RESEARCH ARTICLE

Mindframing: a proposed framework for personal growth

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Abstract

To date, no frameworks are specifically targeted at managing personal growth in a holistic manner, as opposed to solely focusing on educational or professional outcomes. Most frameworks are concerned with the planning of people's career development, despite personal growth being considered a main pillar of psychological well-being. Following a discussion and definition of personal growth and its defining features, the paper proposes a framework for managing personal growth in order to help individuals achieve their potential through applied and iterative learning. The framework can also be used to enhance the theory and practice of personal growth.

Keywords: personal growth, self-development, mindframes, positive psychology

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1. Introduction

Personal growth, which can be defined as the life-long process of improving one's awareness of self and identity, developing talents, and building human capital to ultimately enhance one's quality of life and performance at work (Erikson, 1950), refers to the methods and techniques that support human development at the individual level. Alongside autonomy, environmental mastery, positive relations with others, purpose in life, and self-acceptance, personal growth is one of the six factors of psychological well-being described by Carol D. Ryff (1995) in her model, but its origins can be traced back as far as antiquity. Michel Foucault (1984) described how people in ancient Greece and Rome used techniques such as contemplation, confession, prayer, exercise and dieting to achieve personal growth. In his work *The Care of the Self*, he defines three main axes for personal growth: knowledge, power, and the self. Today, personal growth is more commonly achieved through life coaching, workshops, social interactions, time-management techniques, self-help books, and e-learning programmes (Griffiths, 2015; Pakrosnis & Cepukiene, 2015; Shoukry & Cox, 2018).

Personal growth is considered a change within a person that is affective, cognitive, or behavioural, and is generally thought of as positive, making the individual "more complete and fully functioning" (Prochaska & DiClemente, 2005). It was originally suggested as the motive to realise one's full potential in life (Goldstein, 1939), and then placed, with "self-actualisation" as the term to describe an individual's fulfillment of growth needs, at the top of the hierarchy of needs by Abraham Maslow (1943). In his theory of growth potential, psychologist Carl Roger (1961) argued that any individual can achieve their goals in life through self-actualisation in becoming all that one can be. Additionally, personal growth is a context-driven phenomenon: an individual may set personal growth goals to achieve a chosen goal,

such as completing an academic degree, or to accomplish an essential one, such as changing a particular behaviour (Jain, Apple & Ellis, 2015).

Related to this construct, personal growth initiative is a term that describes the process through which an individual actively and intentionally engages in the self-change process in any life domain (Robitschek, 1999). Personal growth initiative is an acquired skill set which pans cognition, behaviour, attitude and motivation (Robitschek et al., 2009). It finds its roots in positive psychology, a field of research and applied science focusing on developing mental strength as opposed to curing mental illness (Shorey et al., 2007). When an individual actively seeks out personal growth experiences and intentionally involves themselves in the growth process, they demonstrate personal growth initiative. Research has found a positive relationship between personal growth initiative—the active and intentional engagement in the process of self-change—and self-efficacy—a person's belief in their ability to succeed in a particular situation (Sharma & Rani, 2013). That is to say, to bring intentional self-change, an individual should believe in their ability to bring that change, and make appropriate plans and strategies to bring that change.

While there are many personal growth frameworks used in the professional and educational space, such as personal development plans (Tucker & Davis, 2011), most are concerned with the planning of people's career development. Furthermore, when research explores the effect of using a personal development plan on learning and growth, it is focused on the employee's job competencies (Beausaert et al., 2013). When assessing the effectiveness of personal development plans, it is often through the prism of the corporate organisation (Eisele et al., 2013). With freelancing and entrepreneurship on the rise (Osnowitz, 2010; Popiel, 2017; Von Bargen, Freedman & Pages, 2003), there is a need for a more holistic approach to personal growth. The goal of this paper is to propose such a framework for managing personal growth in order to help individuals reach their potential through applied and iterative learning and reduce the planning phase of personal growth, whether at school, at work, or to achieve personal goals.

