

**More Of A Good Thing Is Even Better:**

Examining the Dimensions of Hedonic and Eudaimonic Savouring, and their Interrelations  
with Motivation Self-Regulation and Well-Being

**André Lauzon**

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Taste and see that the Lord is good.

*Psalm 34:8*

Life loves to be taken by the lapel and told: "I am with you kid. Let's go."

*Maya Angelou*

I dedicate this work to my grandfather,

Francis Derouin,

whose gentle spirit, and wonder-filled heart,  
taught me more than anything else in life how to "taste and see."

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## ABSTRACT

Savouring is the capacity to focus on pleasant experiences in order to intensify and prolong the experience of positive affect. Although the mechanisms and processes of savouring have been studied, the components of its very nature have been largely neglected. The primary objective of this project was thus to develop and validate a taxonomy of savouring comprising seven dimensions: hedonic savouring, and eudaimonic savouring of meaning of life, spirituality, inspiration, self-reflection, appreciation, and gratitude. To achieve this objective, a new measure was developed: the Savouring Configuration Inventory (SCI). In Study 1, 190 participants completed the initial extended version of the SCI, which was reduced and revised on the basis of the results of an exploratory factor analysis. In Study 2 ( $N=350$ ), the factorial structure of the final version of the SCI, comprising 28 items (4 items/subscales), was successfully tested using a confirmatory factor analysis, and its complementary metric properties (internal consistency, construct, concurrent, and discriminant validity) were documented. The second goal of this project was to examine the associations among motivation, hedonic and eudaimonic savouring, and well-being. Study 3 ( $N=283$ ) was designed to evaluate the network of relationships between these variables using a structural equation model. Results revealed that intrinsic motivation was associated with hedonic and eudaimonic savouring, while self-determined extrinsic motivation was associated solely with eudaimonic savouring. Eudaimonic savouring was the highest predictor of well-being, although intrinsic motivation was also moderately associated to this outcome. Contrary to hypotheses, self-determined extrinsic motivation and hedonic savouring did not display unique associations with well-being. Although significant correlations were obtained between these constructs, when both forms of motivation and savouring were concurrently tested as predictors of well-being, eudaimonic savouring and intrinsic motivation predominated. The overall fit of the final structural model was satisfactory. Findings from this project hold important fundamental implications, as they contribute original information on the nature and configuration of the dimensions of savouring experiences, and on their associations with motivational antecedents and well-being consequences.

*Keywords:* Savouring, Savouring experiences, Motivation, Self-determination, Well-being

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## **CHAPTER ONE**

### **THEORETICAL FOUNDATIONS**

The notion that happiness is a fundamental aim of human experiences can be traced back to the ancient Greek philosophers. For example, Aristotle (c. 384-322 BCE) spoke of the “good life,” something that can be conceived as a general form of good fortune. Aristippus (c. 435-356 BCE), a disciple of Aristotle, postulated that the goal of human life was to maximize pleasure and to reduce pain. In a similar vein, Epicurus (c. 341-271 BCE) proposed that pleasure is good and pain is evil, and therefore happiness exists when pleasure surpasses pain.

Though challenging to define, happiness has been a concept that has interested researchers in psychology for a long time. However, it is within positive psychology, a relatively new branch of psychology that emphasizes the importance of understanding the factors that serve not only to make life more tolerable, but more rich, fulfilling, and elevated (Peterson, 2006; Seligman & Csikszentmihalyi, 2000), that the concept of happiness has found its greatest niche. Countless studies have examined happiness in various contexts and situations. Recently, a new and related concept has emerged from within the positive psychology literature: savouring.

The concept of savouring is defined as the capacity to focus on and attend to positive experiences from the past, present, or future, in order to intensify and prolong the experience of positive affect (Bryant, 1989; Bryant & Veroff, 2007; Hurley & Kwon, 2013). The documentation pertaining to savouring has focused largely on its mechanisms (i.e., experiential and temporal; Bryant, 2003; Bryant, Chadwick, & Kluwe, 2011), and on various strategies by which it proceeds (Bryant & Veroff, 2007). Little attention has been paid to its essential nature and structure.

The primary goal of the present project was to develop and test a taxonomy that comprises two global savouring dimensions designated by the following terms: hedonic and eudaimonic. In the past, authors who have examined the phenomenon of savouring have emphasized a type of savouring that may be qualified as hedonic. The notion that savouring can target eudaimonic experiences is a novel idea that is put forth for the first time in this thesis, and is an original conceptual contribution. As it currently stands, no distinctions are made in the literature between the savouring of a pleasurable moment (e.g., eating a piece of chocolate and savouring every moment of indulgence), and savouring that occurs when the psychological gratification derived from an event is taken in (e.g., looking back on a challenging situation and reflecting on the personal growth it fostered). The present project therefore focuses on the importance of distinguishing between these two types of savouring. Although the terms “hedonic savouring” and “eudaimonic savouring” were used once by Bryant (Bryant et al., 2011), to incidentally describe the developmental progression of savouring abilities in children, their conceptual meaning was not clarified. In the present thesis, these terms are formally defined and elaborated into an original theory. As aforementioned, this theoretical framework first differentiates between hedonic savouring, which promotes pleasure and positive affect, and eudaimonic savouring, which increases the experiential satisfaction derived from gratifying psychological experiences. Eudaimonic savouring is thought to transcend the negative or positive valence of affect, and has been further elaborated into six complementary components: eudaimonic savouring of experiences related to the search of meaning in one’s life, spirituality, inspiration, self-reflection, appreciation, and gratitude.

To summarize, the first focus of this thesis is the creation of a multidimensional conceptualization of the nature of savouring experiences, and the empirical validation of this

entirely novel taxonomy. As there is currently no information on this topic, this objective is liable to offer a substantial original fundamental contribution.

The second goal of this project was to examine the associations among motivation, savouring, and their psychological consequences. It can be argued that the phenomenological experience of an action is largely dependent on its motives. For instance, as proposed by Self-Determination Theory (Deci & Ryan, 1985; 2002; 2008a; Ryan & Deci, 2017), behaviour can be performed in response to external pressures, out of deliberate personal choice, or because it is inherently pleasurable. Differences in the origins of an undertaking are likely to affect how it is experienced. It was thus suggested here that motivational orientation influences savouring modalities.

Lastly, as mentioned at the onset of the previous paragraph, an important consequence of savouring and motivation was also considered here: psychological well-being. Indeed, the bulk of the documentation on savouring pertains to its contributions to this outcome (Carl, Fairholme, Gallagher, Thompson-Hollands, & Barlow, 2014; Quoidbach, Berry, Hansenne, & Mikolajczak, 2010; Smith & Bryant, 2017). Psychological consequences are a central focus of motivational research as well (Ryan, 2012; Ryan & Deci, 2017). The second goal of the present project was thus to examine associations among motivation, savouring, and psychological well-being.

The following section describes the budding literature that has conceptualized and studied the concept of savouring. This section culminates with the exposition of the theoretical savouring framework that was developed for the purposes of the present project. This information is complemented by two further sections that pertain to psychological well-being and self-determined motivation. The detailed goals and hypotheses of this project are

presented thereafter, accompanied by an overview of the studies that were designed to achieve these goals.

### **Savouring**

Savouring is a novel concept that involves the self-regulation of positive feelings. It may be defined as a cognitive process that seeks to promote the generation, the maintenance, and/or the enhancement of positive affect (Bryant & Veroff, 2007). This is accomplished by the act of attending to, focusing on, and appreciating positive experiences from the past, present, or future (Bryant, 1989, 2003; Bryant, Ericksen, & DeHoek, 2008; Bryant & Veroff, 2007). Conceived in part due to a desire to examine the positive counterpart of coping (Folkman, 2013; Folkman & Lazarus, 1980), the concept of savouring relates to the cognitive-behavioural ability to manage and regulate positive experiences (Bryant, 2003; Bryant & Veroff, 2007). To date, savouring has been conceptualized and studied in terms of its experiential and temporal characteristics, and of the mechanisms and strategies by which it proceeds.

#### **The Experiential and Temporal Aspects of Savouring**

There have been efforts to understand the experience of savouring, that is, the emotions, thoughts, and behaviours that are evoked while attending to positive feelings (Bryant & Veroff, 2007). Savouring can be either world-focused or self-focused (Bryant et al., 2011). World-focused savouring occurs when the cynosure of attention is drawn outwards and when the positive experience takes root in the environment (Bryant & Veroff, 2007). By contrast, self-focused savouring is directed inwards and is precipitated by internal events. Savouring can also be experienced either through cognitive reflection or experiential absorption (Bryant & Veroff, 2007).

Bryant (2003) also proposes that savouring can be characterized by its temporal aspect, depending on whether its source is from the past, present, or future. Savouring through reminiscing occurs after a positive event has taken place when a person looks back on it in order to generate positive emotions (Bryant, Smart, & King, 2005). Savouring in the moment occurs during the positive event, when the positive feelings it elicits are intensified or prolonged (Bryant 2003), whereas savouring through anticipation involves looking forward to a future positive event to generate positive feelings in the present (Kurtz, 2008).

### **The Processes of Savouring**

The processes of savouring relate to the transformation of the event being savoured into positive feelings and this transformation occurs via proactive cognitive and experiential mechanisms (Bryant & Veroff, 2007). Bryant and Veroff (2007) theorized the existence of four primary savouring processes: thanksgiving, marvelling, basking, and luxuriating. These processes differ in terms of their experiential characteristics (Bryant et al., 2011). For instance, both thanksgiving and marvelling are predominantly world-focused, whereas basking and luxuriating are self-focused. Also, thanksgiving and basking involve cognitive reflection; whereas marvelling and luxuriating involve absorption (Bryant et al., 2011). Moreover, these four processes vary in regard to their temporal source and duration. Thanksgiving and basking generally occur after a positive event has taken place (savouring through reminiscing) and require less effort to prolong over time, whereas marvelling and luxuriating normally transpire in the present (savouring the moment) and are more subject to habituation, thus harder to sustain (Bryant & Veroff, 2007).

### **Savouring Strategies**

Savouring strategies relate to the “how” of the savouring process, and represent specific thoughts or behaviours that can be thought of as savouring responses (Bryant &

Veroff, 2007). They are utilized to react to, or generate, a positive stimulus, outcome, or event (Bryant et al., 2011). Ten savouring strategies have been identified, although more are suspected to exist: memory building, self-congratulation, sensory-perceptual sharpening, comparing, temporal awareness, counting blessings, absorption, kill-joy thinking (a negative strategy that hinders savouring), sharing with others, and behavioural expression (Bryant & Veroff, 2007). The first eight of these strategies are cognitive in nature and are described below. The last two of these strategies are behavioural and are described thereafter (Smith & Bryant, 2013).

Memory building signifies taking mental pictures of experiences in order to be able to evoke the memory of the event at a future time through reminiscence (Jose, Lim, & Bryant, 2012). Self-congratulation means basking in one's accomplishment by enjoying the self-satisfaction provided by a positive outcome (Bryant & Veroff, 2007). A person utilizing sensory-perceptual sharpening will, in the midst of a positive experience, seek to bring into focus certain stimuli and block out others in order to maximize pleasure. It is about honing the senses through effortful concentration (Bryant & Veroff, 2007). Comparing entails examining the extent to which a given event resembles a past situation, or how it compares to its representation in one's imagination. Temporal awareness involves remembering how ephemeral the given moment is and reflectively imagining how nice it would be if the moment could last forever. A person that is counting blessings will bring back to mind instances of good fortune. This strategy is about remembering how fortunate and blessed one is. Absorption is an explicit avoidance of intellectual elaboration, in favour of mindful immersion in the present experience. Kill-joy thinking decreases savouring, by focusing on other things while savouring, to dampen the experience of positive affect. It can also entail looking for the imperfections in a given situation.

The two strategies described below are behavioural in nature (Jose et al., 2012). Sharing is done by seeking out others in order to mutually partake in a positive experience. It involves letting others in on the pleasantness or joyfulness of the moment. Behavioural expression describes the outward physical manifestation of an internal feeling. It relates to the manifestation of an energetic response, such as laughing or jumping up and down.

All ten aforementioned savouring strategies can be thought of as state or trait proclivities. Indeed, these strategies may either consist of transient “in the moment” savouring responses or represent a propension that can be thought of as a more enduring personal characteristic (Bryant & Veroff, 2007; Jose et al., 2012).

### **Towards a New Conceptualization of the Nature of Savouring Experiences**

To date, little attention has been paid to the essential nature of savouring. It is proposed, in the present project, that savouring experiences differ depending on their experiential focus. More precisely, it is suggested that an essential distinction can be made between savouring occurrences that involve sensorial pleasure, and savouring experiences that are directed toward significant psychological experiences. These two fundamental aspects of the savouring phenomenon are labelled hedonic and eudaimonic savouring, respectively.

#### **Hedonic Savouring**

Hedonism has a long-standing historical tradition in philosophy (Heathwood, 2013). The Greek word hedonia means pleasure (Vittersø, 2013). In essence, hedonia is the pursuit of pleasure and comfort, as well as the absence of pain and discomfort (Huta, 2013a). An important feature of hedonism is the importance placed on the experience of the individual, that is, it requires awareness of the present moment (Taylor, 2012). Another feature of hedonism is the necessary centrality of the self. Since it is a state of subjective pleasure, a self-focused orientation is inherently necessary (Steger, Shin, Shim, & Fitch-Martin, 2013).

Finally, it is the presence of the pleasure and the extent to which it is experienced, rather than its source, that is viewed as important (Waterman, 2007).

Typically, a distinction is made between personal hedonism and ethical hedonism (Tilley, 2012). The former refers to human nature. According to this view, human beings are motivationally inclined to act with self-interested motives, seeking to either increase personal pleasure and/or to avoid pain (Lemos, 2004). Alternatively, ethical hedonism, first taught by the Cyrenaics, a philosophical school founded by Aristippus (c. 435-356 BCE), proposes the idea that humans have the moral responsibility to act in such a way as to be the happiest. Happiness in this context is defined as experiencing optimal pleasure and minimal pain. Pleasure, particularly physical pleasure, is viewed as the *summum bonum* (i.e., the highest good). Epicurus (c. 341-271 BCE) proposed a tamer version of ethical hedonism, by suggesting that one should learn to discriminate between pleasures that lead to, and those that detract from, happiness (Bobzien, 2006), and by associating pleasure with the concept of *ataraxia*, the Greek term for equanimity (Dewitt, 1954).

