

**THE APPLICATION OF A MENTAL TRAINING TECHNIQUE
IN AN ORGANIZATIONAL TRANSITION PROCESS**

Doctoral Dissertation Research
Submitted to the Graduate Faculty of
Argosy University, Sarasota
Graduate School of Business and Management

In Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education
Organizational Leadership

By
Christian Felix Tschudi

July 2016

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ABSTRACT

Mental training techniques are essential instruments primarily used by professional athletes to complement their physical training for peak performance, control their composure, and achieve their desired results. Sports psychology methods such as mental practice are transferable to nonathletic domains. Yet, there is a lack of research examining the application of mental training in business settings, particularly in ongoing change and transition processes. To fill this gap, six business executives, members of the management team of an industrial organization in change, were introduced to the phenomenon of mental training. Their impressions and lived experiences using this unconventional method were gathered over a 4-month period. All candidates voluntarily participated in semistructured interviews and provided in-depth data. Findings of this phenomenological study showed that mental practice is a valuable instrument for opening people's minds, contributing to their work-life balance, and supporting those involved in challenging transition phases as they adapt their mindsets. Finally, the practice benefits organizational change. Also recognized were behavioral changes and improved communicational skills, which led to the desired results. The necessity of frequent trainings and a strong personal will and discipline to accomplish those trainings were noticed as major challenges. A notable discovery was the match of mental practice as self-help tool in all transition phases. Future researchers can build on the findings and recommendations and explore mental training as a life skill.

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DEDICATION

This doctoral research study is dedicated to Dr. Celia Edmundson, who supported and believed in me from the beginning of my first course in the program of Organizational Leadership at Argosy University, Sarasota. She was the one who designed and developed the organizational leadership program, and my first “lady professor” I ran into. I am more than happy and lucky that I could win Dr. Edmundson as my doctoral coach. After passing my comprehensive exam and entering the dissertation stage, Celia was the first pick as member of my dissertation committee, soon followed by our mutually esteemed professor and chair, Dr. Marguerite Chabau.

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Even after Celia was diagnosed with pancreatic cancer at Stage IV and had to pass through painful treatment cycles, this energized coach and friend continued providing her professional support and heartfelt care. Our last conversation ended with her words: “I’m very tired right now, but please call me in a few days.” Thank you, Celia . . . see yah!

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CHAPTER ONE: THE PROBLEM

Mental training techniques are usually associated with sports psychology methods to complement athletes' physical practice for the purpose of increased performance overall and to facilitate their goal achievement process (R. J. Bell, Jutte, & Johnson, 2012; Connaughton, Hanton, & Jones, 2010; Holland, Woodcock, Cumming, & Duda, 2010; Visek, Harris, & Blom, 2013). Researchers including Fürst (2008), S. L. Miller (2010), and Weinberg, Neff, and Jurica (2012) have also suggested implementing mental training methods in business settings to improve employees' workplace effectiveness and enhance creativity and innovation. Doing so can also help employees deal with stressful moments, difficult situations, and organizational change.

Organizational change and its related psychologically sensitive transition process, as outlined by Bridges (1986), may be facilitated by providing appropriate self-help tools such as mental training techniques to employees going through change and facing transitions. The terms *mental training technique* and *transition process* are later defined in this chapter.

Problem Statement

Organizational change happens when an organization makes a shift from its current state to a desired future state. Anderson and Ackerman-Anderson (2010) identified the following three critical focus areas of an organization during a change procedure: its change content, including strategies, structure, systems, and work procedures; its corporate members and human dynamics of change; and its planned, designed, and implemented change process. They explained that organizational change is usually catalyzed by signals and forces that originate in a company's environment or

marketplace. It is critical for leaders to recognize and understand the drivers of change early and differentiate between external and impersonal factors such as the environment, marketplaces, businesses, and organizational issues and internal and personal factors such as the company culture and employees' mindsets and behavior.

Up to 70% of organizational change initiatives and efforts fail to generate the desired business outcome due to underestimating or insufficiently paying attention to people drivers (Anderson & Ackerman-Anderson, 2010; Kotter, 2012). Anderson and Ackerman-Anderson (2010) and Kotter (2012) agree that there are various tools and methods for managing external drivers. However, Anderson and Ackerman-Anderson (2010) suggested finding ways to handle internal and personal factors, particularly to help change leaders and subordinates adapt their mindset and behavior.

Mindset is the underlying force that causes people to behave and act as they do. Becoming aware that each of us has a mindset—and that it directly impacts our behavior, decisions, actions, and results—is often the critical first step in building a person's and an organization's ability to transform. (Anderson & Ackerman-Anderson, 2010, p. 36)

Anderson and Ackerman-Anderson (2010) also stated that organizational leaders benefit from a mindset shift in order to recognize environmental changes and alternating trends in relevant marketplaces, which allows them to then possibly adapt organizational strategies and structures if needed. Employees may need a change in mindset to understand the rationale of the change content and the necessity to adapt their behavior. In order to successfully perform, changes in both leaders' and subordinates' mindsets are mandatory if their organization passes through significant transformation of its strategy, design, and culture (Anderson & Ackerman-Anderson, 2010).

Numerous books, articles, and scientific reports are available documenting that athletes in various sports effectively apply mental training techniques to not only enhance their performance potential but also achieve and maintain an optimal mindset throughout their peak performance in stressful, competitive circumstances (Cocks, Moulton, Luu, & Cil, 2013; Judge, Bell, Bellar, & Wanless, 2010; Visek et al., 2013). Even in other non-sports-related domains such as health care, piloting, musical performance, or law enforcement, evidence exists that mental practice can be effective in optimizing the performance of professionals such as surgeons, pilots and astronauts, musicians, and police forces. Further, mental practice has been found to significantly facilitate surgical recovery procedures (Arora et al., 2011; Bellon, 2006; Braun et al., 2007; Ietswaart et al., 2006; Immenroth et al., 2007; McDonald & Orlick, 1994; Mount, 2007; Prather, 1973; Sprung, 1997; Tunney, Arnold, & Gimbel, 2011).

Various researchers have suggested applying mental training methods in business settings to more effectively deal with stressful situations, facilitate the achievement of business objectives, enhance mental preparedness for any upcoming organizational change, and master the related transition process (Fürst, 2008; Loehr & McLaughlin, 1986; S. L. Miller, 2010). However, no scientific research is available referring to the use of such methods in an organizational setting, especially with the focus on a transition process. As athletes already benefit from available mental training methods to improve their performance, achieve their goals, and adjust their mindset to the required situation, it was of interest to explore how business executives perceive and describe the application of mental practice, especially in challenging and stressful situations. A

phenomenological study, focused on the lived experience as described by business individuals, provided an effective and appropriate approach to address this problem.

Problem Background

Historically, mental practice methods and similar techniques such as hypnosis were mainly used in medical settings to support healing procedures (Jenkins, 2009). With the rise of sports psychology between the 1960s and 1970s, interest in the application of mental training and its effect on performance in sports increased considerably (Ginns, 2005). Currently, mental training techniques in connection with imagery, positive thinking, and suggestion are mainly used by athletes. Other high-performing professionals such as surgeons, musicians, astronauts and pilots, and police officers are also using such alternative training. The goal is to complement their physical practice; optimize their performance; maintain their motivation and attention; manage their energy and stress level before, during, and after practice or competition and build higher confidence levels (Arora et al., 2011; Bellon, 2006; Burton & Raedeke, 2008; Holland et al., 2010; Immenroth et al., 2007; Mount, 2007; Sprung, 1977; von Guenther, Hammermeister, Burton, & Keller, 2010).

Studying the potential application of sports psychology in business, Fletcher (2011) found that principles and methods of sports psychology, from building mental skills and strengths up to the application of mental practice, could be easily transferred into business settings, especially in comparable areas of both domains. These areas are leadership with its impact on people's behavior, stress management, developing newly formed teams into ones that are high performing, organizational issues as constraints on performance, and unwanted distractions. While various "academic reflective papers

provide an element of credence to the sport-business analogy, there are surprisingly few original research studies in this area” (Fletcher, 2011, p. 144). Fletcher (2011) also emphasized that comparative research is still missing across performance domains like sports and business and pointed to topics such as resilience, work engagement, identification and development of talents, work-life balance, crisis management, organizational change, and transition procedures. As these topics are crucial in both domains, research is justified to explore the effectiveness of sport psychology methods transferred into business settings.

Purpose

The main purpose of this phenomenological study was to explore how a group of business executives experience and assess the application of a mental training technique, such as mind programming, in an ongoing organizational transition process with the intention of establishing different mindsets for different business scenarios, including organizational changes. The study outcomes provided in-depth descriptions and meanings attributed to the phenomenon of mind programming experienced by the participants via data collected from interviews.

I established an organization in 2004 for providing mental training workshops and seminars for individuals and organizational groups. The applied mental training method, *mind programming*, is defined and explained in later in Chapter One in the section titled Constructs and Definitions. My clientele consists of various individual athletes, sport groups, and business professionals, as well as organizational teams of different industries and service organizations. The present study was launched to discover more about business executives and their needs in change situations, particularly when organizational

members, affected by change issues, are required to pass through transition processes. However, this dissertational research focused on individuals' lived experiences using a specific mental training technique. Mental training itself or any specific mental training technique were not examined. Future researchers may investigate the effectiveness and efficiency of a mental training technique such as mind programming used in organizational environments.

Research Questions

Based on the research topic, the application of a mental training technique in an organizational transition process, and the study purpose, the following overarching research question emerged:

What are the lived experiences of business executives using a mental training technique, such as mind programming, in an ongoing organizational transition process?

Subquestions were derived as follows:

- What are the first impressions of business executives guided through the process of a mental training technique such as mind programming?
- In what ways could the introduced mental training technique be used?
- What are observed outcomes or other perceived effects when using a mental training technique?
- What is the practical value of using a mental training technique, such as mind programming, in a business organization, particularly during a transition phase?
- What were/are preconceived beliefs or concerns associated with the use of a mental training technique such as mind programming?

- What are the perspectives regarding the potential utilization of a mental training technique such as mind programming in business settings?

As suggested by Creswell (2009) as well as Hennink, Hutter, and Bailey (2011), the formulated research questions are guiding elements of the selected research design. They build and maintain a researcher's focus during the research project and play an integral role in the data collection process.

Constructs and Definitions

The constructs associated with the topic and the research questions as well as required definitions identifying key expressions related to the research topic are discussed next.

Constructs

The present study's topic was characterized by three primary constructs. The first and central construct discussed at length in the literature review is mental training. The second construct, the application of a mental training technique, is also delineated in the review of the literature. In Chapter Two, different investigations of mental practice in various sports and other nonathletic domains are highlighted, including health care, space flight, musical performance, and law enforcement, as well as business settings. The third construct reflects a critical procedure of organizational life and progress during an organizational transition process where the use of an unconventional technique such as mental practice has not been investigated thus far.

Definitions

Mental training in general and mind programming as a specific, self-applicable, and systematically applied form of mental practice are further defined next. The

transition process in an organization is also explained and contrasted to the term organizational change. Finally, the organization used for the present study's purposes is described in relation to its current exposed change and transition procedures.

Mind programming as a mental training technique. Mental training, also known as mental practice, mental rehearsal, mental conditioning, or mental imagery, is mostly applied in sport settings. It uses imagery to mentally practice a chosen act ("Mental Practice," 2008). Mental practice is a fundamental mental skill used by athletes to expand existing skills, acquire new skills, prepare for and increase performance, reduce anxiety, improve the ability to focus, and enhance motivation (Behncke, 2004; von Guenther et al., 2010).

In the present study, mind programming, a specific technique of mental training, was introduced for the purpose of exploring how business executives experience and assess the application of mental practice. The term mind programming can be defined as the conscious interference of an individual's thoughts and behavioral patterns by implementing a set of instructions in the person's subconscious in order to achieve a specific result ("Mind," 2014; Taylor, 2010). Mind programming, a self-applicable and systematically conducted mental training technique, follows the concept of inner mental training introduced by Jenkins (2009) and can also be compared to the concept of mental conditioning (MayoClinic, 2006). Similar to both of these concepts of mental practice, mind programming also utilizes relaxation, imagery, and positive thinking as core procedures. Furthermore, mind programming uses a programming phase where the act is mentally practiced in a relaxed mode using predefined suggestions. Related to sports settings, Jenkins (2009) noted that "programming the 'winning feeling' involves the use

of posthypnotic suggestion—the suggestions are programmed during deep relaxation, but take effect during competition” (p. 156).

The systematic procedure of mind programming starts with a preparation phase: Applicants are encouraged to make a plan of what, how, and where they intend to mentally rehearse. Before starting with the mental rehearsal, the procedure of rehearsing shall be determined and simulated, and an ideal place in a suitable environment needs to be evaluated. The following step is a relaxation phase to completely reduce any tension of the body and the mind; this procedure is accompanied by achieving a reduced brain wave state known as *alpha waves* (Sebelis, 2011). The next step involves creating and utilizing a mental room. In this stage, imagery, positive thinking as well as emotional feelings and self-suggestion are used to mentally rehearse and to internalize the intended outcome. Jenkins (2009) noted that athletes who do their mental exercises create their own mental rooms, which may be equipped with blackboards for verbalized suggestions and film screens for visualization purposes. The final step is to leave the mental room and regain the original state of consciousness.

Organizational transition process. D. Miller and Friesen (1980) defined organizational transition as an adaption procedure from one state or condition to another where several environmental, organizational, and strategy-making variables are involved. Bridges (1986) agreed and shared that organizational transition is a lengthy, three-part, psychological process in an organizational change event.

First, organizational members affected by the change have to let go of the prior situation and of following old procedures. Second, they need to pass through a neutral zone between the old and new reality. Finally, they have to find a new beginning, which

may involve becoming comfortable with renewed structures, policies, and relationships; developing new competencies and strategies; and establishing new ways of thinking and behavioral patterns (Bridges, 1986; Bridges & Mitchell, 2000). Organizational leaders are well-advised to support their followers to “launch the new beginning by articulating the new attitudes and behaviors needed to make change work” (Greyling, 2006, p. 23).

The company, its organizational change, and transition. The chosen company, which was identified through former business contacts, is a worldwide industrial group operating since 1877 with headquarters in Central Europe. In 2014, this leading global supplier covered 40 business units located in four continents and consisted of two independently operating business areas referred to as Electrical Technology and Plastics Technology. Both areas offer sophisticated engineered products and services for large energy concerns respectively automotive, medical, and other manufacturing industries.

In the past years, the company faced growing losses in the automotive branch, the largest sector of the plastics business. The decision was made to sell the entire automotive business to a competitor. Additionally, the company was confronted with growing financial needs as well as shrinking margins in the other business area; therefore, quick actions were required to strategically secure the organization in a competitive environment.

The divestment of the automotive business and the reframing of the remaining plastics business as well as the transformation of the company into a competitive, profitable, and future-oriented entity have placed the entire workforce, from the shop floors up to the executive management level, into a challenging transition process. The transition stage is usually characterized by resistance and emotional turmoil as

individuals affected by change need to let go of something (Bridges, 2009). Symptoms of both resistance and emotional challenge were discovered at this organization, which led to selecting this particular company as a study subject.

Importance of the Study

Change is inevitable and frequently impacts organizations in many forms such as economic crises, new technologies, market innovation, increased competition, demands for greater performance, or restructuring needs, and it occurs much faster and more unpredictably than decades ago (Bridges, 2009; Brisson-Banks, 2010; Luecke, 2003). Organizational members who are affected by the change go through a transition procedure defined by Bridges (1986) as a “psychological process that extends over a long period of time and cannot be planned and managed by the same rational formulae that work with change” (p. 25). Brisson-Banks (2010), Greyling (2006), Nortier (1995), and Palo and Panigrahi (2004) agreed with Bridges’s concept of transition and confirmed that change can be delineated as a situational, visible, and tangible set of events. For example, during an organizational restructuring, its members are affected by that change and have to pass through a continuous process where they must comply with the new procedures and adapt to the new situation.

Palo and Panigrahi (2004) further recognized that organizational change can be a stressful experience that threatens human beings’ self-esteem and generates uncertainty about the future. Bridges and Mitchell (2000) pointed out that leaders often do not see that it is “the transitions, not necessarily the changes themselves, that are holding people back and thereby threatening to make their change unworkable” (p. 32). On the other hand, Luecke (2003) argued that change is and will stay part of organizational life and is

crucial for progress. He continued by stating that those who can cope with change and its related transition may find themselves in a more satisfying and successful state. Brisson-Banks (2010) analyzed several change and transition models. Each offers comparable, positive ways, from establishing a sense of urgency, creating and communicating a vision and empowering employees to act on the vision to “articulating the connections between the new behaviors and corporate success” (Brisson-Banks, 2010, p. 249). According to Bridges (2009), “Unmanaged transitions makes change unmanageable” (p. 7). This belief was Bridges’s purpose for identifying establishing transition management as one of the key executive skills and for suggesting management trainings to facilitate transition processes rather than just making change happen.

As transition phases are outlined as long-lasting psychological processes, it was of interest to discover if a mental training technique such as mind programming would provide useful support to individuals who need to undergo a transition process in a changing business environment. Consequently, the research purpose connected with the present study’s objective and primary focus on exploring how business executives experience and evaluate the application of a mental training technique in a transition process.

CHAPTER TWO: REVIEW OF THE LITERATURE

Reviewing the literature related to the nature of mental practice offered an insight to mental practice's historical background and future perspectives. Doing so also presented definitions and research results of this phenomenon in such application domains as sports, space flight, health care, and law enforcement. Further, the review revealed potential applications of mental training techniques in business settings.

Historical Context of Mind Programming

The basics of mind programming or similar methods can be traced to more than 4,000 years ago, when therapeutic techniques that involved incantations and passing one's hands over the patient's body were applied in Chinese medicine treatments (Jenkins, 2009). Jenkins (2009) also found that in ancient times Greeks, Romans, and Egyptians induced trances for healing purposes. Gravitz (1991) compared the Egyptian healing methods with modern-day hypnosis. In the 18th century, patients were successfully cured with magnetic power. Such treatments were derived from the ideas of Paracelsus, a Swiss physician, who was convinced that the healing effects of magnets were due to the invisible magnetic fluid (Jenkins, 2009). Jenkins further noted that such unconventional methods using magnetic power and hypnotic trances involved a different state of mind in the patients.

Further ideas and treatments based on natural energetic transference were developed by Mesmer, a German physician who studied the influence of stars and planets on curative powers. "His name has passed into everyday language, with mesmerized now being synonymous with hypnotized" (Jenkins, 2009, p. 172). Later, the treatments were modified by adding suggestions of relaxation, which is also known as "sleeping

trance” (Jenkins, 2009, p. 174). The term light trance is related to the practical work of Coué at the end of the 19th century, who told his clients to use self-suggestions when they were relaxed. Relaxation and self-suggestions are essential and integral parts of today’s mental techniques such as mind programming (Bellon, 2006; Connaughton et al., 2010; Godwin, Neck, & Houghton, 1999; Hellström, 2009; Holland et al., 2010; Jenkins, 2009; Kemp, 2010; Noden, 1997; Selk, 2010; Vitello-Cicciu, 2003; von Guenther, Hammermeister, Burton & Keller, 2010).

Ginns (2005) reviewed empirical studies related to mental practice dated back to the 1930s that used terms such as symbolic rehearsal or imaginary practice. He also found that, with the rise of sports psychology in the 1960s and 1970s, interest in the application of mental training and its effect on performance in sports increased considerably. Murphy and Jowdy (1992) pointed out that mental practice in conjunction with relaxation and visualization techniques has been widely studied and introduced by many sports psychologists to both amateur and professional athletes in order to improve their performance. Driskell, Copper, and Moran’s (1994) meta-analysis, which explored the effectiveness of mental practice, confirmed that “mental practice is an effective means for enhancing performance” (p. 490). They also suggested the consideration of mental practice as an effective training alternative for physically dangerous tasks or as a supplement for conventional training. Weinberg et al. (2012) acknowledged a growing amount of literature attesting to the effectiveness of mental skills training in a variety of sport, leading to enhanced performance and also psychological well-being. Trends in sports psychology using mental training methods suggest that practitioners complement physical with mental practice, equip athletes with imagery skills, utilize stimulus and

positively framed response propositions, formulate desired contents precisely implement relaxation phases, and increase repetitions of trials (Suinn, 1997).

A study conducted by Ranganathan, Siemionowa, Liu, Sahgal, and Yue (2004) showed that voluntary muscle strength could be gained by mental training alone. Thirty previously untrained participants were divided into different groups. The groups, studied over 12 weeks, were assigned to either mental training of finger abduction or elbow flexion; a control group received no mental training but participated in the physical activities. While the control group showed no significant changes, both “mental training groups increased their muscle strength significantly” (p. 948).

Mental practice has also been studied in other high performance domains such as space flight, health care, and music performance (Arora et al., 2011; Bellon, 2006; Bluth, 1984; McDonald & Orlick, 1994, Sprung, 1997). In different qualitative studies, later described in this chapter, various professional individuals such as astronauts, pilots, surgeons, and musicians were interviewed about the use of mental practice and its impact on successful task performance. All individuals confirmed that mental preparation as well as mental readiness had a notable impact on successful performance. The musicians added that mental preparation was as important as physical preparation in achieving their goals (Arora et al., 2011; Bellon, 2006; Bluth, 1984; McDonald & Orlick, 1994, Sprung, 1997). Braun et al. (2007) found that mental practice led to positive results in physical improvement of patients in stroke rehabilitation.

Regarding the use of mental practice in business settings, Neck and Manz (1996) investigated employees receiving thought self-leadership training based on self-dialogue and mental imagery. The participants of this field study who received the training

showed increased mental performance, increased job satisfaction, and more optimistic perception of the organization's status than those individuals not receiving the practice.

Fletcher (2011) investigated applications of sport psychology in business. Foster (2002) discussed the possible contribution of sport psychology principles and essential mental skills such as mental imagery, performance routines, positive self-talk, activation control, and the ability to focus and concentrate. Foster encouraged business consultants to become familiar with those mental training skills used in sports and transfer those techniques to organizations during their engagements. Lloyd and Foster (2006) concluded, in their discussion about creating healthy, high-performance workplaces, that the above mentioned mental skills transferred by consulting psychologists are ideally suited for enhancing employee performance and may additionally contribute to reduce medical costs and increase motivation at work.

Constructs of the Research Topic

The research topic, the application of a mental training technique in an organizational transition process, revealed three constructs. The primary and central construct was mental training. The application of a mental training technique such as mind programming emerged as a secondary construct. The third construct was identified as an organizational transition process.

Primary Construct

The search of the term mental training revealed limited scholarly literature. However, several articles, books, dissertations, and other scholarly papers indicated the application of comparable patterns and methods as well as the utilization of similar descriptions and related expressions such as mental practice, mental rehearsal, mental

imagery, mental conditioning, mind control, meditation, self-hypnosis, or programming mind power (Anderson, Mahoney, Miles, & Robinson, 2002; Bellon, 2006; Blanchard, 2010; Donoghue, 2004; Driskell, Copper, & Moran, 1994; Ginns, 2005; Jenkins, 2009; Kemp, 2010; MayoClinic, 2006; Morin & Latham, 2000; Noden, 1997; Silva, 1978; Zolenas-Kennedy, 2010). Escalas (2004) used the expression mental simulation and defined it as “the cognitive construction of hypothetical scenarios” (p. 37).

Secondary Construct

The application of a mental training technique such as mind programming as a secondary construct of the research topic was also discussed in various studies. Several authors noted that mental techniques can be easily learned, but require repeated practice by applicants in order to gain successful results (Jenkins, 2009; Selk, 2010; Silva, 1978). Kemp (2010) added that these methods “are quite simple to grasp and can be practiced in short periods of time” (p. 17). A mental training process may be executed in different ways, and requires no specific knowledge or know-how, except willingness and readiness for mental practice (Jenkins 2009; Kemp, 2010; Selk, 2010; Silva, 1978; Taylor, 2010).