2. The three mindframes of personal growth

Research has shown that deliberative and implemental mindframes had a positive impact on the self-regulation of behaviour, with the simple act of imagining the implementation of a plan to complete a task improving behaviour as well as cognition in individuals (Armor & Taylor, 2003). In education, the instructor's mindframes are considered an important component in the student's success (Hattie, 2016). The overall performance of personal growth—where the instructor, the student, and the assessor are effectively the same individual—can be enhanced with the integration of the following three key mindframes:

A. Growth mindset

A mindset is the established set of attitudes held by someone. A personal mindset is one's image of one's current and future self. Carol Dweck (2006) found that individuals who believe their intelligence could be developed (growth mindset) outperform those who believe their intelligence is set (fixed mindset). "In a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work—brains and talent are just the starting point. This view creates a love of learning and a resilience that is essential for great accomplishments," she writes in her book *Mindset: The New Psychology of Success* (Dweck,

2006). The growth mindset theory is supported by research on cognition which suggests that everyone has the potential to grow their intelligence (Sternberg, 2008). In addition, researchers have found a positive correlation between having a growth mindset and resilience (Yeager & Dweck, 2012; Zeng, Hou & Peng, 2016) as well as growth mindset and intrinsic motivation (Ng, 2018).

In coaching education, an individual's personal beliefs about their ability to achieve a goal heavily influences their behaviour and the ultimate effectiveness of the intervention. For instance, an individual with a growth mindset who believes that leadership abilities can be learned and acquired through effort and experience will achieve better personal growth than an individual with a fixed mindset who views leadership as an innate quality and believe that people are born leaders (Chase, 2010). Numerous studies have revealed that growth mindset has positive effects on motivation and performance (Blackwell, Trzesniewski & Dweck, 2007; Dweck, 2009)), shaping outcomes and behaviours including overall achievements, engagement, and willingness to attempt new challenges (Yeager & Dweck, 2012), which are crucial in personal growth initiative. In essence, growth mindset is the deep belief that personal growth happens through consistent, incremental work.

B. Metacognition

Metacognition, often described as "thinking about thinking" or "knowing about knowing" is the ability to understand and manipulate one's cognitive processes, and includes knowledge about when and how to use particular strategies for problem-solving or learning (Metcalfe & Shimamura, 1994). There are three main components of metacognition: metacognitive knowledge, which is knowledge of one's own cognitive processes; metacognitive regulation, which is the regulation of cognition—the way individuals monitor and control their own actions and decisions; and metacognitive experiences, which are the experiences through which knowledge is attained or through which regulation occurs (Flavell, 1979; Schraw, 1998). Metacognition is complex and can take many forms, including knowledge about memory and mnemonic strategies (Dunlosky & Bjork, 2013), planning by selecting the appropriate strategies and the correct allocation of resources to maximise performance (Jacobs & Paris, 1987), and assessment of one's own performance and overall knowledge of a concept (Molenberghs et al., 2016).

Metacognition can assist personal growth by helping an individual to understand, analyse, and contextualise current behaviours, performance, constraints and areas of improvement through self-monitoring, self-representation, and self-regulation of their cognitive processes (Demetriou et al., 1993; Jain, Apple & Ellis, 2015). In fact, the use of metacognitive strategies is linked to higher work motivation (Santisi et al., 2014), as well as better learning (Wiezbicki-Stevens, 2009) and better creative problem solving skills (Song & Park, 2017), which are all essential factors for personal growth. Using self-assessment to develop metacognition is particularly effective for self-directed learners, who have agency over the process and strategies before, during and after learning experiences, but the usual strategies of providing learning objectives to evaluate one's learning (Merkel, 2016) or incorporating the use of exam wrappers (Lovett, 2013) may be most appropriate in a setting with clear performance outcomes as measured by exams (Siegesmund, 2017). More appropriately, reflective writing, which has also been studied in the academic space, has been linked to increased metacognition and may offer a

self-assessment method that allows learners to make connections between their behaviours and outcomes and apply that knowledge to influence future learning experiences (Mair, 2012; Siegesmund, 2017).

C. Self-authorship

Self-authorship is the internal generation and coordination of one's beliefs, values and internal loyalties, and the self-belief in one's ability to rely on internal values in order to make decisions (Magolda, Meszaros, & Creamer, 2012). There are three main elements of self-authorship: trusting the internal voice, when the individual realises that although reality is out of their control, they can control how they react to it by using internal voices as a way to shape reactions to external events; building an internal foundation, when the individual combines their beliefs and values into a set of internal commitments from which to act upon; securing internal commitments, when the individual shifts from making internal commitments to actually acting upon them (Magolda, 2008). Self-authorship is constructivist and developmental in nature: as an individual creates knowledge, beliefs, and values by interpreting their personal experiences, their self-authorship continues to develop (Magolda et al., 2012).