In their review, Kahneman, Diener, and Schwarz (1999), offer an overview of hedonic psychology that is described as “the study of what makes experiences and life pleasant or unpleasant” (p. ix). In line with Aristippus’ and Epicurus’ view, hedonism is about optimizing pleasure and minimizing pain.

As it currently stands, the concept of savouring, in part due to its implied close relationship with positive affect, can be easily understood as being related to the concept of hedonia. Savouring is generally understood as a focus on positive experiences, and on the maintenance or enhancement of positive affect (Bryant & Veroff, 2007). Thus, it is logical to envision a type of savouring that relates to the pursuit of pleasure. It is purported here that hedonic savouring occurs when an individual appreciates an enjoyable experience. For this

type of savouring, pleasure is self-evidently central, and attention is focused on agreeable stimulation in one or more of the five senses, as well as on concomitant positive affects. For example, an individual immersing him or herself in a warm bath may be doing so for the positive sensations experienced from the smoothness and heat of the water upon the skin, and for the feelings of comfort and relaxation that ensue.

To complement hedonic savouring, which is derived from physical pleasure, a second main dimension of savouring is proposed here: eudaimonic savouring, which unfolds from satisfying experiences that are of psychological essence.

### **Eudaimonic Savouring**

Although Aristotle did not invent the word eudaimonia – this word deriving from *eu* (meaning good) and *daimon* (meaning spirit; Bok, 2010) was already part of the Greek language (Haybron, 2016) – he was the first to use it to describe a type of happiness that transcends a person's present day health, wealth, and position (Brown, 2009). In fact, although it is often translated as such, the word happiness does not entirely do justice to the concept of eudaimonia as understood by the illustrious classical philosopher. According to Aristotle, it is the implementation of virtue in favourable conditions (Keyes & Annas, 2009), the expression of excellence of character (Belzak, Thrash, Sim, & Wadsworth, 2017). He thus opposes eudaimonia to hedonia, viewing the former not as a state of subjective pleasure (Brown, 2009), but rather as a lifelong pursuit of, and engagement with, values that are aligned with reason (Ryan, Huta, & Deci, 2008).

Neo-Aristotelian perspectives on the concept of eudaimonia abound (Huta & Waterman, 2014; Vittersø, 2016). Although most authors agree on a generic definition of eudaimonia – namely, that it is the way fulfillment *should* be pursued (Ryan, Curren, & Deci, 2013) – and on how valuable it is to human existence, much discord and disagreement remain

regarding its necessary and sufficient conditions (Capuccino, 2013). One cause for the dissension concerns the underlying frame of reference being used in its definition, with two perspectives traditionally being advocated: subjective and objective (Tiberius, 2013). Both viewpoints offer a different answer to the question “what constitutes eudaimonia?” – that is, whether the elements that define eudaimonia are idiosyncratic, or whether an impartial list can be drawn and applied universally.

On the one hand, researchers and philosophers that are adepts of the subjective position will translate the word eudaimonia into happiness (Bradburns, 1969; Ryff, 1989). According to this stance, a person’s assessment of how good he/she feels is considered the best way to judge optimal functioning (Deci & Ryan, 2008a; MacLeod, 2015). He/she is viewed as being the best judge of what is important to him/her, and the emphasis is placed on personal experience, rather than on striving toward a virtuous life or excellence. For example, Norton (1976) describes eudaimonia as the subjective feeling of wanting to do, and being in the process of doing, something that one considers worth doing.

Those who endorse a subjective frame of reference sometimes blur the lines between hedonia and eudaimonia, arguing for the valence and prevalence of positive affect in relation to both concepts, and noting that the distinction between the two is relatively new in psychological research (Kashdan, Biswas-Diener, & King, 2008).

On the other hand, those adopting the objective position consider that the term eudaimonia is more appropriately translated as flourishing (Huta, 2013a; Rasmussen, 1999). From this perspective, eudaimonia is seen as a lifelong venture and progress “toward realization of one’s true and best nature” (Waterman, 2013, p.79). In this sense, it is a striving toward personal excellence (Ryff & Singer, 2008), completeness (Gewirth, 1998), and the development of personal potential (Waterman, 2013). Eudaimonia seen in this light is thus not

about being happy, but about being fulfilled for the right reasons. The idea of living according to one's true self (Waterman, 1993; 2008), and of self-realization, rather than mere personal gratification, is central here. Another important, and perhaps defining characteristic of the objective position, is the idea that there exists a right way to live eudaimonically, or in other words, a set of elements that constitute eudaimonic life. Accordingly, researchers and philosophers have proposed many theories to circumscribe the province of eudaimonia by providing a list of its important components (Tiberius, 2013). For instance, some of the elements proposed to be essential for living eudaimonically are personal expressiveness (Waterman, 1993); striving for authenticity (Haybron, 2016; Schlegel, Hirsch, & Smith, 2013); autonomy, competence, relatedness (Ryan & Deci, 2017); environmental mastery, positive relationships, autonomy, personal growth, self-acceptance, purpose in life (Ryff, 1989; 2013; 2016); meaning, elevating experiences, self connectedness (Huta, 2013b; 2015; Steger, 2012); personal projects (Little, 2016); character strengths (such as hope, creativity, curiosity, gratitude, appreciation, and kindness; Harzer, 2016; Peterson & Seligman, 2004); belonging (Fowers, 2016); and excellence (Papaioannou, 2017).

In an effort to synthesize the abundant literature on this topic, Ryan et al., (2008) proposed that eudaimonia can be conceptualized as either an experiential approach to life, a way of acting or thinking, or a mixture of both. Conceptualizing eudaimonia as a way of being implies experiencing events on a deeper, more meaningful and wonder-filled level, where one may feel inspired, alive and fulfilled (Huta & Ryan, 2010; Vittersø & Dahl, 2013). Seeing eudaimonia as a way of acting or thinking describes such concepts as the pursuit of excellence (i.e., striving to outdo oneself), authenticity (i.e., striving to live in accordance with one's values and true self), or autotelism (i.e., striving to fully experience the means, the journey

that leads to an end; Huta, 2013b; Ryan et al., 2008; Vowinckel, Westerhof, Bohlmeijer, & Webster, 2017).

To conclude, the incipient experience and focus of hedonic savouring, as theorized herein, is physical pleasure and positive affect. By comparison, in line with the conceptual considerations detailed above, eudaimonic savouring is theorized to be elicited and fostered psychologically. If so, what are the key fulfilling components of our cognitive/affective experience that would provide natural triggers and fruitful targets for eudaimonic savouring? After careful consideration, involving the conceptual categorization of savouring experiences, information that to this point had been presented in an impartial and unidimensional way, and complemented with a thorough review of the documentation, a formalized structure was proposed comprising unique and complementary subdimensions. The construct of eudaimonic savouring was thus conceptualized here as consisting of six subdimensions: savouring the search for meaning in one's life, spiritual experiences, inspiration, self-reflection, appreciation, and gratitude.

**Meaning of life and spiritual experiences.** Although the concept of meaning is difficult to define – countless individuals stemming from a plethora of disciplines (e.g., theology, philosophy, psychology, poetry, and literature) have grappled for thousands of years with this concept which cannot be easily reduced or contained in a simple definition (George & Park, 2016; Medlock, 2017; Schlegel & Hicks, 2016) – it is considered by most scholars to be a universal notion (Dezelic, 2017), representative of eudaimonia (Huta, 2017), and central to human experience (Wong, 2017).

Frankl (1963; 1969), who is considered to be a pioneer of the study of meaning, proposed that it is a universal yearning and that individuals construct what lends significance to their lives in a unique way that typically revolves around three main themes: a life goal,

craft, work, or calling of central importance; a spiritual quest or set of religious beliefs; and close relationships. The notion of meaning as a universal, innate human aspiration that is expressed and fulfilled in personal ways (Dezelic, 2017) has remained a key aspect of further conceptual developments. Maslow (1968) defined meaning as a basic human need. Baumeister (1991) proposes that the fulfillment of the needs for purpose, values, efficacy, and self-worth, will translate into the perception of a meaningful life.

More recently, some researchers have mentioned the necessity of considering specific factors (e.g., positive affect, engagement, and spiritual resonance) when describing the concept of meaning (George & Park, 2016). Steger and his colleagues (Steger, Frazier, Oishi, & Kaler, 2006) define meaning as “the sense made of, and significance felt, regarding the nature of one's being and existence” (p. 81). Meaning has also been viewed as a general sense of coherence in life (Antonovsky, 1987; Pallant & Lae, 2002; Wong, 1989), and a sense of rightness (King, 2012). Medlock (2017) adds to this definition three additional dimensions: a sense of significance, purpose, and mattering. Likewise, meaning has been conceptualized as psychological experiences that have personal value, and that transcend the self (Huta, 2017; Huta & Ryan, 2010). Moreover, in her constructivist model, Dezelic (2014; 2017) explained how an individual creates meaning in his life from his experiences by making sense of his own biological, psychological, social, cultural, and spiritual circumstances. Lastly, Wong's PURE model (2010; 2012) defines meaning as consisting of four elements: purpose, understanding, responsible action, and enjoyment.

Others conceive meaning as being a pursuit toward a directed end. According to Rosenmayr (1985), for instance, meaning is related to the knowledge that one's personal actions are in line with one's personal goals. In the same spirit, Spreitzer (1995) described meaning as “the value of a work goal or purpose” (p. 1443). Alternatively, according to Wong

(2011), meaning is the concern to do what is right, and moral actions bring about feelings of fulfillment and significance. Thus, although a wide array of theorists agree about the importance of meaning in life, it has been construed in manifold ways.

One important consensus emerging from the scientific literature is the understanding of meaning in life as consisting of two distinct components: the search for meaning and the sense of meaning (Wong, 2017). Other researchers have proposed their own similar dichotomy, suggesting that the components of meaning are presence/search for meaning (Steger, Kashdan, Sullivan, & Lorentz, 2008), meaning seeking/making (Wong, 2008), detection/construction of meaning (King & Hicks, 2009), and subjective/objective meaning (Fowers & Lefevor, 2015; Lueger & Vettori, 2014).

Meaning in life, whether experienced as a pursuit towards an ever-growing understanding and integration of the external world in relation with the self (i.e., the search for meaning), or whether expressed through the feeling of transcendence of the self with a greater reality (i.e., the sense of meaning), remains a fundamental element of human experience. The search for, and the sense of, meaning thus appear to be core elements of our psychological make-up, and it was proposed here that experiences that are endowed with personal significance are likely to naturally lend themselves to savouring, and to have more impact when they are actually savoured. Savouring meaning is operationalized here as consisting of two dimensions: intellectual and philosophical pursuits toward understanding meaning in life, and spiritual insights and sacred experiences that foster a sense of being part of something bigger than oneself.

**Inspiration.** This concept has not received much attention within psychology (Thrash & Elliot, 2003). It is defined as “a breathing in or infusion of some idea, purpose [...] into the mind; the suggestion, awakening, or creation of some feeling or impulse, especially of an

exulted kind” in the Oxford English Dictionary (cited by Simpson & Weiner, 1989). Thrash, Elliot, Maruskin, and Cassidy (2003) describe inspiration as having three important and fundamental characteristics: transcendence, approach motivation, and evocation.

Transcendence is defined as the attainment of a clear and concrete awareness of a new idea or potentially better state of being. Approach motivation is related to the sense of being beckoned to move into action by inspiration, to the need to act on the inspired idea and to seek its actualization. Evocation relates to the notion that when an individual is inspired, he tends to ascribe the source of inspiration as beyond himself. Thrash and Elliot (2004) further developed this model by suggesting the existence of two component processes: being inspired *by* and being inspired *to*. The former relates to the “appreciation of and accommodation to the perceived intrinsic value of the evocative object (e.g., beauty of a landscape, elegance of a creative insight, or virtue in a human action)” (p.489). The latter relates to the motivation to express and portray the qualities present in the inspired idea or state of being. Transcendence and evocation are considered characteristics of being inspired *by*, whereas approach motivation is a feature of being inspired *to* (Thrash & Elliot, 2004).

Whether it is induced by a moving stimulus, or manifested as an urge to act, inspiration is a striking experience that focuses one’s attention and energy. It is endowed with strong phenomenological qualities, intense concomitant emotions, and a keen sense of direction and vitality. Because of these features, it was proposed here that inspiration is an important dimension of savouring. Eudaimonic savouring of inspiration was thus theorized to occur when a person is seized by the sudden awareness of the evocative qualities of a stimulus, and/or by a creative impulse, yields open heartedly to it, and focuses on this experience in order to optimize the satisfaction that is derived from it.

**Self-reflection.** According to Trapnell and Campbell (1999), self-reflection is a subconstruct of self-awareness – the psychological state in which one’s attention is set upon the self. Self-reflection refers to the tendency to engage in an intellectual form of self-awareness that is aimed toward exploring and understanding one’s self. It is motivated by self-directed epistemic curiosity; in other words, interest in increasing self-knowledge regarding one’s emotional and attitudinal landscape, thought processes, and value system (Morin, 2011). Whereas self-rumination is a negative form of self-focus, referring to a negative form of self-awareness that may be characterized by neurotic tendencies (Tesser, Stapel, & Wood, 2002), self-reflection is said to be a positive form of self-scrutiny (Trapnell & Campbell, 1999), characterized by intellectual tendencies (Boyratz & Waits, 2015), and associated with openness to experience (Harrington & Loffredo, 2010) – one of the Big-5 personality dimensions (McCrae & Costa, 1987). Self-reflection is also associated with inner state awareness (Campbell et al., 1996), a greater sensitivity to the psychological experience of others (Dimaggio, Lysaker, Carcione, Nicolò, & Semerari, 2008), and a greater sensitivity of one’s shared place in nature (Richardson & Sheffield, 2015). Self-reflection fosters behavioural and attitudinal changes by promoting the generation of insights (Knapp, Gottlieb, & Handelsman, 2017). One study (Mori & Tanno, 2015) found that self-reflection was positively associated with decentering – an important component of mindfulness which consist in the ability to observe one’s inner experience without casting any judgment, good or bad. It was also shown to help with the regulation of negative mood (Takano & Tanno, 2009).

