

INTERVENTO – INTERVENTION

ECONOMICS, SELF-AWARENESS AND SELF-MASTERY: A PROPOSED FRAMEWORK *di Sandro Formica*

1. Introduction

The emotional distress triggered by the COVID-19 pandemic in young adults (Shanahan et al., 2020) has offered the opportunity and time to engage in deep reflections about their own nature, particularly who they are and who they intend to become. During the lockdown occurred in most countries, their attention shifted from the doing to the being. Nonetheless, young adults are not well equipped with tools that help them self-reflect (Dunning, Heath & Suls, 2004). One of the causes of that could be the current education system. Most content offered by schools and universities does not focus on the self, but on making sense of the outer world, by focusing on humanities, social sciences, natural sciences, formal sciences, and applied sciences. As most teaching is switching to remote, students are required to self-regulate while studying in physical isolation. At present time, the content of courses offered in primary and secondary schools as well as colleges tends to focus on skills and functions that are proper to the left part of the brain, the one that operates linearly, is analytical, and logical. However, the use of the right brain, which involves the emotional aspect of self-management has been reduced during the last decades (Elmore, 2013).

While in the past self-improvement received little consideration by scholars because it was often based on non-scientific evidence, now it is supported by science. For example, the most popular courses at Harvard and Yale focus on happiness and are based on. “Positive Psychology” which relates to the study of human beings not to heal mental or emotional pathologies but to

improve their state of being (Seligman & Csikszentmihalyi, 2014). To support positive psychology there is a new field of study, neuroplasticity or brain plasticity, which shows that neural pathways and synapses are changed by changes in behavior, thinking, and emotions. Any science exploring the self requires some degree of mindfulness and mindfulness studies on youth have consistently showed positive outcomes (Zoogman, Goldberg, Hoyt & Miller, 2015).

The COVID-19 pandemic has not only caused a widespread emotional distress in the forms of fear, depression and anxiety, but has also generated a global economic crisis. While most of us might perceive the word “economy” from a macroeconomic perspective, as defined by Adam Smith (1904); other eminent authors and scholars, as explained below, have adopted a person-centered definition of it. In presenting both approaches, this paper will be adopting the person-centered definitions of economy and expand on them by introducing a new framework, named Self-Science, to facilitate an understanding of the components of self-awareness with the purpose of pursuing and perfecting self-mastery.

2. Economics

The English term “Economics” is derived from the Greek word “Oikonomia”. Its meaning is “household management”. As the world evolved, the meaning of “economics” became more inclusive, encompassing organizations, societies and nations. Adam Smith (1904), the Scottish economist, used a macro-economic approach to define economics as the science that investigates the nature and causes of the wealth of nations. There are many definitions of economics, based on the values, interests, and focus of the authors that formulated them. For the purpose of this paper, specific attention will be given to the perspective of economics that relates to the person and his behavior. For example, John Maynard Keynes focused on the individual when he stated that «economics is a method rather than a doctrine, an apparatus of

the mind, a technique of thinking, which helps its possessor to draw correct conclusions» (Gwartney, Stroup & Clark, 1985, p. 6). Let's look at his definition more closely. First, economics is not represented by a set of beliefs or principles of governmental policies. Instead, it is a behavioral procedure, a set of actions, coherently performed to accomplish a goal. Second, it belongs to and it is rooted in the mind, which, according to Oxford Languages is «the element of a person that enables them to be aware of the world and their experiences, to think, and to feel; the faculty of consciousness and thought». Therefore, economics must take into account «the element or complex of elements in an individual that feels, perceives, thinks and especially reasons» (Merriam Webster Dictionary, 2020a). Last, the outcome of economics, according to Keynes, is to draw correct conclusions, the fundamental assumption before taking action. Apparently, Keynes was not the only scientist that provided a definition of economics based on the person and rooted on his state of being. Alfred Marshall (1920), English economist, defined economics as «[t]he study of mankind in the ordinary business of life» (p. 1). Again, the subject being investigated is the person as he makes sense of the life he is living. Even non-economists have taken interest in defining the science of economics. For example, the play writer and Nobel laureate, George Bernard Shaw (1903) stated that «economics is the art of making the most of life» (line 91). In conclusion, we are all engaging in the art –according to Shaw (1903) – or method – according to Keynes – of economics, on a daily basis, by activating our mind, with the ultimate goal of maximizing our life experiences.

3. Self-Awareness

Self-awareness is the ability to focus attention on self as an object (Carver, 2003; Duval & Silvia, 2001). Most literature identifies two fundamental branches of self-awareness: public and private (Feifar & Hoyle, 2000). The first focuses on the projections

of the self as it relates to others and society at large. For example, it explores personal attractiveness and shyness from the lenses of the self as it draws assumptions about the social context a person operates in. Private self-awareness looks within and relates to processes such as self-regulation and control. It requires constant practice and practice needs tools and methods that have been tested and have demonstrated to work. Those methods might include mirror work, listening to own voice or other bodily functions such as breath or heartbeat, writing a story of self and others, self-reflection, ways to understand, interpret and solve inner challenges, etc. Scales that measure the level of self-awareness include questions that relate to the current state of the individual, such as “I observe myself”, “I look at why people act the way they do” (Sutton, 2016, p. 652). In most cases, the lack of alignment between what is desired and what is found inside of us while engaging in self-awareness, brings to surface negative affective and cognitive states (Fejfar & Hoyle, 2000). However, the objective of self-awareness is to minimize the negative affect and unwanted cognitive processes by being more mindful of what is happening inside.

Self-awareness comes with a multitude of benefits. For example, people practicing self-awareness are conscious of their values and have an understanding of their needs. Also, they make it easier to monitor their mood swings and realize the consequences those mood swings might have on others. They seek feedback from others in order to make progress and are not afraid of uncertainty as they are willing to explore the unknown (Chow & Luzzi, 2019; Xu & Chan, 2017).