Mental training techniques are predominantly applied in numerous sport settings (Anderson et al., 2002; Driskell et al., 1994; Ginns, 2005; Gould, Greenleaf, Chung, & Guinan, 2002; Greenspan & Feltz, 1989; Jenkins, 2009; Morin & Latham, 2000; Porter, 2003; Selk, 2010; Weinberg & Comar, 1994). There are a few demonstrations of the use of comparable methods in health care (Arora et al., 2011; C. Bell, 1997; Braun, 2007, Immenroth et al., 2007; McDonald & Orlick, 1994; Nilsen, 2010), piloting and space-flight (Bluth, 1984; Prather, 1973; Sprung, 1997), law enforcement (Mount, 2007), and artistic environments (Bellon, 2006; Driskell et al., 1994; McHugh-Grifa, 2011).

Indications of utilizing mental practice in business settings are rare (Fletcher, 2011; Fürst, 2008).

Mind programming, a specific form of mental training to program or reprogram an individual's mind, can be used in any domain to satisfy a person's needs and wishes, from solving a personal problem to achieving success in business (Taylor, 2010). Bellon (2006), Donoghue (2004), Driskell et al. (1994), Ginns (2005), Kemp, (2010), and Selk (2010) also acknowledged that mental training techniques, such as mind programming, can support and facilitate essential organizational leadership procedures, for example problem solving, accomplishment of goals, motivation of employees, and performance improvement. Jenkins (2009) emphasized that using mental practice may even “increase your ability to get immersed in what you attend to” (p. 153). These techniques can be easily learned, but training is necessary to gain successful results (Jenkins, 2009; Selk, 2010; Silva, 1978).

Mind programming and goal attainment. Blanchard (2010), Daft (2008), Hay (1993), Locke, Shaw, Saari, and Latham (1981), and O'Neil and Drillings (1994) acknowledged that the achievement of objectives, especially in business organizations, affects performance and is of vital importance for long term existence. Hsieh (1990) and Taylor (2010) added that all organizations have goals, and goals are essential to success. Therefore, it was of interest to examine mind programming and its impact on achieving objectives in organizational environments.

After reviewing several hundreds of laboratory and field studies related to goal setting on performance, Locke et al. (1981) noticed that goal-setting does “affect performance by directing attention, mobilizing effort, increasing persistence, and

motivating strategy development” (p. 125). Ordóñez, Schweitzer, Galinsky, and Bazerman (2009) agreed and commented that “studies conducted in numerous countries and contexts have consistently demonstrated that setting specific, challenging goals can powerfully drive behavior and boost performance” (p. 6). Locke and Latham (2006) emphasized the effectiveness of goal-setting and noted that setting specific and hard to achieve goals generates higher levels of performance. They also pointed out that “even goals that are subconsciously primed (and participants report no awareness of the primed motive) affect performance” (p. 267).

Recognizing the importance of goals may come first, but to master the art of setting and implementing goals is another step (Hsieh, 1990). Morisano and Shore (2010) suggested that successful goal-setting needs a structured approach. For this purpose, Blanchard (2010), and Kemp (2010) recommended using the SMART technique based on specific, measurable, achievable, related and time-based goals. Halsey (2009) further commented, “Once this is done with all your goals, you have made a contract with yourself and the commitment to take action. This is your road map to get you where you want to go” (para. 8).

“The mind is a powerful tool, and advanced goal setting seems to help ‘program’ it” (Kemp, 2010, p.18). Eppler and Platts (2009), Escalas and Luce (2003), Jenkins (2009), McKenna (2003), Nacif (2008), Silva (1978), and Taylor (2010) also suggested using visualization methods and similar mental techniques. Furthermore, Driskell et al. (1994), Ginns (2005), Jenkins (2009), Morin and Latham (2000), Selk (2010), Silva (1978), and Sprung (1997) recommended mental practice supporting the goal-setting and goal-achievement procedure. Kemp (2010) further pointed out that by applying mental

techniques such as visualization, mental imagery, or self-suggestions “you can enlist your mind’s natural desire or ability to have what it’s programmed to want. As you master the techniques, you’ll find yourself drawn toward your goals with less effort” (p. 18).

Mind programming and self-motivation. Self-motivation refers to a person’s intrinsic force arousing “enthusiasm and persistence to pursue a certain course of action” (Daft, 2008, p. 226). Gavin (2002) continued: “High levels of self-motivation (intrinsic motivation) are reflected when individuals make clear decisions and with a kind of internal gyroscope keep themselves pointed toward their goal no matter how hard the wind is blowing” (p. 33). Mind programming or similar methods could support the process of developing and maintaining self-motivation. To develop self-motivation, C. Bell (1997) recommended utilizing visualization to crystallize expectation and belief. Greggs-McQuilkin (2004) agreed: “Visualize yourself as achieving your goals and succeeding” (p. 73).

Mind programming and self-leadership. Mind programming may also have an impact on self-leadership. Konradt, Andreßen, and Ellwart (2009) delineated self-leadership as “the process of a person to improve his or her self-motivation and influence his or her self-direction in order to behave in desirable ways” (p.323). Blanchard (2010) added that self-leadership is the first stage of a transformational (leadership) process, as “effective leadership starts from the inside. Before you can hope to lead anyone else, you have to know yourself and what you need to be successful” (p. 89). According to Bunch (2001), another approach of self-leadership includes “self-leadership of the mind strategy focus on encouraging effective and positive, or opportunity-focused, thinking patterns through managing self-held beliefs and assumptions, creating positive mental images of

work, and engaging in positive self-talk” (p. 147). In a descriptive exploratory study examining leadership practices of 50 nurse leaders, Vitello-Cicciu (2003) highlighted the following strategies referring to self-leadership and mental strengths:

Meditate daily. Numerous types of meditations exist that can help you grow more aware of how your emotions affect your behavior . . . Engage in positive visualization. Athletics best illustrates the power of positive visioning: An individual rehearses in his or her mind the most challenging and typically encountered aspect of his or her sport and then holds a clear mental image of performing at peak levels. Consider using this technique in anticipation of a difficult encounter with a staff member. Rehearse what you may say ahead of time and project a positive picture of a productive encounter. Another way to conduct visioning is to imagine scenes of exemplary leadership: You’re encouraging staff to reach a high-performing summit. Create an image of this future, see it, hear it, and touch it. Make it as real as you can. (p. 31)

After studying the concept of self-leadership and individual goal performance, Godwin et al. (1999) suggested the use of positive self-dialogues and mental imagery as these cognitive strategies can contribute to creating constructive thought patterns and to enhancing goal performance.

Third Construct

An organizational transition process was identified as the research topic’s third construct. Brisson-Banks (2010), Greyling (2006), Nortier (1995), and Palo (2004) confirmed Bridges’s (1986) concept of an organizational transition as a nonpredictable and time-consuming process in an organizational change event where affected individuals have to adapt to and deal with a new situation. Bridges further explained that a transition is a psychological procedure which unfolds in people’s minds as they process through change. According to Bridges, organizational members in transition pass through three stages, starting with a phase where they have to let go of the old situation, a phase called neutral zone between old and new reality, and a phase of the new beginning when

organizational change become effective. Bridges and Mitchell (2000) recommended that every phase needs to be managed and guided by the executives who initiated the organizational change, and without “successfully managing a difficult transition, no leader can be effective for very long” (p. 36).

In Phase 1, the ending of the previous situation, individuals affected by change often show feelings of loss and demonstrate resistance and disengagement as they are being forced to let go of something they are comfortable with (Bridges, 1986). Leaders should be able to respect and acknowledge subordinates’ feelings and emotions and help them to understand who needs to let go of what; this may support a person’s acceptance that something is ending (Bridges & Mitchell, 2000; Greyling, 2006).

In Phase 2, the neutral zone, uncertainty, confusion, and skepticism may occur, as well as a decrease in work motivation and performance (Bridges, 1986). Bridges and Mitchell (2000) suggested creating an employee communication process for monitoring the transition progress, finding temporary solutions for temporary problems, setting short-term goals for quick wins, motivating the affected members by reminding them how they can contribute to the success of the change, and encouraging people to try out new ways of working and thinking.

In Phase 3, the new beginning, two types of decision makers will dominate the scene: thinking types and feeling types (Bridges, 1986). The thinking types “want to know how the future will work and what the logical reasons for the changes are” while the feeling types “will be more concerned with what the future is going to “feel like” and how everyone will fit into it” (Bridges, 1986, p. 32). Bridges (1986) further explained that, depending on the communication skills of the executives conducting the transition

process and the appeal of the new vision and the new reality, there will be renewed commitment and increase of performance by the thinking types and enthusiasm and enhanced work motivation by the feeling types, or disengagement and personal frustrations may occur. Bridges and Mitchell (2000) recommended that leaders “help people launch the new beginning by articulating the new attitudes and behaviors needed to make the change work—and then modeling, providing practice in, and rewarding those behaviors and attitudes” (p. 35). “Managing transition is an important and essential process, for the quality of life of the individuals and also for the economic wellbeing of the companies” (Nortier, 1995, p. 45).

Mind Programming Applied in Sports

Successfully competing at a high level in any sport requires not only intensive physical training and technical preparation but also depends on an optimal mindset involving acquiring, practicing, and applying mental skills to avoid being blocked in unexpected stressful circumstances (Judge et al., 2010). Through analyzing training plans of track and field athletes, Judge et al. (2010) found that many athletes concentrated too heavily on physical training. Judge et al.’s (2010) recommendations to achieve an optimal mindset, often described as a flow state or *the zone*, have been condensed in a mental periodization plan, a “systematic mental conditioning program designed for peak performance for specific competitions” (p. 2). The suggested mental techniques for athletes to use to get into the flow are instructional self-talk and mental imagery (Judge et al., 2010).

Jones and Stuth (1997) surveyed the literature on mental imagery and concluded that this instrument of mental practice has been successfully applied in a wide variety of

sports. They also found mental imagery effective when used for skills acquisition, performance enhancement, anxiety management, and improving self-confidence. R. J. Bell et al. (2012) confirmed and noticed that imagery sessions “allow athletes to envision the process of successful outcomes . . . (and are) coupled with building confidence through enhanced self-images, such as proper outlooks and positive self-esteem” (p. 102). Additionally, mental imagery was found to be effective in replacing physical practice, mainly used in sports rehabilitation (R. J. Bell et al., 2012; Jones & Stuth, 1997). Jones and Stuth (1997) pointed out that “positive images may be important in maintaining an optimistic attitude that is thought to be of crucial importance in influencing the course of recovery” (p. 109).

Cocks et al. (2013), in their extensive review of literature in sports psychology, found that mental practice is commonly used to supplement physical training and enhance performance. Mental training seems to be beneficial for novice (inexperienced) athletes for learning new skills. However, the practice is more advantageous when used by elite athletes, experienced performers with world-class potential, as they “use mental practice more frequently, have better visualizing abilities, and employ more structured mental practice sessions” (Cocks et al., 2013, p. 263). Visek et al. (2013) examined different age groups using mental training methods and concluded that athletes who have positive experiences with sport psychology when they are young are more likely to use sport psychology approaches in the future regardless of whether they continue their athletic careers or become coaches or sport parents.

In a qualitative investigation, 16 national champion figure skaters with a minimum of 13 years of skating experience were interviewed about crucial forces for

achieving optimal performance (Jackson, 1992). Building up and maintaining a positive mental attitude based on continuous positive thoughts, feelings of confidence, and motivation to do well were perceived as most important factors.

Hellström (2009) analyzed psychological hallmarks of skilled male golfers, 14 top touring golf professionals as well as nine teaching professionals, who indicated that excellent golf performance significantly depended on psychological preparation for excellent practice, goal setting, and imagery training. Female professionals rated command of mental factors as most important for tournament success (Hellström, 2009). Highlights of this study's findings were setting proper goals and practice for enhanced goal achievement as well as include activities for confidence enhancing and positive imagery for better performance.

Mamassis and Doganis (2004) researched the impact of a mental training program on nine elite junior tennis players. All participants received the same amount of physical tennis practice; four players also participated in a mental training program where they were exposed to five different psychological skills: goal setting, positive thinking and self-talk, concentration and routines, arousal regulation techniques, and imagery (Mamassis & Doganis, 2004). The imagery session started with a relaxation exercise followed by positive visualization of an imaginary performance, including perfect execution of techniques and tactics, shot hitting with confidence, and winning all points. The players who participated in the mental training program showed greater overall tennis performance and a higher intensity of self-confidence as well as diminished anxiety issues compared to the individuals who only received tennis practice (Mamassis & Doganis, 2004).

Mamassis and Doganis (2004) also referred to previous research findings that reported performance improvement after participation in mental training programs. For example, Bakker and Kayser (1994) examined 29 female field hockey players, ages 16 to 28 years. The players were divided into experimental, placebo-control, and control groups. The control group received mental training instructions over 7 weeks and reported increased confidence, higher relaxation, and greater concentration ability than the other groups. Daw and Burton (1994) investigated six male and six female collegiate tennis players, ages 18 to 23 years, who participated in a systematic mental training program. A nonparticipating group of seven male and seven female players, ages 18 to 22 years, served as a comparison group. The training program was conducted over three seasonal phases. It began with a preinvestigation and planning phase for developing the program and finalizing the plans for implementation followed by an educational phase teaching goal setting, imagery, and arousal regulation. A rehearsal phase using on-court situations to implement the introduced mental skills into players' games concluded the program. Results indicated the effectiveness of the mental training program provided to the participants in the experimental group. Their tennis game improved as they committed fewer double faults than their counterparts (the control group), and they reported higher self-confidence levels (Daw & Burton, 1994).

Sheard and Golby (2006) confirmed the effectiveness of a psychological skills training program for enhancing athletes' performance as well as contributing to positive psychological functioning. Thirty-six national-level swimmers, 13 boys and 23 girls with an average age of 14 years, participated in a 7-week psychological skills training program on competitive swimming performance and positive psychological development. All

swimmers received instructions about techniques and exercises of different mental skills such as goal-setting, visualization, relaxation, concentration, and thought stopping. A majority of the participants (64%) improved their overall swimming performance (up to 6%). Further, Sheard and Golby found that the improvements remained 1 month after the intervention, indicating longevity of the treatment effect. Significant improvements were measured in 17 of the 18 positive psychological constructs; 94% of all swimmers enhanced their positive psychological development (mean of 19%). Based on their study's encouraging findings, Sheard and Golby suggested that young athletes benefitted from exposure to psychological skills training as their performance improved as well as their coping skills.

In *Sport Psychology for Coaches*, Burton and Raedeke (2008) identified mental training tools such as goal setting, imagery, relaxation, and energization for improving athletes' performance, developing self-confidence, and maintaining their motivation and attention as well as managing their energy and stress level before, during and also after practice or competition. Sadeghi, Mohd-Sofian, Jamalis, Ab-Latif, and Cheric (2010) confirmed that these tools were essential elements of an ideal mental skills training for university soccer players. They investigated and interviewed eight male university soccer players ages 25 to 36 years with average playing experience of 10 years. Preparing an effective, systematic program to develop mental skills of athletes, Sadeghi et al. additionally proposed to take into account personal differences and specific technical, physical, and psychological necessities of a sport. Grouios (1992) added that mental practice "can sometimes be almost as effective as overt practice, and it is sometimes very much more convenient" (p. 42).

Holland et al. (2010) investigated the perceptions of 43 male rugby players, with an average age of 16 years, related to mental qualities facilitating their development and examined their performance using mental techniques. Study results highlighted mental skill training's role in promoting greater personal well-being and self-reliance in athletes as well as in continuing successful performance (Holland et al., 2010). Von Guenther et al. (2010) tested six members of the U.S. Cross Country Ski Team's National Development Group, using a mental skills training program based on the unique needs of each athlete. The skiers were ages 17 to 23 years and were all elite athletes with international racing experience. They participated in a had to participate in a periodized mental skills training (PMST) program based on planned variation in training, which was designed to systematically develop skills and enhance performance. The program started with a 5-month preparatory phase including an 8-week systematic mental skills education phase involving goal setting, imagery, building confidence and motivation, self-talk, and concentration and energy management, as well as mental preparation. The program continued with a 3-month competition phase (national championships) and a 2-month peaking phase (international races), and ended with a 2-month recovery phase consisting of high rest from both physical and mental training. Significant improvements were measured during the entire PMST program ranging from 8%–110% better (with a mean of 58% better). Those improvements focused on any athlete's mental skills such as the successful use of goal-setting, the application of mental imagery and self-talk, the capabilities for concentration and motivation, energy management, and raised confidence-level, as well as use of mental preparation. Von Guenther et al. (2010)

commented that “for elite athletes at the top of their sport, even ‘8% better’ is a substantial amount of improvement” (p. 18).

One of the most prominent cases of successful outcomes of mental practice, outlined by Duhigg (2012), was related to a 2008 Olympic swim final in Beijing, the 200m butterfly race. Michael Phelps, a candidate for the gold medal, lost sight during the race due to leaking swim goggles. Phelps had mentally rehearsed how he would respond if his goggles failed (Duhigg, 2012). Instead of panicking, he went into a mental training mode and still won the race. Phelps’s answer to a reporter’s question regarding what it had felt like to swim unsighted was “It felt like I imagined it would” (Duhigg, 2012, p. 115).

Mind Programming Applied in Other Domains

Mental training and its effect on performance has also been examined in nonathletic areas including piloting, space flight, health care, music performance, and law enforcement (Arora et al., 2011; Bellon, 2006; Bluth, 1984; Braun et al., 2007; Cocks et al., 2013; Ietswaart et al., 2006; McDonald & Orlick, 1994; Mount, 2007; Prather, 1973; Sprung, 1995; Tunney et al., 2011).

Piloting and Space Flight

The results of a pilot training program with 23 participants, divided into an experimental group of 13 individuals receiving mental practice and a control group of 10 with no additional training, showed statistically significant differences (average means) in favor of the experimental group when pilot performance on landing patterns was measured (Prather, 1973). Prather (1973) concluded that combining mental practice with actual practice was more effective than actual practice alone when learning a perceptual

motor skill. Furthermore, Prather (1973) stated that mental training could be an effective and low-cost addition to training programs that typically depend on actual practice of the skill being learned, which can be costly.

According to Bluth (1984), spaceflight experience shows that psychological factors can become critical, above all on long-term missions, and affect flight safety and mission effectiveness. Former Soviet cosmonauts had to pass challenging physical tests and were also required to complete a rigorous mental training program that required them to develop self-reliance, self-control, self-confidence, and being able to stay calm and alert in emergencies (Bluth, 1984).

In Sprung's (1997) study, eight astronauts were investigated related to their using mental strategies such as mental imagery, planning and preparation. Sprung primarily focused on the mental planning and preparation that went into the astronauts' readiness and ability to operate with new material and technical equipment as well as their abilities to avoid surprises and deal with contingencies. Sprung found that the astronauts primarily used mental imagery to learn new tasks as well as lengthy technical procedures. Some astronauts also used imagery to rehearse emergency procedures, derive and learn checklists, and learn or change behavior patterns.

Health Care

Sprung (1997) also found that physicians used mental imagery to learn surgical techniques, to prepare for surgery, and to recall and evaluate their performance. Sprung noted a study conducted by McDonald and Orlick (1994) on using mental strategies in a surgical environment. Thirty-three highly proficient surgeons were interviewed and asked to recall their preparation activities prior to a recent successful performance in

surgery. Mental preparation as well as mental readiness were found to notably impact successful performance (McDonald & Orlick, 1994).

Immenroth et al. (2007) examined 98 surgeons who completed basic laparoscopic training. A randomly selected group of 31 participants received mental training to be able to visualize performing the medical process and to imagine the procedure from an inner perspective. Another group of 32 individuals received additional practical training, and the remaining 35 received no training. Results showed that mental training was an effective approach for optimizing surgical performance and produced better outcomes than additional practical training or no additional training (Immenroth et al., 2007, p. 389). Immenroth et al. further concluded that the involving mental training instead of providing additional physical practice was associated with fewer training expenses and that the expenses did not depend on laboratory analysis or using organs and instruments.

Arora et al. (2011) studied 18 novice surgeons and confirmed the successful effects of mental practice on surgical performance. Furthermore, Arora et al. concluded that using mental practice could be a time- and cost-effective approach for augmenting operating room training and could potentially improve patient care. Cocks et al. (2013) confirmed that mental practice is an innovative approach to support surgical education, especially in teaching and training novice surgeons. They further recommended using mental training as an instrument to help maintain skills and enhance performance of experienced surgeons.

Music Performance

Bellon's (2006) research showed the translation of sport psychology elements to musical performance. Six professional musicians performing in different musical areas

were interviewed about their preparation procedures before participating in a performance, using visualization and arousal regulation, and building up their mental skills to achieve a high level of concentration and control. The musicians indicated that mental preparation was as important as physical preparation to achieve goals; therefore, developing solid mental skills seemed to be an essential need. Bellon also recognized that visualization was often used to reinforce a perfect execution, improve someone's confidence, to get focused on an upcoming task, or simply for relaxation purposes. She noted that some musicians used "a programmatic type of visualization, which consists of having a mental scenario that provides an inspiration for the performance" (Bellon, 2006, p. 89). Bellon described programmatic visualization as creating a series of mental images like a movie to help performing musicians structure their thoughts and stay in the process flow.

Law Enforcement

Mount (2007) emphasized the usefulness and effectiveness of imagery training especially in a high-risk profession like policing in which it is important to master a number of skills. Mount referred to another important factor regarding imagery training, which is the individual's belief in the usefulness of mental practice. Whetstone (1995) studied 72 subjects from a police training institute who received firearms training over several weeks paired with mental practice sessions consisting of imagery training, relaxation instructions, and exercises to increase focus and concentration. Findings showed a statistically significant higher average of marksmanship gain scores (over 30 points) in the treatment group versus the control group. In Whetstone's study, the participants were asked via questionnaire to rate the value of mental rehearsal. Results

showed that participants who believed in the effectiveness of mental training outscored the nonbelievers by an overall ratio of 211:172 on the posttest. Mental practice offers a way to acquire and increase complex psychomotor job skills, reinforce concentration and self-confidence, and support physical training with low risk and minimal expense (Mount, 2007; Whetstone, 1995).

Therapeutic Practice

Therapeutic benefits of motor imagery training (Ietswaart et al., 2006) as well as quicker and/or better recovery through mental practice (Braun et al., 2007) are indicators that emerged from different health care studies that showed how mental training can contribute to nonathletic, elderly, and/or handicapped applicants. By reviewing available studies in health care settings from 1985 to 2009, Nilsen, Gillen, and Gordon (2010) confirmed the successful intervention of mental practice as an add-on to physical training that reduced impairments (poststroke rehabilitation) and improved functional recovery of the upper limb section. Positive impact on performance through mental rehearsal was also confirmed by Tunney et al. (2011). Noninjured individuals between ages 76 and 89 years who participated in a mental practice home program performed a newly learned floor-to-chair transfer over a 6-week period. Tunney et al. found that the study's positive experiences were consistent with other findings on the value of mental practice in facilitating functional motor tasks even with minimal or little ongoing physical practice.

Mind Programming Applied in Business Settings

Dealing with stressful situations, accomplishing organizational objectives, developing a higher level of creativity and innovation, or establishing resilience and mental preparedness to face market forces in a constantly changing business environment

are important characteristics for succeeding and sustainably coexisting in a highly competitive marketplace (Bass & Bass, 2009; Fürst, 2008; Gary & Wood, 2011; Senge, 1992). Situational awareness seems to be a key aspect of mental preparation, which includes the ability to scan the complexity of an environment and comprehend potential risks and opportunities while maintaining the ability to conduct normal activities (Stanton, Chambers, & Piggott, 2001). Stanton et al. (2001) suggested that situational awareness is usually required in areas with high-risk procedures and safety implications such as military operations or law enforcement activities but also applies in business domains such as aviation, ground transportation, and medicine, as well as energy production and distribution.

Managing mental models is another form of an organization's mental preparedness for successfully managing its future (Gary & Wood, 2011; Senge, 1992). Gary and Wood (2011) explained that mental models include beliefs about the most relevant information in various situations and determining the amount of weight different pieces of information should be given during decision-making. Senge (1992) reported that Royal Dutch/Shell was most likely the first large corporation to use mental models in learning. Managers of this organization used scenario planning in the early 1970s to generate an understanding of possible future events, protect the organization from perceived worst consequences, and to prepare for taking advantage of opportunities that may occur as a result of these actions (Hervé, 2011). As it is used today, scenario planning is an organizational learning process "to promote change in the assumptions and expectations of decision makers by expanding their abilities to consider other possibilities

and re-perceive the existing organizational paradigm” (Hervé, 2011, p. 519). Using scenario planning can result in challenging and shaping mental models (Saliba, 2009).

