends to lead to bigger problems (Interviewee 7 & 9). On the other hand, some of the interviewees suggest that constructive distancing can occasionally provide the means to effectively target your time and energy towards more productive feats and towards career development.

When we shift perspectives and start to think more objectively, it can also result in recognizing new career opportunities or tools to deal with the situation. It is not always possible to solve a problem when you are in the heat of the situation, sometimes taking a walk or getting a cup of coffee can lead to finding the solution you are looking for (Interviewee 11).

You can't change others, the only thing you can change is yourself. You should always place your thoughts on that which is relevant (Interviewee 6)

Step outside the situation and work on changing your own negative thoughts about the situation or person (Interviewee 9)

You have to leave from a narcissistic work atmosphere — Long workdays feel much better in a good atmosphere. Even though as an entrepreneur I am working very long days, for me it is mentally much easier to handle than being tormented for eight hours in a negative work environment (Interviewee 6)

Nowadays I am more perceptive of my emotions, when a change or sudden situation happens I stop and listen to my feelings (Interviewee 10)

In fact, creating change often requires us to pause and look inwards. Willingness to let go of out-of-date ways of thinking is occasionally the most important part of change. However, Interviewees 3 and 10 also remind that changes in mindsets and thinking styles largely happen unconsciously. "Until a very late age people should have the attitude of striving to identify personal weaknesses, and to admit when they are wrong or have incorrect views." (Interviewee 11). During change "there is no other choice than to adjust your own attitude and mindset — what was before must be let go of, including letting go of any [misguided] principles" (Interviewee 4).

You can't influence everything. In the beginning you might feel situations or hardships really strongly, especially if they are confrontational with your own values. But through self-reflection you can find a balance (Interviewee 10)

Regardless, the findings from the interviews would suggest that a conscious effort in shifting thoughts and attitudes towards positivity or growth can result in personal well-being and increased work performance. "Thinking positively beforehand usually results in a positive outcome" (Interviewee 6).

The mindset that I have now is that I am capable and brave. Earlier I couldn't even imagine about being an entrepreneur, but all of the past occurrences have nurtured me to become one (Interviewee 6)

Even if you feel that you don't know how to do something, you still have the feeling of being capable to learn. With this mindset I don't feel anxious when I am approaching new work tasks (Interviewee 8)

At first you need to notice that there is at least one thing that is good about the upcoming change. After finding the most important beneficial points it is much easier to focus on the change process (Interviewee 3)

It might not always be easy to validate at once if an upcoming change is for the better or worse. As situations change it is important to be calm and to not get overwhelmed (Interviewees 2, 9 & 10). "Quite frequently creativity calls for calmness and quieting down. In a hectic situation, where disagreements exist, it is rather difficult to find the mental balance which enables you to use your creativity" (Interviewee 11). Similarly, one interviewee noted how important patience is "Be patient, with anything with anybody. When you are patient, you can learn more, listen more, and understand people more" (Interviewee 9). Not only is patience and mental calmness required in times of change, but it may also allow us to learn more from others or from our own experiences.

5 DISCUSSION

This chapter discusses the main findings of the research by connecting theoretical implications with empirical findings. In addition, the chapter contains answers to the research questions of the study and presents a model on the researched influences.

5.1 Discussion of the main findings

The main aim of the research has been to understand how adaptability can be enhanced through self-leadership and cognitive self-developmental measures (RQ1). Consequently, the theoretical and empirical research has been focusing on self-leadership as an approach to developing personal adaptability resources. In addition, based on theoretical implications, the research acknowledges that self-awareness and self-efficacy are likely to be fundamental for sustained development of personal adaptability (RQ2).

Firstly, the findings suggest that self-leadership strategies are being successfully utilized in adaptability development by different workers across multiple occupations and career sectors. Accordingly, the findings also suggest that personal adaptability can be increased by developing more effective self-leadership (see Marques-Quinteiro & Curral, 2012; Wojtczuk-Turek & Turek, 2015). The empirical findings offer evidence to argue that, specifically for personal adaptability development, some components of self-leadership may be more impactful than others. In parallel with the empirical results of this study, self-leadership strategies on self-observation, goal-setting, and constructive thought patterns can be regarded as particularly effective for personal adaptability development (Marques-Quinteiro et al., 2016; Cunha et al., 2017; Neck et al., 2020). As a consequence, it can also be assumed that underperformance in any of these areas causes restrictions to adaptability development.