From a scientific perspective, most scholars point at Duval and Wicklund (1973) as the pioneers in the investigation of self-awareness. In their seminal work, one of their concerns is that a person tends to attribute causality of his behavior «away from himself and not within his personal disposition» (p. 19). To better understand the work that self-awareness entails, they expressly separate the actor, the person analyzed solely on the basis of his actions, from the observer, which is represented by the attention

directed inward and focused on thoughts, emotions, values and beliefs. Put simply, they make a clear distinction between two elements of the self, the “doing” and the “being.” They go on to explain that most of our attention is on the outside world. In addition, our behavior is the result of habituation and our actions are often triggered by default and lacking self-awareness. The educational systems adopted by most countries in the western world confirm this type of approach, which focuses almost exclusively on the external world. The curriculum of studies, from first grade onward, is about learning what happens outside of us, on what makes and affects the external environment. Instead, little or no attention is offered to the inner environment, the area of interest of the observer, which relates to the “being” aspect of the self.

Self-awareness is a broad, all-embracing theoretical construct and its operationalization varies based on the scope of investigation of scholars and social scientists interested in it. There are two critical aspects that should be considered in exploring self-awareness. First, determining its purpose. Second, defining the constructs best representing it. If the purpose of self-awareness is self-improvement and ultimately self-mastery, then the exploration of it should go beyond the mere evaluation of the current state of being, often performed with an analysis of personal strengths and weaknesses. In other words, self-awareness cannot be perceived as a static evaluation of personal behavior, an assessment of one’s character, an understanding of own thoughts and feelings, but as a dynamic process of self-discovery and increased consciousness leading to individual growth and progress. The Collins Dictionary (2020) defines self-mastery as «the ability to take control of one’s life without being born off course by feelings, urges, circumstances, etc.». It goes on to explain that «self-mastery is that condition whereby your body is your servant and not your master». Mankind cannot reach self-mastery without self-awareness or without being aware of what is going on inside of us, therefore the latter is a necessary condition of the former.

The section that follows is an attempt to detect and clarify the constructs that represent the concept of “self” so that the ob-

server can bring awareness to them. Merriam-Webster (2020) defines self by «the union of elements (such as body, emotions, thoughts, and sensations) that constitute the individuality and identity of a person». The next section of this paper is dedicated to introducing Self-Science, a theoretical framework of nine fields of study, which are considered as fundamental components of the self within the context of economics portrayed by Keynes, Marshall and Shaw. The scientific evidence presented below demonstrates the importance of each one of those nine fields of study in deepening the intellectual understanding and in presenting experiential practices to cultivate self-awareness and achieve self-mastery. The ultimate goal of this paper is to integrate Self-Science not only in the curricula of schools and universities but also in extra curricular education programs, such as orientation and placement. This is why the literature review contained in section 4 is not limited to exploring pedagogy and education, but embraces the fields of sports, business, medicine, psychology, sociology and many others.

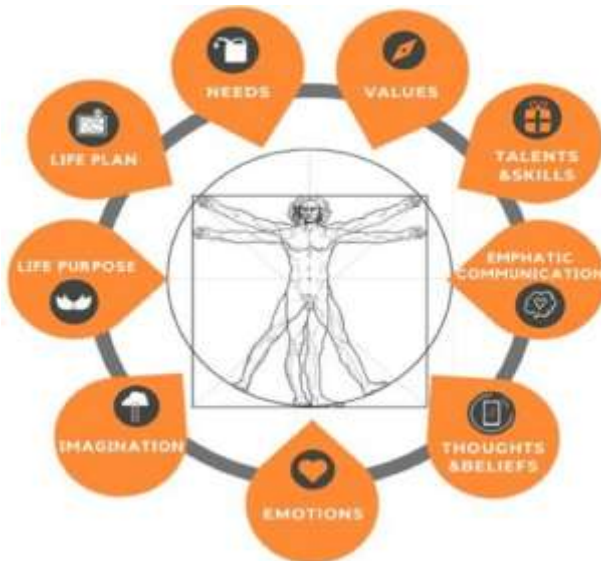


Figure 1. The Self-Science framework

4. Self-Science

The proposed framework, labeled “Self-Science,” encompasses multiple fields of study that are fundamental to the “self” and the very nature of our being. It includes nine areas that require not only investigation and understanding, but also experiential application and consistent practice. They are the following: needs, values, talents and skills, beliefs, emotions, empathic communication, life purpose, imagination and life planning. Each one of them will be presented in the following sub-sections.

4.1 Human needs

All human behaviors can be explained in one simple way: they fulfill one or more human needs. Human needs are the same for every person, regardless of differences in gender, nationality, age or religion. The father of human needs psychology, Abraham Maslow, published his *Hierarchy of Needs* theoretical work from 1943 until 1954. Yet, Maslow’s work continues to be cited in scholarly work (Kenrick, Griskevicius, Neuberg & Schaller, 2010). The new science of Positive Psychology founded by Dr. Martin Seligman, for example, is based on Maslow’s work (Froh, 2004). There are several reasons why the self-awareness practice of monitoring human needs is essential to self-mastery. Needs fulfillment is regarded as a significant predictor of individual function in life and deemed necessary to reach the highest potential and maintain growth, integrity and health (Van den Broeck, Vansteenkiste, De Witte, Soenens & Lens, 2010). Also, human need theory suggests that when individuals are able to satisfy their needs, they achieve and maintain a state of wellbeing (Diener & Lucas, 2000).