Handling different mental models in organizations in a constantly changing environment could be described as a first step for introducing and dealing with mental techniques in business settings. Other forms and methods using mental techniques in business settings are discussed next.

“Mind Control in the Business World” is a chapter of Silva’s (1978) book describing observations of business individuals’ behavior after being introduced to a mind control course. Silva’s seminal work with mind control was highly influential to the acceptance and growth of mental practice techniques. The purpose of Silva Mind Control International (SMCI) was to serve individuals by teaching them a method they could use to enhance their lives (Powers, 1984).

Powers (1984) explained that the Silva method, grown from a local, one-man business to an international, multimillion-dollar enterprise, was taught in a four-session 10-hr day course over two consecutive weekends. Course participants received detailed instructions and exercises about physical and mental procedures and techniques such as relaxation, mental projections, problem solving, and establishing a mental room. After completing their mental practice, salesmen reported that they approached their customers with a more positive attitude, scientists resolved confusing problems quicker, professional athletes generated better scores, those who were unemployed were able to find jobs, and organizational members performed at a higher level (Silva, 1978).

A practical example of applied mental technique in a business setting was reported by Silva (1978) where “a licensed locksmith in the Midwest is often called upon

to (non-destructively) open safes for owners who cannot recall their combination” (p. 162). Prior to visiting the scene, the locksmith accesses his mental laboratory and reconstructs an earlier event when the owner successfully opened the safe himself. While diligently reliving and vividly visualizing the entire procedure regarding how the owner entered the key to unlock the safe, the engineer makes note of the lock code before leaving his mental room. Later, the safe is opened for the amazed owner. Creating a mental room and using visual imagery are essential parts of mental training programs used in sport psychology (Jenkins, 2009). However, as shown in the preceding example, they are tools that can be applied in a variety of ways and in different settings.

While investigating astronauts’ use of mental strategies, Sprung (1997) indicated the possibility of using mental strategies in other high-performance areas to effectively execute tasks in difficult situations, stressful moments, and changing environments. Pines (1980) studied 400 successful and 400 unsuccessful executives and found that the major feature distinguishing both groups was a positive attitude when being confronted with a stressful situation. The successful executives perceived the circumstances as a challenge and focused on solving the problem rather than avoiding stress.

In a similar study conducted over several years on the behavior of business people, Loehr and McLaughlin (1986) searched for the ideal performance state by interviewing hundreds of athletes of all levels in different kinds of sports. They drew data from workshops and consulting experience with many business individuals ranging from junior high school janitors to presidents, who all described the same state. After assessing over 400 statements, Loehr and McLaughlin found that the ideal state can only be achieved when people are at ease in their working environment. This state is

characterized by the availability of mental calmness, physical relaxation, a positive attitude, focus, alertness to what is happening in one's surroundings, self-control, and self-confidence.

Loehr and Schwartz (2001) theorized that the same methods enabling top athletes to achieve their ideal performance state under pressure would also be effective for business executives. They viewed performance as a four-stage pyramid based on physical well-being followed by emotional capacity and mental control and topped by spiritual capacity. When combined, the four stages are a powerful source of motivation, determination, and endurance. Loehr and Schwartz (2001) stated that consistently performing at high levels, particularly in a changing corporate environment, depends as much on how individuals "renew and recover energy as on how they expend it, on how they manage their lives as much as on how they manage their work" (p. 128).

Larsson (1987) examined the impact of mental training on organizational performance in a Swedish military setting. The methodology included elements such as relaxation, meditation, and imagery rehearsal (Larsson, 1987). Improvements on task performance were observed, and subjects who received mental training were better at handling stressful situations (Larsson, 1987). Most strikingly, according to Larsson, was that performance increased in a short amount of time and that the mental training program did not demand much from participants.

In another study on employee performance, Fürst (2008) found beneficial effects of using mental training for increasing workplace effectiveness, improving interpersonal communication, and developing employees. Three employees working in management positions in different organizations were provided with a mental training course that

required them to visualize and work toward a goal related to their work, reframe their thoughts toward solution oriented thinking, and enhance their self-esteem. Results showed an increase in motivation of their subordinates as well as improved relationships between manager and subordinates. Furthermore, all participants reported increases in their work effectiveness and greater skill development in their subordinates. Interest in using mental training also emerged in the participants' colleagues.

As coach and consultant for many individuals and teams in various sports as well as in business settings, S. L. Miller (2010) was convinced that in high-pressure situations, individuals may benefit from adopting a winning, performing-under pressure attitude consisting of "having clear, meaningful goals, the positive belief that one's goals are achievable, a commitment to making that happen, the confidence that one can, a sense of deserving, the mental toughness to stay on purpose, and a positive self-image" (p. 203). S. L. Miller was further convinced that personal success, that is, accomplishing something someone wants, can be mentally rehearsed by systematically applying simple steps such as defining a goal, followed by a controlled relaxation and completed by an imagery procedure using positive, progressive, and vivid images of excellent performance. A team of eight tennis players received mental training to enhance their performance and increase their self-confidence (S. L. Miller, 2010). The training included a relaxation phase with breathing and release techniques followed by a mental programming that combined imaging and good playing mechanics with positive affirmations and "power feelings" (S. L. Miller, 2010, p. 208). Miller found that most of the players enjoyed the process and felt that it helped them.

As recommended by such authors as Foster (2002), Jenkins (2009), S. L. Miller (2010), and Weinberg et al. (2012), sport psychology principles and techniques such as mental training in combination with imagery, performance routines, positive self-talk, focusing, or arousal management could be transferred to leadership procedures in business settings.

Conclusion

Historically, mental techniques such as induced trances or hypnosis were mainly used in medical settings to support healing procedures (Jenkins, 2009). Currently, mental practice such as mind programming and comparable techniques using relaxation and imagery as well as positive thinking and positive self-talk as core procedures are mainly applied by athletes in various sports. However, these practices are also used by other high-performing professionals such as surgeons, astronauts and pilots, musicians, or members of police forces. These individuals make use of such alternative training to support and complement their conventional physical practice (Holland et al., 2010; Judge et al., 2010; Sadeghi et al., 2010; Visek et al., 2013).

The reported outcomes of using such unconventional techniques are enhanced performance, increased motivation and concentration, and a raised level of self-confidence. There are suggestions for integrating mental training techniques in business settings to help accomplish organizational objectives, increase organizational performance, develop a higher level of creativity and innovation, deal with stressful situations, and establish new ways of thinking (Fürst, 2008; Loehr & McLaughlin, 1986; S. L. Miller, 2010; Weinberg et al., 2012). Mental training techniques may also be used

in change events; specifically, psychologically sensitive transition phases can help support affected individuals adapt their way of thinking and their behavioral habits.

Different patterns related to mental practice methods were found in the reviewed literature. First, mental training techniques such as mind programming, mental conditioning, and mind control are strongly connected to imagery and visualization techniques illustrating and reinforcing the intended outcome (C. Bell, 1997; Bellon, 2006; Blanchard, 2010; Ginns, 2005; Godwin et al., 1999; Jenkins, 2009; Kemp, 2010; Noden, 1997; Selk, 2010; Silva, 1978; Taylor, 2010; Vitello-Cicciu, 2003). Second, mental training methods have been identified as essential assets of successful athletes in various sports (C. Bell, 1997; Bellon, 2006; Connaughton et al., 2010; Ginns, 2005; Godwin et al., 1999; Hellström, 2009; Holland et al., 2010; Jenkins, 2009; Noden, 1997; Selk, 2010; Vitello-Cicciu, 2003; von Guenther et al., 2010; Zolenas-Kennedy, 2010). Third, mental training has been found effective for enhancing performance and self-esteem, facilitating goal achievement, and supporting problem-solving processes, as well as for fostering self-motivation and self-leadership (Driskell et al., 1994).

The review of the literature revealed a gap in scholarly research related applying mental training techniques in business settings, especially in situations of organizational change and its related transition phase where organizational members, affected by the change, pass through a critical psychological process. Therefore, it was of interest to explore the application of a mental training technique in an organizational transition process. A phenomenological approach seemed to be appropriate for exploring the lived experiences of a group of business executives applying a mental training technique such as mind programming in an ongoing organizational transition. In-depth descriptions and

meanings attributed to the phenomenon of mind programming experienced by the interviewed individuals were provided in the present study.

CHAPTER THREE: METHODOLOGY

A study's research questions as well as its purpose guide the selection of an appropriate research methodology (Creswell, 2009; Jarvinen, 2000). The chosen research design, focused population, and sampling procedure including sample criteria, sample size, and participants are discussed next.

Research Design

As shown in Chapter Two, a gap in the literature was identified regarding the use of mental training techniques in organizational change situations where organizational members, affected by the change event, are required to cope with the transition phase. The intention in this study was to explore the experiences of business executives as first-time users of a mental practice method in a first-time-tested environment, a transition phase of an active business organization. The study participants' impressions, feelings, and concerns as well as potential options for using such an unconventional technique in a business setting are described in detail and thematized in Chapter Four. The emerging themes created an image of possibilities for using mental practice in organizations and for establishing different mindsets for different business scenarios, including organizational change situations.

The research topic and questions pointed toward conducting a qualitative research method with a phenomenological approach. Creswell (2009) identified phenomenological research as a strategy of inquiry to understand the essence of human experiences about a phenomenon described by a small number of extensively engaged participants "to develop patterns and relationships of meaning" (p. 13).

Phenomenology as a Qualitative Research Method

According to Creswell (2009), qualitative research is a particularly suitable means for examining, understanding, and interpreting the meaning and value individuals assign to a social or human issue. Ritchie, Lewis, McNaughton Nicholls, and Ormston (2014) agreed with Creswell about common characteristics of a qualitative research process seeking after rich and in-depth data, typically collected in the participant's setting, and generating outputs that include detailed descriptions of the phenomena under study that are grounded in the participants' perspectives and accounts. These outputs generate recurrent and overarching themes that the researcher analyzes and interprets.

The present study's purpose was to explore business executives' experiences and assessments of applying a mental training technique, such as mind programming, in an ongoing organizational transition process. Study outcomes provided in-depth descriptions and analysis related to the phenomenon of mind programming experienced by a homogenous group of participating volunteers via an interview data collection process.

A phenomenological approach is best suited to understanding the essence and exploring the lived experience of phenomena by examining several individuals' views (Creswell, 2013; Moustakas, 1994). Moustakas (1994) further noted that phenomenology is particularly determined for research on topics regarding human experiences that are difficult to explore through a quantitative approach. Creswell, Hanson, Clark Plano, and Morales (2007) added that the focus in phenomenology is on "participants' specific statements and experiences rather than abstracting from their statements to construct a model from the researcher's interpretations" (p. 252). As phenomenological research

seeks for individual experiences of human beings, long, in-depth interviews with subjects are suggested for collecting data and obtaining a full perspective of subjects' experiences with the phenomenon (Creswell, 2013). Creswell (2013) stated that after the interviews are completed, phenomenologists will look back through the collected data that describe what the participants experienced and how they experienced it. The collected data from all available interviews are then analyzed by the phenomenologist by gathering quotes and statements and forming them into themes and patterns related to the phenomenon. Creswell's procedure outlined here was followed in the present study.

Creswell (2013) also indicated that phenomenological researchers may generally choose between a hermeneutical or interpretative approach and a transcendental or psychological way, which focuses less on the researcher's interpretations and more on describing the participants' experiences. Creswell also noted that descriptive phenomenology requires bracketing, which requires researchers to set aside their biases and experiences to the maximum possible extent in order to allow open-minded, unprejudiced, and unbiased opinions and perspectives to emerge. Bracketing increases the rigor of a research study (Tufford & Newman, 2012). Creswell (2013) suggested that researchers must decide and outline how they will introduce their personal understandings into their studies.

Mind programming, a mental training technique used by business executives going through a transition phase, is a phenomenon that is best explored through a descriptive phenomenological approach as proposed by Moustakas (1994) and confirmed by Giorgi (2009). Giorgi (2009) further explained that a person's lived and perceived

experience should be described, rather than interpreted or explained, to attach meanings and unified dimension to a phenomenon.

Sampling Strategy and Procedures

Following a purposeful sampling strategy outlined by Patton (2002), experienced and actively engaged business executives passing through a transition phase were asked to voluntarily participate in the mental training as described in Chapter One. The sampling strategy needed to be accomplished systematically to meet the requirements of a reliable and trustworthy research project (Shenton, 2004). Trochim (2006) introduced a systematic sampling procedure covering several stages such as identifying a population of concern (theoretical population), selecting an accessible population (study population), choosing an appropriate sampling frame (instrument of access), and specifying an appropriate sample (numbers and characteristics of participants). The present study's sampling process followed these recommendations.

Population

The general population of interest for this study, as defined in the research topic, problem statement, purpose of the study, and the research questions, was business executives going through a change process and related transition phase. The study population was business individuals who previously completed a mental training workshop and who voluntarily participated in a face-to-face, in-depth interview to describe their lived experiences using this mental training technique. Generally, a random sampling procedure in scientific research is advantageous for eliminating systematic bias (Trochim, 2006). In this case, as the participants were building into a homogeneous group with low variation in their demographics and shared similar

characteristics and traits, the study was based on a homogeneous sampling procedure (Patton, 2002).

Sampling Frame and Sample Size

Potential candidates were recruited through a purposeful sampling strategy. They had to be (a) German- and English-speaking business executives with a minimum leadership experience of 10 years, (b) actively engaged in an operating business organization located in Switzerland, and (c) currently facing organizational change and passing through a transition process. Their previous participation in a mental training workshop was also required, and they had to be willing and able to provide an in-depth interview on a voluntary basis.

A minimum sample size of five up to a maximum of 10 business executives was the goal during the participant recruitment stage. Nine individuals were recruited in 4 weeks. Diversity in gender and/or age was considered. If less than five candidates were registered in the planned timeframe or if more than two individuals cancelled their participation, either the registration process would have been reopened and extended or a convenience sampling procedure added, during which additional participants would have been chosen based on ease of access.

Small sample sizes are justified, particularly in quantitative research, if the information provided is rich and in depth (Patton, 2002). Extensive in-depth interviews were conducted with all participants, and these interviews in turn provided rich and detailed data. The variety of required characteristics combined with a homogenous sampling method as well as limited resources such as a limited time frame due to

participants' work schedules and restrictions on study length and costs led to a restricted number of participants.

Sampling Procedure

A sampling procedure was developed to outline the steps of the sampling process paired with explanatory and reasoning arguments. In preparing for searching for a suitable study population, accessible business executives needed to be evaluated. The main requirement was to identify organizational members affected by organizational change who previously participated in the mental training workshop conducted specifically for this study.

As soon as potential study subjects were identified, they were approached and informed about the research purpose. After they considered participating in the study, in accordance with organizational rules and regulations including ethical principles, the potential candidates were officially invited to participate in the research. All potential candidates received a corresponding invitation letter (see Appendix A).

A minimum of five executives expressing their interest in taking part in the announced investigation would be considered a sufficient sample. In qualitative research, suggestions about sufficient sample size are rarely available; rather, researchers base their guiding principle about satisfactory sample size on achieving data saturation after several interviews are conducted (Mason, 2010). However, Creswell (2009) recommended at least five interviews to be on the safe side for collecting sufficient data. Englander (2012) emphasized that phenomenologists pursuing qualitative purposes and qualitative research questions seek "knowledge of the content of the experience, often in depth, to seek the meaning of a phenomenon, not 'how many' people who have experienced such

phenomenon” (p. 21). He suggested considering at least three participants when using a phenomenological method.

Six individuals agreed to participate in the further research process; they were invited to describe their lived experiences in an in-depth interview. The interviews were scheduled to take place after potential interviewees had completed the mental training to ensure that all participants had the opportunity to test the training technique in their individual organizational environments.

Data Collection

There are generally two ways to collect data in phenomenological research: the traditional face-to-face interview and obtaining a written or recorded report related to a participant’s lived experience (Englander, 2012; Giorgi, 2009). However, phenomenologists focus on receiving concrete as well as detailed information about participants’ experience related to the studied phenomenon (Giorgi, 2009). Creswell (2013) and Englander (2012) stated that in-depth interviews are preferred for conducting a phenomenological study if the phenomenon of interest is extensive and complex and a personal atmosphere between interviewer and interviewee is beneficial for gathering rich and detailed information. A challenge interviewers face is remembering the descriptive criterion throughout the process, which is demanding as it requires making continual and intentional shifts between the subject and the phenomenon “while in an overall single mode of consciousness” (Englander, 2012, p. 34).

Interview Structure and Questions

Individual, semistructured, in-depth interviews were conducted to gather the lived experiences of each participant related to using a mental training technique in an

organizational transition phase. Tomura (2009) noted that semistructured interviews are valuable for their natural spontaneity and flexibility, which facilitates interviewees exploring their experiences in depth. An interview guide was developed for the present study that included an introduction to research, a confidentiality statement, and a list of 10 guiding questions (see Appendix B). Hennink et al. (2011) supported a well-structured interview guide including introductory points so the interviewer remembers what to tell participants before beginning the interview. Hennink et al. also suggested integrating ethical issues such as confidentiality and anonymity in relation to the interviewee and the shared information.

The central section of the interview guide consists of the interview questions, being the “essential questions on the research topic which are designed to collect the core information to answer the research questions” (Hennink et al., 2011, p. 113). While research questions are usually posed in academic language due to their abstract and conceptual characteristics, Hennink et al. recommended to formulate interview questions as actual operationalizations of the research questions in more colloquial language that interviewees can more easily understand.

Interview Procedure

The primary research instrument in qualitative research is not the interview, it is the interviewer with his or her empathy to obtain high quality information (Kvale, 2007). I was the interviewer in the present study.

The interviewees, chosen by the sampling strategy previously detailed, were the study participants. All interviews were conducted face-to face with one study subject at a time to ensure absolute confidentiality and allow collecting maximum data.

According to Whiting (2008), semistructured interviews should include the following key features related to time, location, duration, and number of interviews per participant:

- any interview shall be prescheduled at a designated time,
- preferred interview locations are chosen outside everyday events,
- the duration of each interview may vary from 60 min up to 2 hr, and
- one in-depth interview per interviewee.

All potential participants received a personal invitation for scheduling an interview at the time and location they preferred.

As suggested by Englander (2012), a preliminary meeting with research participants may be scheduled before conducting the actual interview. This meeting is helpful for establishing trust, reviewing ethical considerations, completing consent forms, and reviewing the research questions (Englander, 2012). Doing so can also give participants extra time to review their thoughts and statements, could create a richer description of the interviewee's statements and experiences, and may reduce the numbers of additional questions as well as the duration of the entire interview.

Ethical Matters and Informed Consent

Kvale and Brinkmann (2015) recommended considering potential ethical concerns from the beginning of study to its conclusion. They identified ethical issues at seven research stages such as the topic, design, situation, transcription, analysis, verification, and reporting.

An essential ethical issue of design, before potential participants engage in a study, is to obtain their signed informed consent (Creswell, 2009; Kvale & Brinkmann,

2015). This form acknowledges the participants' rights, secures confidentiality during data collection, and must be preapproved by the institution's Institutional Review Board (IRB). See Appendix C for the research participant informed consent form used for the present study. Further, Kvale and Brinkmann (2015) stated that any interview study should positively contribute to a participant's current situation. This may have been established by offering a cost-free mental training workshop to all potential candidates.

As the study subjects and the site of data collection were located outside the United States, it was necessary to ensure that the rules and regulations of the international compilation of human research protections were understood and followed. An adequate IRB statement of assurance for international studies is attached in Appendix D. The received IRB approval, as initial document authorizing the principal investigator to begin with the data collection procedure, is attached in Appendix E.

Other issues connected to a researcher's ethical responsibility may arise when an interview needs to be transcribed and later when interview data are analyzed, verified, and reported. Qualitative researchers are invited, as well as challenged, to discern the fine line between letting their subjects to participate in interpreting, reviewing and, if needed, revising their statements (Kvale & Brinkmann, 2015). In the present study, the participants were given the opportunity to check their transcribed interviews and were invited to send their feedback by email. All participants also received an offer to provide them a copy of their analyzed statements and were invited to add comments or send in their proposal for modification. Any received supplementary comment or suggested modification would have been added to the participant's transcription. However, none of

the participants used the opportunity to send additional comments or requested any modification of their statements.

Finally, I completed a previously required training to learn more about regulatory definitions of research and human subjects, to conduct systematic investigation, and to ensure ethical standards. A completion confirmation form is attached as Appendix F. To further uphold the ethical standards, the Collaborative Institutional Training Initiative (CITI) certificates of both dissertation committee members are attached (see Appendix G).

Transcriptions and Recordings

The last step of an interview procedure is the transcription process from an oral conversation to a written transcript. In this study, I conducted the interviews and transcribed each after it was concluded. Kvale and Brinkmann (2015) recommended to digitally record or video record interviews not only to receive best quality of oral interviews but also to either have the chance to transcribe a verbatim recording by computer or even add some body language to the (video) recorded situation. Kvale and Brinkmann also stated that recording interviews provides data backup and enhances an interviewer's concentration during a self-conducted interview. Groenewald (2004) noted the importance of minimizing external, technical, or human interruptions as well as background noise in interview settings.

To avoid any loss or incompleteness of interview data, all interviews were recorded on two separate recording systems. Both systems were previously tested, and each interviewee authorized their use. Both devices offered unlimited recording length and configurable quality for storage in a digital format.

Data Review and Feedback Phase

After a first review of the data, all participants were invited to comment on their transcribed interviews via email. Potential adjustments or changes of statements would be noticed and recorded separately in written form. Additional feedback related to the utilized mental training technique, including its perceived usefulness or ease of use, would have been also separately recorded in writing.

Data Analysis

Ritchie et al. (2014) described the phase of data analysis in qualitative research as challenging and exciting and noted that data analysis requires creativity, systematic searching, inspiration, and diligence. Van Manen (1997) wrote,

Phenomenological understanding is distinctly existential, emotive, enactive, embodied, situational, and non-theoretic; a powerful phenomenological text thrives on a certain irrevocable tension between what is unique and what is shared, between particular and transcendent meaning, and between the reflective and the pre-reflective spheres of the lifeworld. (p. 345)

Analyzing phenomenological data demands reflective and reflexive behavior of the researcher between experience and awareness (Kleiman, 2004). In a more technical sense, phenomenological data analysis involves coding and categorizing interview data as well as finding the essential meanings of the phenomenon (Creswell, 2013).

Analysis of a Descriptive Phenomenology

In regard to a descriptive phenomenological research, Creswell (2013) suggested that data should be analyzed for significant phrases and that researchers should then develop meanings and cluster them into themes so as to present an exhaustive description of the phenomenon. Giorgi (2009) identified the ultimate goal of a phenomenological

analysis as the meaning of the experience. In Giorgi's scientifically driven descriptive phenomenology, four steps of analyzing data are delineated:

1. Read for a sense of the whole.
2. Differentiate the description into meaning units.
3. Reflect on the psychological significance of each meaning unit.
4. Clarify the psychological structure(s) of the phenomenon.

These steps were followed during this study.

Open reading. Giorgi (2012) and Kleiman (2004) recommended initiating the analysis by reading the entire interview transcriptions in order to get a global sense of the whole. Kleiman further suggested to execute the reading by considering the attitude of phenomenological reduction, which involves the process of bracketing as far as possible, and “to withhold any existential claims, which means to consider what is precisely as it is given, as presence, or phenomenon” (p. 12). I followed these suggestions when listening to the audio recorded interviews and conducting the transcription procedure, by which the audio data were transferred into Word documents. The readings were completed without critical reflection on the participants' experience.

Demarcation of meaning units. The interview data are divided into meaning units after the researcher has diligently reread the transcriptions. The demarcation of each meaning unit takes place in areas where noticeable meaning shifts occur (Giorgi, 2009). The distinguished meaning units need to be marked and numerically labeled at their starting points. After becoming familiarized with the provided data, I divided respectively combined delineated meaning units to enhance their distinction.