Secondly, it seems that adaptability development is accelerated by having positive mental attitudes and values in the cognitive qualities of openness, curiosity, and cognitive

flexibility (e.g. Hamtiaux et al., 2013; Waldeck et al., 2021). Interestingly, the three cognitive qualities appear to be interrelated. Openness to experience and openness to change typically results in increased personal initiative and proactiveness towards change (Wojtczuk-Turek & Turek, 2015). Therefore, the personal quality of openness can be indicative of the willingness to learn new knowledge and to develop both intellectual curiosity and cognitive flexibility. Moreover, analysis of the narrative research evidence shows that it may be possible to develop cognitive flexibility through continuously exposing oneself to new information and by adopting mental attitudes that encourage learning in different social environments (cf. Martin & Anderson, 1998; Leong, 2020). Hence, development of the three cognitive qualities seem to direct towards similar outcomes, outcomes that are beneficial for adaptability development (Fugate et al., 2004; Savickas & Porfeli, 2012; Yu et al., 2019). Summarizing, the three cognitive qualities are characterized as increased willingness to consider other perspectives, and as an interest to continuously learn new things or to seek out new experiences.

As suggested by the research evidence, personal adaptability development is accelerated by aligning self-leadership strategies towards developing these cognitive qualities. Admittedly, previous research has also shown that other personal- and background factors such as learning orientation, proactivity, and optimism may influence development in a similar manner (Fugate et al., 2004; O'Connell et al., 2008; Marques-Quinteiro et al., 2016, p. 112; Villalobos et al., 2020). Consequently, it is suggested that cognitive self-development is approached with an individualized consideration.

Furthermore, the empirical data of the study confirms that both self-awareness and self-efficacy perceptions may significantly alter the probability of choosing adaptive behaviors in different working conditions. In particular, some of the interviewees reported a positive correlational relationship between self-efficacy and their personal tendency to take initiative and personal responsibility over work roles and career development opportunities. Also, the results suggest that self-awareness is paramount in recognizing important personal values, mental attitudes, strengths, and current adaptability resources

which enable the individual to demonstrate adaptive behaviors in different situations (Cunha et al., 2017). Moreover, self-awareness may lead to identifying skills shortages. Correspondingly, these influences have an impact on setting effective work related goals or standards that ultimately can have a positive effect on adaptation and self-development (Wojtczuk-Turek & Turek, 2015, p. 403; Godwin et al., 1999; McCormick, 2001).

Generalized personal adaptability can be summarized as consisting of the ability to quickly learn new skills, work-related knowledge, and work processes in addition to being capable of effectively self-regulating behaviors, cognitions, and emotions (Pulakos et al., 2000; Fugate et al., 2004; Ployhart & Bliese, 2006; Savickas & Porfeli, 2012). Active development of generalized adaptability resources is broadly seen as a vital career competency since occupational work roles and work tasks may change rapidly (Miller et al., 1994; Hall & Chandler, 2005; Ployhart & Bliese, 2006; Savickas & Porfeli, 2012). Thus, similarly to prior theory, the research recognizes that adaptation in the workplace includes multiple elements that are comparable as the demonstration of resilience, thriving, and flexibility (Hamtaux et al., 2013; Waldeck et al., 2021; Yu et al., 2019).

As an interpretation of the interview data, personal adaptability is primarily required in a) social situations, b) creative problem solving, c) lifelong learning, d) prioritization, time and focus management, and e) in mental adjustment of responses to unforeseen circumstances or setbacks (cf. Ployhart & Bliese, 2006; Wojtczuk-Turek & Turek, 2015). Admittedly, there are differences in work situations and subsequently the needed adaptability resources between employees of different organizations tend to vary. With regards to this, the interviews affirmed that receiving organizational support and having clarity over work roles and personal KSAO's (knowledge, skills, abilities, and other characteristics) has an impact on selecting and actualizing adaptive behaviors (cf. Fugate et al., 2004; O'Connell et al., 2008). Likewise, since perceptions and cognitions are unique, the necessary adaptability resources for a specific work task may have differences between employees of the same organization. Consequently, the interviews revealed that universally applicable personal adaptability competencies exist, however, the findings

overwhelmingly suggest that adaptability is exceptionally sensitive to perceptions of the work environment and situation (Ployhart & Bliese, 2006; Braem & Egner, 2018).