The formation of identity is a developmental task that lasts a lifetime, and is a central focus of absorption. As exemplified by the research on the self-reference effect (e.g., Macrae, Visokomogilski, Golubickis, Cunningham, & Sahraie, 2017), information that is self-related spontaneously engages attention and interest, and contemplating this information is

engrossing. Self-reflection was therefore considered to constitute a key dimension of savouring. Eudaimonic savouring of self-reflection is more specifically defined here as the intentional enhancement of the gratification induced by fruitful introspection, progress in self-knowledge, personal growth, or by any internal event that elicits an awareness of a connection to one's self-concept.

Meaning, inspiration, and self-reflection are dimensions of eudaimonic savouring that are directed inwards. By contrast, the two following dimensions, appreciation and gratitude, are elicited when positive emotions generated by external events are actively enhanced. Though somewhat related, appreciation and gratitude are distinctive features of an individual's emotional landscape (McCraty & Childre, 2004), and it is proposed here that they both represent different opportunities for eudaimonic savouring.

**Appreciation.** There is only a small amount of research that pertains to appreciation (Chow & Berenbaum, 2016). This concept is defined as the acknowledgement of the value and importance of a stimulus (e.g., an event or an object), and of the positive emotions that it elicits (Adler & Fagley, 2005). It is the act of noticing and valuing. It has also been described as an experience of awe or wonder induced by the subjective perception of impressive qualities, and is considered one of the 24 character strengths (labeled "appreciation of beauty and excellence") by Peterson and Seligman (2004). Haidt and Keltner (2004) understand appreciation as "the ability to find, recognize, and take pleasure in the existence of goodness in the physical and social worlds" (p. 537). These authors identified three common triggers for appreciation: physical beauty, skill or talent, and virtue. Diessner, Solom, Frost, Parsons and Davidson (2008) proposed three similar targets of appreciation: beauty found in nature, art, and moral behaviour. Fagley (2012; Fagley & Adler, 2012) proposes a broader perspective and suggests that appreciation contains eight aspects: valuing what one possesses in life,

feelings of wonder, comforting rituals and routines, being present in the moment, comparing oneself with others, valuing blessings, recollecting loss or adversity, and valuing of close ones. Adler and Fagley (2005) also suggest that two pathways can bring about appreciation: triggers (which induce appreciation inadvertently) and strategies (which induce appreciation deliberately).

Appreciation is, at its core, the favourable outcome of an evaluation experience, which translates into positive emotions that can range from joy, approval, or contentment, to more self-transcendent affective states like awe and admiration. Such a direct focus on a rich array of positive affect is theorized to be a wellspring of savouring experiences. Eudaimonic savouring of appreciation was therefore defined here as the purposeful intensification of the pleasant emotions that occur when a worthwhile event is noted and valued.

**Gratitude.** According to Emmons (2004), gratitude is defined as a sense of joy and thankfulness felt in response to a tangible or abstract gift from a person or from the universe. Likewise, for Froh and Bono (2012), gratitude is “a typical emotional response when a person receives a personal gift or benefit that was not earned, deserved, or expected, but instead due to the good intentions of another person” (p. 1228). McCullough, Emmons, and Tsang (2002) also describe this notion as the positive emotions brought by the recognition of the role played by benevolent moral agents in a beneficial outcome. Lambert and colleagues (Lambert, Fincham, Braithwaite, Graham, & Beach, 2009) labelled this type of gratitude as “benefit-triggered gratitude”, opposing it to another type labelled “generalized gratitude”, which consists of being thankful for and valuing the gifts bestowed by life. Benefit-triggered gratitude is a reformulation of the understanding of gratitude as including three key elements: the benefactor, the benefit, and the beneficiary (Emmons & McCullough, 2004; Fagley, 2016).

The nature of the benefit received can be physical, emotional, psychological, or spiritual (Emmons, 1999; McCullough, Kilpatrick, Emmons, & Larson, 2001).

Furthermore, gratitude is considered a self-transcendent emotion (Haidt, 2003), that is, an emotion that encourages one's attention to move beyond the self, to emphasize others instead (Stellar, et al., 2017). Gratitude can either be personal (i.e., feeling thankful to another person) or transpersonal (i.e., feeling thankful to God, the universe, or a higher power; Emmons, 2004; Emmons & McCullough, 2004). Although the acknowledgement of a gratuitous favour is implied in gratitude (Watkins, 2014) it does not, however, necessarily entail feeling indebted (Algoe, Gable, & Maisel, 2010; McCullough, et al., 2001). It rather involves an awareness of the kindness and generosity of others, and it elicits delight and thankfulness. Finally, gratitude has been found to be contagious (Fredrickson, 2004), in that it often motivates individuals to respond with reciprocal kindness and pro-social behaviours (Ma, Tunney, & Ferguson, 2017; Waters, 2012).

A sense of entitlement, greed for material wealth, and low personal insight, are said to act as obstacles to gratitude, because they imply an absence of awareness or a lack of sensitivity to the benevolence of others (Emmons, 2004). Moreover, a caveat for the expression of gratitude, proposed by the philosopher Adam Smith (1790/2002), is the approval of the benefactor's conduct. In other words, one must, to some degree at least, *like* the benefactor.

Like appreciation, gratitude is a fount of rich positive emotions liable to provide fertile grounds for savouring. Eudaimonic savouring of gratitude was thus theorized to be triggered when a gift or unexpected benefit is bestowed by a real or abstract entity, and realized by enhancing the awareness of the kindness or generosity of this being in order to amplify one's delight and thankfulness.

### **Hedonic and Eudaimonic Savouring Dimensions as Trait Constructs**

As explained earlier when reviewing the seminal work of Bryant (1989; 2003; Bryant & Veroff, 2007), savouring can be understood either as a state or as a trait. In the present project, hedonic and eudaimonic savouring dimensions were examined as trait proclivities, because this level of analysis is more suitable to the assessment of the overall structure of a phenomenon. Trait-like concepts are more apt to allow for the generation of coherent trends that can be compared, to determine if they are best distinguished or aggregated. By contrast, state constructs are more idiosyncratic and unstable. Although it may be interesting, in future research, to assess whether the dimensions of savouring proposed here can also manifest themselves in the form of transient states, it was deemed preferable to begin this relatively complex conceptual undertaking by focusing on set personal dispositions.

To summarize, it is proposed in this thesis that the concept of savouring can be expanded by considering various facets of its nature. Specifically, hedonic savouring is distinguished from eudaimonic savouring, which is further differentiated into six subtypes: savouring of meaning of life, spirituality, inspiration, self-reflection, appreciation, and gratitude. This research project also focuses on a known outcome of savouring: psychological well-being.

### **Well-Being**

Well-being is a thriving topic that has commanded an abundance of theoretical and empirical attention (Waterman, 2007). The field of well-being, though complex (Deci & Ryan, 2008b), is flourishing (Ryan & Deci, 2001). Given the multifaceted nature of this construct (Disabato, Goodman, Kashdan, Short, & Jarden, 2016), alternative viewpoints in its conceptualization are not surprising (Forgeard, Jayawickreme, Kern, & Seligman, 2011). Four prevalent theories of well-being are described below.

First, drawing from a hedonic perspective, Diener and colleagues (Diener, 2012, 2013; Diener and Lucas, 1999; Diener, Oishi, & Lucas, 2002) have proposed the concept of subjective well-being in which the focus is placed upon positive experiences. Subjective well-being is typically assessed by measuring both positive and negative affect (Watson, Clark, & Tellegen, 1988), with the addition of satisfaction with life (Diener, Emmons, Larsen, & Griffin, 1985).

Second, Ryff introduced psychological well-being (Ryff, 1989; Ryff & Keyes, 1995; Ryff and Singer, 1998), in which the emphasis is placed upon the process of flourishing and growth (Waterman, 2013; Weiss, Westerhof, & Bohlmeijer, 2016). According to Ryff's model (1989; Ryff & Keyes, 1995), well-being consists of six dimensions: personal growth, self-acceptance, purpose in life, positive relationships with others, environmental mastery, and self-reliance.

Third, spiritual well-being (Ellison, 1983; Gomez & Fisher, 2003), defined as “an indication of individuals' quality of life in the spiritual dimension or simply an indication of their spiritual health” (Fehring, Miller, & Shaw, 1997, p. 664), is considered to be a dimension of both subjective well-being (Paloutzian & Ellison, 1982) and psychological well-being (van Dierendonck, 2005; van Dierendonck & Mohan, 2006). According to Fisher (2011), an individual's spiritual well-being is assessed in four domains: personal, communal, environmental, and transcendental.

Fourth, social well-being (Keyes, 1998) is a model of well-being that takes into account the contribution of positive relationships within social structures to an individual's quality of life. Social well-being indicates the level of social health of a person by assessing five dimensions of social wellness: social acceptance, social contribution, social coherence, social integration, and social actualization (Keyes & Shapiro, 2004).

Seeking to consolidate and reconcile this wealth of information, Seligman (2011) proposed an inclusive well-being model, which is the theoretical perspective that will be favoured in the present thesis, that is comprised of five elements: positive emotions, engagement, positive relationships, meaning, and accomplishment. Each of these elements is said to have three properties: They contribute to well-being, are pursued for their own sake, and are defined and measured independently of one another (Seligman, 2011). Moreover, while these five elements are distinctive of one another, each is construed as an integral part of well-being as a whole (Huppert & So, 2013).

### **Positive Emotions**

Seligman (2011) considers positive emotions to be one of the cornerstones of well-being. Historically, there has been an imbalance in the field of emotions, in that most of the focus has been on the study of negative emotions to the detriment of positive emotions. Prompted by the rise of the field of positive psychology, researchers have put forth novel information on this topic that contributes to a more balanced take on emotion (Fredrickson & Branigan, 2005; Lyubomirsky, King, Diener, 2005). Moreover, positive emotions were found to bestow many benefits. They help foster creative thinking and efficient problem solving, enhance self-regulation, promote desirable social outcomes and contribute to physical health and well-being (Kiken & Fredrickson, 2017; Kok et al., 2013; Tugade & Fredrickson, 2004; Van Cappellen, Rice, Catalino, & Fredrickson, 2017; Wood, Heimpel, & Michela, 2003). Enabling people to engage in activities that are associated with positive emotions also reduces negative emotions (Fredrickson & Levenson, 1998; Kiken & Fredrickson, 2017; Tugade & Fredrickson, 2004). Moreover, experiencing positive emotions broadens a person's momentary thought-action repertoire (i.e., it expands the number of thoughts and actions that comes to mind; Fredrickson & Branigan, 2001). For example, the cultivation of positive

emotions, such as joy, fosters greater creativity and imagination. This, in turn, allows the individual to build durable inner personal resources (i.e., social, psychological, physical and intellectual). These resources function as a reserve and are made available to manage future threats (Frederickson, 1998; 2001). The capacity to experience positive emotions is thus posited to be a fundamental human strength and a key aspect of well-being.

### **Engagement**

This aspect of well-being relates to the concept of flow. Initially proposed in 1975, and further refined in 1982, flow is an intriguing and powerful concept that is the foundation of Csikszentmihalyi's life work. Flow can be defined as an optimal form of engagement (Csikszentmihalyi, 1990, 2000; Csikszentmihalyi & Nakamura, 2003). It is said to occur when the skills of a person are a match for the challenge provided by an activity. Flow involves intense experiential involvement, and proceeds through the immersion of attention in the present moment. It is an important component of optimal experience because the merging of awareness and action is a pleasant and rewarding experience (Csikszentmihalyi, 1997).

Flow has been the focus of a long and prolific research tradition. It has been extensively studied from a variety of fundamental and applied viewpoints, and related to a host of positive psychological, emotional, and behavioural outcomes (Csikszentmihalyi, Abuhamdeh, & Nakamura, 2005; Nakamura & Csikszentmihalyi, 2009). For example, flow experiences have been studied in work settings (Bakker, 2008; Ceja & Navarro, 2012; Csikszentmihalyi & LeFevre, 1989; Demerouti, 2006; Demerouti, Bakker, Sonnentag, & Fullagar, 2012; Demerouti & Fullagar, 2013; Eisenberger, Jones, Stinglhamber, Shanock, & Randall, 2005; Fullagar & Kelloway, 2009; Mäkikangas, Bakker, Aunola, & Demerouti, 2010; Tobert & Moneta, 2013); education (Admiraal, Huizenga, Akkerman, & Ten Dam, 2011; Bakker, 2005; Csikszentmihalyi, 1997; Egbert, 2004; Lloyd & Smith, 2006; Rogatko, 2009;

Stormoen, Urke, Tjomsland, Wold, & Diseth, 2016); exercise, sports and leisure (Bakker, Oerlemans, Demerouti, Slot, & Ali, 2011; Catley & Duda, 1997; Chavez, 2008; Elbe, Barene, Strahler, Krusturp, & Holtermann, 2016; Heo, Lee, McCormick, & Pedersen, 2010; Jackson & Csikszentmihalyi, 1999; Jackson & Marsh, 1996; Russell, 2001; Schüler & Brunner, 2009; Swann, Piggott, Crust, Keegan, & Hemmings, 2015); art (Baker & MacDonald, 2013; Chemi, 2016; Chilton, 2013; Chirico, Serino, Ciproso, Gaggioli, & Riva, 2015; Marin & Bhattacharya, 2013; Sinnamon, Moran, & O'Connell, 2012; Wrigley & Emmerson, 2013); and spiritual endeavours (Dillon & Tait, 2000; Fave, Bassi, & Massimini, 2003; Hollander & Acevedo, 2000; Rufi, Wlodarczyk, Páez, & Javaloy, 2016; Tsaur, Yen, & Hsiao, 2013; Watson & Nesti, 2005).

### **Positive Relationships**

Furthermore, Seligman (2011) views the presence of positive relationships as being central to an individual's well-being. Unsurprisingly, it has long been recognized and documented that close relationships positively contribute to overall health and happiness (Peterson, 2006). Perhaps the most eloquent and convincing case for the importance of significant and positive relationships to human welfare was put forward in a landmark review by Roy Baumeister in 1995 (Baumeister & Leary, 1995), which relies heavily on the literature on Attachment Theory (for reviews on this topic, please consult Cassidy & Shaver, 2008; Shaver & Mikulincer, 2009; or Simpson & Rholes, 2015). Based on over 400 sources, Baumeister demonstrated that people form relational bonds under most conditions and that they resist their dissolution; that relational information is an ongoing focus of cognitive activity, a prominent source of varied emotions, a strong influence on behaviour; and that relational deficits are associated to a variety of lasting detrimental effects on health and well-

being. This author further argued that these effects were universal, as they were successfully documented by a wide array of cross-cultural studies.