Phenomenologists do not have to commit to initially demarcated expressions and

statements as there are no objective meaning units as such or strict rules of establishing such units (Giorgi, 2009). “What strictly matters is how the meaning units are transformed and how, and to what extent, they are reintegrated to the structure of the experienced phenomenon” (Giorgi, 2009, p. 130).

Transformation of psychologically sensitive expressions. Giorgi (2009) denominated the third step of descriptive phenomenological analysis as the heart of the method. In this analytical phase, the first modification to the interview data is made. The researcher is prompted to turn back to the description consisting of the delineated meaning units to “discover how to express in a more satisfactory way the psychological implication of the lifeworld description” (Giorgi, 2009, p. 131). Using a free imaginative variation approach, the researcher transforms the raw data of the subjects “into expressions that are more directly revelatory of the psychological import of what the subject said” (Giorgi, 2012, p. 5). The researcher’s task is to pinpoint and illustrate the psychological meanings included in the transcribed data. Eidetic reductions are the results of this analytical phase in order to awaken the phenomenal characteristics of the description (Giorgi, 2009).

Structural understanding and description. The transformed expressions of the participants are synthesized into a general structure of their lived experiences as a clarifying, interpretative, and comparative view of the research (Giorgi, 2009). Wertz et al. (2011) agreed and concluded that the final stage of analyzing descriptive phenomenological research “entails an articulation of the meaningful organization of the investigated psychological phenomena as a structural whole” (p. 132).

Computer-Aided Support in Data Analysis

The data analysis phase was supported by an appropriate software program to facilitate the coding procedures as well as the theme generation process, providing several tools to compare and visualize raw data and present the analyzed results. The most recent version of QSR International's analysis software, NVivo11, was used.

Creswell (2013) recommended initiating a well-founded analysis of a qualitative research study with a coding process organizing research material into different kinds of text sequences or parts of audio/visual data before attributing specific meaning to information. According to Hennink et al. (2011), coding procedures involve carefully evaluating data, selecting specific codes (usually organized and documented in a codebook), and labeling those data sections with adequate codes. Strauss and Corbin (2008) introduced a step-wise coding process beginning with open coding to develop themes of information by examining, comparing, and categorizing data. Followed by axial coding, researchers may discover relationships and patterns among reassembled data to interconnect the themes, and the final step of selective coding shall lead to an integrative system with a central theme surrounded by its subordinated categories (subthemes). These suggested coding procedures were used in the present study.

Open coding in NVivo is related to free nodes and may be executed by a word-frequency query resulting in an unsorted word cloud (see Figure 1).

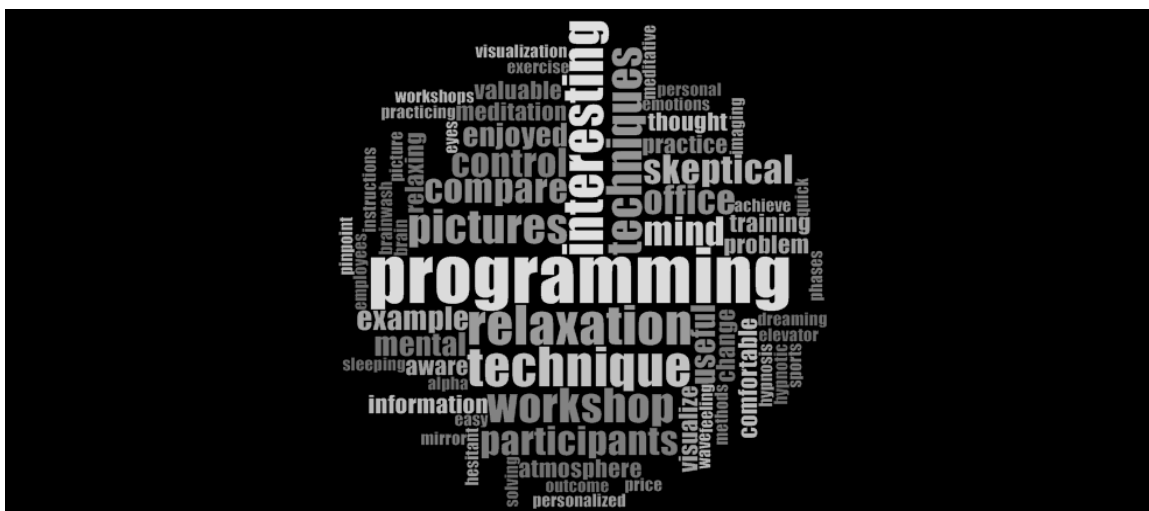


Figure 1. Word cloud related to a test interview issued by NVivo 11.

An additional analysis of a word frequency query leads to a tree map organizing potential themes in a tree-like hierarchy and identifying consistent terms in relation to weighted percentages. This process was used to complete an axial coding procedure evaluating potentially linked themes as displayed in Figure 2.

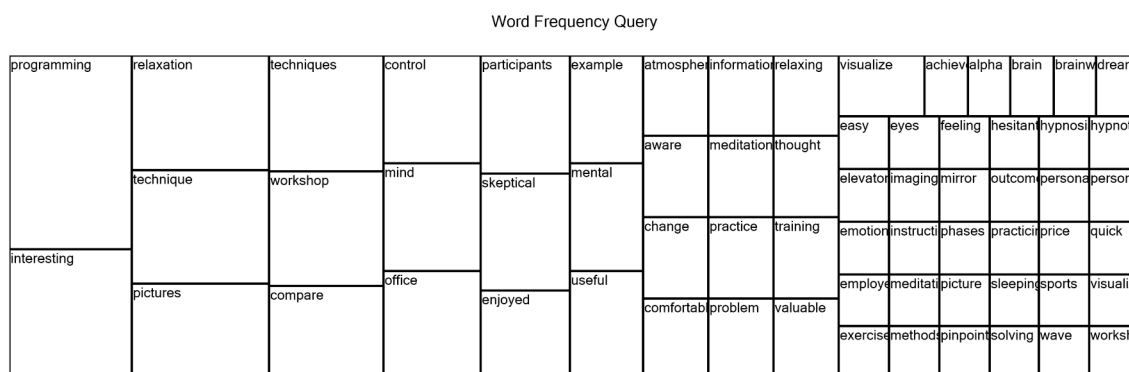


Figure 2. Tree map related to a test interview issued by NVivo11.

Another axial coding process had to be completed by executing a text search query making connections between themes delineated in open coding, as presented in Figure 3.

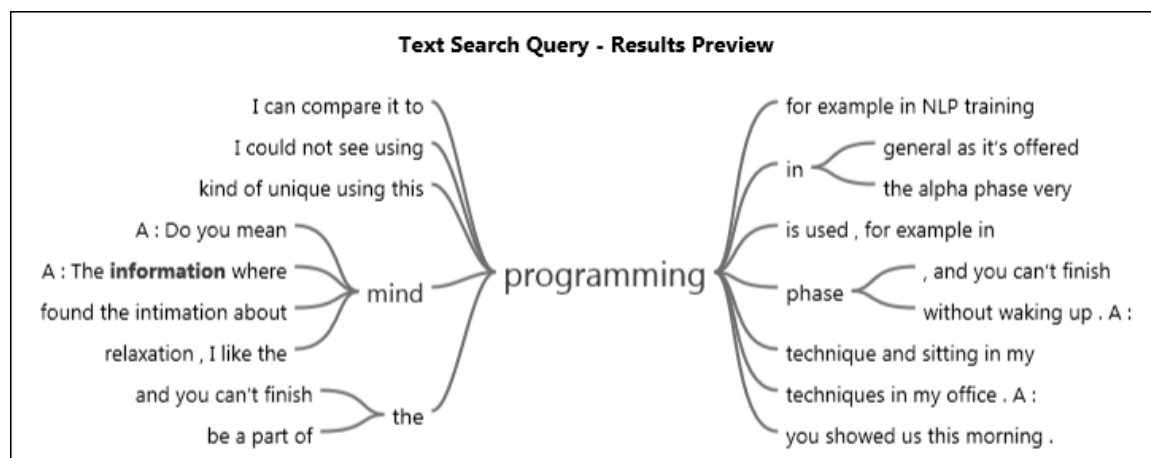


Figure 3. Word tree related to a test interview issued by NVivo11.

With a selective coding process as a final step, the categories uncovered in axial coding around a central theme are integrated. This synthesis results in a selective coded response representing the entire group of categories, for example in response to a specific interview question. NVivo offers to run a compound query consisting of either two independent text search queries, coding queries, or a combination of both to find adequate references and percentage of coverage.

Data Storage

Besides recording and transcribing interview data, Groenewald (2004) suggested to take field notes as a secondary data storage method. Groenewald identified four types of field notes: (a) observational notes of what happened, (b) theoretical notes related to reflections, (c) methodological notes in relation to the data collection process, and (d) analytical notes after completion of the entire procedure. By taking any field notes,

researchers are urged to clarify the interview setting (Groenewald, 2004). Groenewald's field note suggestions were followed in the present study.

Further, Groenewald (2004) recommended creating hard-copy files that include informed consent agreements, interview and field notes, any collectable notes or sketches from the participants, notes taken during the data analysis procedure, drafts of transcription or other interview data that were handed out to participants, notes of corrections and confirmation, and other supporting documents or means of communication related to the research process. In the present study, all participant-related data were numerically labeled from C1 to C6 to ensure the subject's anonymity. Furthermore, an external hard drive, exclusively and safely configured for the present study, was established in a secure location to electronically store the complete transcriptions, field notes, and other important audio recordings, written documents, and videos related to this study. All gathered research data will be saved for 3 years and then destroyed.

Methodological Assumptions, Limitations, and Delimitations

Researchers are required to outline the basic assumptions, limitations, and delimitations under which they performed their research study (Creswell, 2009).

Assumptions

The intention for this study was to explore how business executives apply and experience a mental training technique while going through an organizational change process. A descriptive phenomenological approach was used to investigate the human experience of a phenomenon in a psychologically challenging situation. Mental practice has never been explored with first-time users in such an organizational setting. Still, the

expectations to receive meaningful and significant outcome attributed to using this phenomenon were based on the outcomes in various other settings, for example in different sports, health care, and entertainment environments, as presented in the literature review.

The data were collected personally via semistructured, in-depth, face-to face interviews following recommendations and suggestions of Creswell (2009, 2013), Englander (2012), Giorgi (2009), Hennink et al. (2011), and Kvale and Brinkmann (2015). Data were analyzed using the four-stage procedure suggested by Giorgi (2009, 2012) with the focus on descriptive data resulting from the participants' perceptions and experiences. I have knowledge and experience regarding the investigated phenomenon. Therefore, the process of bracketing, which requires the researcher to set aside biases and experiences to increase the rigor of a research study, needed to be established (Creswell, 2013; Tufford & Newman, 2012). Complying with the principles, procedures, and requirements presented here enhanced the study's quality, believability, and trustworthiness.

Limitations

According to Marshall and Rossman (2011), "limitations derive from the conceptual framework and the study's design" (p. 76). Using a solely qualitative methodology following a phenomenological approach to capture the impressions and lived experiences of the targeted study subjects may have been a study limitation. Another limitation was indicated by only interviewing five to 10 participants. However, there are no specific rules for a minimum quantity of samples in qualitative research according to Patton (2002). Patton (2002) further explained that "sample size depends on

what you want to know, the purpose of the inquiry, what's at stake, what will be useful, what will have credibility, and what can be done with available time and resources" (p. 244). An additional limitation was the restricted time available for introducing a new method to first-time applicants, which may have affect their ability to accurately describe and express all relevant occurrences.

Transferability of study results as one of the criteria for judging qualitative research, according to Trochim (2006), was not an issue. Transferring results of this study to other contexts or settings as well as generalizations were not intended. Besides transferability, Lincoln and Guba (1985) proposed other criteria to indicate trustworthiness of a study such as credibility, dependability, and confirmability.

Confirmability is the degree of neutrality of a study where specific researcher interest, bias, and preconceptions are excluded to a maximum extent (Lincoln & Guba, 1985). To minimize potential preconceptions or personal biases, I used bracketing and attempted to suspend judgments, experiences and beliefs. As bracketing may not be fully achieved in many cases, Roberts, Priest, and Traynor (2006) recommended that "researchers make explicit their presuppositions and acknowledge their subjective judgments" (p. 44) to increase the credibility of their findings. Bias could also be reduced by respondent validation as researchers may share their interpretations with participants, receive useful feedback in return, and take the opportunity to review these interpretations (Roberts et al., 2006). Furthermore, making use of the triangulation technique, for example to combine two or more methods, data sources, or researchers to complete the study, and/or creating a transparent research process as an audit trail with regular supervision, and peer review on analysis and findings, may also enhance a study's

credibility. A peer review procedure to monitor the data analysis process and verify the findings was considered in this study in consultation with the dissertation committee.

Credibility is outlined by Lincoln and Guba (1985) as only the participants know the truth of the findings and are able to judge the validity of the results. A study's credibility may also be determined by "how well the research tools measure the phenomena under investigation. A potential difficulty in achieving validity in qualitative research is researcher bias, arising out of selective collection and recording of data, or from interpretation based on personal perspectives" (Roberts et al., 2006, p. 44). Roberts et al. (2006) pointed out that a researcher who is familiar with the topic being studied "may overlook certain nuances and ambiguities of data because of their implicit understanding of the research setting. Being familiar with the setting, its people and processes, is both advantageous and potentially problematic" (p. 44).

Reliability is another essential criterion to ensure high-quality research (Trochim, 2006). "In qualitative research, reliability can be thought of as the trustworthiness of the procedures and data generated. It is concerned with the extent to which the results of a study or a measure are repeatable in different circumstances" (Roberts et al., 2006, p. 43). As a form of interrater reliability to reduce any researcher bias in the process of interpreting data, interview data could be delivered to an independent researcher who verifies the conformity of findings and analysis (Roberts et al., 2006). Further recommendations to add to auditability and enhance reliability in qualitative studies are:

- keeping detailed notes throughout the entire research process,
- tape recording interviews and interview transcripts,
- ensuring technical accuracy in recording and transcribing, and

- using computerized data analysis packages such as NVivo (Roberts et al., 2006).

Reliability may also be improved “by acknowledging biases in the technique and working to avoid biases in the interview construction” (Zolenas-Kennedy, 2010, p. 52). Zolenas-Kennedy (2010) also noted that formulating appropriate interview questions helps to determine “the amount of desired detail and generality or specificity of answer” (p. 53). The recommendations detailed here were followed to ensure maximum reliability of the qualitative research and to document any limitations or acknowledgements (e.g., subjective prejudgments) in the appropriate sections of the present study.

Delimitations

The focus on a specific population of interest, business executives, may be considered a delimitation of the study. The intention was to focus on this target group as results from the literature review indicated that no business professionals had been involved in any mental training such as mind programming at the time the present study was conducted. Further delimitations concerning the general population were the following: participants had to be experiencing an organizational change and transition process of a business organization located in Switzerland, they had to speak German and English, and they had to be actively engaged individuals with a minimum of 10 years of leadership experience.

An additional delimitation included the completion of the specific type of mental training that was provided. This training established relationships with the participants that were further developed during the interviews. Kvale and Brinkmann (2015) mentioned that “interviewing is an active process where interviewer and interviewee

through their relationship produce knowledge” (p. 21). The fact that invited business executives voluntarily participated in a 4-hr workshop that I led and subsequently participated in face-to-face interviews may have impacted the dynamics of the interviews. Although, according to Quinlan (2011), many key factors can affect interview dynamics such as “relative age, gender, race or ethnic background, educational background, social status, religion, regional identity, relationship to each other, and even relative degree of emotional commitment to the project” (p. 32).

Using a single instrument for data collection needs to be listed as a delimitation. However, face-to-face interviews, instead of written accounts, may enrich the value and depth of the received statement and themes.

The uniqueness of this study is the thematization of using a mental training technique in an organizational change situation when business executives are passing through individually stressful transition phases. More importantly, these individuals may have benefitted from using such a mental training technique on the job in similar ways as athletes do; that is, by using mental practice to facilitate their goal-achievement process and to enhance their overall performance.

CHAPTER FOUR: DATA ANALYSIS AND RESULTS

The present study's purpose was to describe how business executives going through organizational change and individual transition phases experienced and assessed the application of a mental training technique such as mind programming. Another research goal was to uncover common themes resulting from their expressed first impressions and lived experiences, which focused on revealing benefits and perspectives but also the shortcomings of using mental practice in a business setting.

The data procedure and analysis depended on the research questions and the derived, guided interview questions presented in Appendix B. All interview candidates completed a mental training workshop as delineated in the sampling procedure before voluntarily sharing their lived experiences in a face-to-face interview.

Close Reading Combined With Distance Reading

Close reading is the “mindful, disciplined reading of an object with a view to deeper understanding of its meaning” (Brummett, 2010, p. 3). Brummett further explained that direct reading is most effective when used to achieve profound comprehension; this process empowers researchers to analyze the central theme as well as the related subthemes and allows them to reflect on the meanings of words and sentences. Hennink et al. (2011) recommended several close readings of the collected data to identify subtler meanings or underlying concepts. Giorgi's (2012) four-step procedure to systematically analyze the interview data was accompanied by repeated close readings.

Further, as a complement to close reading, distant reading was applied to allow themes to develop as well as to visualize their occurrence. Distant reading is defined as a

computer-aided, statistical-based approach to analyzing text documents (Moretti, 2013). NVivo 11, a complex software tool with various functionalities and instruments for qualitative data analysis, offers different types of distant reading features and was used to enable an extraction of themes and related subthemes from the transcribed statements of the study participants (QSR International, 2015). Different queries were run related to word frequency, text search, and cluster analysis to see where particular expressions emerged in content and to identify frequently occurring terms. Charts were generated, such as word clouds and tree maps, to visualize and highlight emerging meaning units, sensitive expressions, and themes.

Participants

Six business executives who were actively engaged in an industrial corporation undergoing a major business reorganization and expansion were intensely interviewed. These participants provided in-depth data referring using a mental training technique such as mind programming. All interviewees were first-time users of such a technique, participated in and successfully completed a 4-hr mental training workshop prior to their interviews, and participated in the entire research process on a voluntary basis.

The first step was to gather demographic data from each participant such as age, nationality, family status, management function, leadership experiences, and sports activities. The interview candidates were identified as married, Caucasian, Swiss males ages 40 to 60 years, who were corporate executives with a minimum of 10 years of leadership experience, and who occasionally involved in different sports activities in their off-business time. The participants were part of the executive operating management team of a business unit with nearly 150 employees of a larger Swiss-based internationally

active corporation that employs approximately 3,000 people. All study participants held the same organizational status as executive manager but were involved in different managerial functions. They formed a homogenous group of interviewees. As only males volunteered to participate in the research process, the study results may only be applied to the male population.

After receiving commitment from the individuals invited to participate in the interview procedure, interview meetings were prescheduled with dates, times, and locations chosen by the participants. When they arrived at the prearranged interview setting, each interviewee was introduced to the interview procedure, signed the previously explained informed consent document, and provided his demographic data. To ensure their anonymity, their interview data and statements were listed and stored under their individually assigned alphanumerical code, from C1 to C6.

Each interview was recorded by two independent means, a conventional tape recorder and a mobile phone with an integrated voice memory app. Every interviewee approved and voluntarily agreed to all the steps of the interview procedure and also agreed to subsequently deliver data that they may have thought of within 2 weeks after the interview. The average interview length was 65 min. The following interview outcomes are presented in the sequence of the research questions.

Research Questions

The present study's research questions consisted of an overarching key question that summed up the purpose and created the study's focus and several derived subquestions for investigating various aspects of the research problem. Linked to the research questions, an interview guide with 10 leading questions (see Appendix B) was

designed to assist data collection and to allow possibly occurring themes to develop related to the research topic. The results of the interview process, covered as condensed statements and meaningful expressions of each participant (see Appendix H), provided the following answers to each research question.

The present study's overarching research question was: What are the lived experiences of business executives using a mental training technique such as mind programming in an ongoing organizational transition process? This general and overarching research question was divided into the following subquestions to systematically search for specific answers. The interviews delivered detailed, rich, and in-depth data to eventually evaluate the themes from the collected statements.

Subquestion 1

Subquestion 1 was: What are the first impressions of business executives guided through the process of a mental training technique such as mind programming?

Four months before the candidates received an interview invitation, they participated in a 4-hr workshop presented as a mental training for business executives. Six individuals of a business management team voluntarily participated in this training where they received specific information about the topic as well as instructions to complete different mental training exercises in order to achieve a pending goal and to solve a currently existing problem.

All participants who completed the workshop agreed to participate in an interview to answer 10 guiding questions exploring first-time users' impressions and experiences related to the value and use of a mental training technique such as mind programming. For some, mental training was an entirely new subject; others were familiar with the topic

but had never used such a technique in either sports, private matters, or for business purposes. Each participant was positively surprised about the impact of mental practice and its potential power to achieve personal imaginations or beliefs and left the workshop with positive and satisfied thoughts and feelings. One participant assessed mind programming as a highly acceptable method, particularly for people in the Western world, because the entire system is built logically and comprehensibly. The imaginary world was not new to most participants, but to get there may still be a thing that needs stronger beliefs.

All participants kept the workshop in good memory, especially the images that emerged in the relaxation process; for example, the visualized way when counting down to a lower, relaxed level or the final picture, called the relaxation place. The relaxation phase was also remembered as a fast-acting and easy-to-apply procedure that five participants continued to frequently use. In contrast, the goal programming process was remembered as a highly complex phase that needed a lot of concentration and personal discipline.

Study participants mentioned that the challenging part was to stay focused on the task; for example, concentrating on a goal being programmed rather than being distracted by any background activity. Some of them assumed that dealing with background noise may also depend on the users' experience level. However, most participants were able to recall their visualized goal very well as well as the fact that the power of visualization supports the goal programming process on an essential level. Loehr and Schwarz (2001) were convinced that "visualization can literally reprogram the neural circuitry of the brain, directly improving performance" (p. 127). Eppler and Platts (2009) pointed out

Subquestion 2

Subquestion 2 was: In what ways could the introduced mental training technique be used? In general, all interviewees opined that setting and reaching goals are more than just a business necessity. They all agreed that goal achievement is equally important in their private lives. Most of the workshop participants verified that mind programming is a valuable method to set, program, and achieve personal goals and business objectives; this instrument may also be useful to just evaluate and define those targets. Participant C4 stated,

It would be possible to mutually evaluate and specify an organizational objective, and program it among the concerned members for the well-being of the organization, for example, to build up a new business idea, and to reach a profitable growth.

The same participant mentioned that mental training could be used to establish an individual's work-life balance. He further emphasized that one should strive to achieve an individual work-life balance first before approaching any business objective.

Mental training may also support individuals in increasing their creativity, generating new ideas, approaching problems with different solutions, questioning behavioral issues, or just opening their minds for further improvement. Another important way of applying a mental training technique is to better deal with stressful situations and focus on top-priority tasks by differentiating between important and unimportant assignments and efforts.

All participants were convinced that the relaxation technique, as an essential phase of mental practice, can be used as a single method for instant relaxation in any personal or business situation. Participants C3 and C6 stated that they frequently used the relaxation technique to be well-prepared for important meetings and decisions and to

control their behavior in a positive way. Both interviewees found that they were now able to change their behavior to act in a more composed and calm way before starting a delicate business discussion or when making a difficult decision within their organizational environment. Participant C3 also noticed that he adapted his emotional behavior in family discussions.

Another approach for using a mental training technique is to handle things differently in relationship matters, treat conflicts differently, find compromises to the benefit of all stakeholders, or lead a controlled form of communication. Participant C5 indicated that mental training could support team-building processes including conflict resolutions and possibly prevent upcoming negative behavioral aspects from occurring. Several interviewees emphasized that one may only apply mental training for any attainment or problem to be solved when full personal attention is given to the approached matter.

All participants agreed that mental training is best introduced by a workshop offering general and theoretical information about the subject as well as practical exercises. Particularly for first-time users, face-to-face conducted training sessions may be more inspiring and encouraging for picking up the subject than anonymously provided information and instructions. Most of the participants indicated that refresher courses would be required to maintain a certain training discipline.