Sustainable adaptation requires a vision to develop the capacity for effective adjustment in spite of any emerging situational changes. When perceived through the lens of self-development, personal adaptability is the process of consistently making progress on goals that are aimed at developing various adaptability resources. In particular, two approaches arise as highly relevant.

The first approach is related to removing ambiguity associated with work roles and responsibilities (Neck et al., 2013, p. 466). According to the interviewees, adaptive performance becomes much easier to actualize when there is clarity over work processes and work tasks. In addition, the ability to function in different work roles, i.e. functional flexibility, is directly correlated with increased personal adaptability in the workplace (Neck et al., 2013, p. 466; Wojtczuk-Turek & Turek, 2015; Leong, 2020). Hence, it is argued that the personal capacity for adaptation benefits from work experience and from taking work assignments and training outside one's own work role (Leong, 2020).

Besides, the empirical findings also suggest that being able to consider and understand the work roles and responsibilities of one's colleagues can aid in personal adjustment and bring forth opportunities that may support the whole organization. Likewise, employees with occupational tasks or roles that have high complexity are additionally required to develop cognitive skills and cognitive flexibility in order to solve problems efficiently and creatively (Wojtczuk-Turek & Turek, 2015). Therefore, the influence of cognitive flexibility is emphasized in team environments and in occupational roles that are characterized by creating value through creative thinking and analysis of knowledge. Nevertheless, it can also be interpreted that the different forms of flexibility may be somewhat synergetic, meaning the personal adaptability of employees can see benefits from development of different forms of flexibility.

The second important approach to sustainable adaptability development is to learn how to balance between different dimensions of one's personal and career life (Cunha et al., 2017, pp. 473–478). In particular, the interviewees reported that a balance between work and personal life was perceived as important for mental well-being. Moreover, the findings of the research indicate that mental well-being may influence the capacity for demonstrating creative and adaptive work performance (Besser et al., 2020; Orkibi, 2021; Waldeck et al., 2021). Given these points, it is easy to argue that continued adaptation requires effective means of self-regulation.

Adaptability literature recognizes, by and large, that self-regulatory resources are needed in sustained positive development and cognitive adjustment (e.g. Spreitzer et al., 2005; Waldeck et al., 2021). Hence, self-regulation supports the individual in their adaptability development. In addition, the interviews led to an interesting finding – personal capacity to adapt benefits from learning to constantly adjust one's personal standards. This active reorientation was perceived as valuable not only for mental well-being but also for raising work performance over a period of time. Thus, self-regulation and management of standards should be approached with an appreciation towards flexibility.

Another significant interpretation can additionally be made based on the interview data, it would seem that personal standards and self-regulation are influenced by personal perceptions on self-confidence and self-efficacy. With enough self-awareness we may begin to understand what our personal strengths and resources are and how they can aid in dealing with challenges presented by work situations. Moreover, these perceptions can be confirmed after acting outside one's comfort zone and by successfully completing challenging work assignments. Hence, the empirical results seem to conform with previous theories stating that triumphing over work-related challenges assists in adaptability development (Griffin & Hesketh, 2003; Leong, 2020).

The effectiveness of self-regulatory approaches can be improved with self-observation and self-reflection (Cunha et al., 2017). By the same token, planning, goal-setting, and

goal-orientation are expected to require a degree of introspection and self-observation. As a common factor, the respondents voiced that there is a constant need to continuously identify relevant work processes and behaviors. As a partial solution, the respondents suggested that there are different approaches to monitoring and tracking progress on work related objectives. By identifying what changes are necessary and what are the resources for creating this change, one is immeasurably more prepared to take adaptive action. Therefore, it is argued that feedback, self-observation strategies, and accurate self-perceptions are some of the most essential factors that expedite personal adaptability development (Stewart et al., 2011; Cunha et al., 2017; Kiersch & Gullekson, 2021).