In addition to Maslow’s hierarchy of needs, basic need satisfaction has been investigated through self-determination theory, which is composed of three clusters: autonomy, relatedness and competence. The need for autonomy springs from the intention and desire to take action independently from external forces and

in alignment with one's own will and values. The need for relatedness points at humans' innate need to connect, interact, and care for each other. The need for competence, instead, is associated with self-efficacy and a sense of confidence in performing one or more tasks (Deci & Vansteenkiste, 2004). Meeting the needs of autonomy, relatedness and competence results in positive emotions. For example, we feel good when we reach a goal, enjoy meaningful, close relationships with friends and feel independent and succeed in self-regulating (Sheldon & Schuler, 2011). The concept of needs is also associated with motivation and creates the premise for the «energization and direction of action» (Deci & Ryan, 2000, p. 227).

4.2 *Values*

Values determine the way we think, give us a sense of direction, and relate to something we hold dear, find relevant, or consider important. They transcend specific situations, serve as standards or criteria, and guide action (Schwartz, 2012). What we value could be something tangible or intangible. For example, we could value art, in a tangible form, such as paintings or sculptures. We can also value art in an intangible form, such as poetry or acting. Values relate to standards of behavior, for example being proper and polite, or principles, like justice and diversity (Bardi & Schwartz, 2003).

Rokeach (1973) divided values based on personal or social interests. Some people are more focused on personal interests which revolve around their well-being, career, education, while others are more attracted by social values, such as world peace, politics and climate change. These two sets of values, personal and social, are not mutually exclusive. Instead, they are at the opposite sides of a spectrum containing a mix of the two (Gouveia, Milfont & Guerra, 2014). For example, individuals who value education might do it for personal reasons – career advancement – and for social reasons – sharing their knowledge and bettering others' lives. The same considerations can be made with people

who value health and personal growth for personal benefits and for the betterment of society at-large.

In reviewing literature, the study of values can be looked at in four separate steps: surfacing individual's values, aligning values and behavior, understanding and being interested in the values of others and transitioning from single to societal values. The first step, surfacing individual's values, is best represented by Schwartz (2012), who identified 10 broad values based on the motivation that is behind each one of them. They are: self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence and universalism. Once personal values are clear, the second phase is to seek and find alignment between values and behavior (Branson, Baig & Begum, 2015; Buchanan & Bardi, 2015). This is a step by which values are operationalized through behavior, tasks, processes and procedures (Brown, 2018). The third step, understanding and being interested in the values of others, helps us connect with others' points of view, avoid conflict and become more supportive and compassionate (Korsgaard, Meglino & Lester, 1997). Finally, the transition from single to societal values appear to play a critical role in bridging the gap between individualism and collectivism. An example of that is brought by Baxter-Moore et al. (2018), who found that the values of the founding fathers of the countries of the United States of America and Canada are, to these days, influencing what is considered important by residents of the two countries, even when living at a few miles from each other and are only separated by the U.S.A.-Canadian border.

4.3 Talents and Skills

Multiple fields of study – particularly business, sports, and education – investigate the importance and impact of talent acquisition, management and retention as well as talent-building competencies. Specific attention to talent is given by researchers in the field of sports to identify and develop skills around the natural talent demonstrated by young athletes. In particular, the

investigations are geared to building protocols that are effective in selecting talented individuals from a wide number of candidates (Wilson et al., 2016). Literature points at the instrumental role that skills have in serving talents to increase success and performance. Elferink-Gemser and Hettinga (2017), for instance, suggest that practicing the skills of pacing and self-regulation is critical in developing talent in the context of endurance sports. Talent development programs in sports can also have a positive impact on psychosocial factors of youth with social skill problems (Foley-Nicpon, 2017). Olszewski-Kubilius, Subotnik and Worrell (2015) offer a model that emphasizes practices that enhance psychosocial skills – contrary to simply focusing on personality traits – to increase potential and feed talent.

In business, talent attraction and retention have been associated with an organizational culture that fosters and encourages performance growth, change management, a creative environment, and open communication (Kontoghiorghes, 2016). Besides, literature (Collings & Mellahi, 2009) shows a correlation between employee well-being, satisfaction, motivation and commitment processes and talent management, retention and performance. In education, literature points at the success of talent development programs, especially in showing the supportive role of soft skills in fostering talent and reaching success (Subotnik, Olszewski-Kubilius & Worrell, 2011).

4.4 Beliefs

Richardson (1996) explains that «[b]eliefs are thought of as psychologically held understandings, premises, or propositions about the world that are felt to be true» (p. 103). Rokeach (1972) suggested that beliefs build on three main elements, cognitive, affective and behavioral. When a person determines what is true and what is not – cognitive element – the affective component is activated, especially when a person takes a negative or positive stand about that truth. When a belief is activated, it leads to action, which represents the behavioral aspect of it. Rokeach (1972)

goes on to differentiate core from peripheral beliefs, stating that peripheral beliefs act like protons revolving around the nucleus, intended as the core belief.

Beliefs, especially core beliefs, are associated with life outcomes. They are the filters with which we see and make sense of what happens around us (Fives & Buehl, 2012). Literature frequently points out to childhood in understanding when beliefs are formed. Hampson, Goldberg, Vogt and Dubanoski (2007), for example, found that childhood beliefs held direct and indirect effects on adult health behaviors and overall health status. A longitudinal study focused on the impact of maternal sensitivity in the first years of life on academic and social performance until age 32. Results show that maternal sensitivity predicts effectiveness of romantic engagement and educational attainment through mid-adolescence (Raby, Roisman, Fraley & Simpson, 2015). Also, the predictive significance of maternal sensitivity continued through adulthood. Wang, Cox, Mills-Koonce and Snyder (2015) analyzed the influence of parent's beliefs on their offspring and found that children's attachment disorganization could be predicted by weak parental beliefs in discipline and control.

Students' peer academic reputation was found to be associated with achievement beliefs. Specifically, when students believe they can perform a task well, they place more energy and commitment to that task and do not give up in the presence of challenges (North & Ryan, 2018). Bobis, Way, Anderson & Martin (2016) investigated teacher beliefs about the level of engagement of their students in mathematics and found that teachers' assessment of students' engagement was mediated by their beliefs about student efficacy and engagement.