Working with visual elements seemed to be important, but participants also emphasized being focused during the exercises and not being distracted by a flood of thoughts or interrupted by background noise. The interviewees emphasized that a successful outcome of mental training may also depend on a quiet, comfortable, and

inspiring environment. Some participants pointed out that addressing a few more examples and situations where mental training is best used, particularly in sports, would be useful. Most candidates stated a preference for small-sized group trainings versus one-to-one sessions due to the potential of receiving feedback from other group members. They also recognized that one should start with easy-to-achieve goals or simple problems to be solved, particularly as a first-time user.

Some interviewees found that they used mental training differently in private than in an organizational environment, mostly because business settings are controlled by facts and figures and emotions and feelings would be rather kept back compared to private settings. Figure 5 illustrates a word frequency query related to Subquestion 2 generated by NVivo 11.

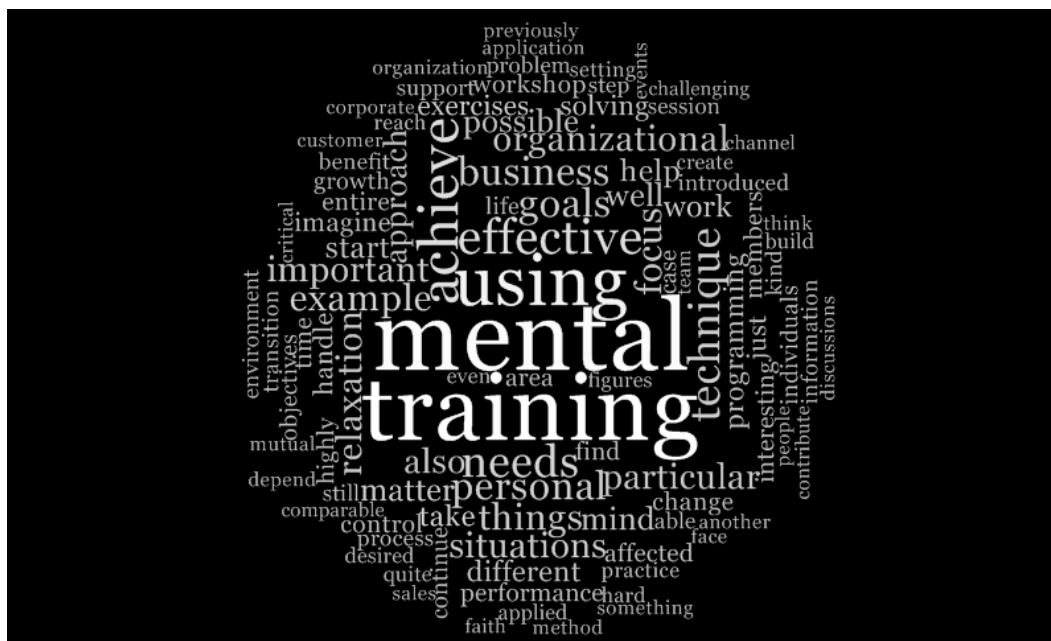


Figure 5. Word frequency query related to Subquestion 2.

Subquestion 3

Subquestion 3 was: What are observed outcomes or other perceived effects when using a mental training technique? Participant C3 recognized that building and maintaining mental strengths through mental training can have an enormous impact on life. An exercise at the beginning of the workshop demonstrated that physical performance can be increased by employing a mental training technique. “Getting quickly in a calm and relaxed mode,” “finding ideas to achieve a work-life balance,” and “enjoying positive feeling” were just some of the statements the participants made on this topic. Participant C5 remembered that the more he relaxes the less he feels affected by time and the environment. Most of the participants noticed that visualization effects supported the mental training procedure, and these visualized moments were well remembered.

Most of the participants completely achieved the goals they had programmed during the workshop. Some indicated that they are acting in a much calmer and more composed way when facing critical situations in private or business settings. Participant C4 even stated that he gained new power and energy to balance his work-life situation by using mental training. Participant C6 noticed that he was led to a quick gain in self-confidence.

Participant C3 mentioned that he was using the mental training technique just for relaxation purposes and learned that he was better prepared facing a crucial customer situation, could handle a dismissal of an employee in a more effective way, and was able to master an auditing procedure in a calm and composed mood. Participant C5 mentioned that using a mental training technique may support brainstorming processes in,

transition phase. He further recognized that mental training would be a suitable instrument to help achieve organizational members' objectives. This interviewee also emphasized that mental training could create an atmosphere of consistency and calmness, which may benefit those who pass through a transitional phase and support those who need to recognize progress to have faith in what's coming next. Furthermore, Participant C1 suggested creating an image of the future organizational status, including the implemented change, supported by mental practice including visualization. Another interviewee agreed with this concept and found that using mental training could finally lead to a new corporate identity. One participant concluded that applying mental training in a transition phase may depend on the level of acceptance related to the topic (mental training) and the positive attitude toward change. Figure 7 illustrates a word frequency query related to Subquestion 4 generated by NVivo 11.

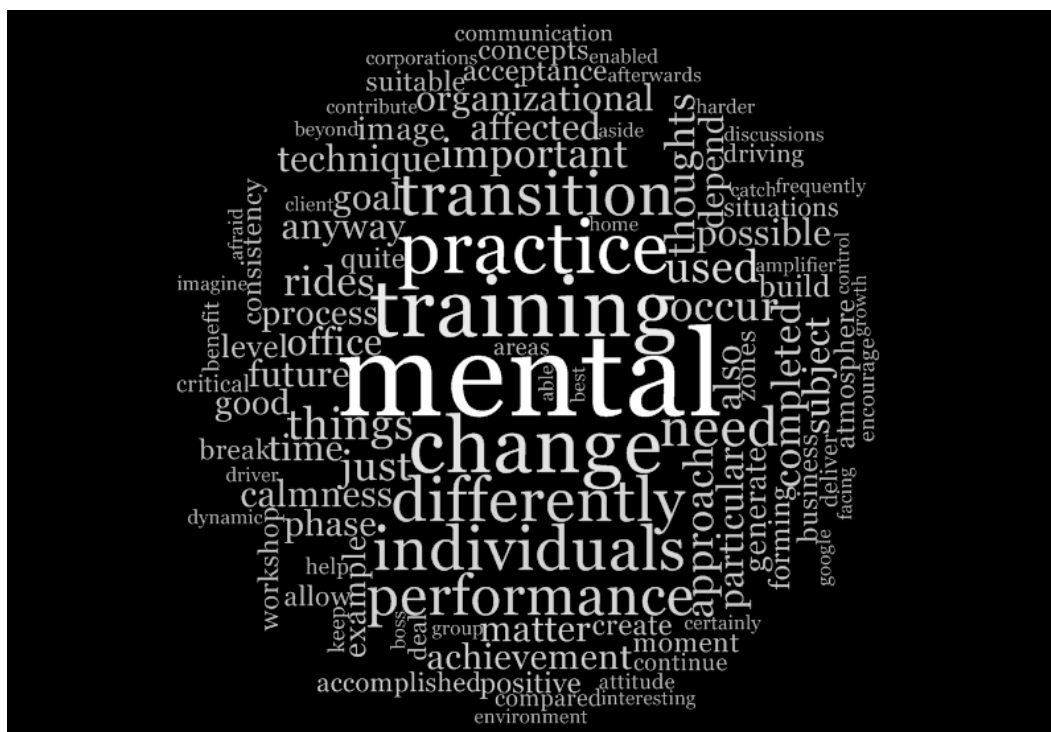


Figure 7. Word frequency query related to Subquestion 4.

Subquestion 5

Subquestion 5 was: What were/are preconceived beliefs or concerns associated with the use of a mental training technique such as mind programming? Although half of the participants were somewhat skeptical toward the topic of mental training due to different reasons, five interviewees stated that they were neither biased against mental training nor had any preconceptions regarding the application of a mental training technique such as mind programming. Participant C4 noted “I was somewhat skeptical towards the topic (mental training), but finally I was open minded when I participated in the workshop, and also curiously interested. For me it was like a Greenfield approach.” All participants were curious and interested in participating in a mental training workshop and experiencing its outcomes. Some mentioned they felt relieved when they realized that the workshop did not include any esoteric elements or procedures. Participant C3 stated that “I am open for new things, and I also like to try out unconventional methods such as mental training. On the other hand, I may be highly skeptical if it turns out to be an esoteric event.”

All participants were open to the topic, interested in examining the mental training procedures, and positively surprised about its effectiveness. Participant C5 noted: “Business people may judge mental training as an exotic thing. Still, many individuals may smile at those who utilize mental training. That’s okay. People who first used an umbrella had a hard time too; today, everybody carries one.” Participant C4 opined that “mental training or similar methods only work for those people who believe in it and for those who are willing and able to just let go and give it a try.” Figure 8 illustrates a word frequency query related to Subquestion 5 generated by NVivo 11.

calmness, physical relaxation, positive attitude, alertness to stress, using the power of visualization, focus, and self-confidence. Furthermore, Fürst (2008) and S. L. Miller (2010) suggested applying mental training methods in business settings to more effectively deal with stressful situations, facilitate the achievement of business objectives, and to enhance mental preparedness for any upcoming organizational change, including its related transition processes.

Participant C1 noticed that goal achievement is a suitable subject matter when using mental training. Particularly in transition phases, he was convinced that individuals affected by change should be supported in their undertakings by creating an atmosphere of consistency and calmness. Participant C6 stated that organizational members should not be pushed too hard to perform, particularly in change situations, but rather be enabled to deliver their best possible performance. Using the power of visualization and mental imagery could help to envision a desired and prospective picture of the future status, the required change and completed transition considered. Participant C2 assumed that executing mental training in a business setting, due to permanent stress and no moment of pause, would be much harder than in a private environment. However, established quiet zones may help as they would allow employees to step aside during an office break and do some relaxation exercises. These zones may also be used to regularly practice mental exercises.

Several participants mentioned communication as an area where using a mental technique could be very effective, either to control upcoming emotions in critical discussions or to create a more productive conversational atmosphere. Participant C4 assumed that different generations may approach this topic differently. Similar to

Participant C3, he suggested that mental practice could be performed during car rides, in particular between home and office. Both of these participants successfully completed their goal achievement during this previously unproductive time. One was convinced that future car concepts, where a car driver does not necessarily need to navigate the car, will allow individuals to use their time during car rides differently.

The final statement of the interview procedure included that applying mental training in any setting and environment depends on the level of acceptance related to the topic. If organizational change is involved, a positive attitude toward the outcomes to be achieved is required. Participant C6 added, “It may not work for those who are afraid of what’s coming. For me, there’s no good or bad change, it will just be different afterwards.” Figure 9 illustrates a word frequency query related to Subquestion 6 generated by NVivo 11.

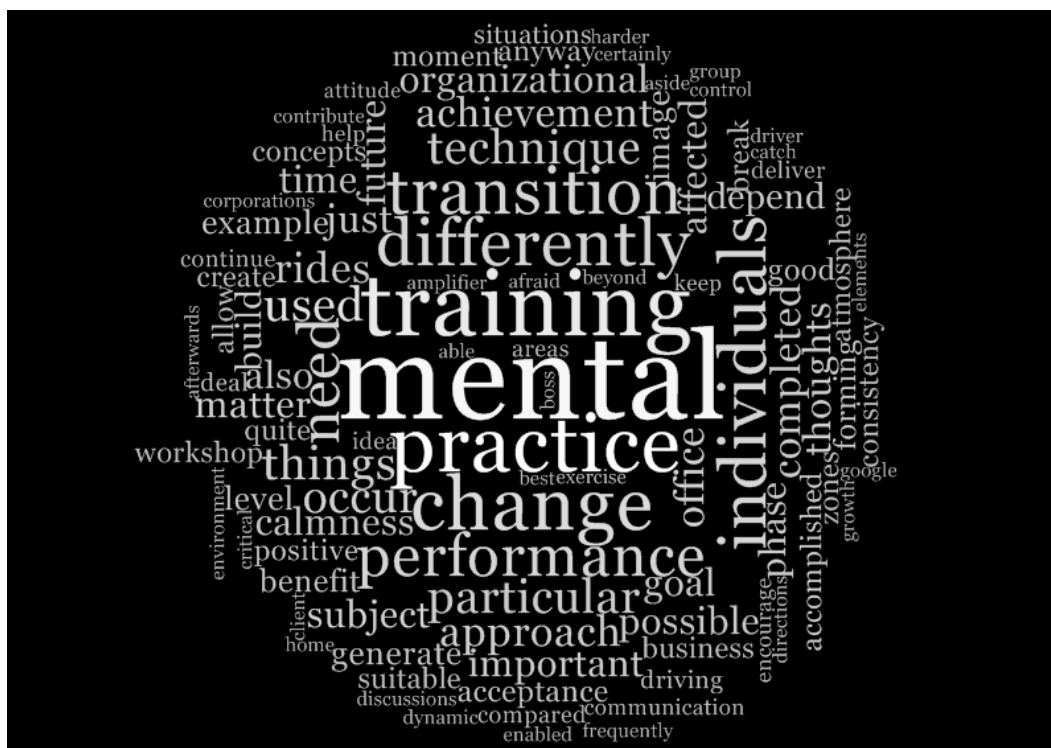


Figure 9. Word frequency query related to Subquestion 6.

Word Frequency Query

achieve	relaxation	process	important	business	possible	goals	level	suitable	conscious	solving	count	individual	approach		
						method	occure	people	some	sport	follow	process	change		
positive	pictures	entire	things	focused	still		finally	perform	work	addi	disci	prac	setting	feel	exan
						experie			comp	intro	place	right	seen	issue	crea
			personal	needs		challe	relate		resul	alwa	quic	imag	sess	cont	eval
effective	phase	topic			particip				highl	help	reall	tried	grou	start	pres
			particular	emotio		interes	quite		highl	help	reall	tried	grou	start	pres
exercises	technique	experien			taking	enviro	introc	objed	infor	ques	hand	esse	acce	reac	
			think	first											
					differen	organ	bene	probl	rece	repe					
											elem	gene	bal	thou	

Figure 13. Tree map based on a limited word frequency query.

Text search queries were used to explore expressions, meanings, and statements related to the focused area of investigation, the business domain, as well as to the phenomenon of mental training in general. The following NVivo charts (Figures 14 and 15) present comments, impressions, and lived experiences of interviewed participants linked to these terms.

Some of the interviewed executives proposed to use mental training techniques in business settings, for example to open employees' minds for further improvements or being more creative, to establish a work-life balance, to better deal with stressful moments and control emotional behavior, and to act in a much calmer and more composed way when facing critical situations or conflicts. One interviewee even suggested programming a business objective among the concerned members for the organization's benefit and well-being. Another recommended using the technique and the power of visualization to create an image of the company's future with all organizational change implemented. This mental image of the restructured organization

may create a visionary effect for those who were engaged in the related mental imagery process. Further, mental training could support the organizational members who are affected by change and need to pass through their transition phases by creating an atmosphere of consistency and calmness. However, some interviewees stated that applying mental training in a transition phase may depend on the level of acceptance related to that learning and practice.

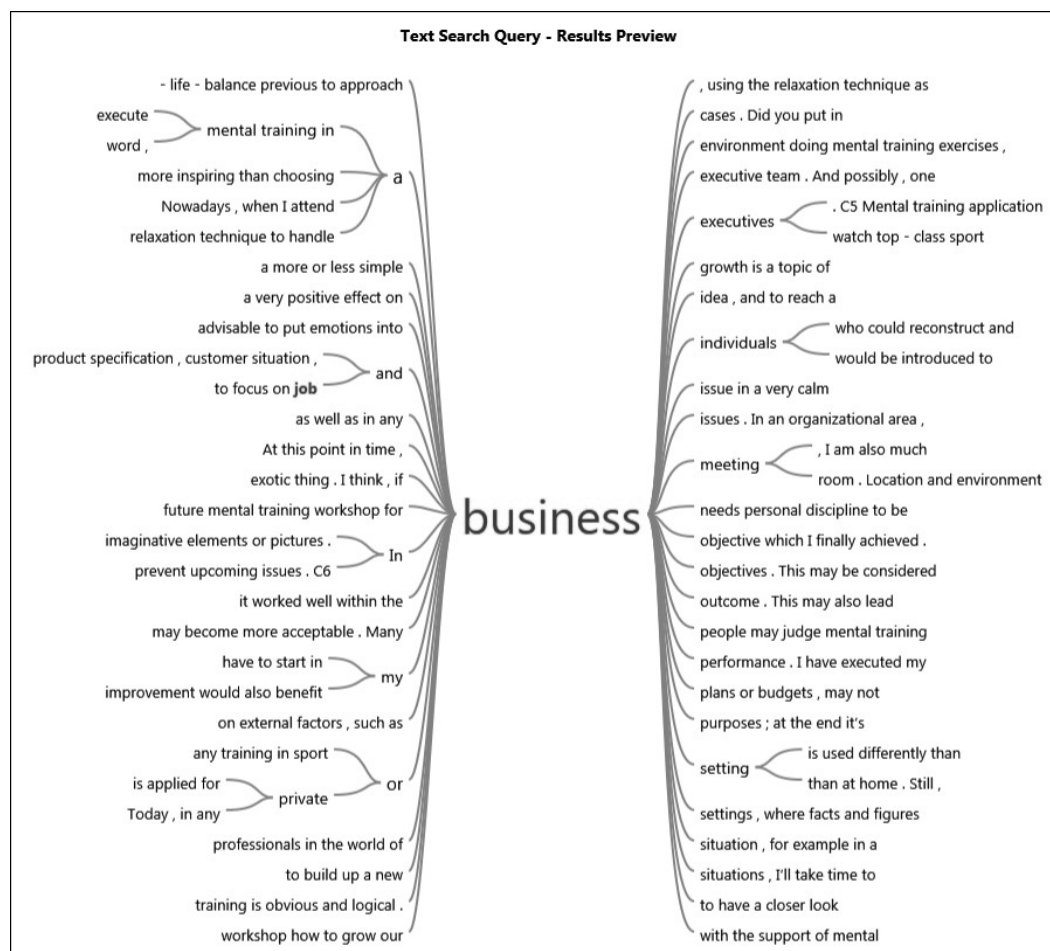


Figure 14. Text search query related to mental training in a business setting.

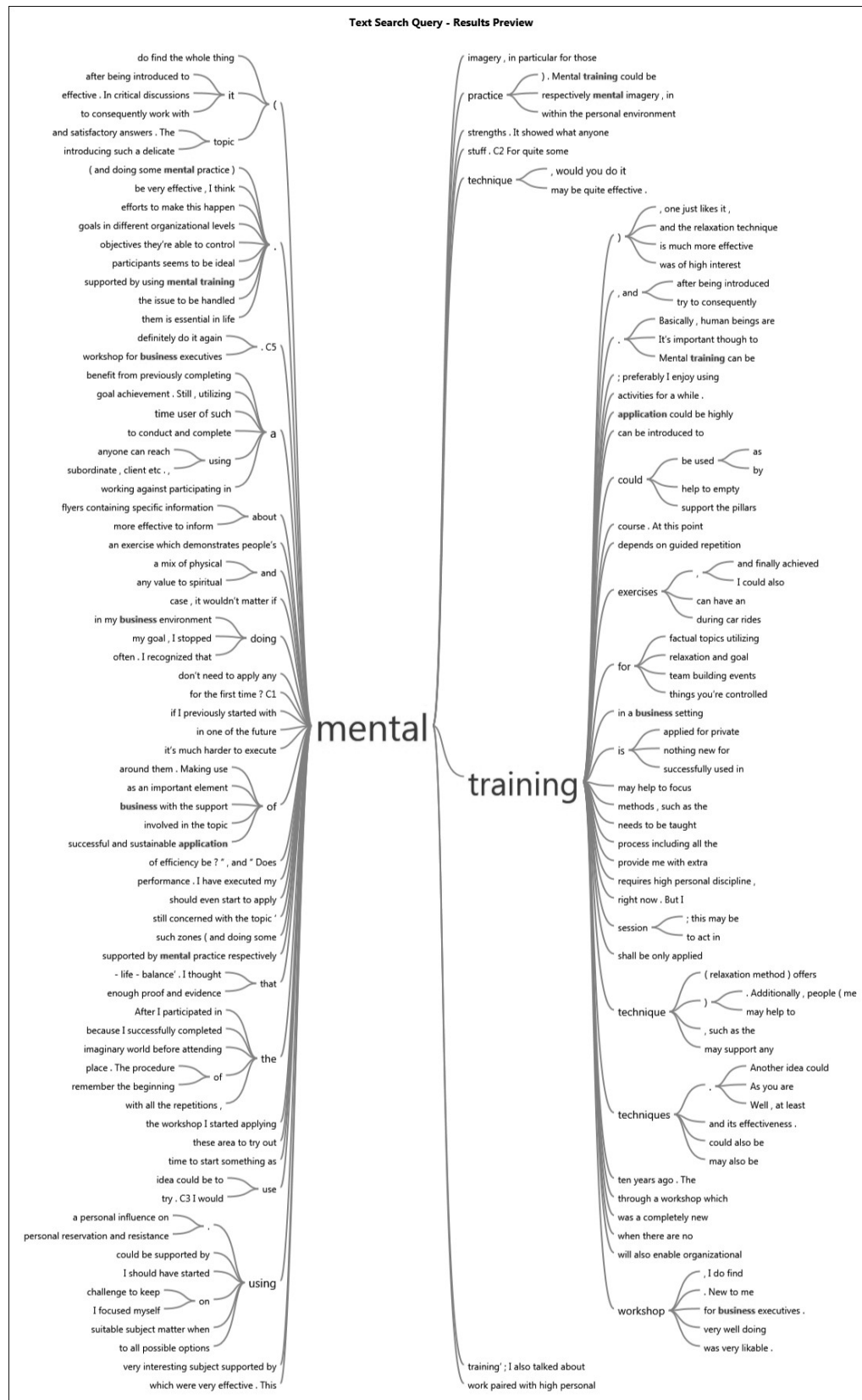


Figure 15. Text search query related to the application of mental training.

Several participants pointed to the communication field and conflict management regarding using a mental training technique to control emotions in critical discussions or to create a more productive conversational atmosphere. Participant C3 stated that “Since completing the workshop, it occurs to me that I am acting and reacting in a much calmer way. Ask my wife, she would agree.” He further noted, “I realized that I achieve much better results with my new behavior.” Participant C3 was convinced that the advantage and benefit of using a mental training technique “is huge, in particular when using it in stressful situations, e.g. in a family dispute or in critical discussions.” He added that “Mental training techniques could also be applied in discussions with organizational members, subordinates or leading managers, to handle any kind of issues in a more controlled way.”

Participant C5 explained that applying mental training “could be highly interesting and effective in relationship matters, particularly in conflict situations, for example, to achieve compromises in difficult personal conflicts with an approach of openness and readiness for mutual understanding.” Participant C6 emphasized that he frequently used the relaxation technique to be well-prepared for important meetings and decisions and to control his behavior in a positive way. Participant C2 agreed and mentioned that

Utilizing a mental training technique may support any challenging negotiation and help to face very difficult counterparts. Even if I’m not able to change a counterpart’s character, I may adapt my own behavior towards the other person to achieve a desired outcome of the meeting.

He added that using a mental training technique may be quite effective in the entire area of communication “in all kind of directions, for example with your boss, subordinate, client etc. In critical discussions it (mental training technique) may help to control

upcoming emotions, and create a more productive conversational atmosphere.”

Participant C5 came up with the idea to use mental training

for team building events and conflict resolution. Particularly in change situations, forming new teams may generate personal reservation and resistance. Using mental training methods, such as the relaxation and the mirror techniques, could be an approach to prevent upcoming issues.

Finally, an autocoding procedure was conducted through NVivo to extract themes and related subthemes based on the condensed statements of all interview participants.

An overall search process generated the following hierarchy chart as shown in Figure 16.