It is also suggested that self-regulatory approaches which include a combination of cognitive self-leadership strategies and goal-setting strategies result to higher performance in reaching personal objectives (Neck & Manz, 1996; Godwin et al., 1999). Likewise, the benefits of a broad application of goal-orientation strategies carry forward to adaptive and proactive work performance (Marques-Quinteiro & Curral, 2012), and to development of flexible learning habits.

In regard to adaptive performance in goal-setting, it is important to distinguish between the strategic approaches of setting goals based on work outcomes and setting goals based on work processes. In the former, one would measure success with performance measures such as quality or time spent on the work task. In the latter, one would instead focus on the activities and means to achieve the outcomes. In other words, process related goals shift the attention to the behaviors and means of accomplishing the goals.

Thus, it is argued that personalized goals based on work processes can even be set in organizational environments where goals and standards on work outcomes are supplied by the employer. To illustrate, one could set a personal goal of spending 30 minutes each day on searching for and reading information on relevant career competencies for their current occupation. Gradually this process related goal could potentially lead to developing more value in their everyday work activities.

Since goal-setting strategies affect and are affected by other self-leadership strategies (Godwin et al., 1999; Knotts et al., 2021), it is argued that personal adaptability development benefits from goal-setting and goal-orientation that specifically aligns with positive mental attitudes and with development of adaptability resources. In conclusion, self-regulation together with effective self-observation and goal-setting practices can guide the person to incrementally develop personal resources for adaptation and to habitually become more open to selecting adaptive work behaviors.

Lastly, the findings on constructive thought patterns are discussed. Over half of the interviewees reported that negative thoughts and negative self-perceptions make adaptation more difficult. The results of this study are in line with earlier research proclaiming that there is a positive effect to personal performance when dysfunctional and limiting thought patterns are reduced (Neck & Manz, 1996, p. 450; Godwin et al., 1999, pp. 157–158; Neck et al. 2020, pp. 114–115). Subsequently, the findings support the theory that optimistic and realistic assessment of situations can lead to recognizing courses of action that direct thoughts towards more productive and functional directions (Neck & Milliman, 1994, pp. 13–14; Fugate et al., 2004; Ledesma, 2014, p. 5).

A number of interviewees advocated for the approach of trying to develop mental attitudes where one perceives mistakes and setbacks as learning opportunities or as opportunities to become aware of new ways to move forward. This move towards more optimistic and opportunity oriented outlooks may be vital given that dysfunctional thought patterns create impediments and hinderances to adaptive performance (Neck & Manz, 1996; Ledesma, 2014, p. 5; Wojtczuk-Turek & Turek, 2015, p. 401). Equally, the findings of this study also seem to suggest that many people may benefit from a mental shift towards deeper appreciation of valuing continuous learning and openness (cf. Marques-Quinteiro et al., 2016, p. 112; Fugate et al., 2004; Porath et al., 2012). To summarize, adopting solution focused thinking styles that focus on actively recognizing opportunities for growth is suggested to strongly contribute to personal adaptability development.

Once again, it must be recognized that functional and adaptive thought patterns may vary between individuals. One of the limitations in suggesting thought pattern strategies for adaptability development is that while one approach might work for one person, it does not guarantee that the same approach can be successfully adopted by another person. Regardless, as a commonality the interviews revealed that management of personal expectations should typically be considered as an important part of thought pattern strategies since it is not always possible to meet and exceed expectations. Adversities and challenges are an inevitable part of business life, therefore, some of the interviewees additionally pointed out that stressful situations call for learning to navigate cognitive processes with compassion, calmness, patience, and non-judgemental attitudes.

In conclusion, this research maintains the notion that self-leadership can offer effective tools for self-influence and self-regulation which may ultimately contribute to development of personal adaptability. In addition, the primary strength of approaching adaptability development via multiple self-leadership approaches is that, in theory, a combination of various self-influencing methods is more likely to increase adaptive performance (Marques-Quinteiro & Cural, 2012, p. 573; Neck et al., 2020). To illustrate, while an employee might be good at setting challenging, achievable, and measurable goals, they may lack in positive self-talk. Thus, in the absence of constructive thoughts the perceived self-efficacy of the individual may suffer resulting in reduced performance. Needless to say, one should attempt to create a balance between the different dimensions of self-leadership.