Research shows that beliefs can be changed. Ritzau (2018) carried out a longitudinal study of 49 Swiss university students learning a foreign language and found that the students' beliefs about learning a foreign language changed as they perceived making progress. Different teaching methods and the material selected by the language teacher also contributed to changing students' beliefs. Specifically, the Socratic teaching method selected by the

teacher was found to generate greater belief change than the control condition in Australia (Harrison, Clark, Rock & Egan, 2019). On one hand, we know that most of our beliefs are formed in the developmental stage of our life and influence the way we see the world through adulthood. On the other hand, we have the ability to change our beliefs. This is particularly meaningful in the context of a self-awareness framework that aims at achieving self-mastery because it confirms that those beliefs that act as deterrents to personal and societal growth can be removed or replaced.

4.5 Emotions

Emotional intelligence is the mindful ability to be aware of, control, and express our emotions, and to relate to others' emotions with awareness and empathy. It is considered to be the single most important predictor of job productivity and overall performance at work (Romanelli, Cain & Smith, 2006). Ninety percent of top professionals and successful managers have tested very high in terms of emotional intelligence (Bradberry & Antonakis, 2015) whereas only 20 percent of success in life is attributed to intellectual intelligence (Goleman, 1996). The success of emotionally knowledgeable, open and honest individuals is not only limited to positive business outcomes. Emotionally mature people tend to have better mental health than average, lead longer lives and experience more satisfaction out of life (Extremera & Fernández-Berrocal, 2005). If not properly managed, emotions have the potential to be particularly detrimental. For example, researchers in the medical field are coming to the conclusion that most diseases are caused by stress (Cassel, 2017). Stress also acts as an accelerator in worsening health problems that are not directly linked with it.

Emotions are felt in the body, while feelings are interpretations of the mind. Emotions appear in the subcortical part of the brain and in the amygdala. Feelings, instead, are present in the neocortex, a different area of the brain and their main purpose is to signal dangers and rewards. Feelings are produced immediately

after emotions and their purpose is to provide a meaning to those emotions. It is with the feelings' intervention and interpretation of emotions that our body signals to us that something is going on inside of us, soliciting our attention (Damasio & Carvalho, 2013). James Gross (2014), a professor of psychology at Stanford, explains that the emotions we feel are the result of how we evaluate what happens to us or to others. It is the meaning that we give to what happens inside of us and in our external environment that causes the emotional upset or enjoyment. It is not the event itself that triggers the emotion, it is how we interpret it that determines whether we are going to experience positive or negative emotions.

4.6 Empathic Communication

Every year, Hart Research Associates runs an extensive employers' survey where they consistently find that the majority of those employers value your communication skills more than college majors of applicants (Gallo, 2017). Emotional triggers can make or break the flow of a communication. They are thoughts, words, actions, events, or circumstances that stimulate an immediate emotional reaction. They are considered the cause of an emotional reaction or outburst. Also, emotional triggers are often perceived as uncontrollable reactions and the cause of inner conflicts (Caldara, McBride, McCarter & Sheremeta, 2017). Managing, not suppressing or avoiding, emotions is the key to a functional and successful communication. Within the context of communication, Rosenberg (2003) explains empathy as a respectful understanding of what others are experiencing, focusing mainly on the feelings and universal needs underlying people's actions and words. He developed a model that has been successfully tested in different settings, circumstances, and subjects (Czarny, 2018). His empathic communication model, *Non-Violent Communication*, suggests to shy away from judging, evaluating, or assessing others when interacting with them; instead, it encourages to find out and share the truth that is inside of us, as it relates to specific

situations or behaviors. Rosenberg's model builds on creating a safe and secure space where people can express themselves in a compassionate, conscious way, and communicate from their heart. Museux, Dumont, Careau and Milot (2016) consider it one of the best tools to consciously and effectively interact with others. It requires to: (1) remove a person's brain filters by reporting facts as they actually occurred and without brain filters, (2) connect to feelings and emotions, (3) understand the needs behind those feelings and (4) make specific, actionable requests geared toward the satisfaction of specific, unmet needs (Rosenberg, 1990).

4.7 Imagination

Imagination is the act that allows humans to generate images in their minds, which refer to situations that have not yet occurred. Agnati, Guidolin, Battistin, Pagnoni and Fuxe (2013) specify that

imagination not only has the potential to enrich the meaning of an experience and deepen understanding, by multiplying and expanding the perspectives from which a phenomenon can be considered, but it also allows anticipating the outcome of an action without actually performing it via a simulation process. At its peak, imagination is the very mental faculty underlying visionary and creative thought (p. 2).

In 2008, Harvard University researchers published an experiment in which they tested the effects of imagination when stimulated by external events. Those researchers worked with two hotel cleaning crews. They took blood tests and health-related measurements from housekeepers pertaining to both cleaning crews. To the first group of housekeepers the researchers explained that the effect of cleaning guest rooms on their bodies and on their overall health was equivalent to that of a daily workout at the gym. The housekeepers belonging to the other cleaning crew did not receive this message from the researchers. The delivery of that message was the only differentiating aspect between cleaning crews, within the context of this experiment. After three months,

the housekeepers belonging to the first cleaning crew, who were made aware of the beneficial physical results of cleaning, lost weight and decreased their blood pressure without changing any of their lifestyle activities. The other housekeepers, who were not mentioned the beneficial physical and health effects related to their job performance, did not experience any physical or biological changes (Crum & Langer, 2007).