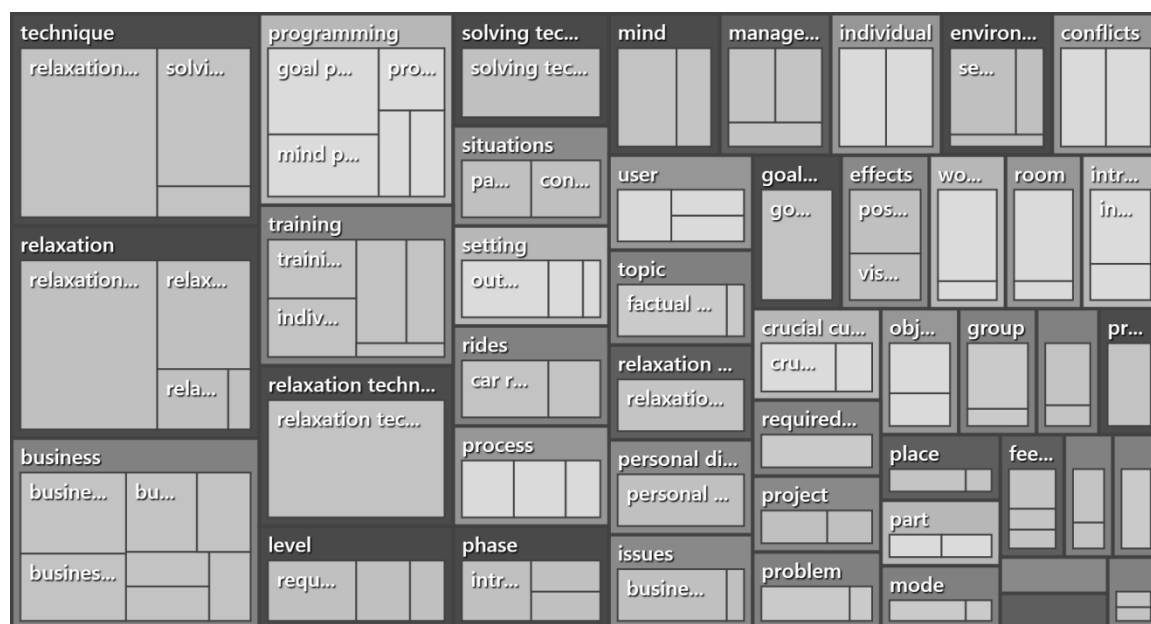


Figure 16. Hierarchy chart with extracted themes after autocoding procedure.

The theme extraction process was refined by separating meaningful units from trivial and inconsiderable subjects. This selection procedure was conducted to ensure that close reading contents corresponded with distant reading outputs and to avoid any

overlapping of units and subjects. A hierarchy chart was generated by NVivo based on a limited selection of meaningful theme characteristics and is presented in Figure 17.

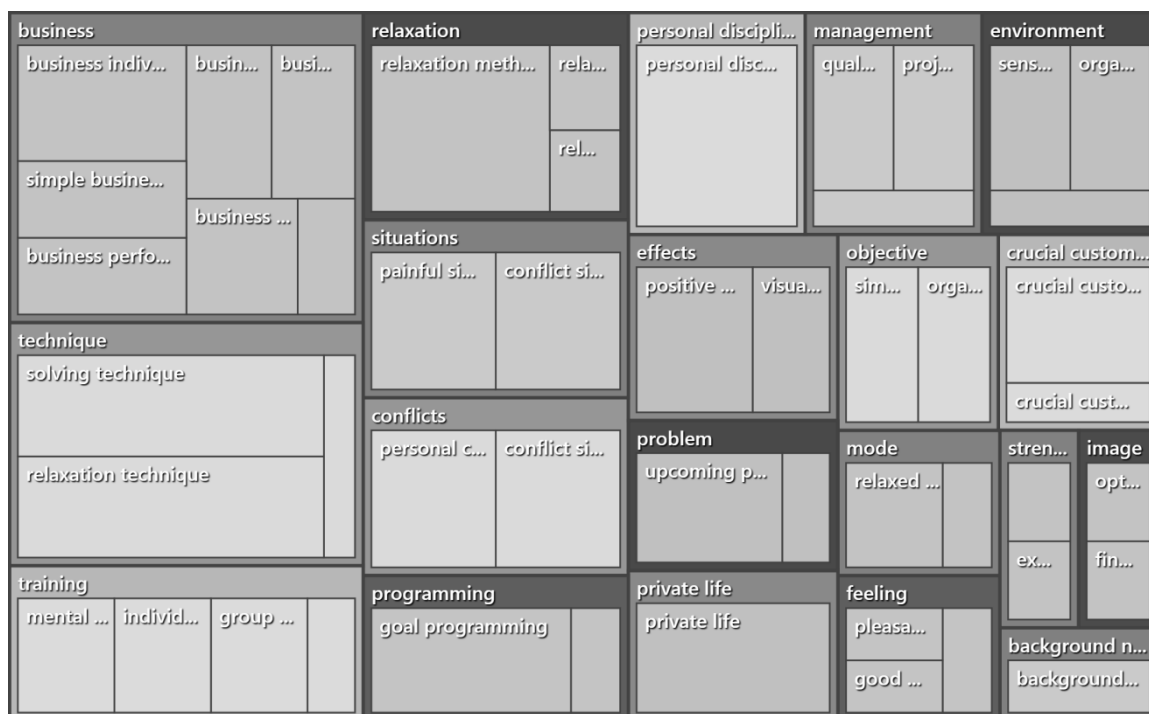


Figure 17. Hierarchy chart with reduced theme selection.

The adequate themes results, documented in Figure 18, highlight two top themes such as technique and business with its contexts followed by main themes such as training, relaxation, programming, management, feelings, personal discipline, and environment. The main themes and their meanings related to the research topic are discussed and interpreted in Chapter Five.

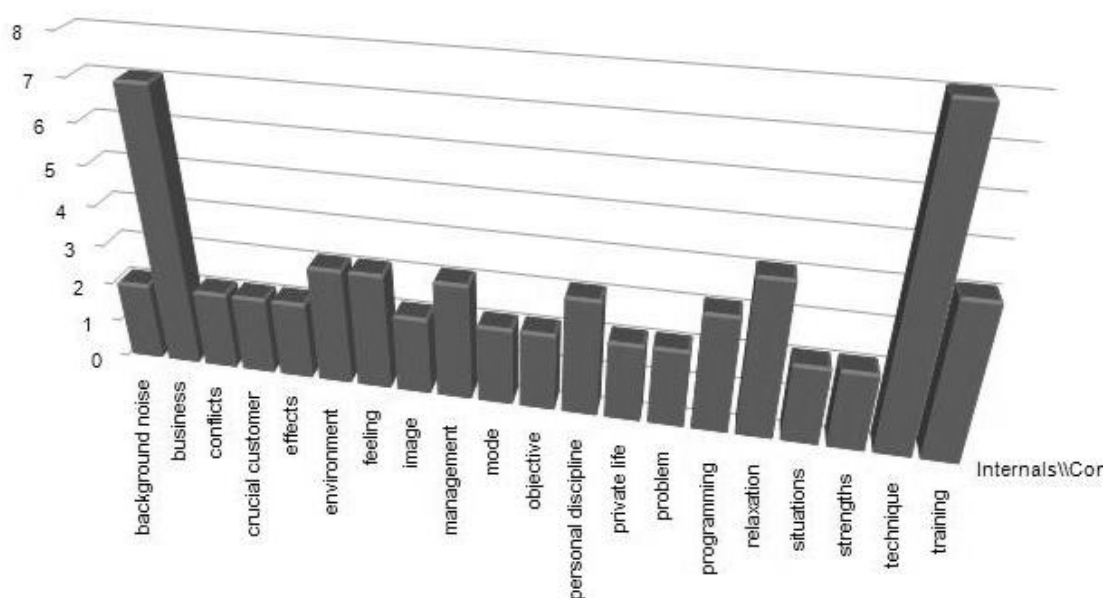


Figure 18. Autocoding themes results.

The purpose of this research study was accomplished. The essentials related to the research topic were obtained through the study participants' impressions and experiences using a mental training technique while passing through organizational change. All research questions were addressed and thoroughly responded to during in-depth, face-to-face interviews with the study participants. Common themes resulted from the combination of close and distant readings of the condensed statements of the interviewees as previously discussed.

According to study participants' statements, which included first impressions, lived experiences, and recommendations, as well as assumed perspectives, the introduction to mental training and its application in a business environment, particularly when organizational change needs to be mastered, was positive, surprising, and beneficial.

All participants appreciated having received informative and explanatory material about mental training and being invited to a workshop where they were guided through different applications of mental practice such as the relaxation process, the programming procedure, and the problem-solving technique. All interviewees confirmed the successful achievement of their goals, which were evaluated and programmed during the workshop. Most also mentioned that they still used the mind programming method or parts of it, for example the procedure of relaxation and visualization, or that they would use mental training again. They all benefitted from the guided exercises during the workshop, including the achieved results. After completion of his mental training exercises, Participant C4 stated, “I gained new power and energy to strengthen my work-life balance. It was a wise decision to participate in a mental training workshop.” Participant C4 further explained that mental training contributes to his achieving his optimal work-life balance, which then may lead to a higher efficiency in accomplishing the desired business results.

While some participants experienced behavioral change, a more focused approach during stressful moments, and an increase in their self-confidence, others pointed to communicational improvements, for example in discussions with organizational members and during business meetings, negotiations with customers, and audit procedures. Participant C4 accentuated that “The topic (mental training) was of high interest to the entire management team, particularly in this critical phase of change and transition.”

Several participants enjoyed using the relaxation technique as a means to get in a calm and relaxed mode in order to act in a more composed and self-controlled way. Participant C3 benefitted from using this mental training technique in an auditing process

where you need to cooperate, solve a lot of problems, and stay very much focused, you may benefit from previously completing a mental training session to act in a relaxed mode, and to be as highly effective and efficient as possible.

This participant also experienced that “Particularly in change situations, when you have to let go from different things, for example to dismiss an employee or to adapt to a new situation, one may benefit from doing that in a more relaxed way.” Participant C3 recognized that mental practice supports the goal achievement process, particularly in a phase of transition. He opined that “In a stage of transition, an atmosphere of consistency and calmness needs to be created. People also need to recognize progress to have faith in what’s happening.” Participant C2 suggested implementing quiet zones in organizational environments, as established in large corporations, to help employees relax or do their mental practice. He was convinced that these zones, if used on a consistent basis by organizational members who pass through stress and painful transition phases, would positively contribute to their productivity and well-being. Whipple (2014) confirmed that important factors from a leader’s perspective in transition phases are to keep people calm, particularly in a restructuring process, and to keep these people aligned with the right attitude regarding the ongoing organizational change.

Besides the listed benefits and encouraging recommendations, study participants also indicated some difficulties and obstacles to executing mental practice. As first-time users of the mind programming method, most of the participants were challenged by the complexity of the programming phase. They were overwhelmed by the number of occurring images and the amount of information during that portion of the training. Some participants struggled with maintaining constant focus during the mental training

exercises and indicated that they were distracted by the impact of background noise, the low temperature in the room, or uncomfortable seats.

Half of the interviewees found that doing mental practice requires a very high personal discipline, not only to complete the mental exercises but also to rehearse them. Participant C6 compared the challenge of doing mental practice with learning a new musical instrument. He commented,

First, you should like to get to know the instrument, second, you must be willing to learn the basics, third, you need to repeat some exercises to improve the learned technique, and finally, you may develop some enthusiasm to play it every day.

Participant C6 further suggested that “A successful and sustainable application of mental training depends on guided repetition of exercises to facilitate and implant the procedures.” Participant C2 agreed that “One thing is to learn and comprehend the technique(s); the other thing is to maintain a discipline of keep on doing mental practice.” Further, he admitted that “Human beings, I think, are not that disciplined to follow a training schedule on a constant basis.”

Assumed by some interviewees and confirmed by Breeden (2013), overcoming self-imposed limitations is another challenge to successfully complete mental training exercises. To master this lack of personal will, Participant C2 recommended “engaging a coach who pushes applicants in an acceptable and reasonable way.” Participant C4’s response on this topic was “Mental training or similar methods only work for those people who believe in it and for those who are willing and able to just let go and give it a try.”

Doing mental practice in an organizational setting may be restricted by the lack of quiet zones, as previously mentioned. Participant C3 explained that mental training in a

business environment was different than in a private place, as “In business settings, where facts and figures are required, I am used to work with numbers and letters. In privacy, dealing with personal affairs and emotions, I’d rather work with imaginations and pictures.” He added, “In organizational settings I back away from any feelings or showing emotional behavior; in privacy it’s the opposite.” Other interviewees confirmed that mental practice is preferably used in a private environment, for example at home or in the car, without being stressed or distracted by organizational events or stakeholders, and where emotions, feelings, and other personal issues could take their course.

Different values were attributed to the phenomenon used during organizational change and individual transition phases. The participants were all positively surprised about the effectiveness of the mind programming method, in particular about its relaxation technique. Most of the interviewees used this procedure during the transition phase they were in at the time of the study to control their behavior and emotions, act in a composed way, and prepare themselves before participating in tough meetings or facing delicate discussions. Some candidates were convinced that mental practice would be a valuable method for opening people’s minds and to support those involved in transition phases to adapt their mindsets to the benefits of change for the organization. Mental training techniques may also have an influence on new cultural values and reinforce organizational members’ self-confidence, which, in turn, will benefit their work-life balance.

Some candidates recognized that mind programming seemed to be a valuable instrument for achieving personal goals as well as organizational objectives. Participant C1 suggested using mind programming in combination with the visualization technique

to create a visionary image of the successfully transformed organization and communicating this picture to its members and stakeholders, above all to the individuals who passed through their required transition stages.

CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

The present study's overall purpose was to find the essence of how business executives applied mental training during organizational change and transition. Common themes resulting from the interview participants' statements needed to be extracted and are discussed in this chapter to satisfy this phenomenological research. Furthermore, the findings discussed in Chapter Four led to implications for professional practice and recommendations for implementation, which are presented in Chapter Five. Finally, areas for further research are highlighted.

Discussion of Common Themes

Overarching themes such as technique and business emerged from the coding procedure as presented in Figures 15 and 16 in Chapter Four. In this study, mental training was described as a systematic procedure consisting of four stages: preparation, relaxation, programming, and reactivation, outlined in the Definitions section of Chapter One. From a technical point of view, each of those sequences uses an individual technique supported by different technical features such as visualization and verbalizations. Furthermore, specific techniques were applied in different mental training exercises introduced in the workshop. In many of the study participants' statements, the theme of technique was linked to training, personal discipline, relaxation, and programming. Both mental practice procedures, particularly the relaxation technique but also the programming process, were assessed by the interviewees as practical, effective, and supportive instruments for achieving desired outcomes, for example mastering problematic and stressful situations, changing behavioral patterns, improving communicational skills and approaches, reaching goals, and enhancing their self-

confidence. On the other hand, all participants recognized that developing and increasing mental strengths may depend on frequent training sessions connected to a strong personal will and discipline to accomplish these trainings.

The other main theme, business, was linked to several subthemes such as business settings and individuals, business performance and objectives, business situations and conflicts, organizational issues, business environment, and work-life balance.

Participants presumed that mental training supports achieving a work-life balance, which in turn may lead to a higher efficiency in accomplishing desired business results. In fact, Beauregard and Henry (2009) confirmed that work-life balance practices are associated with improved organizational performance. They further concluded that “having employees who make use of available work-life practices may also incur cost savings for organizations via longer work hours and enhanced productivity” (Beauregard & Henry, 2009, p. 18).

Participants also noticed communicational improvements connected to applying a mental training technique, particularly when used prior to crucial staff meetings, negotiations with customers, and audit procedures. One interviewee described his experiences using a mental training technique before attending a stressful auditing procedure of a business process as follows:

When you need to cooperate, solve a lot of problems, and stay very much focused, you may benefit from previously completing a mental training session to act in a relaxed mode, and to be as highly effective and efficient as possible.

A remarkable finding supported initial concerns of most interviewees that business environments are not a favorable place to execute mental practice even if the mental exercises are determined to support the organization’s well-being. Participants explained

they would prefer private places, for example their homes or cars. Various reasons were mentioned such as missing quiet zones in organizations, common habits and behaviors in business settings like being used to dealing with facts and figures, and eliminating feelings and emotions wherever possible. However, all interviewees were convinced that mental practice would be a valuable instrument to open people's minds, contribute to their work-life balance, and help those involved in psychologically challenging transition phases to adapt their mindset and to benefit the organizational change. Nortier (1995) noticed, later confirmed by Brisson-Banks (2010), that well-managed transitions are essential and beneficial processes for the quality of life of organizational members as well for the economic prosperity of their companies.

Implications and Recommendations for Professional Practice

The present study's focus was on exploring how business executives experienced and assessed the application of mental training in their current process of organizational change and personal transition. A closer look at the procedural aspects of both transition and mental training revealed similarities. Both are multistage, psychologically sensitive processes requiring personal acceptance and discipline to be successfully mastered. Both need to be executed systematically, step by step and stage after stage. Similarities were also found in both processes' outcomes such as change of mindset, behavioral adaptations and change, mastering difficult situations in a composed and relaxed way, being focused on future perspectives, and gaining a higher level of self-confidence. Finally, transition phases need to be mastered individually and require personalized solutions that may be well supported by using personally adapted mental training techniques and exercises.

In each of the three transition phases during organizational change, as defined by Bridges (1986), there are indications that mental techniques and practice can be suitably applied. In the first phase, where employees must let go of the old situation and deal with losing the old reality and their old identity as well, a systematically conducted mental training session simulating a farewell celebration could facilitate the disconnection from the past of employees who are affected by the organizational change event. This mental act of celebration may not only be a chance for organizational leaders to communicate and initialize the change procedure but could also create a group dynamic among the affected organizational members. The final stage of the recommended mental training process, delineated as the step of leaving the mental room and regaining the original state of consciousness, suits the completion of this transition phase with its final act, letting go. The study subjects recognized that organizational change affects people's mindsets. Mental practice could support adapting an individual's mindset to master any stage of transition.

The second transition phase, characterized as the neutral zone, is "where the creativity and energy of transition are found and the real transformation takes place" (Bridges & Mitchell, 2000, p. 32). Participants covering the topic of the responsibility of leading business executives were convinced that the individuals affected by change must be supported in their undertakings and be enabled to deliver their best possible performance, also by creating an atmosphere of consistency and calmness. The mental relaxation technique may be an appropriate way to support individuals who are experiencing the discomfort of a transition phase loaded with uncertainties (Bridges & Mitchell, 2000; Nortier, 1995). This transition stage could be used to implement a

company workshop for all the organizational members who intend to impact the company's future. Besides communicating visionary and strategic aspects of the newly aligned organization, one of the topics could include using mental techniques and practice for individual and organizational purposes. One study participant suggested using the power of visualization and mental imagery for envisioning a desired and prospective picture of the organization's future status. Some interviewees found that the process of defining, evaluating, setting, and achieving goals should be supported by applying mental training techniques such as mind programming. Introducing and trying out new ideas and methods may fit in this creative and energized phase of transition.

The third transition phase represents the new beginning and requires individuals to start behaving in a new way (Bridges, 1986). Nortier (1995) clarified that

This stage requires a move to another logic, the acquisition of new forms of behavior, new skills, a new way of thinking, of establishing contact with new people, etc., in order to get familiar with the new policy, the new procedures and the new organization accompanying the change. (p. 35)

Mental training seems to be best suited to supporting and helping achieve demands of individuals who intend to successfully master the final transition stage. Some study participants confirmed that using a mental training technique led to behavioral changes, for example acting more calmly and composedly during crucial business meetings or prior to finalizing tough organizational decisions. Furthermore, they discovered communicational improvements as well as a more productive conversational atmosphere in discussions with organizational members and during customer negotiations and audit procedures. Mental practice can also develop solution-based thinking to facilitate quick, positive reactions when facing a problematic or stressful situation.

Business executives manage organizational change as a part of their daily business, but they may not be experienced in coping with employees' transition processes and problems. Bridges and Mitchell (2000) emphasized that "most leaders come from backgrounds where technical, financial, or operational skills were paramount, and those skills provide little help when it comes to leading people through transitions" (p. 32). These authors continued that leaders who are not willing and able to develop a sense for accomplishing transition phases cannot act effectively and sustainably in organizational change situations. Using mental training techniques and practicing them like professional athletes do may support leaders in building up the necessary attitude to recognize and confidently master challenging change and transition phases for the organization's well-being and its members and, last but not least, be prepared for further upcoming, unavoidable change events.

Areas for Further Research

This qualitative research study was based on the lived experiences of six business executives who used a mental training method in an organizational change and transition process. Future researchers should build on the present findings and recommendations and further investigate using mental practices in business environments considering (a) additional and diverse business executives operating in different business settings; (b) varying application periods (from several months to a few years); and (c) measurable results such as achieved objectives, solved problems, and changed behaviors.

Further qualitative research that could be of interest would be to interview graduates of various academies offering mental training programs in order to explore participants' achievements as a result of successfully completing these training programs.

Another recommendation includes conducting a longitudinal study to determine if using mental techniques did indeed make a difference in a transition process. Subsequently, a team could be trained in order to determine the value of mental practice for that team during a transition stage. Comparing and contrasting statements of business executives using mental techniques in different countries with diverging cultural dimensions, as presented by Minkov and Hofstede (2012), could be another research approach from a different perspective.

Supplementary quantitative studies to explore the ease of use as well as the applicability and practicality of mental training in business settings may draw attention to this rather unconventional method, better known as a sports psychology instrument, for complementing athletes' physical practice and enhancing their overall performance (Connaughton et al., 2010; Holland et al., 2010; Vissek et al., 2013). Results from these future studies may also facilitate reducing or eliminating mental barriers to establishing such a self-help tool in the business world.

Finally, as was apparent throughout the study participants' statements and as suggested by interdisciplinary research studies (Fürst, 2008; Loehr & McLaughlin, 1986; S. L. Miller, 2010; Weinberg et al., 2012), sports psychology methods such as mental training techniques may be easily implemented in other domains like business settings, could facilitate life outside of the field of sports, and therefore should be considered and further explored as life skills.

In conclusion, the present study's findings were discussed in this chapter. Also included were implications and recommendations for professional practice with a particular focus on transition procedures. Furthermore, areas of future research were

identified along with the final suggestion to possibly consider using mental techniques as life skills. As indicated by the participants in this study, mental training methods appeared as practical, effective, and supportive instruments for achieving desired outcomes; for example, mastering problematic and stressful situations, changing behavioral patterns, improving communicational skills, reaching goals, and enhancing a person's self-efficacy and self-confidence.

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APPENDICES

APPENDIX A
Invitation Letter

APPENDIX A

Invitation Letter

Christian F. Tschudi

[REDACTED]

Phone:

e-mail:

[REDACTED]

Participant ...

Company ...

Address ...

January, 2016

Invitation to an Interview Meeting

Dear Participant,

Time has passed since you were introduced to a mental training technique such as mind programming. Now, you're invited to share your lived experiences in an interview meeting scheduled at your convenience.

Your participation in my research study "The application of a mental training technique in an organizational transition process" is highly appreciated.

Please be reassured that all data generated during our interview, as well as your identity, will be treated strictly confidential.

I look forward to our meeting. If there are any questions, please feel free to contact me either by phone ([REDACTED]) or by e-mail ([REDACTED]).

Thank you in advance and best regards.

Christian F. Tschudi

APPENDIX B
Interview Guide

APPENDIX B

Interview Guide

Introduction

Interview Purpose

To explore how business executives experience and assess the application of a mental training technique, such as mind programming, in an ongoing organizational transition process.

Confidentiality

An IRB approved informed consent was received from the participant prior to this interview. All data generated during this interview including a participant's identity will be treated strictly confidential. Participants may have access to their personal data file.

Requirements

The participant is informed about the importance of this study and confirms herewith to participate voluntarily and willingly.

Interview Questions

1. What are your impressions, as detailed as possible, now that you've been introduced to and experienced a mental training technique, such as mind programming, for the first time?
2. Tell me about your experiences when going through each of the four phases of this mental training technique. What did you like/dislike, and how did you complete each phase?
 - a. How have you experienced the introduction phase?
 - b. How have you experienced the relaxation phase?
 - c. How have you experienced the programming phase?
 - d. How have you experienced the reactivation phase?
3. What feelings or emotions did you experience throughout the entire mind programming process?