Self-authorship is considered central to intrapersonal and interpersonal growth (Magolda & King, 2008). It is not only linked to better performance outcomes, but to better critical reasoning, cognitive thinking, motivation, and internally defined values which support individuals in taking charge of their own lives through developing their goals and beliefs (Magolda, 2007). The ability to see knowledge as fluid and learning as a life-long learning process is central to both self-authorship and personal growth initiative, with a shift in focus from simply acquiring new information, to actively organising and making meaning of experiences, challenging one's assumptions about knowledge itself, and adapting to ever-changing external conditions in order to continuously grow as an individual (Magolda, 1999).

It is worth noting that the nature of personal growth may be culturally-specific. Other areas that concern the perception of the self have been found to vary depending on an individual's culture. For example, the attitude towards self-enhancement—as defined as the motivation to pursue a positive self—differs between Western and Eastern cultures (Cai et al., 2016). While this view is disputed, researchers have posited that while individuals in Western culture are motivated to self-enhance, those in Eastern culture are motivated to self-efface (Kitayama et al., 1997; Heine et al., 2000). Similarly, research shows that happiness is less valued in Eastern cultures than Western ones (Eid & Diener, 2009), with harmony being ranked higher than personal fulfillment in many non-Western cultures when it comes to the most important goals to pursue in life (Uchida, Norasakkunkit & Kitayama, 2004). Research in cross-cultural social psychology suggests that the differences in autonomy and individualism across cultures may also have implications for personal growth (Chirkov, 2008).

3. Existing personal growth frameworks

Several personal growth frameworks exist, but are currently limited to either education or work, and are lacking structured methods to implement personal growth strategies. In the case of education, the unique characteristics of students samples make them more open to external influences than the general population (Sears, 1986), which does not align with the self-authorship mindframe of personal growth. In the case of work, most personal growth frameworks in the workplace are based on a deficit

model in which an individual's weaknesses are seen as their greatest opportunity for growth (Van Woerkom et al., 2016). These existing frameworks still offer interesting insights in the way individuals and organisations currently manage personal growth.

A. Education frameworks

A few personal growth frameworks are targeting students in an academic setting. For instance, the Strengths, Improvements, and Insights (SII) framework focuses on self-assessment as a tool for improvement (Beyerlein, Apple & Holmes, 2007). Originally used as a way to communicate feedback, an SSI assessment first notes the strong points of the individual's own performance; the areas in which their performance could be improved along with suggestions for how the improvement could be made; and insights that might help the individual in other contexts (Wasserman & Beyerlein, 2007). More complex, the Learning Process Methodology (LPM) is made of ten steps designed to support the creation of new knowledge: (1) defining the "why" behind the motivation to learn; (2) stating the learning objective; (3) indicating the performance criteria; (4) reviewing the instructions and materials; (5) identifying prerequisites such as prior skills necessary as a foundation for new learning; (6) creating a study plan; (7) transferring learnings to a new context; (8) solving more complex types of problems; (9) researching and designing new ways to investigate applications related to the topic; (10) assessing one's growth (Leise, Beyerlein & Apple, 2007). While comprehensive, this framework assumes an academic environment where the student will be guided through the content, with instructions, materials, and clear prerequisites. The ten steps also create a longer feedback loop, with the self-assessment component only addressed after going through a lengthy learning process. Finally, personal development planning (PDP) is a framework used in education to help students prepare for the professional world through career planning, with a focus on identifying and highlighting personal skills against employers' requirements (Tucker, Duncan & Davis, 2011). Rather than a personal growth framework, PDP may be more accurately described as a tool used in education for career guidance (Mittendorff et al., 2008) to get an overview of desired future plans (Beausaert et al., 2013). As such, research suggests that PDP may be more effectively used in the workplace (Kneale, 2007).