Relationships have remained a popular focus of investigation over the last 20 years, yet the content of this literature remains largely consistent with Baumeister's key conclusions, and there is a consensus to the effect that social relationships participate heavily in subjective well-being (Biswas-Diener & Diener, 2001; Forgeard et al., 2011; Reis & Gable, 2003).

Interpersonal relationships may take on many forms in an individual's life, ranging from friendships (Collie, Martin, Papworth, & Ginns, 2016; Fuglestad, Wall, Shim, Eisenberg, & Neumark-Sztainer, 2016; Miething et al., 2016; Rubin et al., 2004; Zandvliet, Den Brok, & Mainhard, 2014); romantic partnerships (Frost, McClelland, & Dettmann, 2017; Kashdan et al., 2017; Kretschmer, Vollebergh, & Oldehinkel, 2017); family ties (Armstrong, Birnie-Lefcovitch, & Ungar, 2005; Brown, Manning, & Stykes, 2015; Diener & Diener-McGavran, 2008; Gauze, Bukowski, Aquan-Assee, Sippola, 1996; Umberson, 1989; van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017); and work-related associations (Carmeli, Brueller, & Dutton, 2009; Dagenais-Desmarais, Forest, Girouard, & Crevier-Braud, 2014; Guinot, Chiva, & Roca-Puig, 2014; Heaphy & Dutton, 2008; Otakum & James, 2017; Stephens, Heaphy & Dutton, 2011). Furthermore, social relationships have been found to be associated with subjective well-being across the lifespan [i.e., in children (Fattore, Mason, & Watson, 2007; Gómez, Casas, Inzunza, & Costa, 2017), adolescents (Arslan, 2017; Jiao et al., 2017; Long et al., 2017; Navarro et al., 2017; Verhagen, Lodder, & Baumeister, 2017), young adults (Warner et al., 2016), and the elderly (Litwin & Shiovitz-Ezra, 2011; Liu & Gong, 2000; Wedgeworth, LaRocca, Chaplin, & Scogin, 2017)].

## **Meaning**

For Seligman (2011) the pursuit of meaning is about putting one's signature strengths and personal talents to the service of something bigger than oneself. Finding a connection and devoting oneself to a superordinate goal is further theorized to be an inherent aspect of well-being because it provides direction and substance to life. Indeed, Ryff and Singer (1998) view meaning in life as an indicator of well-being, and studies revealed countless beneficial relationships between meaning and meaning-making, on one hand, and, on the other hand, constructs such as positive affect (Hicks & King, 2007; King, Hicks, Krull, & Del Gaiso, 2006; Tang, Kelley, Hicks, & Harmon-Jones, 2013), life satisfaction (Fonseca, Lencastre, & Guerra, 2014; Park, Park, & Peterson, 2010; Steger & Kashdan, 2007), positive social behaviour (Shek, Ma, & Cheung, 1994), post traumatic growth (Janoff-Bulman, Berg & Harvey, 1998; Triplett, Tedeschi, Cann, Calhoun, & Reeve, 2012), coping with stressful life events (Park, 2010; Park & Folkman, 1997; Van Tongeren, Hill, Krause, Ironson, & Pargament, 2017), and grief and loss (Davis, Nolen-Hoeksema, & Larson, 1998; Gillies & Neimeyer, 2006; Haynes et al., 2016). Studies also showed that meaning acts as a protective factor against drug abuse (Brassai, Piko, & Steger, 2011; Nicholson et al., 1994), health risk behaviours, psychological health, and suicidality (Heintzelman & King, 2014; Park & Baumeister, 2017; Wang, Lightsey, Pietruszka, Uruk, & Wells, 2007). Therefore, as asserted by Wong and Fry (1998), there is a strong consensus established by a critical mass of converging expert opinions and empirical evidence to the effect that personal meaning is instrumental to psychological well-being (Peterson & Park, 2014).

## **Accomplishment**

Finally, Seligman (2011) proposes that another important aspect of well-being is the fulfillment brought about by progressing toward, or having reached, one's goals (Forgeard et

al., 2011). It relates to perceived proficiency, skilfulness, and competence, and elicits feelings of self-satisfaction, optimism, and pride (Schmuck & Sheldon, 2001). Fecund goal pursuit has consistently been associated with well-being (Brunstein, 1993; Emmons, 1986; Klug & Maier, 2014; Klug & Maier, 2015; Koestner, Lekes, Powers, & Chicoine, 2002; Wiese, 2007). Other facets of achievement have also been shown to influence well-being, such as the rate of progress towards one's goal (Carver & Scheier, 2004; Diener, Suh, Lucas, & Smith, 1999; Gärling, Gamble, Fors, & Hjerm, 2016; Hsee & Abelson, 1991; Wiese, 2007), beliefs in one's will power (Bernecker, Herrmann, Brandstätter, & Job, 2017), the importance of a successful endeavour (Brunstein, Schultheiss, & Maier, 1999; Nurmi, Salmela-Aro, & Koivisto, 2002; Steca et al., 2016), and goal commitment (Martin, McNally, & Taggar, 2016; Monzani et al., 2015). In a recent meta-analysis that included 108 independent samples, Klug and Maier (2014) summarized the information on this topic and reached the conclusion that even when considering moderating factors, such as the distinction among goal pursuit and goal progress, the use of positive versus negative well-being indicators, the conceptual congruence among goal content and well-being indicators, and cultural orientation (individualistic versus collectivistic), striving for goals remained positively associated with subjective well-being.

As aforementioned at the onset of this section, well-being will be conceptualized in the present research project according to Seligman's integrative five component perspective exposed above. In line with the results of the prolific research that has examined savouring and well-being, both hedonic and eudaimonic savouring are expected to be positively associated with well-being. In addition to focusing on a known outcome of savouring – that is, well-being – the present project also addresses a novel antecedent of savouring: motivation.

## **Motivation**

Self-Determination Theory (Deci & Ryan, 1985; 2000; 2002; Ryan, 2012; Ryan & Deci, 2017) is a macro theory of human motivation that focuses on the importance and benefits of volitional behaviour. It includes six subtheories (Ryan & Deci, 2017), two of which are germane to the purposes of this project: Organismic Integration Theory and Causality Orientation Theory.

### **Organismic Integration Theory (OIT)**

OIT proposes a taxonomy of motivation composed of three main forms of behaviour self-regulation: intrinsic motivation, extrinsic motivation, and amotivation.

**Intrinsic motivation.** This form of behaviour regulation is characterized by an autonomous and volitional intention and interest to move freely toward the realization of a given activity. It refers to behaviours that are pursued chiefly for the sake of experiencing sheer inherent pleasure or enjoyment (Deci & Ryan, 2008b; Ryan & Deci, 2017). Intrinsic motives are an end in themselves and imply optimal levels of self-determination.

**Extrinsic motivation.** By comparison with intrinsic behaviours, which are performed for pleasure, extrinsic behaviours are instrumental. That is, extrinsic motivation is the source of behaviours performed to elude negative outcomes (such as pain or discomfort) or to obtain positive outcomes (such as rewards or compensations). Extrinsic motives are a means to an end, yet they vary according to their level of autonomy. Deci and Ryan (Ryan, 2012; Ryan & Deci, 2017) posit the existence of four types of extrinsic motivation that can be distinguished by the extent to which they are internalized and self-directed (i.e., self-determined): integrated regulation, identified regulation, introjected regulation, and external regulation.

**Integrated regulation**, the most self-determined type of extrinsic motivation, refers to the undertaking of an action that is in agreement with deeply held personal beliefs. Actions are

perceived as being harmonious with, and essential to, one's self-concept, and as reflecting one's identity. Although volitional intent is a characteristic of this type of motivation, the behaviour is nonetheless done in order to reach personal goals, and not pursued out of inherent pleasure or interest.

**Identified regulation** occurs when the outcome of a given action is deemed important and valued. The reasons behind the behaviour are thus internalized and of high personal significance. Integrated and identified regulation underlie behaviours that are freely pursued and are thus considered autonomous (i.e., self-determined). By contrast, the two following types of extrinsic motivation (introjected and external regulation), are non self-determined because they are performed in reaction to emotional or social pressure.

**Introjected regulation** governs behaviours through partially internalized social demands that take the form of negative self-conscious emotions, such as guilt or shame, or controlling positive self-conscious emotions, such as contingent self-worth. Thus, even though introjected regulation comes from within, it is not considered self-determined because it proceeds through emotional pressure.

**External regulation** entails carrying out an action for purely instrumental reasons, according to operant conditioning principles. Behaviours are done solely to avoid negative outcomes or to gain positive rewards. It is the least self-determined type of extrinsic motivation because actions are completely governed by a desire to please or appease the external environment. Behaviour is thus entirely regulated by social contingencies.

**Amotivation.** This concept represents the incapacity to regulate behaviour. It stems out of an inability to perceive its consequences. It can be generated either by internal processes (i.e., beliefs about one's incompetence or feelings that an action has no value) or by

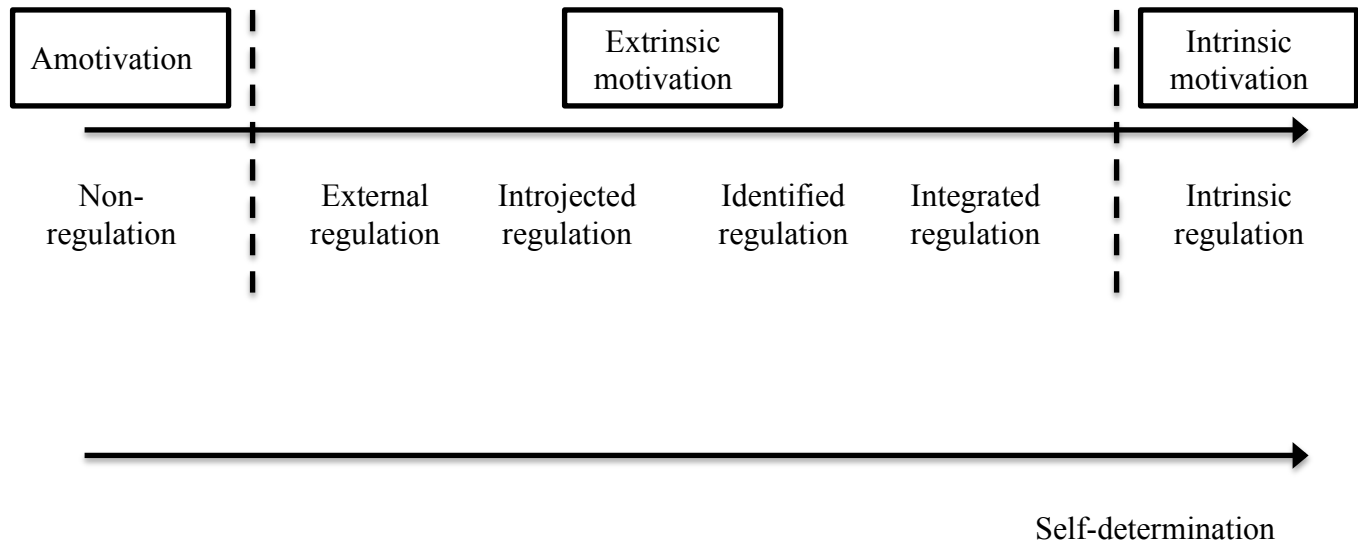
problems from the external environment (e.g., removal of personal control). Amotivation is akin to learned helplessness (Abramson, Seligman, & Teasdale, 1978).

### **Self-Determination Continuum**

As previously described, the motivational subtypes proposed within OIT can all be defined by their unique characteristics, but share to varying degrees a core dimension: self-determination. According to Deci & Ryan (1985; 2002; Ryan & Deci, 2017), these forms of motivation can be situated on a self-determination continuum, and seen as incremental steps in the process of internalizing behaviour regulation.

The self-determination continuum is depicted in Figure 1. Its extreme poles are delimited by amotivation, which represents an absence of self-determination, at its lowest point, and by intrinsic motivation, which exemplifies the culmination of self-determination, at its apex. The extrinsic motivation subtypes are posited in between, ranked as a function of their level of autonomy. External regulation, which proceeds through external pressure, is a marginal improvement over amotivation. Introjected regulation is more self-determined than external regulation because the pressure to act comes from within. Identified regulation is above the self-determination threshold, as it governs behaviours that are performed freely because they are genuinely valued. Integrated regulation is the most self-determined extrinsic motive, because autonomy is optimized when behaviours are freely enacted expressions of the self.

Theoretically, the self-determination continuum is used to predict the outcomes of behaviours. Specifically, self-determined motivations are expected to be associated with beneficial, and non-self-determined motivations with detrimental, outcomes.



*Figure 1.* The Self-Determination Continuum (adapted from Ryan, 2012)

### **Empirical Support**

The validity of the motivational taxonomy proposed by OIT has been documented in a plethora of domains (Deci & Ryan, 2008c; Ryan & Deci, 2017). These include mental health (Britton, Williams, & Conner, 2008; Vancampfort et al., 2013); health, and self-care behaviour (Blais, Mack, Wilson, & Blanchard, 2017; Halvari, Halvari, Bjørnebekk, & Deci, 2010; Patrick & Williams, 2012; Williams et al., 2009); psychotherapy, counselling, and behaviour change (Fortier, Williams, Sweet, & Patrick, 2009; Patterson & Joseph, 2007; Ryan, Lynch, Vansteenkiste, & Deci, 2011; Teixeira, Patrick, & Mata, 2011; Vansteenkiste & Sheldon, 2006); physical activity and sport (Owen, Astell-Burt, & Lonsdale, 2013; Vallerand, 2004; Van den Berghe, Vansteenkiste, Cardon, Kirk, & Haerens, 2014; Weman-Josefsson, Fröberg, Karlsson, & Lindwall, 2017); gamification<sup>1</sup> (Bornfeld & Rafaeli, 2017; Chapman & Rich, 2017); sexuality (Boislard-Pépin, Green-Demers, Pelletier, Chartrand, & Séguin, 2002;

<sup>1</sup> Gamification is defined as the use of classical elements of game playing in non-game contexts (Chapman & Rich, 2017).