Clark, in 1960, tested 144 high school students performing basketball shots. He tested the students' performance in practicing basketball throws as well as imagining to practice that activity without physical engagement. The results showed that imaginative practice granted significantly positive performance results, almost as relevant as the results obtained by physical practice. Driskell, Copper and Moran (1994) conducted a meta-analysis, where they executed a review and combined all academic studies measuring the effect of imagination on physical and cognitive performance. Overall, 62 studies from 1934 to 1991 were accurately reviewed, compared, and analyzed. The authors concluded that imagination has a statistically significant positive effect on performance when applied to both physical and cognitive activities. In other words, when you imagine to perform a mental or physical task, imaginative practices will help you do it significantly better. Other studies support the evidence presented in that meta-analysis. For example, one tested volleyball performance (Roure et al.,1998) and another tested tennis (Zhang, Ma, Orlick & Zitzelsberger, 1992) with the same statistically significant positive results.

4.8 Life Purpose

Life Purpose is «your commitment and dedication, using your natural talents and skills, to something greater than yourself» (Formica, 2018, p. 305). Han (2015) explains that purpose is a moral virtue that helps achieve happiness and human flourishing. It is no surprise then, that progress toward a life purpose is directly related to well-being (Wiese, 2007). Scientific studies have

pointed out that those who have a life purpose live longer than those who do not (Hill & Turiano, 2014). Additionally, individuals who know and pursue their life purpose are less affected by illnesses related to cognition, such as Alzheimer's disease (Boyle, Buchman, Wilson, Yu, Schneider & Bennett, 2012).

There are more benefits to having a life purpose. Drolet (1990) found a correlation between life purpose and symbolic immortality. He also found that adults have a stronger sense of purpose than younger adults. Finally, he reported a negative correlation between the fear of death and life purpose. Hershner and Strecher (2015) collected data from 4144 respondents. Their research associated higher purpose with a lower incidence of sleep disturbances in the course of the 4-year study follow-up.

Life purpose showed to help with depression as Hedberg (2010) found an inverse relationship between the two of them. The negative effects of poverty on antisocial behavior, such as disobedience and bullying, are mitigated in young adults who have and pursue a life purpose (Machell, Disabato & Kashdan, 2016). Lastly, student's sense of purpose in life was found to mediate the relationship between hope, self-efficacy, resilience, optimism and satisfaction with life (Zhang, Ewalds-Kvist, Li & Jiang, 2019).

4.9 Life Plan

Planning is an essential part of life. Since we were born, our caretakers planned for us, where we would attend child care, kindergarten and school. Then, we started getting involved in the planning process of our life, not only to select our preferred educational institutions, but also to choose our sports and recreational activities, vacations, jobs and more. It is well established in every society that planning is a fundamental function of all trades and fields. Farmers plan when to seed and when to harvest. Manufacturers plan when to buy raw materials, when to process and offer them to other businesses or to the final consumer. College students must have a plan of study to complete their required and

elective courses successfully and on time. Ultimately, we all plan for a safe and secure retirement and we even plan for what will happen after our own death, by writing our will or subscribing to a life insurance (Tame, 1993).

Propensity toward future life planning does not function equally among young adults (Brooks & Everett, 2008). In fact, those who were privileged enough to attend top ranked programs and universities were not as interested in formulating and following a life plan as much as the others. This is possibly explained by the sense of security and self-confidence generated by their elitist academic and social status. Life planning has several advantages. For example, a self-development and professional life planning program tested on nursing students effectively increased their competencies (Areesophonpichet, Rungnoi, Methakunavudhi & Halloran, 2011). Maree, Gerryts, Fletcher & Olivier (2019) have successfully experimented career counseling based on life design principles to increase the degree of employability of young adults with a history of crime and addiction caused by poverty. A holistic career-planning model named Integrative Life Planning, which focuses on multiple elements of the self including integrative thinking and social values, helps students make career decisions that have a positive impact not only on the individual but also on society at large (Hansen, 2001). Life design career interventions are also effective when administered online in terms of career adaptability and satisfaction with life (Nota, Santilli & Soresi, 2016). Based on constructive alignment reflective practice and assessment theories for learning, Clark & Adamson (2009) recommend that personal development planning be integrated into higher education curricula.

5. Conclusion

The educational framework presented in this paper builds on the definitions of economics by Keynes, Marshall and Shaw. Those definitions emphasize the central role of the human being

and, particularly, the power of his mind. In other words, his consciousness when regulating activities of thinking and feeling and the ability and potential to make the best out of life. It requires personal growth through a pathway of self-discovery and self-mastery. Unlike our formal education, which has a beginning and an end, Self-Science requires a never-ending planning process. As soon as a goal is achieved, a new goal is formulated to keep the quest for self-mastery flowing. T.S. Eliot (1942), a twentieth-century poet, explains this flow as «[w]hat we call the beginning is often the end. And to make an end is to make a beginning. The end is where we start from» (p. 5). Not only does he explain that life is a continuous dance between ends and beginnings, but also he suggests that we must start from the end. In simple words, to begin, we need to know where it is that we are going so that we can determine our direction. We practice beginning from end in our simplest actions, such as driving or walking. We do not engage in either of these activities until we know the destination. We start our car knowing where the final destination will be. Why are we not doing it in our life? Put simply, the end is the answer to a simple question: “What do you want?”. The moment in which we answer that question we define the starting point for a new beginning. Stephen Covey (1989), in his bestselling book, *The 7 Habits of Highly Successful People*, was probably inspired by T. S. Eliot when he titled his second habit “Begin with the end in mind”. The essence of this habit is to find out, first, what you want and, then, start planning backward, all the way to your current situation.

Rigopoulou and Kehagias (2008) state that there is a gap between demand and supply in investigating student needs and university programs. They go on to say that personal development programs and, generally, college offerings focused on the self are considered valuable by most students because they are interested and willing to enroll in them. Programs based on self-mastery and self-awareness principles are particularly effective during adolescence as they help define who they truly are and surface values, talents and purpose. Once those programs are formulated and

implemented, future research endeavors could be oriented toward the sustainability of those programs' benefits throughout life (Maree, Pienaar & Fletcher, 2017).