5.2 Model development

According to the research evidence found in this study, there is a substantial amount of data to suggest that self-leadership and development of mental or cognitive qualities related to openness, curiosity, and cognitive flexibility have a mutual connection to development of personal adaptability. The previous chapter discussed the background and significance of these effects and influences, whereas this chapter is focused on discussing the relationships between the influences.

Firstly, self-leadership and the cognitive qualities of openness, curiosity, and cognitive flexibility can be regarded as predictors of personal adaptability development. In other words, individually both of them have a direct positive influence on development of personal adaptability. Moreover, there is an important correlation between the two predicting factors.

It is suggested that self-leadership may lead to development of openness, curiosity, and cognitive flexibility. For example by practicing self-observation of thoughts or work behaviors one may become aware of a need to develop more openness or cognitive flexibility, and by setting effective goals that support the objective of developing these personal qualities it is more likely that one finds constructive means to reach desired results. Similarly, research on cognitive flexibility has previously indicated that self-cueing and reward strategies can be helpful in encouraging the use of cognitive flexibility (Braem & Egner, 2018, pp. 473–474). Hence, it is theorised that self-leadership moderates the relationship between development of personal adaptability and the three cognitive qualities.

In contrast, cognitive flexibility and openness is often required in selecting effective self-leadership approaches and in creating commitment for practicing the approaches in different situations. This suggests that the three cognitive qualities of openness, curiosity, and cognitive flexibility have an additional moderating effect on the relationship between self-leadership and personal adaptability development. In conclusion, it is

proposed that the two predicting factors of personal adaptability development additionally have a positive moderating effect on each other's influence in personal adaptability development (see Figure 2).

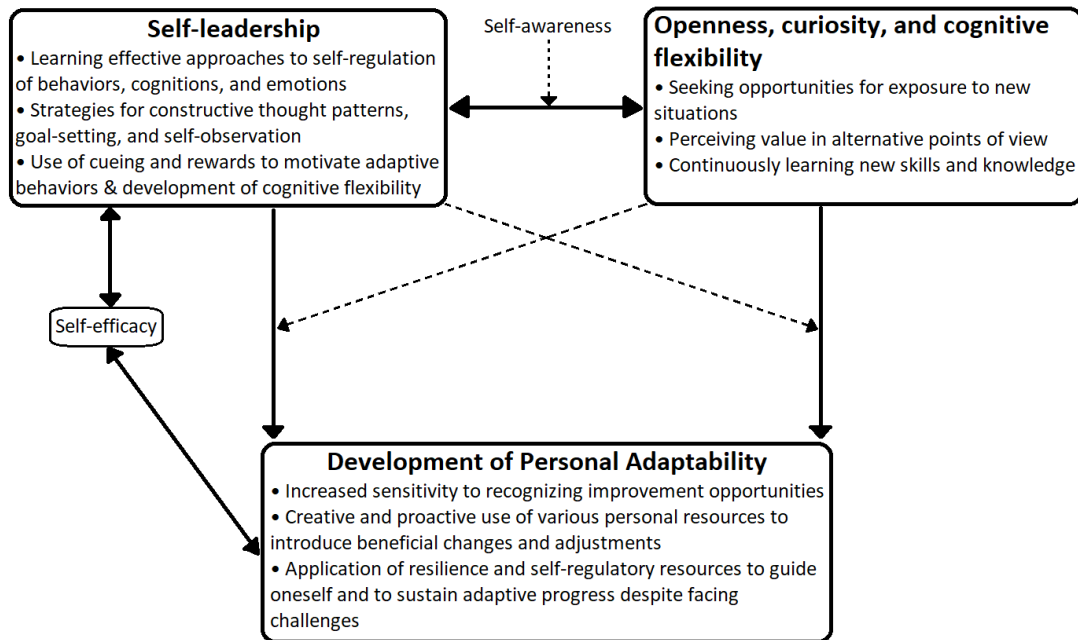


Figure 2. Personal adaptability development as a self-directed process

Secondly, the research found that self-awareness has a moderating effect between self-leadership and the cognitive qualities of openness, curiosity, and cognitive flexibility. By becoming more aware of, for example, one's strengths, weaknesses, traits, and behaviors it is more likely that constructive areas for self-development and self-leadership are recognized. In addition, the research affirms that diversity of experiences in different social or work roles is a crucial contributor to building adaptability resources (see Chandra & Leong, 2016; Leong, 2020). Consequently, self-awareness that is gained through effective self-reflection or introspection may indirectly enhance adaptive capacities by encouraging one to develop self-leadership and the cognitive qualities related to openness, curiosity, and cognitive flexibility (cf. Cunha et al., 2017; Wojtczuk-Turek & Turek, 2015).