Brunell & Webster, 2013; Kindelberger & Tsao, 2014); environmental behaviours (Green-Demers, Pelletier, & Ménard, 1997; Pelletier, Tuson, Green-Demers, Noels, & Beaton, 1998; Séguin, Pelletier, & Hunsley, 1998); and education (Blanchard, Pelletier, Otis, & Sharp, 2004; Chirkov & Ryan, 2001; Legault, Green-Demers, & Pelletier, 2006), among others.

### **Causality Orientation Theory**

As exemplified by the abundant documentation cited above, research pertaining to Self-Determination Theory (Deci & Ryan, 1985; 2002; Ryan & Deci, 2017) has mainly focused on motivation in a variety of life domains. That is, this research has studied motivation as a concept characterized by a moderate degree of generality. However, behaviour regulation can be examined using a much narrower or larger focus. For instance, motivation for a given activity can be evaluated at a precise moment in time. In this case, the motives described by OIT would be assessed at a very specific juncture, and described as situational (state) motivation (e.g., Guay, Vallerand, & Blanchard, 2000). By contrast, the motives described by OIT can also be conceived, at a much more general level, as enduring personality traits. This notion is the key focus of Causality Orientations Theory (Ryan & Deci, 2017). That is, this aspect of Self-Determination Theory is concerned by overall inclinations in behaviour regulation (Deci & Ryan, 2000; 2002; Ryan & Deci, 2017). Thus, in general, when faced with a task, people are said to tend to approach it in an autonomous, controlled, or impersonal (amotivated) manner. Vallerand (1997; Vallerand & Ratelle, 2002) has expounded on this topic, and thoroughly documented that the six forms of motivation proposed by OIT can be found at the personality level, a notion designated as global motivation (for a review on this topic, please refer to Vallerand, 2012 or Vallerand & Ratelle, 2002). In other words, global motivation can be seen as a dynamic aspect of identity. Self-concept has often been described as composed of information on its content and processes (Leary & Tangney, 2012).

Causality Orientations Theory (Deci & Ryan, 2002; Ryan & Deci, 2017) contributes to our understanding of self-processes by describing the mechanics of behaviour regulation at the personality level. This overall motivational perspective will be favoured in the current project, as it is congruent with the level of generality of the other variables under study (savouring and well-being).

For the purposes of the present research project, motivation will be represented by two constructs: intrinsic motivation, and self-determined extrinsic motivation (a compounded average of all other subtypes, where each form of motivation receives a negative or positive weight that is graded according to its position on the self-determination continuum). These two overall constructs were chosen because of their affinity with the conceptualization of savouring developed herein. Intrinsic motivation is driven by pleasure. Because savouring is a form of emotion regulation that fosters pleasant affect, both overall types of savouring (hedonic and eudaimonic) are likely to be influenced by intrinsic motivation. By comparison, self-determined extrinsic motivation describes behaviour regulation strategies that are driven by fully endorsed personal reasons. It is plausible to conceive that self-congruent motives bring about savouring experiences that intensify psychological satisfaction (i.e. eudaimonic savouring). To summarize, intrinsic motivation was hypothesized to be positively associated with hedonic and eudaimonic savouring, whereas self-determined extrinsic motivation was hypothesized to be positively associated solely with eudaimonic savouring. Both intrinsic and self-determined extrinsic motivations were hypothesized to be positively associated with well-being.

### **The Present Study**

The primary focus of interest of this project was the essence of the phenomenon of savouring. More specifically, the present thesis is an initial attempt to address an important

gap in the literature on savouring. The extant documentation pertaining to this notion has mostly explored the mechanisms by which it proceeds and its affective consequences. Its very nature and structure has been largely overlooked. A primary objective of the present project was therefore to develop a more thorough conceptualization of this construct. Specifically, it was proposed here that savouring comprises two global dimensions: hedonic and eudaimonic. It was further proposed that eudaimonic savouring is composed of six dimensions: meaning of life, spirituality, inspiration, self-reflection, appreciation and gratitude.

A subsequent objective was to examine the relationships among the two dimensions of savouring, well-being and motivation. As previously mentioned, a large proportion of the studies on savouring have as their object the construct of well-being. Since a new taxonomy of savouring experiences was proposed herein, it was deemed important to evaluate its associations with this central outcome. Furthermore, the present thesis also looked at an antecedent of savouring: namely, motivation. To date, no studies have measured the associations between motivation and savouring, despite their clear conceptual consonance – that is, that they both have a respective, though distinct, regulatory function. The present thesis is thus the first research project that examines these relevant relationships.

### **Goals and Hypotheses**

The first goal of this project was thus to empirically examine the validity of the proposed novel taxonomy. To achieve this objective, a new measure was created: the Savouring Configuration Inventory (SCI). The validity of the taxonomy of savouring proposed above was documented in Studies 1 and 2 by evaluating the factorial structure of the SCI, as well as an array of complementary psychometric properties. The hypotheses to this effect are listed below.

- (1) The factorial structure of the SCI was expected to comprise seven dimensions: hedonic savouring, and eudaimonic savouring of meaning of life, spirituality, inspiration, self-reflection, appreciation, and gratitude.
- (2) The seven subscales of the SCI were expected to display adequate internal consistency.
- (3) The subscales of the SCI were expected to display meaningful associations with relevant variables, that is, adequate construct validity.
- (4) The subscales of the SCI were expected to be independent from, or modestly associated with, the subscales of the Savouring Beliefs Inventory (SBI; Bryant, 2003), thereby documenting their concurrent validity. Non-existent to weak associations were expected because the SCI and the SBI are hypothesized to measure different aspects of savouring, and because savouring and mindfulness are theoretically distinct concepts.
- (5) The subscales of the SCI were hypothesized to be unrelated to social desirability.

The second goal of this project was to assess the associations among motivation, hedonic and eudaimonic savouring, and well-being. The hypothesized network of associations between these variables is represented in Figure 2, detailed below, and was tested in Study 3.

- (6) Intrinsic motivation was hypothesized to be positively associated with hedonic and eudaimonic savouring.
- (7) Self-determined extrinsic motivation was hypothesized to be positively associated with eudaimonic savouring.
- (8) Both intrinsic and self-determined extrinsic motivations were hypothesized to be positively associated with psychological well-being.

(9) Both hedonic and eudaimonic savouring were hypothesized to be positively associated with psychological well-being.

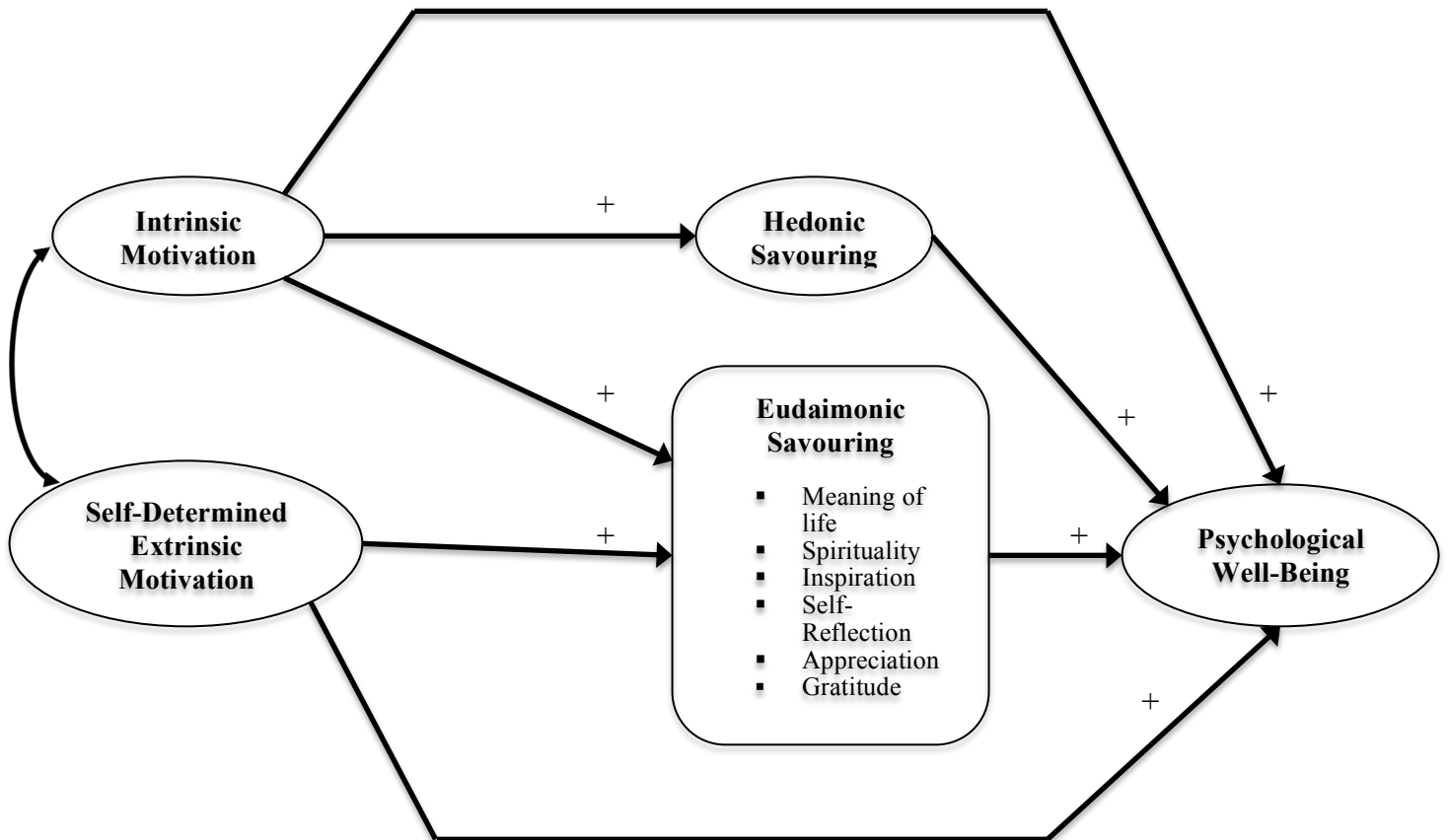


Figure 2. Hypothesized Associations among Motivation, Savouring, and Well-being

## CHAPTER TWO

### STUDY 1

This study provides the groundwork for the development of the taxonomy of savouring that is one of the central foci of this thesis. Its primary objective was to develop and test an initial version of this taxonomy comprising the seven dimensions of savouring that were conceptually proposed, defined, and presented, in Chapter One: hedonic savouring, and eudaimonic savouring of meaning of life, spirituality, inspiration, self-reflection, appreciation, and gratitude. To this effect, an initial version of the Savouring Configuration Inventory, comprising a large number of items, was developed, and its factorial structure examined using an item-reduction procedure. The purpose of this procedure was to provide a preliminary assessment of the factorial structure of the SCI, and to retain the scenarios and items that best represent each savouring dimension. It was hypothesized that a clean factorial structure, corroborating the presence of the seven hypothesized dimensions of savouring, would emerge, and that the subscales of the reduced version of the SCI would display acceptable internal consistency.

### Research Method

#### Participants and Procedure

A total of one hundred and ninety individuals (men = 31, women = 158, unreported gender = 1), ranging from 18 to 63 years of age ( $M$  age = 21.89,  $SD$  = 7.49), were recruited. Most participants were students (full-time = 85%; part-time students = 7%; not in school = 8%), whose primary language was English (English = 59%; French = 29%; Other = 12%). Among the participants, 13% were employed full-time, 35% were employed part-time, and 52% were not employed. Fifty-nine percent lived in an urban area, 26% in a suburban area, and 15% in a rural area.

The participants were recruited through the Integrated System of Participation in Research (ISPR) of the School of Psychology of the University of Ottawa, as well as through social networking. They were provided with a link to the study website via email and completed the questionnaire and consent form online, using LimeSurvey. Those recruited through ISPR received one course credit for their participation.

### **Measure**

The online questionnaire consisted of the Savouring Configuration Inventory, accompanied by basic demographic questions (please refer to Appendix A).

**Savouring Configuration Inventory.** The SCI was developed to measure hedonic and eudaimonic savouring. Its initial pool of scenarios and items was generated by two experts in social psychology with a good understanding of the concept of savouring. The SCI is composed of a series of short scenarios, followed by relevant items. The original version of the SCI used in this study consisted of a total of 48 scenarios. Each scenario was accompanied by three savouring items. Two of those items measured savouring responses congruent with the scenario, whereas the third one was conceptually reversed and designed to assess a lack of interest in savouring. The 3 items were randomly ordered, and answered on a 7-point Likert-type scale (1 = Not like me at all; 7 = Totally like me). For instance, the scenario “*You rest in a hammock on a warm summer day*” is followed by the three following items: “*I unwind and let the breeze cradle me to the gentle beat of the wind*”, “*I am mindful of the warm feeling of the sun on my face*”, and “*I want to do something else*”.

### **Results**

Data analyses were performed in two stages. Firstly, preliminary analyses were conducted to manage missing data and outliers and to verify statistical assumptions. Secondly,

the main psychometric results of this study were generated by means of an exploratory factor analysis. Internal consistency indices were also obtained.

### **Preliminary Analyses**

**Treatment of missing data.** Originally, 206 participants filled out the questionnaire. Two participants were eliminated due to excessive amounts of sequential missing data. Missing information among the remaining 204 participants was distributed randomly. Missing values were therefore replaced using linear interpolation.

**Outliers.** Univariate outliers were identified using a combination of statistical ( $Z$  score  $> |3.29|$ ) and substantive criteria. Seven problematic cases were removed from the sample. Multivariate outliers were screened for using Mahalanobis distances. Seven multivariate outliers were discovered and deleted, bringing the final sample size to 190 cases.