4. Tell me about the level of awareness (state of consciousness) you experienced throughout the entire mind programming procedure.
5. Tell me about any occurring visual effects, images, or imaginary items you experienced during the mind programming process. How did you cope with that experience?
6. Tell me about other occurrences or events you may have experienced throughout the entire process of mind programming.
7. In what ways could these mind programming experiences be helpful or meaningful for your personal use?
8. What is your opinion regarding the use of mind programming in an organizational environment, particularly during a transition phase?
9. Tell me about any preconceptions or fears you had or still have about using a mind programming technique or similar methods.
10. What elements/details of this mind programming technique would benefit from change or improvement?

Follow-up questions, such as ‘Please give me an example of ...’, ‘Please tell me more about ...’, or ‘Please describe that in more detail.’ may be added to any of the guiding interview questions in order to achieve an acceptable saturation of the interview response data.

Additional Information (After Completion of the Interview)

Any additional information to be added after the interview is completed may be handed in to the researcher by e-mail within the next 2 weeks.

APPENDIX C**Research Participant Informed Consent Form**

APPENDIX C

Research Participant Informed Consent Form

Consent Form

Please read this consent form carefully and ask as many questions as you like before you decide whether you want to participate in this research study. You are free to ask questions at any time before, during, or after your participation in this research.

Research Information

This study is being conducted by Christian F. Tschudi, the principal researcher, who is a doctoral student in the Graduate School of Business and Management at Argosy University, Sarasota (Florida) working on a dissertation. This study is a requirement to fulfill the researcher's degree and will not be used for decision-making by any organization.

Title of Research Study

The application of a mental training technique in an organizational transition process

Purpose of this Research Study

I have volunteered to participate in a research study designed to better understand the experience of business executives who applied and experienced a mental training technique, such as mind programming, in an organizational change situation and transition process.

This research study will include a minimum of five adult participants and no more than ten.

Procedures

For this research study I will be asked to attend an interview meeting. This interview is expected to take approximately 60 - 90 minutes.

I give permission for a digital recording of my interview with the researcher, for the purposes of accurate transcription.

The interview will be transcribed by the researcher.

Benefits, Risks or Discomfort

Prior to this study, business executives participated in a mental training workshop conducted by the researcher. Participants may benefit from using such a mental training technique on the job in similar ways as athletes do, using mental practice to facilitate their goal achievement process, and to enhance their overall performance.

This study is designed to minimize as much as possible any potential physical, psychological, and social risks. I am entitled to know in advance of giving my consent that although very unlikely, there are always risks in research.

I am aware that the interview might bring emotional thoughts and images to my mind which may be upsetting. The researcher will make every effort to minimize such an occurrence.

Confidentiality

All the information I provide and my identity will be treated as confidential, and the records of this study will be kept private. No words linking me to the study will be included in any sort of report that might be published. The records will be stored securely and only the researcher will have access to the records.

I have the right to get a summary of the research results if I would like to have them.

Termination of Research Study

I understand that my participation is strictly voluntary. If I decide to participate, I am free to refuse to answer any of the questions that may make me uncomfortable. I can withdraw my participation at any time.

I can contact the principal researcher, Christian Tschudi, via email at:

_____ with any questions about this study.

IRB Statement

I understand that this study has been reviewed and Certified by the Institutional Review Board, Argosy University, Sarasota. For research-related problems or questions regarding participants' rights, I can contact the Institutional Review Board through Dr. Dale Lee Covert, IRB Chair, at _____ or via e-mail:

Authorization

I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study. I have been given a copy of this consent form. By signing this document, I consent to participate in the study.

Name of Participant (printed) _____

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

APPENDIX D

IRB Statement of Assurance for International Studies

IRB Statement of Assurance for International Studies

As the principal investigator, I have reviewed the most-recent edition of the *International Compilation of Human Research Protections* to ensure that I understand the laws, regulations and guidelines for research in Switzerland and understand what will be expected for ethical collection of data. This is my assurance that I will comply with all applicable laws, regulations and guidelines in both the U.S. and Switzerland and that I will treat human participants' data ethically and in compliance with all applicable U.S. and foreign rules and regulations as they apply to this study.

November 30, 2015

Date

Tschudi

Christian Tschudi (principal investigator)

APPENDIX E
IRB Approval Certificate

*Application for IRB Review and Certification of Compliance
Expedited Cover Sheet*

IRB# SB15-003

Date Logged: 12/15/2015

Expedited Review (Level 2) Application, Moderate Risk

(Review by one or more IRB Members—May lead to Full IRB Review)

Principal Investigator/Researcher's Name: Christian Tschudi

Student ID Number: 1010375163

Type of Research Project (CRP, Dissertation, describe other) Dissertation

Title of Research Project: The Application of a Mental Training Technique in an Organizational Transition Process

Principal Investigator/Researcher's Address: _____

Email Address: tschudi@argosy.edu

Telephone Number: 911-991-9975

Faculty Research Supervisor/CRP/Dissertation Committee Chair's Name: Dr. Marguerite Chabau

College: ☒ Business ☐ Psychology and Behavioral Sciences
☐ Education ☐ Health Sciences ☐ OTHER _____

Program of Study: EdD in Organizational Leadership Degree EdD

Project Proposed Start Date: 01/07/2014 Project Proposed Completion Date: 04/30/2016

As the principal investigator, I attest that all of the information on this form is accurate, and that every effort has been made to provide the reviewers with complete information related to the nature and procedures to be followed in the research project. Additional forms will be immediately filed with the IRB to report any change in subject(s), selection process, change of principal investigator, change in faculty research supervisor, adverse incidents, or final completion date of project. I also attest that I will treat human participants' data ethically and in compliance with all applicable state and federal rules and regulations that apply to this study, particularly as they apply to research work conducted in countries other than the United States.

Signature of Principal Investigator/Researcher Christian Tschudi Digitally signed by Christian Tschudi
Date: 2015.12.03 10:53:59 -05'00' 12/03/2015
Date

Approval Signature - Faculty Research Supervisor/CRP/Dissertation Committee Chair:

Marguerite Chabau Digitally signed by Marguerite Chabau
Date: 2015.12.08 09:54:36 -05'00' 12/08/2015
Date

IRB Certification Signature:

Dale Lee Coovert, PhD Digitally signed by Dale Lee Coovert, PhD
DN: cn=Dale Lee Coovert, PhD, o=Argosy University, ou=College of Behavioral Sciences, email=ccoovert@argosy.edu, cn=US
Date: 2015.12.15 10:42:46 -05'00' _____
Date

The above named research project is certified for compliance with Argosy University's requirements for the protection of human research participants with the following conditions:

- 1. Research must be conducted according to the research project that was certified by the IRB.*
- 2. Any changes to the research project, such as procedures, consent or assent forms, addition of participants, or study design must be reported to and certified by the IRB.*
- 3. Any adverse events or reactions must be reported to the IRB immediately.*
- 4. The research project is certified for the specific time period noted in this application; any collection of data from human participants after this time period is in violation of IRB policy.*
- 5. When the study is complete, the investigator must complete a Completion of Research form.*
- 6. Any future correspondence should be through the principal investigator's research supervisor and include the assigned IRB research project number and the project title.*

NOTES:

- Please complete this cover and the Petition in detail. Every question must be answered. Please type your answers.*
- Attach the appropriate documents and submit the entire application materials under the cover of a completed Application Checklist to the CRP or Dissertation Chairperson.*
- Do not proceed with any research work with participants until IRB Certification is obtained.*
- If any change occurs in the procedure, sample size, research focus, or other element of the project impacts participants, the IRB must be notified in writing with the appropriate form (see ancillary forms).*
- Please allow 30 days after receipt of a complete application for processing.*
- DO NOT COLLECT DATA PRIOR TO RECEIVING
IRB CERTIFICATION**

APPENDIX F**CITI Collaborative Institutional Training Completion Report–Tschudi**

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)

AU STUDENTS CURRICULUM COMPLETION REPORT

Printed on 01/19/2014

LEARNER Christian Tschudi (ID: 3948044)
PHONE [REDACTED]
EMAIL [REDACTED]
INSTITUTION United States
EXPIRATION DATE Argosy University
01/18/2019

AU STUDENTS
COURSE/STAGE: Refresher Course/2
PASSED ON: 01/19/2014
REFERENCE ID: 12116114

REQUIRED MODULES	DATE COMPLETED	SCORE
SBE Refresher 1 – Defining Research with Human Subjects	01/19/14	2/2 (100%)
SBE Refresher 1 – Privacy and Confidentiality	01/19/14	2/2 (100%)
SBE Refresher 1 – Assessing Risk	01/19/14	2/2 (100%)
SBE Refresher 1 – Research with Children	01/19/14	2/2 (100%)
SBE Refresher 1 – International Research	01/19/14	2/2 (100%)
SBE Refresher 2 – Federal Regulations for Protecting Research Subjects	01/19/14	1/1 (100%)
SBE Refresher 2 – Defining Research with Human Subjects	01/19/14	1/1 (100%)
SBE Refresher 2 – Research with Children	01/19/14	1/1 (100%)
SBE Refresher 2 – Research in the Public Schools	01/19/14	1/1 (100%)
SBE Refresher 2 – International Research	01/19/14	1/1 (100%)
SBE Refresher 1 – History and Ethical Principles	01/19/14	2/2 (100%)
Informed Consent in Social & Behavioral Research	01/19/14	1/1 (100%)
SBE Refresher 2 – Assessing Risk	01/19/14	1/1 (100%)
Argosy University	01/19/14	No Quiz

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid Independent Learner. Falsified information and unauthorized use of the CITI Program course site is unethical, and may be considered research misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Program Course Coordinator

APPENDIX G

**CITI Collaborative Institutional Training Completion Reports–Dissertation
Committee**

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)**AU FACULTY & COMMITTEE MEMBERS CURRICULUM COMPLETION REPORT**

Printed on 08/22/2014

LEARNER Marguerite Chabau (ID: 2000906)
[REDACTED]
DEPARTMENT USA
College of Business
PHONE [REDACTED]
EMAIL [REDACTED]
INSTITUTION Argosy University
EXPIRATION DATE 08/21/2019

AU FACULTY & COMMITTEE MEMBERS

COURSE/STAGE: Refresher Course/2
PASSED ON: 08/22/2014
REFERENCE ID: 13747337

REQUIRED MODULES	DATE COMPLETED	SCORE
SBE Refresher 1 – History and Ethical Principles	08/22/14	2/2 (100%)
SBE Refresher 1 – Informed Consent	08/22/14	2/2 (100%)
SBE Refresher 2 – Assessing Risk	08/22/14	1/1 (100%)
Argosy University	08/22/14	No Quiz

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid Independent Learner. Falsified information and unauthorized use of the CITI Program course site is unethical, and may be considered research misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Program Course Coordinator

Collaborative Institutional
Training Initiative
at the University of Miami

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)**AU FACULTY & COMMITTEE MEMBERS CURRICULUM COMPLETION REPORT**

Printed on 10/22/2014

LEARNER

Kathleen Cornett (ID: 4471585)

DEPARTMENT

Business

PHONE**EMAIL****INSTITUTION**

Argosy University

EXPIRATION DATE

10/21/2019

AU FACULTY & COMMITTEE MEMBERS**COURSE/STAGE:**

Basic Course/1

PASSED ON:

10/22/2014

REFERENCE ID:

14377689

REQUIRED MODULES	DATE COMPLETED	SCORE
History and Ethical Principles - SBE	10/18/14	5/5 (100%)
Assessing Risk - SBE	10/20/14	5/5 (100%)
Informed Consent - SBE	10/20/14	5/5 (100%)
Argosy University	10/22/14	No Quiz

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid Independent Learner. Falsified information and unauthorized use of the CITI Program course site is unethical, and may be considered research misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Program Course Coordinator

Collaborative Institutional
Training Initiative
at the University of Miami

APPENDIX H

Condensed Statements of the Interview Process

APPENDIX H

Condensed Statements of Interview Participants

- 1. What are your impressions, as detailed as possible, now that you've been introduced to and experienced a mental training technique, such as mind programming, for the first time?**

C1

Mental training was a completely new topic to me.

Still, there's something which is not really new to me, as I plunged into my imaginary world before attending the mental training workshop.

New to me is that one experiences everything in a conscious mode, comparable to the stage shortly before falling asleep.

The place, I reached after counting myself down, is still in best memory.

As you are a first time user of such a mental technique, would you do it again?

Yes.

C2

I left the workshop very positively, very relaxed, calm, and with good feelings. I did not expect that.

As per today, I'm able to remember the occurring pictures very well, especially the elevator ride when I counted myself down, and the relaxation place.

The procedure of the mental training workshop was very likable.

I enjoyed the advantages of an individual training, the intensity and the attentiveness.

I was introduced to all possible options using mental training techniques.

As you are a first time user of such a mental technique, would you do it again?

Yes.

C3

I remember the beginning of the mental training workshop very well doing an exercise which demonstrates people's mental strengths. It showed what anyone can reach using a mental training technique, such as the relaxation technique.

I also remember the goal programming quite well. Due to the fact, that the procedure as well as the environment were more technical and factual (versus an esoteric process and environment), I was a bit reluctant and therefore chose a more or less simple business objective which I finally achieved. The procedure was very intensive, and I still can't get the chosen objective as well as the programmed wording out of my head.

I have used the relaxation technique during car rides, because this is a neutral zone between workplace and home. I was always aware of what I was doing.

I didn't follow up on the problem solving technique though. However, the programmed solution is on a positive track which goes along with my increasing self-confidence. I should reuse the problem solving technique more often. I recognized that doing mental training exercises can have an enormous impact on someone's life.

As you are a first time user of such a mental technique, would you do it again?

Yes.

C4

For me the entire topic was highly interesting, especially in relation to the theme 'work-life balance'. I thought that mental training could support the pillars of my life (job, family, leisure/sports). The main point of interest was to get some ideas how to achieve my work-life balance.

Questions came up such as "What's the benefit of it?", "How high will the level of efficiency be?", and "Does mental training provide me with extra strength for any situation?." To any of those questions, I received suitable and satisfactory answers.

The topic (mental training) was of high interest to the entire management team, particularly in this critical phase of change and transition.

The theme 'work-life balance', on the other side, seems to be taboo; nobody wants to admit that he or she struggles with self-management issues.

After the workshop, I was still concerned with the topic 'mental training'; I also talked about it with my family members.

An important thought was that I don't necessarily have to start in my business environment doing mental training exercises; I could also start in my private life, because personal improvement would also benefit my business performance.

I have executed my mental training exercises during car rides as I'm spending more than two hours per day in the car. During those car rides there is also an atmosphere of calmness.

I did complete the goal programming by taking the elevator down, and watching me on the big screen. I repeated the session several times - with every repetition the picture got clearer. The goal, I was focused on, was the outlook and the well-being of my person which is at the same time the center element of my work-life balance. I imagined that I'll be slimmer, fitter, better looking, more active and better performing than before.

The ongoing refinement of the received pictures and images caused the central question "Do I really want this?"

After achieving my goal, I stopped doing mental training activities for a while. I should pick it up again now (otherwise it's hard to restart it later again).

At the beginning of the workshop, too many pictures occurred to create the optimal image of my person. Later, with all the repetitions, the mental training process including all the visualization effects was easier to handle.

The final image of the goal is all-time present and programmed deeply.

As you are a first time user of such a mental technique, would you do it again?

Yes, I would do it again. At the moment everything runs smoothly, that's why I don't need to apply any mental training right now. But I will definitely do it again.

C5

Mental training is nothing new for me.

The relaxation technique used by mind programming is similar to exercises in martial arts, where power and performance are generated from a relaxed state.

The programming part was new to me and very interesting.

The entire system is built logically and comprehensibly and is therefore highly acceptable, particularly for people in the Western world (who do not just believe in things but need to understand what they are doing).

I often use relaxation techniques (e.g. meditation).

I have used the goal programming technique; it worked out well.

The challenging part is to stay focused on the task (e.g. the goal to be programmed), and not be distracted from any background noise. A calm environment seems to be important to successfully manage the things you want. Not getting distracted by any background noise may also depend on the level of experience.

The length of time of the workshop was sufficient but it seems to be important to get a refresher course after three to six months.

A group training seems to be more effective than doing an individual training, especially if a new topic is introduced, and it is always helpful to receive feedback from other participants.

A group size of five to six participants seems to be ideal.

Mental training requires high personal discipline, especially to successfully apply the goal programming and problem solving techniques. It's all about following a systematic routine combined with pre-defined repetitions. But I assume that any training in sport or business needs personal discipline to be effective.

As you are a first time user of such a mental technique, would you do it again?

Yes, in any case I'll do it again. Also, because I successfully completed the mental training exercises, and finally achieved the desired results.

It may be a big challenge to keep on using mental training when there are no satisfying results.

However, just look at some impressive examples in sport showing that a mix of physical and mental work paired with high personal discipline can bring you back on track (example in tennis, Stan Wawrinka, and in skiing, Lindsey Vonn).

C6

The workshop was very impressive.

I enjoyed the relaxation exercises which were very effective. This mental training technique (relaxation method) offers a very quick way to get in a calm and

relaxed mode. Until today, the relaxation technique is something I still use quite often.

The programming of a goal, as instructed in the workshop, was completed successfully.

The technique of solving a problem has not been followed through as instructed in the workshop; sometimes an occurring problem disappears without taking any action.

My focus was clearly on goal attainment and practicing the relaxation technique. My approach is, to test and try out any new method.

As you are a first time user of such a mental technique, would you do it again?

Certainly, I will give that method (mind programming) a try again.

Maybe, it will be even more effective compared to the first time.

The relaxation technique was very effective. I've adapted the method to my own liking and needs.

2. Tell me about your experiences when going through each of the four phases of this mental training technique. What did you like/dislike, and how did you complete each phase?

C1

In summary, all phases could be completed without any problems, in a reasonable time, and with positive results.

a. How have you experienced the introduction phase?

The introduction phase was very informative. To define and evaluate a goal needs a good amount of time. This topic (evaluating and programming a goal) could have filled a workshop easily.

A central thought came up: „What do I really want? .”

b. How have you experienced the relaxation phase?

I counted myself down to a place of relaxation which probably will stay in my mind forever. It was a very impressive and pleasant process.

c. How have you experienced the programming phase?

It is a difficult and challenging procedure, and needs a lot of discipline.

I think you can complete this phase with the desired results if you strictly follow the programming procedure, and are convinced that you will achieve what you've programmed. It is like a balancing act between what seems possible (to you) and the impossible.

d. How have you experienced the reactivation phase?

That went quickly and without any difficulty.

C2

I did complete all phases without major issues. One should practice those things (mental training exercises) on a regular basis - just relaxing, maybe taking a glass of wine, and starting to count you down to your favor place of relaxation. But human beings, I think, are not that disciplined to follow a training schedule on a constant basis.

a. How have you experienced the introduction phase?

There was some intriguing information, for example measuring brain activity in a sleep center.

Also, the exercises, to introduce the basic effects of mental training, were appreciated. Maybe those examples could be performed in a quicker way.

A more sensitive workshop environment (e.g. room with more ambience, comfortable seats, and a view to an appealing outdoor setting) would have been more inspiring than choosing a business meeting room. Location and environment could have some impact on mental training courses and its performance.

b. How have you experienced the relaxation phase?

That went really well. I am still using that method from time to time to just relax. Maybe it's even possible to count oneself further down to get into a deeper relaxation mode.

c. How have you experienced the programming phase?

For me, it was a very challenging and complex phase. I swayed back and forth to finally choose a suitable goal to be programmed. But at the end (after the workshop was terminated) I was unsure if I took the 'right' one as my chance of personal influence on the goal was below 50%. I've chosen a currently crucial customer project where more than one decision maker plays an important role. I think one should select an objective with an unrestricted personal impact. I should repeat the whole procedure, and (mentally) program another goal which I can get under control.

d. How have you experienced the reactivation phase?

I did not remember having any issues with this phase.

C3

Generally, it went well. Some efforts were needed to complete the programming phase.

a. How have you experienced the introduction phase?

The first phase was more of an identification stage to get acquainted with that unusual topic, as well as to find one's position (towards the topic).

I enjoyed this intro phase; it was timed well, and its content was helpful and interesting. The link between mental training and sport was very intriguing. I

didn't know that this topic is used in various sports so intensively and successfully.

b. How have you experienced the relaxation phase?

That went well. I was impressed how quickly and easily you can reach the level of relaxation. And it doesn't need much effort.

c. How have you experienced the programming phase?

That was the most challenging part. I needed some time to get adjusted to the procedure, and it wasn't easy to keep my focus (on the subject to be programmed). Also, it wasn't easy to finally evaluate a (suitable) goal as there were many emerging options. Finally, it went well.

I had some difficulties to get comfortable with the workshop location (room, seats, and environment) and its ambience.

d. How have you experienced the reactivation phase?

I found this phase was quite helpful and important to completely recover from the meditative state of relaxation.

C4

Overall, I successfully completed all phases. Very important and supportive was the visualization process throughout the entire mental programming procedure.

a. How have you experienced the introduction phase?

It was an important phase to get mentally prepared for the things to come. The introduction process was well scheduled; I was always prepared for the next step. An important message was that any of the programmed subjects or events had to follow the maxim 'for the benefit of all' (parties involved).

b. How have you experienced the relaxation phase?

I was quite focused on myself, and I received various pictures. Sometimes I asked myself if I really reached the required level of relaxation (alpha level).

Besides that, I achieved quite a high efficiency rate. But I would be more confident if I could receive a measured proof of how close I can reach the required alpha level.

c. How have you experienced the programming phase?

As I reached the alpha level I started asking myself what I actually want (at that stage). But as soon as I started the visualization process related to the desired goal, I was able to complete the programming process in a timely manner. And after the second and third time (doing my goal programming exercise) the mental image of my person got refined and much clearer. The entire programming process including the visualization benefited from its repetition and could be completed effectively.

d. How have you experienced the reactivation phase?

This phase is crucial to terminate the programming procedure. It can be done quickly.

C5

The most challenging part is the programming phase which needs time and concentration.

a. How have you experienced the introduction phase?

The first phase is mandatory but also intriguing, particularly for beginners. Every participant (of the workshop) received an overview related to the topic and information about different options how to use mental training. For advanced users, this phase needs to be offered in a more condensed way.

b. How have you experienced the relaxation phase?

For me, using numbers to get in a relaxed mode is just fine. I faced some difficulties and distraction when I tried to use other means, for example an elevator, to get down to the alpha level.

c. How have you experienced the programming phase?

This certainly is a challenging phase. I had some difficulties to stay focused during the programming process. I was distracted by background noises and emerging thoughts about all kind of things which bother me in my daily life. It seems to be crucial to find a way to concentrate on the important things. Somehow, I managed to evaluate and program a suitable goal which I finally achieved.

It could be helpful to invest more time in the programming part to do it more intensively.

The main challenge is focusing on priorities.

d. How have you experienced the reactivation phase?

That went well and without any issues. I did it almost too quickly.

C6

The entire workshop was very informative and rewarding. I enjoyed the mental training exercises, particularly the relaxation part. I could have done that the whole day.

I was a bit distracted by the low room temperature. I like it warm and cozy. You lose a lot of energy during those exercises, and then the temperature of the environment feels even lower. I can still feel that cold atmosphere.

A lot of images emerged during those sessions which are ever-present.

a. How have you experienced the introduction phase?

Sufficient information was provided about mental training and its mode of operation. For me, it's not necessary to receive details about a method's

functionality, such as the impact of brain waves. If an applied method works that's just fine and satisfactory; I don't need to know specifics of how it works.

b. How have you experienced the relaxation phase?

That is my favor part of mental training. I still remember this phase including all the pictures very well.

c. How have you experienced the programming phase?

This phase is difficult to master. But I think it (the programming phase) is the core piece of mental training. It seems to be very important to do all the exercises step by step, to take easy-to-achieve goals at the first time of utilizing a (mental training) technique, and to repeat all the steps a few times.

d. How have you experienced the reactivation phase?

That was a very easy process and went well.

3. What feelings or emotions did you experience throughout the entire mind programming process?

C1

I felt emotionally comfortable during the entire mental training. A lot of thoughts came through my mind, for example „What do you really want?“ I assume there is a difference of what you wish to come through versus what you're able to achieve. During some exercises, I also had to fight off some emerging themes which I didn't want to deal with (emotionally).