Bibliography

- Agnati L.F., Guidolin D., Battistin L., Pagnoni G., & Fuxe K. (2013). The neurobiology of imagination: possible role of interaction-dominant dynamics and default mode network. *Frontiers in Psychology*, 4.
- Areesophonpichet S., Rungnoi N., Methakunavudhi P., & Halloran E.J. (2011). Development and Evaluation of Self-development and Professional Life Planning Program for Thai Nursing Students. *Pacific Rim International Journal of Nursing Research*, 15(3), 234-247.
- Bardi A., & Schwartz S.H. (2003). Values and Behavior: Strength and Structure of Relations. *Personality and Social Psychology Bulletin*, 29(10), 1207-1220.
- Baxter-Moore N., Eagles D.M., Berrada I., Chernomorchenko O., Coleman P.D., Gaskin K., Hatch K., Hilimoniuk C., & Morris P. (2018). Explaining Canada-US differences in attitudes toward the role of government: a test of S.M. Lipset's "Continental Divide". *Commonwealth & Comparative Politics*, 56(4), 472-492.
- Bobis J., Way J., Anderson J., & Martin A.J. (2016). Challenging teacher beliefs about student engagement in mathematics. *Journal of Mathematics Teacher Education*, 19(1), 33-55.
- Boyle P., Buchman A., Wilson R., Yu L., Schneider J., & Bennett D. (2012). Effect of purpose in life on the relation between Alzheimer disease pathologic changes on cognitive function in advanced age. *Archives of General Psychiatry*, 69(5), 499-504.
- Bradberry T., & Antonakis J. (2015). Is Emotional Intelligence a Good Measure of Leadership Ability? *HRMagazine*, 60(9), 22-23.
- Branson C.M., Baig S., & Begum A. (2015). Personal values of principals and their manifestation in student behaviour: a district-level study in Pakistan. *Educational Management Administration & Leadership*, 43(1), 107-128.
- Brooks R., & Everett G. (2008). The prevalence of "life planning": evidence from UK graduates. *British Journal of Sociology of Education*, 29, 325-337.

- Brown B. (2018). *Dare to Lead*. Vermilion: Copy.
- Buchanan K., & Bardi A. (2015). The roles of values, behavior, and value-behavior fit in the relation of agency and communion to well-being. *Journal of Personality*, 83(3), 320-333.
- Caldara M., McBride M.T., McCarter M.W., & Sheremeta R.M. (2017). A Study of the Triggers of Conflict and Emotional Reactions. *Games*, 8, 21.
- Carver C.S. (2003). Self-awareness. In M.R. Leary & J.P. Tangney (Eds.), *Handbook of self and identity* (pp. 179-196). New York: The Guilford Press.
- Cassel J. (2017). Physical illness in response to stress. *Social stress*, 189-209.
- Chow G.M., & Luzzi M. (2019). Post-Event Reflection: a Tool to Facilitate Self-Awareness, Self-Monitoring, and Self-Regulation in Athletes. *Journal of Sport Psychology in Action*, 10(2), 106-118.
- Clark L.V. (1960). Effect of Mental Practice on the Development of a Certain Motor Skill. *Research Quarterly of the American Association for Health, Physical Education, & Recreation*, 31, 560-569.
- Clark W., & Adamson J. (2009). Assessment of an ePortfolio: developing a taxonomy to guide the grading and feedback for personal development planning. *Practitioner Research in Higher Education*, 3(1), 43-51.
- Collings D.G., & Mellahi K. (2009). Strategic talent management: a review and research agenda. *Human Resource Management Review*, 19(4), 304-331.
- Collins Dictionary (2020). Self-mastery. Available in: <https://www.collinsdictionary.com/dictionary/english/self-mastery> [19 october 2020].
- Covey S.R. (1989). *The seven habits of highly effective people: restoring the character ethic*. New York: Simon and Schuster.
- Crum A.J., & Langer E.J. (2007). Mind-set matters: exercise and the placebo effect. *Psychological Science*, 18(2), 165-171.
- Czarny R. (2018). Reflections on Merging Two Theories to Nurture the Potential of Mediation. *International Journal of Choice Theory and Reality Therapy*, 38, 40-49.
- Damasio A., & Carvalho G. (2013). The nature of feelings: evolutionary and neurobiological origins. *Nature Reviews Neuroscience*, 14(2), 143-152.
- Deci E.L., & Ryan R.M. (2000). The “what” and “why” of goal pursuits: human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Deci E.L., & Vansteenkiste M. (2004). Self-determination theory and basic need satisfaction: understanding human development in positive psychology. *Ricerche di Psicologia*, 27(1), 23-40.

- Diener E., & Lucas R.E. (2000). Explaining differences in societal levels of happiness: relative standards, need fulfillment, culture and evaluation theory. *Journal of Happiness Studies: an Interdisciplinary Forum on Subjective Well-Being*, 1(1), 41-78.
- Driskell J., Copper C., & Moran A. (1994). Does Mental Practice Enhance Performance? *Journal of Applied Psychology*, 79(4), 481-492.
- Drolet J.-L. (1990). Transcending death during early adulthood: symbolic immortality, death anxiety, and purpose in life. *Journal of Clinical Psychology*, 46(2), 148-160.
- Dunning D., Heath C., & Suls J.M. (2004). Flawed Self-Assessment: implications for Health, Education, and the Workplace. *Psychological Science in the Public Interest*, 5(3), 69-106.
- Duval S., & Wicklund R.A. (1973). Effects of objective self-awareness on attribution of causality. *Journal of Experimental Social Psychology*, 9, 17-31.
- Duval T.S., & Silvia P.J. (2001). *Self-awareness and causal attribution: a dual systems theory*. Boston: Kluwer Academic.
- Elferink-Gemser M., & Hettinga F. (2017). Pacing and Self-Regulation: important Skills for Talent Development in Endurance Sports. *International Journal of Sports Physiology and Performance*, 12, 831-835.
- Eliot T. S. (1942). *Little Gidding*. London: Faber and Faber 24.
- Elmore T. (2013). Left Brain Schools in a Right Brain World. *HuffPost*. Available in: <https://www.huffpost.com/entry/leftbrain-schools-in-a-right-brain-world> [19 october 2020].
- Extremera N., & Fernández-Berrocal P. (2005). Perceived emotional intelligence and life satisfaction: predictive and incremental validity using the Trait Meta-Mood Scale. *Personality and Individual Differences*, 39(5), 937-948.
- Fejfar M.C., & Hoyle R.H. (2000). Effect of private self-awareness on negative affect and self-referent attribution: a quantitative review. *Personality and Social Psychology Review*, 4(2), 132-142.
- Fives H., & Buehl M.M. (2012). Spring cleaning for the “messy” construct of teachers’ beliefs: What are they? Which have been examined? What can they tell us? In K.R. Harris, S. Graham, T. Urdan, S. Graham, J.M. Royer & M. Zeidner (Eds.), *APA handbooks in psychology®. APA educational psychology handbook, Vol. 2. Individual differences and cultural and contextual factors* (pp. 471-499). Washington: American Psychological Association.
- Foley-Nicpon M., Assouline S., Kivlighan M., Fosenburg S., Cederberg C., & Nanji M. (2017). The effects of a social and talent develop-