**Verification of statistical assumptions.** Kurtosis and skewness values were examined to assess deviations from univariate normality. Results revealed that some values were slightly below or above the conventional criteria of -1.00 and +1.00, respectively. This was not considered a major issue because mean kurtosis and skewness values were within -1.00 and +1.00 ( $M_{\text{kurtosis}} = -0.70$ ;  $M_{\text{skewness}} = -0.06$ ; Muthén & Kaplan, 1985). Multivariate residuals were obtained to evaluate conformity to multivariate normality and their distribution adopted an approximately normal configuration. Bivariate scatterplots were produced for all pairs of variables and examined to ascertain departures from the assumptions of linearity and homogeneity of variances. Bivariate distributions showed no indication of curvilinearity or heteroscedasticity.

**Screening for multicollinearity.** Pearson correlations were calculated for all possible pairs of variables. There were no correlations above 0.90 (Tabachnick & Fidell, 2013).

## Psychometric Analyses

**Exploratory factor analysis.** The items from the SCI were subjected to an exploratory factor analysis, using maximum likelihood extraction and oblimin rotation. The cut-off for acceptable loadings was set at 0.30. An item-reduction procedure was utilized, with the purpose of retaining the scenarios and items that best represent the proposed savouring dimensions.

The first analysis that was performed revealed that reverse coded items had no discernable structure, and created a lot of random noise within the solution. All reverse coded items were thus deemed unhelpful and deleted.

Successive runs were performed thereafter to progressively exclude the worst items (i.e., multiple cross-loadings, absence of loading(s) on target factor and/or loading(s) on wrong factors, etc.). The solution was refined until optimal results were obtained, and further improvements proved impossible. The final solution is presented in Table 1.

Support was obtained for five savouring dimensions. That is, it was possible to identify sets of 4 scenarios and items that were adequate representations of: hedonic savouring, and eudaimonic savouring of self-reflection, appreciation, and gratitude. Meaning of life and spirituality items merged into a fifth factor. It was not possible to obtain a factor representing eudaimonic savouring of inspiration. Three minor problems remained in the final solution as well: two cross-loadings and a sub-threshold loading. These 3 items were retained nonetheless, as they displayed the potential to yield improved results if reworked a little.

Eigenvalues for the 5 factors of the final solution ranged from 1.00 to 6.54, and the variance explained by each factor from 4.98% to 32.72% (see Table 1). The total variance explained by the factorial solution was 61.76%.

Reliability was ascertained by examining the internal consistency (Cronbach's  $\alpha$ ) among the items of each factor. Although the results were somewhat low for hedonic savouring ( $\alpha = 0.58$ ), which indicated that this subscale required fine-tuning, internal consistency indices were acceptable for the four other factors ( $\alpha$  self-reflection = 0.79,  $\alpha$  appreciation = 0.78,  $\alpha$  gratitude = 0.75,  $\alpha$  meaning = 0.83).

Table 1

*Exploratory Factor Analysis*

Subscales	Factors				
	1	2	3	4	5
<b>Self-Reflection</b>					
Self-Reflection 3	0.93				
Self-Reflection 7	0.53				
Self-Reflection 8	0.47				
Self-Reflection 2	0.33			0.31	
<b>Meaning</b>					
Spirituality 2		-0.86			
Spirituality 6		-0.80			
Inspiration 1		-0.75			
Meaning of Life 4		-0.30			
<b>Appreciation</b>					
Appreciation 4			0.83		
Appreciation 8			0.75		
Appreciation 1			0.62		
Appreciation 7			0.39		
<b>Gratitude</b>					
Gratitude 5				0.73	
Gratitude 8				0.60	
Gratitude 4				0.57	
Gratitude 7				0.45	
<b>Hedonic</b>					
Hedonic 7				0.42	0.38
Hedonic 5					0.46
Hedonic 4					0.34
Hedonic 3					0.28
<b>Eigenvalues</b>	6.54	2.10	1.48	1.23	1.00
<b>% Variance</b>	32.72	10.52	7.39	6.15	4.98

## Synthesis and Discussion

The main goal of this initial study was to develop and test an initial version of the Savouring Configuration Inventory (SCI) by means of an item-reduction procedure, using exploratory factor analyses, to ascertain whether the proposed seven factor savouring taxonomy held promise.

Starting with an initial pool of 144 items, exploratory factor analyses were performed, and successive item trimming yielded a final solution composed of five factors. Sound preliminary support was obtained for four dimensions: hedonic savouring, and eudaimonic savouring of self-reflection, appreciation, and gratitude.

Two prevalent difficulties remained to be addressed. First, meaning of life and spirituality items merged into a single “meaning” factor. Second, inspiration items failed to coalesce into a unified distinct factor.

On a more minor note, three problems remained in the final solution (two cross-loadings and a sub-threshold target loading), and the internal consistency for hedonic savouring was low.

Nonetheless, as this study was an initial attempt to devise a complex instrument from scratch, based on an entirely novel conceptual framework, these results were auspicious, and provided a solid basis for further improvements.

The SCI was thus refined and reworked, and careful attention was paid to the problems outlined above. Firstly, meaning of life and spirituality items were entirely redesigned, in the hope of better capturing the unique features of each of these constructs, and of disentangling their common variance, to optimize their capacity to form two distinct factors. Secondly, inspiration items were also scrutinized, reconceptualized and redesigned in an attempt to endow them with the ability to differentiate themselves from other savouring dimensions, and

to form a coherent distinct factor. Thirdly, the two items that presented cross-loadings were revised to eliminate the ambiguous elements in their content, and the item that presented a sub-threshold loading was consolidated. Fourthly, hedonic savouring items were slightly modified with the goal of increasing their internal consistency. Lastly, the final revised 28 items version of the SCI was carefully examined as a whole, and minor changes were implemented to further polish its content.

Study 1 fulfilled its exploratory role and, on the basis of its results, an improved version of the SCI was carefully elaborated. In Study 2, the factorial structure of the improved version of the SCI was tested by means of a more stringent procedure, using a confirmatory, rather than exploratory, analytical strategy.

## CHAPTER 3

### STUDY 2

The first purpose of Study 2 was to test the proposed taxonomy (hedonic savouring, and eudaimonic savouring of meaning of life, spirituality, inspiration, self-reflection, appreciation, and gratitude) using a confirmatory factor analysis (CFA), a rigorous and sophisticated analysis that can be utilized to evaluate the validity of theoretically derived dimensions. Study 2 also aimed to document four complementary psychometric properties of the Savouring Configuration Inventory (SCI), namely its construct, concurrent, and discriminant validity, as well as the internal consistency of its subscales.

#### Research Method

##### Participants and Procedure

Three hundred and fifty individuals (62 men, and 287 women, 1 unreported gender), aged from 18 to 64 years old ( $M$  age = 22.20,  $SD$  = 8.10), participated in Study 2. Most participants were students (full-time = 86%; part-time students = 5%; not in school = 9%). The primary language of the majority of participants was English (English = 64%; French = 26%; Other = 10%). Eleven percent worked full time, 46% part-time, and 43% were not employed. Fifty-four percent lived in an urban area, 33% in a suburban area, and 13% in a rural area.

Participants were recruited through ISPR, and through social networking. Those recruited through ISPR received one course credit for their participation. Participants were given a link to the website of the study via email and completed the questionnaires online using LimeSurvey.

##### Measures

The instruments that were utilized in Study 2 are: the revised version of the SCI developed in Study 1; six measures selected for construct validity purposes that assess the

following constructs: awe, joy, flow, life satisfaction, hope, and anhedonia; the savouring process measure developed by Bryant (2003) and a mindfulness scale, included to evaluate concurrent validity; as well as a social desirability inventory intended to examine discriminant validity (please refer to Appendix B).

**Savouring Configuration Inventory (SCI).** The final version of the SCI generated in Study 1 consists of seven subscales designed to evaluate the seven dimensions of the savouring taxonomy proposed in this thesis. This new version consists of 28 scenarios (4/subscale), paired with a single item. Items are rated on a 7-point Likert-type scale ranging from 1 (Not at all like me) to 7 (Totally like me).

**Awe and joy.** Awe is defined as consisting of two fundamental features: vastness (referring to anything experienced that is larger than the self) and the need for accommodation (referring to the relative degree of expansion of one's frame of reference when something is not easily assimilated within any of the pre-existing schemas; Keltner & Haidt, 2003). Joy is conceived as a high arousal positive emotion. In the present study, Awe (6 items) and Joy (6 items) were assessed using subscales from the Dispositional Positive Emotion Scales (DPES; Shiota, Keltner & John, 2006). For both scales, items were rated on a 7-point Likert-type scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). The subscales of the DPES have shown adequate construct validity, and internal consistency ( $0.72 < \text{Cronbach's } \alpha < 0.92$ ; Gruber & Johnson, 2009; Shiota et al., 2006). The scale was successfully cross-validated in German (Güsewell & Ruch, 2012). In the present study, internal consistency (Cronbach's  $\alpha$ ) was 0.87 for awe and 0.86 for joy.

**Flow.** Flow is defined as "a state in which an individual is completely immersed in an activity without reflective self-consciousness but with a deep sense of control" (Engeser & Schiepe-Tiska, 2012, p.1). The concept of flow was measured by means of 3 items devised for

the purposes of the present study and designed to assess concentration on the task at hand (“I keep my attention focused on what I am doing”), loss of self-consciousness (“I don’t worry about how others are evaluating me”) and autotelic experience (“I engage in an activity for its own sake”). All items were measured on a 7-point Likert-type scale ranging from 1 (Never) to 7 (Always). The internal consistency of this scale was 0.56.

**Life satisfaction.** Life satisfaction is defined as an overall subjective assessment of one’s life (Pavot, Diener, Colvin, & Sandvik, 1991). It was measured using the classic 5-items Satisfaction with Life Scale (SWLS; Diener et al., 1985). Items were measured on a 7-point Likert-type scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). The one-factor structure of the SWLS has been supported by the results of a principal component analysis (Pavot et al., 1991). Convergent validity was corroborated by correlations with relevant constructs (Diener et al., 1985). The predictive validity of the SWLS was found to be acceptable (Pavot et al., 1991). In the original study, Diener et al. (1985) showed that the SWLS displayed good temporal stability (test-retest correlation coefficient of 0.82 over a period of 2 months); satisfactory internal consistency ( $\alpha = 0.87$ ); and was uncorrelated with social desirability. In the present study, internal consistency (Cronbach’s  $\alpha$ ) was 0.90.

**Hope.** Hope is described as the state of being driven toward a desired goal, while sensing that one’s quest toward that goal will be successful (Snyder, 2002). Hope was examined using the Adult Hope Scale (AHS; adapted from Snyder et al., 1991), a 12-items scale that measure pathway thinking and agency thinking. All items were measured on a 7-point Likert-type scale ranging from 1 (Definitely false) to 7 (Definitely true). Snyder et al. (1991) tested and supported the viability of their two-factor hope model using a principal components analysis. A confirmatory factor analysis, conducted across four large samples, also supported their two-factor model (Snyder et al., 1991), by comparison to a single-factor

model and a null model (Babyak, Snyder, & Yoshinobu, 1993; Creamer et al., 2009).

Construct validity was established by means of correlations with relevant variables (Snyder et al., 1991). Concurrent validity was assessed by correlations with public and private self-consciousness subscales (Snyder et al., 1991). The temporal stability of the AHS was successfully documented ( $r=0.85$  for a 3 week interval; Snyder et al., 1991). This scale also displayed adequate internal reliability in four independent samples, for the agency subscale, ( $0.71 < \text{Cronbach's } \alpha < 0.76$ ) and for the pathway subscale, ( $0.63 < \text{Cronbach's } \alpha < 0.80$ ; Snyder et al., 1991). In the present study, both subscales were aggregated and their internal consistency (Cronbach's  $\alpha$ ) was 0.88.

**Anhedonia.** Anhedonia is defined as the loss of capacity to experience pleasure (Ribot, 1897). The Snaith-Hamilton Pleasure Scale (SHAPS; adapted from Snaith et al., 1995) is a 14-items questionnaire that measures hedonic response in pleasurable situations. The scale encompasses four domains of pleasant experiences (i.e., interest/past-times, social interaction, sensory experiences and food/drink; Leventhal, Chasson, Tapia, Miller, & Pettit, 2006). All items were measured on a 7-point Likert-type scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). The structure of the SHAPS was supported by the results of two confirmatory factor analyses (Franken, Rassin and Muris, 2007; Leventhal et al., 2006). Construct validity was corroborated by ways of correlations with relevant factors, such as depression. Franken et al. (2007) demonstrated adequate test-retest reliability of the scale ( $r=0.70$ ) for an interval of 3 weeks. Internal consistency of the SHAPS was assessed, in the original study (Snaith et al., 1995), using the Kuder-Richardson formula (KR-20) for non-parametric data. The KR-20 was 0.86, which indicated adequate reliability. In a further study, Franken et al. (2007) obtained excellent internal consistency values (Cronbach's  $\alpha = 0.91$  in a

non-patient sample and Cronbach's  $\alpha = 0.94$  in a clinical sample). In the current study, internal consistency (Cronbach's  $\alpha$ ) was 0.88.

**Savouring Beliefs Inventory (SBI).** The SBI (Bryant, 2003) measures the use of savouring processes. This instrument consists of 3 separate 8-items scales for past-, present- and future-focused modes of savouring (Bryant, 2003). Items were measured on a 7-point Likert-type scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). The structure of the SBI was corroborated by the results a confirmatory factor analysis. Construct validity was examined by correlations with concepts such as affect intensity, extraversion, and dispositional optimism. Concurrent validity for the SBI was also assessed by correlations with measures of neuroticism, guilt, shame, and hopelessness. The SBI demonstrated strong test-retest reliability across all subscales ( $0.80 < r < 0.88$  for an interval of 3 weeks), as well as satisfactory internal reliability ( $0.88 < \text{Cronbach's } \alpha < 0.94$  ; Bryant, 2003). In the present study, internal consistency (Cronbach's  $\alpha$ ) was 0.80 for the reminiscing scale, 0.83 for the savouring the moment scale, 0.81 for the anticipating scale, and 0.91 for the overall instrument.