Lastly, it is argued that positive perceptions and beliefs related to leading or adjusting oneself will generate trust towards one's capabilities to function in various situations that require adaptation. Consequently, the self-efficacy that is gained through adaptation and adaptability development may lead the individual into capitalizing on opportunities that further develop the personal adaptability of the individual. This claim finds partial support from prior literature which states that higher levels of self-efficacy and self-confidence generally enhances motivation and the ability to create effective adaptation (Wood & Bandura, 1989, p. 366; Fugate et al., 2004, p. 23; Savickas & Porfeli, 2012; Wojtczuk-Turek & Turek, 2015, p. 403; Leong, 2020, p. 611). However, literature has not fully researched the possibly very significant two-directional relationship between self-efficacy and development of personal adaptability that is hypothesized by the research model in this study.

Moreover, research has previously shown that self-efficacy is developed by self-leadership, and that self-leadership influences outcomes by first developing self-efficacy perceptions that motivate for further action (Prussia et al., 1998; Knotts et al., 2021, p. 12). Based on the empirical data in this study, it would seem plausible to believe that self-efficacy can also motivate towards self-leadership development. For example, experiencing success with goal setting and thought pattern strategies may result in self-efficacy that further motivates to continue developing self-leadership. On the other hand, since self-leadership has been shown to increase self-efficacy (Neck et al., 2020), it can be argued that individuals with low self-efficacy may also be motivated to develop self-leadership in the hopes of improving their current self-efficacy beliefs. While the findings may suggest that self-efficacy perceptions and beliefs are one of the major mechanisms that lead to personal adaptability development, they additionally suggest that self-efficacy mediates between self-leadership and personal adaptability development through a bidirectional relationship.

6 CONCLUSIONS

The objective of this thesis has been to research self-directed approaches to adaptability development. In particular, the research was set out to answer how personal adaptability development can be supported by self-leadership and cognitive self-development. Consequently, the research focused on studying the influence of self-leadership, cognitive flexibility, and cognitive qualities related to openness and curiosity. The study conducted qualitative interviews in addition to examining a wide theoretical foundation. To the authors knowledge, similar studies have not been conducted before.

As suggested by the research data, self-leadership and development of positive attitudes towards openness, curiosity, and cognitive flexibility can significantly predict personal adaptability development. Moreover, since there is variety in adaptive resources and in the developmental activities associated with cognitive self-development, the research claims that self-leadership can be used as an effective guiding tool for developing relevant competencies for one's profession and career. Consequently, the research has created a model to elaborate the relationship between these factors.

6.1 Theoretical contributions and practical implications of the research

The main theoretical contribution of the research has been to consolidate research and to map out relationships which have received minimal attention in previous literature. In addition, the research allowed for confirming earlier theories and assumptions between the related fields of research. Most notably, the research made theoretical contributions by increasing understanding on the causal and correlational effects between self-leadership and different personal resources on the outcome of adaptability development. Furthermore, empirical findings of the research suggest that there are still new findings and observations left to be discovered in understanding how different individuals approach self-leadership and personal adaptability development.

The research provides practical implications for different settings. Firstly, for both individuals and organizations, it can be beneficial to begin approaching adaptability development by identifying competencies and areas that need to be developed. This can be achieved, for example, by using various scales and measures for evaluating and assessing individual-level adaptability (e.g. Ployhart & Bliese, 2006; Savickas & Porfeli, 2012). Likewise, the broad theoretical base of self-leadership suggests that different individuals have different levels of proficiency in different areas of self-leadership. Hence, assessment of personal self-leadership competencies may be beneficial since it can lead to recognizing what strategies are already being applied, how to enhance them, and what new strategies should be added.

Secondly, self-leadership programs or coaching could prove useful for organizations that are willing to invest in developing their employees' adaptability and flexibility skills. Of course, as recommended by other researchers (Griffin & Hesketh, 2003; O'Connell et al., 2008; Braem & Egner, 2018), the organizational environment and context of work should be considered in advance. Nevertheless, it can be stated that in most organizational contexts self-leadership can support organizational development by improving the effective self-directedness of the employees.