Did you put in any additional emotions?

No.

C2

Emotions came into place when I had counted myself down reaching my spot of relaxation.

Also, it was interesting to me how calm and relaxed I was when I left the workshop.

As I wanted to keep the whole thing (mental training exercises) on a factual basis, I did not bring in many emotions. But if my goal was to marry my girlfriend, I would not hold back with any emotions.

It is not advisable to put emotions into business cases.

Did you put in any additional emotions?

No, I tried to follow the chosen factual goal configuration.

C3

During the workshop some surprising as well as reflective moments emerged; that's when emotions came into play. Also, positive feelings (emotions) such as *you can do this* or *that feels good* occurred.

In organizational settings I back away from any feelings or showing emotional behavior; in privacy it's the opposite. In other word, mental training in a business setting is used differently than in privacy.

Did you put in any additional emotions?

No.

C4

Basically, I did not use a lot of emotions. Still, some positive momentum emerged as I was quite engaged to find an optimal personal profile. Mental training just came in the right moment; I felt really well throughout the entire procedure. Mental training created a feeling of happiness in my case.

Did you put in any additional emotions?

No. I was more focused on visualizing suitable images.

C5

I have not been affected by any noteworthy emotions. Although, I would have accepted any emerging feeling or emotional moment.

Did you put in any additional emotions?

No.

C6

I left the workshop with a very positive and pleasant feeling. The entire day is still kept in best memory. All occurring emotional moments were right in place.

4. Tell me about the level of awareness (state of consciousness) you experienced throughout the entire mind programming procedure.

C1

I never drifted off during the mental training process. I was very relaxed though, calm and prepared.

During the entire workshop, did you experience the mental training in a conscious manner?

Yes.

C2

I perceived the mental training procedure in a conscious way.

I did appreciate participating in a one-to-one training session. There's no need to talk to other participants about your experiences, particularly if those are your working colleagues. I wouldn't mind joining a mental training workshop with people you don't know.

During the entire workshop, did you experience the mental training in a conscious manner?

Absolutely.

C3

In the relaxation phase, when I counted myself down to the lower level, I felt as if I were somewhere else. But I think that I was always aware of what I was doing. When I was doing my mental training exercises during the car rides, I was somehow relaxed, but I experienced everything in a conscious manner.

During the entire workshop, did you experience the mental training in a conscious manner?

Yes.

C4

I was always aware of what I was doing. I am using a self-adjusted breathing technique to get in the desired mode.

During the entire workshop, did you experience the mental training in a conscious manner?

Yes.

C5

The more you relax, the less you're aware of what's happening around you, and the less you perceive time. In other words, the deeper you go the lesser important are time and environment. Overall, I was fully conscious and aware of what I was doing all the time during those mental training exercises.

During the entire workshop, did you experience the mental training in a conscious manner?

Yes.

C6

To me, it is not important if you are 100% aware of what you're doing during the mental sessions. It's much more important that you are able to let go and let things taking their course.

During those sessions, I've lost my sense of time.

I noticed, if I tried to control the (programming) process, I was interrupted. That happened a few times; this may be due to lacking experience with such mental training procedures.

I like to go deep - the deeper the better. And it benefits my nature as I am a very nervous and active person. It makes me very calm and relaxed.

During the entire workshop, did you experience the mental training in a conscious manner?

Yes.

5. Tell me about any occurring visual effects, images, or imaginary items you experienced during the mind programming process. How did you cope with that experience?

C1

The mental training procedure, in particular the goal programming process, can be reinforced and intensified by using visualized elements such as images, pictures or moving pictures. But taking an enforced or fake picture may disturb the whole process or even have contra-productive effects, I think.

C2

I use visualization effects during the entire relaxation process, for example using a specific elevator to count myself down, and a picturesque scene as my place of relaxation. I also visualize the final product of my programmed goal. Generally, I am using three-dimensional pictures.

To me, pictures or imaginative subjects are much more important than numeric objects or statements.

C3

Finally, (after I received a variety of pictures) I was successful in choosing suitable pictures which are still very clearly in my mind.

However, I prefer to work with alphanumeric objects instead of imaginative elements or pictures.

In business settings, where facts and figures are required, I am used to work with numbers and letters. In privacy, dealing with personal affairs and emotions, I'd rather work with imaginations and pictures.

C4

Interesting to me was that I could visualize myself regardless of the location. I could picture myself in private settings as well as in any business situation, for example in a sales process. I was even able to see myself in an optimum shape and under ideal conditions.

Visualization is the central part of a mental training or programming procedure. As in any sport setting, only with clearly visualized goals one is able to achieve exactly what's desired.

Successful and satisfying visualization effects usually lead to positive feelings. I remember that type of feeling when I was in best shape, years ago. I'd like to experience the same feeling again.

C5

Imaginations and pictures are very important (in a mental training process). The visualization procedure is very challenging though, particularly to get clear pictures and to be able to get a hold on them. This only happens when I'm focused. When I lose my focus, those pictures disappear quickly.

It makes you feel very happy and confident if pictures occur and stay.

I think it is highly crucial to create pictures for the goals you intend to achieve. And after the goals are achieved, you may very well remember those visualized momentums.

C6

Pictures are the center of a mental training process. For me it was easy to receive pictures. Maybe this has something to do with my job as chief developer using the power of imagination and visualization a lot.

For my purposes, visualization effects are highly important, much more than any sound effects or emotions. Another important thing is, particularly related to the performance during a four hours workshop, to feel comfortable. That also depends for example on a welcoming-warm room temperature. It was rather cool during our workshop.

6. Tell me about other occurrences or events you may have experienced throughout the entire process of mind programming.

C1

Related to goal programming, I found a suitable goal and programmed it the way suggested, and finally achieved it.

I've also talked to a colleague about the workshop and its topic. He explained that he also attended a mental training course sometimes ago; he is convinced about the topic's effectiveness.

C2

For me it was quite stunning how quickly one is able to achieve a status of satisfaction by using the relaxation method. If you're taking the time to do it right, it's possible to reduce or even fade out stress.

The entire process of applying a mental training technique is agreeable and reasonable as there is a systematic structure divided into four phases. It is an uncomplicated, not esoteric, and easy-to-comprehend procedure.

C3

It was good having my working colleagues around at the mental training workshop. A positive momentum was generated through the fact that we all intended to achieve something together. I imagine we all (participants) could program and achieve an objective which we have in common.

Since completing the workshop, it occurs to me that I am acting and reacting in a much calmer way. Ask my wife, she would agree.

I learned that previous to any of my reactions or emotions, I take a deep breath and after that I act/react more calmly. I realized that I achieve much better results with my new behavior.

Today, in any private or business situations, I'll take time to relax using the relaxation technique, practiced in the mental training workshop, before taking any action or reaction. I think that it benefits the results to be achieved; I am much

more focused. Nowadays, when I attend a business meeting, I am also much more focused on relevant issues.

C4

I talked to a few friends, who currently face a challenging job situation, about mental training and its effectiveness. I also explained to them what we completed during the workshop. Many of them were thrilled about the possibilities and could picture themselves doing the same or something similar.

In addition to that, I experienced that my past vacation generated similar (positive) effects compared to the outcome of mental training.

Finally, after I completed my mental training exercises, I gained new power and energy to strengthen my work-life balance. It was a wise decision to participate in a mental training workshop. After all, any decision leading to the desired results generates positive momentum.

C5

According to my experiences, it is crucial to believe in the principle that 'faith can move mountains'. If this basic thought is established, the whole thing (mental training) works.

To me, as a sportsman, the effectiveness of mental training is obvious and logical. Business people may judge mental training as an exotic thing. I think if business individuals would be introduced to the entire training procedure of athletes, mental training may become more acceptable.

Many business executives watch top-class sport on TV, but only a few may reflect about what it needs to get there (as successful athlete).

In earlier times, my parents used a form of mental training, autogenous training, to effectively overcome a partnership crisis. So, mental training techniques are nothing completely new to me, and also highly acceptable.

Still, many individuals may smile at those who utilize mental training. That's ok. People who first used an umbrella had a hard time too; today, everybody carries one.

C6

The entire mental training workshop was a well-rounded and complete event, and resulted in very positive, joyful feelings. From that moment on I knew that I will continue with mental training.

I want to point out that I'm frequently using the relaxation technique to be well-prepared for important meetings and decisions, and to control my behavior in a positive way.

A group dynamic was created throughout the workshop resulting in a team spirit which could be well-used for achieving a mutual objective. After the workshop I received very positive feedback from any of the participants.

I assume that about half the people in my department (counting 15 individuals) would give it a try to learn more about the topic; the other half would probably refuse to participate.

A way to introduce the topic (mental training) to an organizational group could be by following the motto “open your mind.” As we are facing a crucial change process right now, this could make a lot of sense, above all because we do have to change our mindset anyway.

7. In what ways could these mind programming experiences be helpful or meaningful for your personal use?

C1

With increasing age and experience, the importance of setting and achieving goals is growing. Some may develop their own technique to handle that.

One should choose and set goals, which one can absolutely believe in and also be engaged to achieve those. It is also important to do something for it, sometimes this works automatically and unknowingly.

A lot of time it is a matter of practice.

If there is no faith in achieving a goal, this can be quite obstructive.

It needs a lot of enthusiasm and excitement to conduct and complete a mental training session; this may be comparable to a sales process.

Throughout the past, I am more the type of person to deal with facts and figures, visible and tangible things. I did never attach any value to spiritual and mental stuff.

C2

For quite some time now, I am asking myself how to proceed with my job and generally how to reorganize myself - I'm pretty sure mind programming could help in finding some appropriate ideas and decisions. It would have been very interesting to know what would have happened if I previously started with mental training.

Basically, human beings are lazy, and usually one doesn't take time to start something as mental training, and try to consequently work with it (mental training technique). Additionally, people (me included) have a hard time to pause to think how they could do something in another way using a method such as mind programming. I should have done this more often just asking myself “What am I doing right now?” and “How can I reach the things I (really) want?”

Perhaps it needs some routine, some constant exercise to do things as stated above.

C3

After I participated in the mental training workshop, I do find the whole thing (mental training) and the relaxation technique in particular very intriguing and important.

It is sort of striking that over the years, one never got involved in the topic of mental training, and after being introduced to it (mental training), one just likes it, especially its mind-blowing effectiveness.

I should have started using mental training ten years ago.

The advantage and benefit is huge, in particular when using it in stressful situations, e.g. in a family dispute or in critical discussions.

C4

In my case, it wouldn't matter if mental training is applied for private or business purposes; at the end it's important to achieve a work-life balance.

Perhaps, one should even start to apply mental practice within the personal environment achieving goals and solving problems, and then continue to focus on job and business issues. In an organizational area, you may also face other people's interest and influence.

Another thought is, that one should strive to achieve an individual work-life balance previous to approach business objectives. This may be considered in one of the future mental training workshop for business executives.

C5

Mental training application could be highly interesting and effective in relationship matters, particularly in conflict situations, for example, to achieve compromises in difficult personal conflicts with an approach of openness and readiness for mutual understanding.

For this kind of situation, the problem solving technique using different mirrors (as exercised in the workshop) would be suitable. In my case, it worked out successfully and satisfactorily.

C6

After attending the workshop I started applying mental training; preferably I enjoy using the relaxation technique.

Mind programming can be very well used to either find or achieve goals. For me, being aware of having goals and to achieve them is essential in life.

Mental training needs to be taught and exercised step by step; one may start by focusing on smaller, easy-to-achieve goals, and continue with more complex ones.

Mind programming could be used only to evaluate and define goals.

There's enough proof and evidence that mental training is successfully used in sport. In ski-jumping, for example, if you look from the top down to the take-off ramp, and later to successfully master the jump, it needs more than just being physically fit, right?

Mind programming works very well for instant relaxation. It's doable in the office wearing head phones.

8. What is your opinion regarding the use of mind programming in an organizational environment, particularly during a transition phase?

C1

The achievement of goals is certainly a suitable subject matter when using mental training. It's important though to keep individuals on task, those in particular who are affected by organizational change, and pass through a transition phase.

In a stage of transition, an atmosphere of consistency and calmness needs to be created. People also need to recognize progress to have faith in what's happening.

An image of the future status (after change and transition is completed) could be a very interesting subject supported by mental practice respectively mental imagery, in particular for those who are affected by the transition.

C2

In an organizational environment there's permanent stress and no moment of pause compared to private life. That's why it's much harder to execute mental training in a business setting than at home.

Still, there should be room to step aside for a moment, perhaps ten minutes, to take an office break, and to do a relaxation exercise.

Some corporations, such as Google and Microsoft, have established quiet zones. I can imagine that these areas contribute to individuals' well-being. One may benefit from frequently utilizing such zones (and doing some mental practice). Mental training could be used as amplifier for goal achievement, no matter what goal needs to be attained.

In the field of communication, in all kind of directions, for example with your boss, subordinate, client etc., using a mental technique may be quite effective. In critical discussions it (mental training technique) may help to control upcoming emotions, and create a more productive conversational atmosphere.

So far, I focused myself on using mental training for relaxation and goal achievement.

Still, utilizing a mental training technique may support any challenging negotiation and help to face very difficult counterparts. Even if I'm not able to change a counterpart's character, I may adapt my own behavior towards the other person to achieve a desired outcome of the meeting; at least I could try.

C3

I would use mental training for factual topics utilizing the relaxation technique to handle a business issue in a very calm way. There are so many hectic moments in our professional life.

For example, if you're facing a crucial customer call or an upcoming problem solving event which requires immediate action, one may use the relaxation method to control any upcoming emotions and to stay focused on the issue to be handled. Mental training techniques could also be applied in discussions with organizational members, subordinates or leading managers, to handle any kind of issues in a more controlled way.

Also, particularly in change situations, when you have to let go from different things, for example to dismiss an employee or to adapt to a new situation, one may benefit from doing that in a more relaxed way. This may also strengthen your self-esteem after all.

It is also highly important to focus on things and processes you are able to have a personal influence on. Using mental training for things you're controlled by

others or which depend on external factors, such as business plans or budgets, may not be very effective, I think.

Mental training shall be only applied in situations you have a personal impact on, and where behavioral activities or emotional aspects come into play.

In auditing processes, where you need to cooperate, solve a lot of problems, and stay very much focused, you may benefit from previously completing a mental training session to act in a relaxed mode, and to be as highly effective and efficient as possible. This needs a lot of exercises. Some day you may create your own personal reset button to quickly reach a desired way to act.

C4

In an organizational environment, I imagine it would be possible to mutually evaluate and specify an organizational objective, and program it among the concerned members for the well-being of the organization, for example, to build up a new business idea, and to reach a profitable growth.

The entire procedure could be visualized with all its consequences, such as new office environment, product specification, customer situation, and business outcome.

This may also lead to a new corporate identity which is pictured by all contributors as well as lived by them. This process requires mutual understanding and some efforts to make this happen.

Mental training techniques may also be applied by programming personal goals which contribute to organizational objectives.

C5

A company following a vision and using strategies is focused on goals in different organizational levels. Mental training could be used by organizational members to achieve objectives they're able to control. Mental training may help to focus on any objective which can be influenced by an organizational member. This may be an effective as well as efficient approach.

Maybe it would be possible to focus on a functional area, such as development, quality management, marketing and sales, or project management. It could well be that there are different approaches to obtain acceptance from these area to try out mental training techniques. Well, at least it worked well within the business executive team. And possibly, one should take care about those individuals who are working against participating in a mental training course.

At this point in time, business growth is a topic of very high interest. So, for example, individuals from the marketing and sales force could be selected to do a brainstorming workshop *how to grow our business* with the support of mental training techniques.

Another idea could be to use mental training for team building events and conflict resolution. Particularly in change situations, forming new teams may generate personal reservation and resistance. Using mental training methods, such as the relaxation and the mirror techniques, could be an approach to prevent upcoming issues.

C6

In business, using the relaxation technique as an important element of mental training could help to empty employees' heads of the numerous things which are around them. Making use of mental training will also enable organizational members to focus on top priority tasks and events, and help them to differ between highly important and unimportant things. There are only limited resources (in a company) which need to be treated carefully and efficiently.

There's no need to step on the brakes but sometimes one shouldn't push the gas pedal to hard. It's not all about the performance of individuals, it's more important that an entire organization is able to catch up with all the things to be performed. Particularly in change situations, organizational members shouldn't be pushed too hard to perform but rather be enabled to deliver their best possible performance. This could be supported by using mental training.

Mental training can be introduced to newcomers by distributing flyers containing specific information about mental training techniques and its effectiveness. But it's more effective to inform about mental training through a workshop which includes general information, examples from applicants in different domains, and exercises - just as we did. A personal and emotional way of introducing such a delicate topic (mental training) is much more effective than using an anonymous channel, such as flyers, TV or PC sessions, to distribute relevant information and present examples and exercises. There is always a personal momentum in introducing intangible subjects which should inspire and encourage first-time users to give it a try.

Subsequently, it needs follow-up events with Q&A sessions and repetition of exercises. A successful and sustainable application of mental training depends on guided repetition of exercises to facilitate and implant the procedures.

9. Tell me about any preconceptions or fears you had or still have about using a mind programming technique or similar methods.

C1

For me, mental training is linked to spiritual things and processes. This may have something to do with my early childhood where things like meditation, or mental practice were rejected. So called soft facts, such as fine arts or spiritual things, had never been an issue in my past.

Later, I was curious about those things (e.g. mental training), and I have tried out a few methods but without success. I have also read many books referring to contents which were banned in earlier times, and I listened to classic music; things which were tabooed at that time.

C2

I did not have any biases related to mental training. In this case, maybe I was positively influenced by my father's hobby as a dowser.

I was very curious about experiencing that topic and the offered workshop.

C3

I am open for new things, and I also like to try out unconventional methods such as mental training. On the other hand, I may be highly skeptical if it turns out to be an esoteric event.

More and more, I do accept to consider gut feelings before making any decision, despite all the occurring facts and figures in my professional environment. I have been quite successful (listening to my gut feelings) lately.

I had a neutral point of view towards the topic (mental training).

C4

Maybe I was somewhat skeptical towards the topic (mental training), but finally I was open minded when I participated in the workshop, and also curiously interested. For me it was like a greenfield approach.

And I'm aware that some individuals may smile at that topic.

I am convinced that if you really want to achieve something, it is definitely achievable. You can reach almost any goals even if its bar is set very high. The only question remains if you are willing and able to pay an adequate price for achieving it.

The topic (mental training) may also have an esoteric touch. Mental training or similar methods only work for those people who believe in it, and for those who are willing and able to just let go and give it a try.

C5

I never had any preconceptions or biases toward the topic (mental training), even though I am rather refusing esoteric events.

I have been always a big fan of martial arts, and I have faced some unbelievable and very impressive things when I've joined martial arts events on the Philippines. For example, I saw a 70 year old guy doing the splits without warming up in advance. From that moment on, I believed in the power of thoughts, and I also learned that there must be something else than just doing physical exercises.

Since then, I knew that the phenomenon of mental practice will always get my fullest attention without ever questioning its effectiveness.

C6

There weren't any preconceptions. All new methods are worthy of being examined and tested. I'm open for new things as they might be useful. The Asian philosophy of Ying & Yang, where everything somehow fits and does not exclude anything, seems reasonable.

10. What elements/details of this mind programming technique would benefit from change or improvement?

C1

A repetition of a mental training workshop is essential, or at least part of it, particularly for first-time users. It would also enable participants to redo the exercises in a more efficient and time-saving way.

Through mental training people get inspired to relax, to look inside and be concerned with their own interests asking themselves “What do I really want?”

The size of the workshop group (of participants) was just right.

There was no pressure to do or achieve something as all individuals participated on a voluntary basis.

The mental training workshop worked well for me. I can’t compare it though to something similar as this was the first time participating in a mental training.

C2

The goal programming technique needs to be frequently practiced. Applicants shall be directed explicitly to work with pictures, in other words visualizing what they intend to do.

The same is true for using the problem solving method (mirror technique).

First-time users of mental training techniques can’t be educated with a single workshop. Beyond that, refreshing courses need to be offered periodically, for example after four to six months, just to make sure the topic (mental training) is still being applied.

One thing is to learn and comprehend the technique(s); the other thing is to maintain a discipline of keep on doing mental practice. This discipline could be supported by engaging a coach who pushes applicants in an acceptable and reasonable way.

The duration of an initial workshop of four to five hours seems to be sufficient. What matters is to do follow ups.

The selection of a creative workshop environment may be more inspiring than sitting in a businesslike equipped meeting room.

C3

I like the concept of the workshop to get a first training in mental practice. Still, one may add some physical movements; I’m not comfortable sitting for four to five hours in a chair which can’t be moved. Maybe, one should add some individually moveable and comfortable chairs to improve the workshop ambience.

One may also address a few more examples and situations where mental training is best used. Besides that, people who are used to touch things (and do not use their imagination a lot) may respond best to tangible examples and situations.

Besides goal attainment and problem solving, mental training is also well-suited to positively and constructively question situations and personal behavior for any kind of improvements.

C4

I perceived the mental training workshop as a dynamic event where in just a few hours a complex topic was addressed with theoretical as well as practical elements, and some highly surprising and satisfying outcome.

Creating a mobile app which contains some essential information and easy-to-apply exercises (e.g. the relaxation procedure) may support those who attended a mental training workshop and intend to use it (mental training) again.

The mental training workshop included various contents in a compact format; it was like a 'best of' program. The workshop may benefit if some of the elements would receive more weight than others. One could also create a separate workshop only referring to the subject 'goal evaluation and achievement', particularly how to create SMART (specific, measurable, achievable, relevant, timely) goals. This could be highly interesting and helpful for organizational members in all functional areas.

Also, it could be questioned if a one-to-one training is more effective than a group workshop, particularly in an industrial organization where individuals may approach the topic (mental training) in different ways. The big difficulty to introduce mental training to a group is the general acceptance of this topic with its intangible character. Diverging generations may approach that topic differently. I completed my mental training exercises while driving to the office in my car. I think this is a very innovative, time-saving, and suitable approach as random thoughts may occur during car rides anyway. Therefore it is also possible to deal with structured thoughts in a systematic way during those rides.

Anyway, future car concepts, where a car driver does not necessarily need to navigate the car, will allow the individual to use his or her time during car rides differently. As time could be used differently in the future, other things can be accomplished, and the level of performance may rise.

C5

It's rather individuals' discipline to practice mental training than technical issues which would require any improvement. The effectiveness of the mental training process depends on its consistent application. Time is certainly an important factor as well.

As soon as people find out about advantages or benefits related to the use of mental training, they would not hesitate to try it out.

Presenting comprehensive examples of professional athletes doing their mental practice would help to convince professionals in the world of business to have a closer look at it. Application of mental practice in the field of triathlon should have a very positive effect on business individuals who could reconstruct and understand how these athletes reach their finish line going through stressful and painful situations, and persist until they succeed.

C6

The biggest potential for any kind of improvement regarding the mental training workshop could lie in introducing individuals how to evaluate goals and later in the process guide them through a step-by-step procedure how to program a goal.

It's essential to start with an easy-to-achieve goal. After the goal is achieved one should try to focus on another, more challenging goal. And finally, complex and top priority goals can be mastered.

Any first-time user of a mental training technique shall divide his or her mental practice into manageable stages, from small to big, from simple to complex and from short-term to long-term subjects. This may lead to a quick gain in self-confidence and establish a sustainable pattern of doing exercises successfully. Developing sense for mental training can be compared to learning a new musical instrument. First, you should like to get to know the instrument; second, you must be willing to learn the basics; third, you need to repeat some exercises to improve the learned technique; and finally, you may develop some enthusiasm to play it every day.

Particularly for first-time applicants, mental training executed in a group is preferable compared to an individual training due to possibly received feedback from other participants. Also, some group dynamic may occur to encourage participants (of a workshop) to do things differently or just continue to practice mental training techniques beyond the workshop.

To apply mental training in a transition phase may depend on the level of acceptance related to the topic (mental training) and the positive attitude towards change. It may not work for those who are afraid of what's coming. For me, there's no good or bad change, it will just be different afterwards.