- ment intervention for high ability youth with social skill difficulties. *High Ability Studies*, 28, 1-20.
- Formica S. (2018). *Personal Empowerment: empower the leader within you*. Dubuque, IA: Kendall Hunt.
- Froh J.J. (2004). The History of Positive Psychology: Truth be Told. *NYS Psychologist*, 16(3), 18-20.
- Gallo C. (2017). College Seniors: 65% Of Recruiters Say This One Skill Is More Important Than Your Major. *Forbes*.
- Goleman D. (1996). *Emotional Intelligence: Why It Can Matter more than IQ*. London: Bloomsbury Publishing.
- Gouveia V.V., Milfont T.L., & Guerra V.M. (2014). The functional theory of human values: from intentional overlook to first acknowledgement. A reply to Schwartz. *Personality and Individual Differences*, 68, 250-253.
- Gross J.J. (2014). Emotion regulation: conceptual and empirical foundations. In J.J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3-20). New York: The Guilford Press.
- Gwartney J.D., Stroup R. & J.R. Clark. (1985). *Essentials of Economics*. 2nd ed. Orlando: Academic Press. Print.
- Hampson S.E., Goldberg L.R., Vogt T.M., & Dubanoski J.P. (2007). Mechanisms by which childhood personality traits influence adult health status: educational attainment and healthy behaviors. *Health Psychology*, 26(1), 121-125.
- Han H. (2015). Purpose as a moral virtue for flourishing. *Journal of Moral Education*, 44(3), 291-309.
- Hansen L.S. (2001). Integrating work, family and community through holistic life planning. *The Career Development Quarterly*, 49(3), 261-274.
- Harrison L.M., Clark G.I., Rock A.J., & Egan S. J. (2019). The impact of information presentation style on belief change: an experimental investigation of a Socratic Method analogue. *Clinical Psychologist*, 23(1), 71-78.
- Hedberg P., Gustafson Y., Alèx L., & Brulin C. (2010). Depression in relation to purpose in life among a very old population: a five-year follow-up study. *Aging & Mental Health*, 14(6), 757-763.
- Hershner S., & Strecher V. (2015). Purpose in life and incidence of sleep disturbances. *Journal of behavioral medicine*, 38(3), 590-597.
- Hill P., & Turiano N. (2014). Purpose in life as a predictor of mortality across adulthood. *Psychological science*, 25(7), 1482-1486.
- Kenrick D.T., Giskevicius V., Neuberg S.L., & Schaller M. (2010). Renovating the Pyramid of Needs: Contemporary Extensions Built

- Upon Ancient Foundations. *Perspectives on psychological science: a journal of the Association for Psychological Science*, 5(3), 292-314.
- Kontoghiorghes C. (2016). Linking high performance organizational culture and talent management: satisfaction/motivation and organizational commitment as mediators. *The International Journal of Human Resource Management*, 27(16), 1833-1853.
- Korsgaard M.A., Meglino B.M., & Lester S.W. (1997). Beyond helping: do other-oriented values have broader implications in organizations? *Journal of Applied Psychology*, 82(1), 160-177.
- Machell K.A., Disabato D.J., & Kashdan T.B. (2016). Buffering the negative impact of poverty on youth: the power of purpose in life. *Social Indicators Research*, 126(2), 845-861.
- Maree J., Gerrys E., Fletcher L., & Olivier J. (2019). Using career counselling with group life design principles to improve the employability of disadvantaged young adults. *Journal of Psychology in Africa*, 29, 110-120.
- Maree J., Pienaar M., & Fletcher L. (2017). Enhancing the sense of self of peer supporters using life design-related counselling. *South African Journal of Psychology*, 48(4), 420-433.
- Marshall A. (1920). *Principles of Economics: an introductory volume* (8th ed.). London: Macmillan.
- Maslow A.H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396.
- Maslow A.H. (1954). *Motivation and personality* (1st ed.). New York: Harper.
- Merriam Webster Dictionary (2020a). Mind. Available in: <https://www.merriam-webster.com/dictionary/mind> [19 october 2020].
- Merriam Webster Dictionary (2020b). Self. Available in: <https://www.merriam-webster.com/dictionary/self> [19 october 2020].
- Museux A-C., Dumont S., Careau E., & Milot E. (2016) Improving interprofessional collaboration: the effect of training in nonviolent communication. *Social Work in Health Care*, 55(6), 427-439.
- North E.A., & Ryan A.M. (2018). The Association of Peer Academic Reputations in Math and Science with Achievement Beliefs and Behaviors During Early Adolescence. *The Journal of Early Adolescence*, 38(6), 772-794.
- Nota L. & Santilli S., & Soresi S. (2016). A Life-Design-Based Online Career Intervention for Early Adolescents: Description and Initial Analysis. *The Career Development Quarterly*, 64, 4-19.