B. Workplace frameworks

Other personal growth frameworks are targeting employees in a professional setting. PDP is more commonly used as an assessment tool embedded in a larger assessment cycle of performance reviews for employers to document information about the current and potential competencies of employees (Hagan et al., 2006). While considered a crucial practice within human resource management which can lead to increased employee engagement (Fletcher, 2019), it is often led by a supervisor and limited to professional development (Beausaert, 2011), which does not align with the self-authorship mindframe of personal growth. In a society where employees are confronted with the challenge to continuously update their knowledge and skills (Hashim, 2008), traditional episodic interventions need to evolve into broader notions of continuous growth, including voluntary activities that correlate to long-term personal effectiveness (Hurtz & Williams, 2009). In fact, many employees do not know their personal learning goals and are not aware of the learning processes that will lead to those goals (Caffarella & O'Donnell, 1987; Doornbos, Bolhuis & Simons, 2004). While the education space is mostly focused on preparing for one's career as a driver for personal growth, researchers found that personal growth in the workplace is mostly an expression of employees' agency and

ability to cope with, appropriate, and shape their situation (Hennessy & Sawchuk, 2003). This is why the strengths intervention framework, based on strengths theory (Peterson & Seligman, 2004), has recently been explored as a method to increase feelings of competence, efficacy, and mastery in employees to foster personal growth, with a direct effect on general self-efficacy and an indirect effect on personal growth initiative (Van Woerkom & Meyers, 2019). This is a promising field of research, and strengths intervention may provide an effective tool for organisations that aim for self-directed learning among their employees.

4. The mindframing model of personal growth

Personal growth frameworks may include goals that define the end-points; strategies for reaching these goals; assessment of progress; stages that define milestones along a development path; feedback systems to provide information on changes (Obadara & Abatan, 2014). Built on the three mindframes of personal growth—growth mindset, metacognition, self-authorship—mindframing is a framework based on a cycle of commitment, action, reflection, and feedback. Mindframing is the active shaping of one's mindframes to achieve personal growth. It is comprised of four stages:

Pact	Rather than goal-setting based on the desired outcome, the first stage of mindframing consists in creating a private or public pact on a specific course of action. While planfulness—the ability to be strategic and organised in self-change efforts—is an essential component of personal growth initiative (Robitschek et al., 2009), overplanning can hinder personal and professional growth, and non-predictive, adaptive approaches are more efficient (Wiltbank, Dew, Read & Sarasvathy, 2006). The Pact stage focuses on identifying a few constructive actions that will, if consistently acted upon, bring the individual closer to their long-term objective.
Act	Resting on the theory of active learning, which posits that the only way a skill can be developed is through practice (Felder & Brent, 2003; Johnson & Johnson, 2008), the second stage of mindframing consists in performing repeatable and incremental actions such as solving relevant problems. The Act stage is the actual follow-through or doing of self-change behaviours. The actions must be both motivational and realistic, with an outcome of learning to do (skills), not just to know (factual knowledge).
React	Taking advantage of the generation effect, the phenomenon where information is better remembered if it is actively created from one's own mind rather than simply engaged with in a passive way (Jacoby, 1978; Rosner, Elman & Shimamura, 2013), the third stage of mindframing is an opportunity for reflection and feedback in which the individual internalises new concepts by producing and publishing their own content. Because receiving feedback that provides information specifically related to the task and that fills the gap between what is understood and what is aimed to be understood is essential to personal growth (Hattie & Timperley, 2007), the React stage allows the individual to both generate their own feedback through content creation, and feedback from peers through content publication.
Impact	Finally, in the fourth stage of mindframing, the individual steps further out of their comfort zone, a process which has been shown to improve personal growth (Jain, Apple & Ellis, 2015; Youn et al., 2014) and performance (White, 2009), and is particularly effective in self-directed learning (Gibbons, 2003). The Impact stage consists of larger experiential or creative activities that represent a significant challenge to the individual and require higher levels of preparation, commitment, and completion.

Table 1. The four stages of mindframing.

The four stages of mindframing—pact, act, react, impact (PARI)—are designed to enable individuals to manage their personal growth in a structured yet flexible way, which can be applied to all areas of self-growth, from education, to work, and wellness. In the case of education—for instance, learning how to code—the pact could be to code every day, the actions could include going through tutorials or solving code challenges, the reactions could be to create one's own tutorials or share videos about one's progress online, and the final stage to build a larger applications. In the case of work—for example, public speaking—the pact could be to practice once a week, the actions could include watching talks, taking notes, and recording oneself giving similar short talks, the reactions could be to share longer talks of oneself online as well as techniques for public speaking, and the larger impact project to give a talk at a local event. In the case of wellness, the pact could be to train three times a week, the actions could include running, swimming, or going to the gym, the reactions could be posts on a sports or social media application, or longer articles about one's training routine, and a more challenging project could be to run a half-marathon.