By the same token, training and development programs could be targeted on improving the employees' personal resources that enable generalized or organization specific adaptability development. As an example set out by this research, developing the cognitive qualities of openness and cognitive flexibility may be effective in nurturing personal adaptability development.

Moreover, one of the major implications of this research is that individual-level adaptability and self-leadership development is part of sustainable leadership and sustainable human resource management. Therefore, leaders and organizations should think of ways to develop work environments which encourage employees to develop their personal resources in these areas. Even more, the topic is relevant since development in

these competencies is strongly related with occupational well-being and ability to manage work-related responsibilities.

6.2 Limitations and future research suggestions

This research is not without its limitations. To repeat, two very significant limitations of the research have been that the research has a broad scope of research while utilizing a cross-sectional research design. Thus, the interpretations and analysis of the causal relationships may not be as reliable as compared to research designs that use longitudinal approaches to data collection. It is suggested that future studies on personal adaptability development should utilize longitudinal research designs, and perhaps, a combination of both qualitative and quantitative empirical data. Moreover, future research could benefit from selecting a specific industry or demographic group as a sample. This would lead to a higher degree of practical applicability in the selected work life context.

The research led to identifying many interrelated factors that were classified as outside the scope of the research. Consequently, it could be possible that personal adaptability development is influenced by other relevant mediating or moderating variables which the study was not able to discuss. Thus, there are several future research directions.

Firstly, future research could study adaptive self-regulation and development of internal locus of control. This research confirms that self-regulation and self-efficacy has a very significant influence on adaptability development, however, the study was not able to extensively describe how perceptions on internal confidence and self-control are maintained in changing situations. Secondly, future research could examine how self-leadership and adaptability development are influenced by emotional factors. In particular, answers may be found from the broad theoretical base on psychological flexibility. This research area could prove insightful considering the recently emerging scientific research on emotional self-leadership.

Alternative directions for future research are also found from studying cognitions. For example, future research could study the influence of specific cognitive functions on personal adaptability. In particular, cognitive processes related to learning and language may prove to be insightful for personal adaptability development since development of adaptability and cognitive flexibility in the workplace is dependent on the quality and flexibility of applying social learning strategies. Lastly, the research was not able to extensively discuss the repercussions of having cognitive inflexibility, dysfunctional thoughts, cognitive biases, or maladaptive thinking. Thus, future research could approach possible research gaps in this area to make further suggestions on how personal adaptability can be developed.

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Appendix 1. Interview guide

Introduction

A short explanation on the purpose of the interview.

Background information

Questions related to age, education and career background, current profession, and on experiences working internationally or in a leadership role.

Main interview questions

1. How have you approached overcoming adversity and uncertainty in your working life? And what types of resilience, mental toughness, or flexibility skills have been essential for your success?
2. How have you improved your ability to identify adversities or failures as positive learning experiences?
3. How have you developed your ability to prioritize objectives and goals?
4. How do you mentally approach situations where goals or objectives may constantly change?
5. Have you had work assignments where you quickly needed to learn or adapt the way that you were doing things? How did you mentally prepare for changes or to new challenges in the work tasks?
6. In what ways has the outcomes of personal adaptability development (e.g. adjustment related self-efficacy or self-confidence) changed your approaches to self-leadership and self-development?

Appendix 2. Follow-up questions

These follow up questions were adapted to each interview based on the experiences of the interviewees.

Have you been able to utilize knowledge or know-how from earlier projects to solve brand new challenges? And if so, how?

Have the diverse experiences of your life developed you to become a more flexible learner?

If your work requires you to work simultaneously on multiple projects, do you find it difficult to switch between working on different tasks?

Do you consciously try to develop your mindset, for example to be more understanding and accepting of different people and opinions?

How do you approach developing openness? Do you spontaneously search for new information or look for conversations where you can learn something new?

Do you believe that your initiative towards solving challenges and being positively orientated towards change is a personal characteristic of yours?

How do you react if you can't meet the standards that have been set? And how do you approach situations where you have become aware that elevation of previous standards is necessary?