- Olszewski-Kubilius P., Subotnik R.F., & Worrell F.C. (2015). Antecedent and concurrent psychosocial skills that support high levels of achievement within talent domains. *High Ability Studies*, 26(2), 195-210.
- Raby K.L., Roisman G.I., Fraley R.C., & Simpson J.A. (2015). The enduring predictive significance of early maternal sensitivity: social and academic competence through age 32 years. *Child Development*, 86(3), 695-708.
- Richardson V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Ed.), *Handbook of Research on Teacher Education* (pp. 102-119). New York: Macmillan.
- Rigopoulou I., & Kehagias J. (2008). Personal development planning under the scope of self-brand orientation. *International Journal of Educational Management*, 22, 300-313.
- Ritzau U. (2018). From form-focussed to communicative: how university students change their beliefs about learning a foreign language. *The Language Learning Journal*, 46(3), 263-276.
- Rokeach M. (1972). *Beliefs, attitudes, and values: a theory of organization and change*. San Francisco: Jossey-Bass.
- Rokeach M. (1973). *The nature of human values*. New York: Free press.
- Romanelli F., Cain J., & Smith K.M. (2006). Emotional intelligence as a predictor of academic and/or professional success. *American Journal of Pharmaceutical Education*, 70(3), 69.
- Rosenberg M. (1990). Reflexivity and emotions. *Social Psychology Quarterly*, 53, 3-12.
- Rosenberg M. (2003). *Non Violent Communication: A language of life* (2nd ed.). Encinitas, CA: PuddleDancer Press.
- Roure R., Collet C., Deschaumes-Molinario C., Dittmar A., Rada H., Delhomme G., & Vernet-Maury E. (1998). Autonomic Nervous System Responses Correlate with Mental Rehearsal in Volleyball Training. *European Journal of Applied Physiology and Occupational Physiology*, 78(2), 99-108.
- Schwartz S.H. (2012). An Overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture*, 2(1).
- Seligman M.E.P., & Csikszentmihalyi M. (2014). Positive Psychology: an Introduction. In M. Csikszentmihalyi (Ed.), *Flow and the Foundations of Positive Psychology* (pp. 279-298). Dordrecht: Springer.
- Shanahan L., Steinhoff A., Bechtiger L., Murray A., Nivette A., Hepp U., & Eisner M. (2020). Emotional distress in young adults during the COVID-19 pandemic: evidence of risk and resilience from a longitudinal cohort study. *Psychological Medicine*, 1-10.

- Shaw B. (1903). *Man and Superman*. Cambridge: The University Press.
- Sheldon K.M., & Schüler J. (2011). Wanting, having, and needing: integrating motive disposition theory and self-determination theory. *Journal of Personality and Social Psychology*, 101(5), 1106-1123.
- Smith A. (1904). *An Inquiry into the Nature and Causes of the Wealth of Nations* by Adam Smith (ed. by Edwin Cannan, Vol. 1.). London: Methuen.
- Subotnik R.F., Olszewski-Kubilius P., & Worrell F.C. (2011). Rethinking Giftedness and Gifted Education: a Proposed Direction Forward Based on Psychological Science. *Psychol Sci Public Interest*, 12(1), 3-54.
- Sutton A. (2016). Measuring the Effects of Self-Awareness: Construction of the Self-Awareness. *Europe's Journal of Psychology*, 12(4), 645-658.
- Tame J. (1993). Life Planning for executives. *Long Range Planning*, 26(5), 93-102.
- Van den Broeck A., Vansteenkiste M., De Witte H., Soenens B., & Lens W. (2010). Capturing autonomy, competence, and relatedness at work: construction and initial validation of the Work-Related Basic Need Satisfaction Scale. *Journal of Occupational and Organizational Psychology*, 83(4), 981-1002.
- Wang F., Cox M.J., Mills-Koonce R., & Snyder P. (2015). Parental Behaviors and Beliefs, Child Temperament, and Attachment Disorganization. *Family Relations*, 64, 191-204.
- Wiese B.S. (2007). Successful pursuit of personal goals and subjective well-being. In B.R. Little, K. Salmela-Aro & S.D. Phillips (Eds.), *Personal Project Pursuit: Goals, Action and Human Flourishing* (pp. 301-328). Hillsdale, NJ: Lawrence Erlbaum.
- Wilson R., James R., David G., Hermann E., Morgan O.J., Niehaus A.C., Hunter A., Thake D., & Smith M. (2016). Multivariate analyses of individual variation in soccer skill as a tool for talent identification and development: utilising evolutionary theory in sports science. *Journal of Sports Sciences*, 34, 2074-2086.
- Xu H., & Chan J.K.-S. (2017). Developing Undergraduates' Self-management and Self-awareness Abilities Through Service-Learning. In S.C. Kong, T.L. Wong, M. Yang, C.F. Chow & K.H. Tse (Eds.), *Emerging practices in scholarship of learning and teaching in a digital era* (pp. 171-187). Singapore: Springer.
- Zhang L.-W., Ma Q.-W., Orlick T., & Zitzelsberger L. (1992). The effect of mental-imagery training on performance enhancement with 7-10-year-old children. *The Sport Psychologist*, 6(3), 230-241.
- Zhang R., Ewalds-Kvist B.M., Li D., & Jiang J. (2019). Chinese Students' Satisfaction with Life Relative to Psychological Capital and

Mediated by Purpose in Life. *A Journal for Diverse Perspectives on Diverse Psychological Issues*, 38(1), 260-271.

Zoogman S., Goldberg S.B., Hoyt W.T., & Miller L. (2015). Mindfulness interventions with youth: a meta-analysis. *Mindfulness*, 6(2), 290-302.