Mindframing differs from personal development planning and other personal growth frameworks by its absence of formal self-assessment. As self-evaluation is based on judgement of actions or judgement of self and can lead to self-criticism, it can prove counterproductive by concentrating the attention on how others may perceive one's current performance, instead of putting the focus on strategies to improve the next performance (Beyerlein, Holmes & Apple, 2007). Additionally, people tend to maintain negative self-evaluations to gain a better sense of control over their situation (Epstein, 1992), as a negative coherent self-evaluation produces less distress and existential anxiety than an unstable self-evaluation (Epstein & Staub, 1980). To avoid the potential counterproductivity and distress of self-assessing one's performance, the mindframing method only measures whether the actions outlined in the Pact stage are being completed in the Act stage, regardless of perceived or actual performance. Additionally, individuals can assess their own progress through the reflective practice of creating and publishing content throughout their self-growth process.

The mindframing model relies heavily on the three mindframes of personal growth. In particular, a growth mindset is essential to the first two stages—Pact and Act. Metacognition is most useful for the Act and React stages. Finally, self-authorship is crucial for the React and Impact stages.

GROWTH MINDSET		METACOGNITION		SELF-AUTHORSHIP	
PACT		ACT		REACT	IMPACT
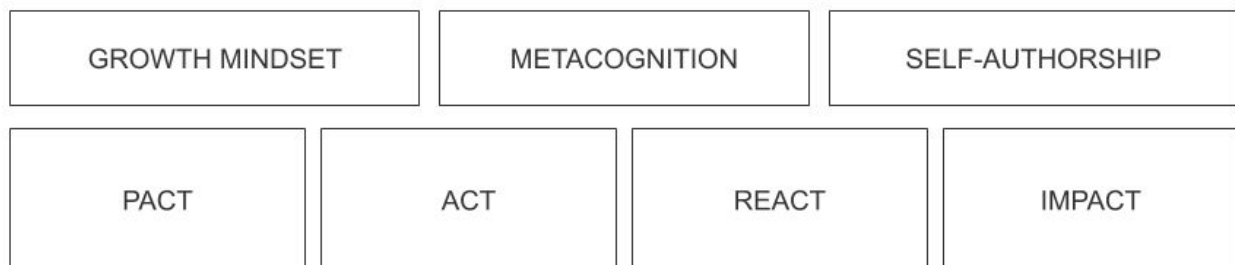
Table 2. The three mindframes and the four stages of mindframing.

5. Discussion

There is a growing interest in the utility of personal growth frameworks and methods in positive psychology (Kashdan, Rose & Fincham 2004; Seligman & Csikszentmihalyi, 2014; Shorey et al., 2007). While based on previous research in the field of personal growth and positive psychology, the mindframing method has not yet been tested through an experimental study, and its effectiveness is yet to be demonstrated. The design of such a study poses several challenges, the first being the inherent difficulty in measuring personal growth. Because of the absence of dedicated scales to measure personal growth, previous studies have used peripheral scales such as the Post-Traumatic Growth Inventory (Anderson & Lopez-Baez, 2011). Others have used the Loevinger's measure of ego development (Hy & Loevinger, 1996) to measure eudaimonic growth—the increase in psychosocial maturity and subjective well-being over time (Bauer & McAdams, 2010). Personal growth initiative is measured using the PGIS-II scale by Robitschek et al (2009), but does not measure personal growth itself. The second challenge is that personal growth may be subjective in nature—in fact, most research currently uses subjective scales to measure personal growth (Anand, 2016; Geise, 2008), while the methods used in school and the workplace employ extrinsic measures of performance to assess the effectiveness of personal growth frameworks (Beausaert, 2011; Hagan et al., 2006; Merkel, 2016). One last challenge in the implementation and assessment of the mindframing method is the prerequisite of three mindframes—growth mindset, metacognition, self-authorship—which themselves are hard to measure, complicating the recruitment of qualified individuals. Despite these inherent limitations, future developments based on this theory may include an experimental study with a set of individuals enrolled in a personal growth programme designed around the mindframing method to translate this research into practice, understand the implementation outcomes, and evaluate the results.

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