**Mindfulness.** Mindfulness has been described as an enhanced and sustained attention to present reality and experiences (Brown & Ryan, 2003). The Mindful Attention Awareness Scale (MAAS; adapted from Brown & Ryan, 2003) includes 15 items that measure a fundamental characteristic of dispositional mindfulness: an open awareness to experience the present moment. Items were measured on a 7-point Likert-type scale ranging from 1 (Never) to 7 (Always). The structure of the MAAS was supported by the results of an exploratory factor analysis (Brown & Ryan, 2003) and a confirmatory factor analysis (MacKillop & Anderson, 2007). Results from the initial study (Brown & Ryan, 2003) showed extensive construct validity by means of correlations with relevant variables. Concurrent validity with

other measures of psychological well-being, and predictive validity with day-to-day autonomy and affect, was also established (Brown & Ryan, 2003). Test-retest reliability was corroborated ( $r=0.81$  for a 4 week period; Brown & Ryan, 2003). The scale also showed satisfactory internal consistency (Cronbach's  $\alpha = 0.82$ ). This scale was successfully cross-validated in French (Jermann et al., 2009). In the present study, internal consistency (Cronbach's  $\alpha$ ) was 0.86.

**Social desirability.** Social desirability is defined as the tendency to engage in behaviours that are socially appropriate and acceptable in order to satisfy one's need for approval (Crowne & Marlowe, 1964). In the present study, social desirability was assessed using the Marlowe-Crowne social desirability scale (MC; Crowne & Marlowe, 1960). The MC contains 33 True/False items about behaviours relating to everyday events that are either rare but desirable, or common but undesirable. A higher score on the MC represents a higher need for approval. Construct validity was supported by means of correlations with relevant constructs. Concurrent validity of the MC was established by correlations with other social desirability scales. The temporal stability of the MC was corroborated ( $r=0.88$  over 1 month). Internal consistency (KR-20) was 0.88 in the original validation study, and 0.75 in the current study.

Please note that to optimize testing efficiency, and to avoid overburdening participants with an overly lengthy array of measures, participants were randomly assigned to complete one of two questionnaire packages. As a high number of participants is required to perform a confirmatory factor analysis, the SCI was included in both packages. However, as fewer participants are needed to generate correlations, the measures used to evaluate construct validity, concurrent validity, and discriminant validity, were divided between both packages. In addition to the SCI, the first questionnaire package comprised the following measures: the

Savouring Beliefs Inventory (Bryant, 2003), the joy subscale of the Dispositional Positive Emotion Scales (Shiota et al., 2006), the Snaith-Hamilton Pleasure Scale (adapted from Snaith et al., 1995), and the Marlowe-Crowne social desirability scale (Crowne & Marlowe, 1960). This version was completed by 171 participants. Alternatively, in addition to the SCI, the second questionnaire package comprised the Mindful Attention Awareness Scale (adapted from Brown & Ryan, 2003), the Adult Hope Scale (adapted from Snyder et al., 1991), the Satisfaction with Life Scale (Diener et al., 1985), the Awe subscale of the Dispositional Positive Emotion Scales (Shiota et al., 2006), the three items devised for the purposes of the present study and designed to assess the concept of flow, and the Marlowe-Crowne social desirability scale (Crowne & Marlowe, 1960). This second version was completed by 179 participants.

### **Technical Information Relating to the Confirmatory Factor Analysis**

The validity of the savouring taxonomy that is the main focus of this thesis was evaluated by a confirmatory factor analysis performed using EQS 6.1 (Bentler, 2006). Seven factors, corresponding to the seven dimensions of this taxonomy, were specified, and the tenability of this structure was assessed. To this effect the SCI was tested as a classical measurement model. For identification purposes, the first loading of each subscale was fixed to 1.00. Maximum likelihood was retained as the estimation method. The selected type of matrix to be analysed was variance/covariance. Estimated parameters included factor loadings, measurement errors for each item, factor variances, and correlations between factors.

In light of the controversy surrounding goodness-of-fit indices (every index has theoretical strengths and weaknesses as summary measures of model fit; Kline, 2016), it is recommended to report several of them (Byrne, 2006). Hence, five complementary indices were used to assess overall model fit: the Satorra-Bentler chi-square ( $SB-\chi^2$ ; Satorra &

Bentler, 2001), the Incremental Fit Index (IFI; Bollen, 1989), the Comparative Fit Index (CFI; Bentler, 1990), the Standardized Root Mean Squared Residual (SRMR; Bentler, 1995) and the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990).

The SB- $\chi^2$  (Satorra & Bentler, 2001) was used because it is adjusted to compensate for potential minor departures from the normality assumption (Kaplan 2000). The IFI and the CFI are relative fit indices, which are obtained by calculating, using slightly different formulas, the improvement in fit offered by the estimated model, when compared to the null model. These indices vary from 0 (poor fit) to 1.00 (perfect fit; Kline, 2016), and are considered acceptable when above 0.90 (Bentler, 1992). By contrast, the SRMR and the RMSEA are absolute fit indices (Curran, Bollen, Chen, Paxton, & Kirby, 2003) that are based on residuals that indicate misfit, and have been dubbed “badness-of-fit” indices (West, Taylor, & Wu, 2012). The SRMR transforms the residuals (differences between the initial and reproduced covariance matrices) into standard metrics, before calculating the average of the square root of squared residuals. Values below 0.10 are considered satisfactory (Kline, 2016). The RMSEA evaluates the estimates discrepancy, per degree of freedom, between the population covariance matrix and the covariance matrix reproduced by the model (Steiger, 1990). Values below 0.08 suggest a reasonable fit (Browne & Cudeck, 1993).

## **Results**

As in Study 1, preliminary analyses were implemented to manage missing data and outliers, as well as to verify statistical assumptions. The main psychometric analyses of Study 2, that is, the confirmatory factor analysis and the evaluation of construct validity, concurrent validity, discriminant validity, and reliability of the subscales of the SCI, are presented thereafter.

## Preliminary Analyses

**Treatment of missing data.** A total of 356 participants filled out the questionnaire. The amount of missing data was distributed randomly across the data set and among participants. Consequently, linear interpolation was used to replace missing values.

**Outliers.** A combination of statistical ( $Z$  score  $> |3.29|$ ) and substantive criteria were utilized to seek out univariate outliers. Five problematic cases were detected and deleted. Multivariate outliers were screened for using Mahalanobis distances. A single multivariate outlier was revealed and removed, hence reducing the sample size to 350 cases.

**Verification of statistical assumptions.** Deviations from univariate normality were evaluated by looking at kurtosis and skewness values (see Table 2). A few of the values were slightly below or above the conventional criteria of -1.00 and +1.00, respectively. As in Study 1, this was not considered a cause for concern since mean kurtosis and skewness values were within -1.00 and +1.00 ( $M_{\text{kurtosis}} = 0.19$ ;  $M_{\text{skewness}} = -0.25$ ; Muthén & Kaplan, 1985). Multivariate normality was ascertained by scrutinizing the distribution of multivariate residuals, which appeared relatively normal. Bivariate scatterplots were generated for all pairs of variables and examined to identify departures from the assumptions of linearity and homogeneity of variances. No instances of curvilinearity or heteroscedasticity were detected.

**Screening for multicollinearity.** Pearson correlations were computed for all possible pairs of variables and no correlations above 0.90 were found (Tabachnick & Fidell, 2013).

**Descriptive statistics.** The descriptive statistics of the items for each of the 7 subscales of the SCI are presented in Table 2. Mean item values can generally be described as moderately high, thereby indicating that all seven forms of savouring were prevalent among participants. Moreover, standard deviations ( $0.91 < SD < 2.18$ ) indicated a dispersion of scores

that is fairly typical in magnitude for normal distributions of scores rated on a 1.00 to 7.00 point scale, which also connotes interesting variability in savouring responses.

Table 2

*Descriptive Statistics*

<b>Subscales</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>Hedonic</b>	5.91	0.91	-0.81	0.10
<i>Hedo1</i>	6.12	1.18	-1.48	1.99
<i>Hedo2</i>	6.08	1.26	-1.58	2.28
<i>Hedo3</i>	5.84	1.26	-1.12	1.08
<i>Hedo4</i>	5.58	1.57	-1.12	0.69
<b>Meaning of life</b>	4.16	1.53	-0.15	-0.65
<i>Life1</i>	4.63	1.73	-0.42	-0.71
<i>Life2</i>	4.46	1.84	-0.27	-0.90
<i>Life3</i>	4.07	1.92	-0.11	-1.02
<i>Life4</i>	3.49	2.00	0.26	-1.20
<b>Spirituality</b>	3.38	1.64	0.37	-0.85
<i>Spir1</i>	3.39	1.95	0.43	-0.98
<i>Spir2</i>	3.66	1.97	0.16	-1.20
<i>Spir3</i>	3.18	1.88	0.48	-0.92
<i>Spir4</i>	3.29	2.18	0.43	-1.26
<b>Inspiration</b>	4.58	1.37	-0.26	-0.69
<i>Insp1</i>	4.99	1.86	-0.66	-0.66
<i>Insp2</i>	4.44	1.98	-0.35	-1.04
<i>Insp3</i>	4.44	1.94	-0.25	-1.07
<i>Insp4</i>	4.46	1.99	-0.45	-0.98
<b>Self-reflection</b>	5.25	1.05	-0.59	0.22
<i>Self1</i>	5.69	1.33	-1.07	1.04
<i>Self2</i>	5.89	1.37	-0.45	0.06
<i>Self3</i>	5.33	1.36	-0.56	-0.14
<i>Self4</i>	5.08	1.52	-0.67	0.08
<b>Appreciation</b>	5.55	1.25	-0.96	0.58
<i>Appr1</i>	5.41	1.66	-1.05	0.42
<i>Appr2</i>	5.40	1.69	-1.11	0.42
<i>Appr3</i>	5.70	1.44	-1.10	0.81
<i>Appr4</i>	5.69	1.50	-1.17	0.86
<b>Gratitude</b>	5.87	0.94	-0.81	0.10
<i>Grat1</i>	5.85	1.28	-0.22	1.45
<i>Grat2</i>	5.69	1.50	-1.28	1.21
<i>Grat3</i>	6.06	1.23	-1.70	3.35
<i>Grat4</i>	5.87	1.25	-1.29	1.63

## Psychometric Analyses

**Confirmatory factor analysis.** The results of this analysis fully supported the structure of the proposed savouring taxonomy, composed of the following seven factors: hedonic savouring, eudaimonic savouring of meaning of life, spirituality, inspiration, self-reflection, appreciation, and gratitude. Model fit was satisfactory [ $SB-\chi^2(329) = 449.97, p < 0.001$  ; CFI = 0.95 ; IFI = 0.96 ; SRMR = 0.05 ; RMSEA = 0.03 ;  $CI_{RMSEA} = \{0.03, 0.04\}$  ]. No post hoc modifications were required nor performed. All estimated parameters were statistically significant, and of satisfactory magnitude (see Figure 3).

**Construct validity.** Correlations among the seven subscales of the SCI are presented in Table 3. As could logically be expected, most savouring dimensions were positively and significantly associated, and those associations were generally of moderate magnitude. Associations between savouring of spiritual experiences and other savouring dimensions were either non-existent or of modest magnitude. This different pattern of associations can possibly be explained by the lessened emphasis on spirituality in our current societal context.

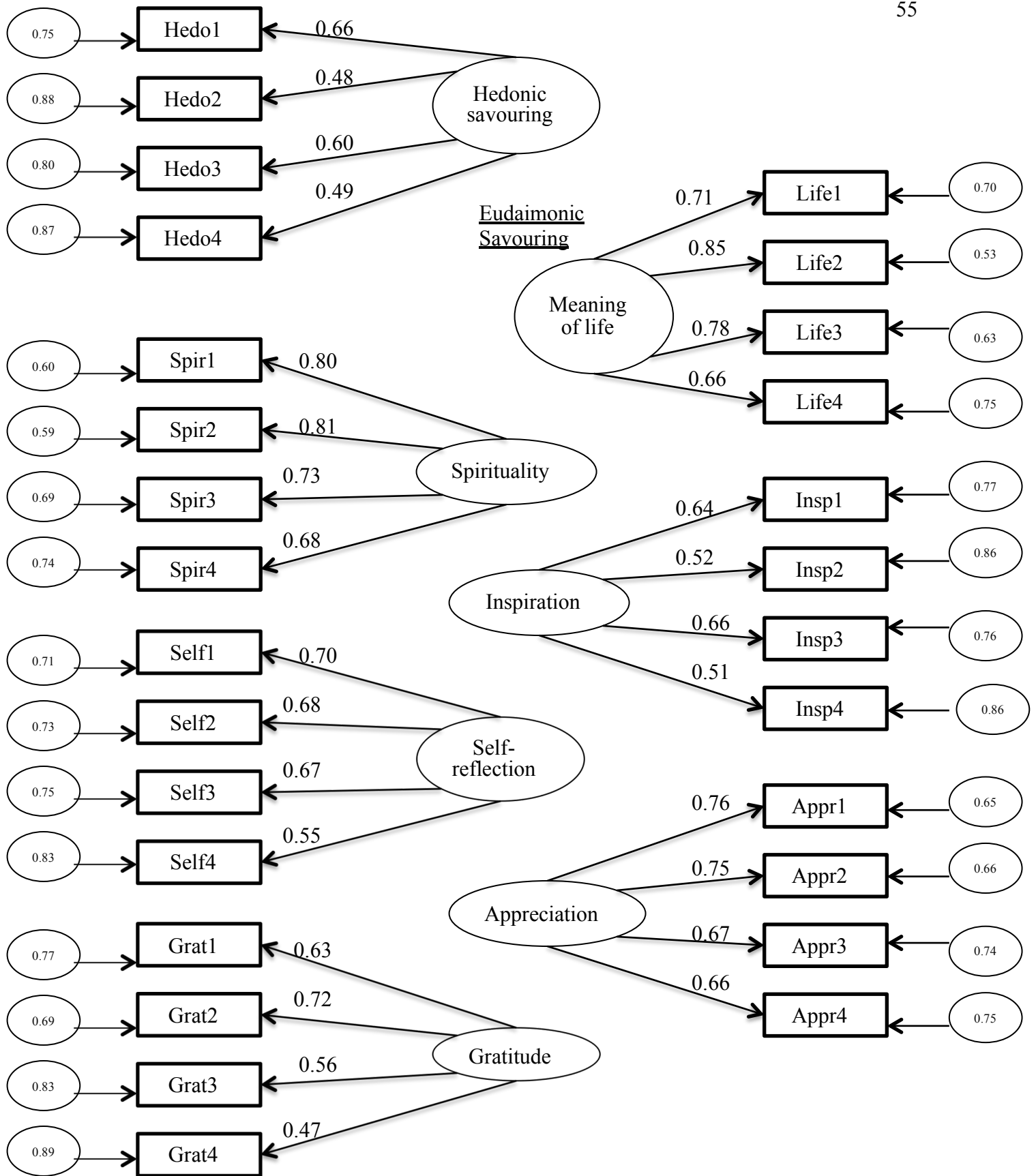


Figure 3. Confirmatory Factor Analysis

Table 3

*Correlations between the Subscales of the SCI*

	Hedonic Savouring	Eudaimonic Savouring					
		Meaning of life	Spirituality	Self- reflection	Inspiration	Appreciation	Gratitude
Hedonic	1.00	0.09	-0.06	0.33***	0.33***	0.26***	0.40***
Meaning of life	0.16*	1.00	0.47***	0.36***	0.26***	0.31***	0.17**
Spirituality	-0.06	0.53***	1.00	0.17**	0.20***	0.14*	0.07
Self-reflection	0.47***	0.48***	0.22**	1.00	0.30***	0.33***	0.42***
Inspiration	0.47***	0.35***	0.27***	0.42***	1.00	0.28***	0.33***
Appreciation	0.34***	0.38***	0.16*	0.41***	0.38***	1.00	0.33***
Gratitude	0.59***	0.21**	0.06	0.56***	0.48***	0.41***	1.00

*Note.* Pearson correlations are presented above the diagonal, and Phi correlations between latent factors (from the CFA) below the diagonal. \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ .

Correlations among the seven subscales of the SCI, and a variety of relevant constructs, are reported in Table 4. Overall, savouring dimensions were positively associated with positive variables (awe, joy, flow, life satisfaction, and hope), and negatively associated with anhedonia. This pattern of associations argues in favour of the construct validity of the SCI.

**Concurrent validity.** Correlations were also evaluated among the seven savouring dimensions of the SCI, on the one hand, and savouring beliefs (according to Bryant, 2003) and mindfulness, on the other hand (see Table 4). Results revealed non-existent to modest associations, thereby indicating that the SCI measures savouring characteristics that can be successfully distinguished from the three temporal savouring processes identified by Bryant (2003), as well as from mindfulness.

Table 4

*Correlations between the Subscales of the SCI and Relevant Constructs*

	Hedonic Savouring		Eudaimonic Savouring				
		Meaning of life	Spirituality	Self-reflection	Inspiration	Appreciation	Gratitude
<b>Construct Validity</b>							
Awe	0.19*	0.47***	0.35***	0.39***	0.36***	0.40***	0.25***
Joy	0.26***	0.19*	0.59***	0.35***	0.29***	0.24***	0.25***
Flow	0.14	0.35***	0.27***	0.24***	0.20***	0.03	0.06
Life satisfaction	0.24**	0.08	0.08	0.29***	0.20**	0.20**	0.12
Hope	0.23**	0.24***	0.12	0.46***	0.20**	0.31***	0.26***
Anhedonia	-0.51***	-0.15*	-0.09	-0.35***	-0.28***	-0.34***	-0.37***
<b>Concurrent Validity</b>							
Savouring beliefs	0.28***	-0.09	-0.07	0.10	0.20**	0.19*	0.13
Reminiscing	0.21**	-0.07	-0.11	0.09	0.17*	0.16*	0.16*
Savouring the moment	0.24**	-0.17*	-0.00	0.06	0.14	0.12	0.01
Anticipating	0.28***	0.03	-0.07	0.10	0.22**	0.21**	0.17*
Mindfulness	0.06	0.09	0.05	0.16*	0.06	0.05	0.11
<b>Discriminant Validity</b>							
Social Desirability	-0.03	0.01	0.00	-0.09	0.06	0.02	-0.10

Note. \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$ ; \*\*\*  $p \leq 0.001$

**Discriminant validity.** As indicated in Table 4, there were no significant correlations among any of the seven subscales of the SCI, and scores on the Marlowe-Crowne scale. The SCI is thus not affected by socially desirable responding biases.

**Reliability.** Internal consistency indices (Cronbach's  $\alpha$ ) were of acceptable magnitude for all subscales of the SCI (hedonic savouring = 0.63; eudaimonic savouring of meaning of life = 0.84; spirituality = 0.84; self-reflection = 0.74; inspiration = 0.67; appreciation = 0.80; gratitude = 0.67).

## Synthesis and Discussion

The main goal of the present study was to test the validity of the proposed taxonomy of savouring using a stringent a priori approach. This objective was successfully achieved. Results of the confirmatory factor analysis revealed that the seven dimensions of savouring (hedonic savouring, eudaimonic savouring of meaning of life, spirituality, self-reflection, inspiration, appreciation, and gratitude) displayed a sound factorial structure. Model fit was satisfactory, estimated parameters were significant, and no post hoc modifications were necessary.

Study 2 also aimed to examine and document four complementary properties of the SCI. Results revealed that the subscales of the SCI displayed satisfactory construct, concurrent, and discriminant validity, as well as acceptable reliability (internal consistency as evaluated by Cronbach's  $\alpha$ ).

Having successfully established the validity of the proposed savouring taxonomy, and demonstrated that hedonic savouring can be distinguished from several forms of eudaimonic savouring, it would be interesting to examine how these differences in the nature of savouring experiences influence their associations with their precursors and consequences. Study 3 was intended as an initial research endeavor on this topic.

## CHAPTER 4

### STUDY 3

The aim of Study 3 was to examine the network of associations among motivation, savouring, and well-being. First, it was hypothesized that intrinsic motivation would be positively associated with both hedonic and eudaimonic savouring. Second, self-determined extrinsic motivation was hypothesized to be positively associated with eudaimonic savouring. Finally, both forms of motivations and both forms of savouring were hypothesized to be positively associated with psychological well-being.

#### Research Method

##### Participants and Procedure

A sample of two hundred and eighty three individuals (men = 82, women = 195, unreported gender = 5) participated in Study 3. Participants' age ranged from 18 to 75 years old ( $M$  age = 23.78,  $SD$  = 10.48). Most were students (full-time = 75%; part-time students = 10%; not in school = 15%). Participants' prevalent primary language was English (English = 57%; French = 32%; Other = 4%). Sixteen percent were employed full-time, 37% part-time, 45% were not employed, and 2% were retired. A total of 60% lived in an urban area, 29% in a suburban area, and 11% in a rural area.

Participants were recruited through ISPR, receiving one course credit for their participation, and through social networking. They were given a link to the study website via email and completed the questionnaires online using LimeSurvey.

##### Measures

The questionnaire package for this study included the following instruments: a trait level motivation scale, the SCI, five scales evaluating the components of well-being defined

by Seligman (2011): positive emotions, engagement, positive relationships, meaning, and accomplishment (please refer to Appendix C).

**Motivation.** The Global Motivation Scale (GMS; adapted from Guay, Mageau, & Vallerand, 2003) measures global motivation (i.e., the trait level proclivity of an individual to regulate his or her behaviour). The GMS comprises 28 items divided into five subscales that correspond to the motivational subtypes proposed by Self-Determination Theory (Deci & Ryan, 2002; Ryan & Deci, 2017): intrinsic motivation, extrinsic motivation by identified, introjected, and external regulation, and amotivation. Items are measured on a 7-point Likert-type scale ranging from 1 (Does not correspond at all) to 7 (Corresponds completely). The factorial structure of the GMS was supported by the results of a confirmatory factor analysis (Guay et al., 2003). Construct validity was established by means of correlations with relevant constructs (Guay, Blais, Vallerand, & Pelletier, 1999). The scale also demonstrated adequate to strong internal consistency ( $0.75 < \alpha < 0.91$ ; Guay et al., 2003). In the present study, internal consistency (Cronbach's  $\alpha$ ) varied from 0.76 to 0.92.

**Savouring Configuration Inventory.** The final version of the SCI validated in Study 2 was utilized.

**Positive emotions.** Positive Emotions were measured using the Scale of Positive and Negative Experience (SPANE; adapted from Diener et al., 2009), which assesses positive (6 items) and negative (6 items) experiences. For the purpose of this study, only the positive experience subscale was used. Items were measured on a 7-point Likert-type scale ranging from 1 (Never) to 7 (Always). Using a multigroup confirmatory factor analysis, Silva and Caetano (2013) replicated the two-factor solution for the SPANE that Diener et al. (2009) had discovered. Construct validity was supported by correlations with relevant constructs, such as measures of emotions and happiness (Diener et al., 2010). The temporal stability on both

subscales of the SPANE was found to be adequate ( $r = 0.62$  for the positive subscale and  $r = 0.63$  for the negative subscale, both across 1 month). The scale showed satisfactory internal consistency ( $\alpha = 0.87$  for the positive subscale and  $\alpha = 0.81$  for the negative subscale). The SPANE was successfully cross-validated in Portuguese (Silva & Caetano, 2013) and Chinese (Li, Bai, & Wang, 2013). In the current study, internal consistency (Cronbach's  $\alpha$ ) was 0.93.

**Engagement.** This variable was assessed using the Engagement subscale of the Orientations to Happiness questionnaire (OTH; adapted from Peterson, Park, Seligman, 2005), a 6-items measure of an individual's tendency to be engaged in the moment, which is one part of a 18-items self-report instrument designed to measure the subjective assessment of the three orientations (or pathways) to happiness proposed by Peterson et al. (2005). Items were measured on a 7-point Likert-type scale ranging from 1 (Very much unlike me) to 5 (Very much like me). The 3-factor structure of the instrument was corroborated by the results of both a principal component analysis (Peterson et al., 2005) and a confirmatory factor analysis (Ruch, Harzer, Proyer, Park, & Peterson, 2010). Internal consistency was found to be acceptable for the three subscales, with the engagement subscale yielding a Cronbach's  $\alpha$  of 0.77 (Peterson et al., 2005). The scale was successfully cross-validated in German (Ruch et al., 2010). In the present study, the internal consistency of this scale was 0.74.

**Positive relationships.** Positive Relationships were investigated using the Unidimensional Relationship Closeness Scale (URCS; Dibble, Levine, & Park, 2012), a 12-items questionnaire that measures interpersonal closeness, examining four different types of relationships (romantic partners, friends, family, strangers). Items were measured on a 7-point Likert-type scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). The unidimensional structure of the scale was supported by the results of both an exploratory and a confirmatory factor analysis (Dibble et al., 2012). Construct validity was examined by means of correlations

with relevant constructs. The internal reliability of the URCS was excellent ( $\alpha = 0.96$  across relationships types; Dibble et al., 2012). In the present study, internal consistency (Cronbach's  $\alpha$ ) was 0.94.

**Meaning.** Meaning was assessed using the Meaning in Life Questionnaire (MLQ; Steger et al., 2006), a 10 items scale that assesses two dimensions of meaning in life (i.e., the presence of meaning and the search for meaning). A robust two-factor solution (i.e., presence of meaning and the search of meaning) has been obtained by both a principal-axis factor analysis and a confirmatory factor analysis (Steger et al., 2006). Items were measured on a 7-point Likert-type scale ranging from 1 (Absolutely untrue) to 7 (Absolutely true). Construct validity was examined by means of correlations with relevant concepts, such as positive emotions, intrinsic religiosity, extraversion and agreeableness (Steger et al., 2006). The MLQ subscales were found to be unrelated to social desirability and related non-significantly to intrinsic religiosity, giving evidence of discriminant validity (Steger & Kashdan, 2007). The temporal stability of the MLQ was acceptable ( $r = 0.70$  for presence of meaning and  $r = 0.73$  for search of meaning, over a period of 1 month). Both subscales of the MLQ also showed good internal consistency ( $0.81 < \alpha < 0.92$ ; Steger & Kashdan, 2007). In the present study, internal consistency (Cronbach's  $\alpha$ ) was 0.79.

**Accomplishment.** Accomplishment was measured using the fulfillment subscale of the Life Regard Index-Revised questionnaire (LRI-R; adapted from Debats, 1998), a 14-items measure of "the degree to which an individual sees himself as having fulfilled or as being in the process of fulfilling his framework of life-goals" (Aguinaldo & de Guzman, 2014, p. 36), which is one part of a 28-items self-report instrument designed to measure positive life regard. Items were measured on a 7-point Likert-type scale ranging from 1 (Do not agree) to 7 (Agree). The structure of the LRI-R was tested using exploratory and confirmatory factor

analyses (Harris and Standard, 2001; Yockey, 2006). Adequate concurrent and discriminant validity for the LRI-R were demonstrated by correlations with measures of hopelessness, spiritual well-being, and personal meaning (Harris and Standard, 2001). The temporal stability of the LRI-R was good ( $r = 0.81$  for fulfillment subscale at an 8 week interval; Harris & Standard, 2001). Furthermore, results from Harris and Standard's (2001) showed that the LRI-R and the fulfillment subscale displayed very good internal consistency (Cronbach's  $\alpha$  of 0.92 and 0.87, respectively). In the current study, internal consistency (Cronbach's  $\alpha$ ) was 0.88.

### **Analyses**

**Preliminary analyses.** As in Study 2, initial analyses were first performed to take care of technical difficulties (treatment of missing data, exclusion of outliers, and verification of statistical assumptions), as well as to evaluate the descriptive properties of the five variables included in the structural equation model (intrinsic motivation, self-determined extrinsic motivation, hedonic savouring, eudaimonic savouring, and well-being).

Main analyses comprised two steps: the assessment of bivariate associations among the five factors under study and the full structural equation model.

**Bivariate associations.** Interrelations among intrinsic motivation, self-determined extrinsic motivation, hedonic savouring, eudaimonic savouring, and well-being, were assessed using two complementary statistics: zero order Pearson correlations and phi correlations between latent variables.

**Structural equation modeling: defining the indicators of the measurement model.** It is well known that latent constructs cannot be measured by large numbers of individual items without penalizing model fit, and/or model estimation, to the point where the analysis becomes unmanageable. The use of indicators (aggregated items) is the practice that has largely been adopted to circumvent this difficulty when a latent construct is assessed by a

measure, a set of subscales, or by an instrument package, that includes more than 4 to 6 items. Moreover, because they are composed of several individual scores, or groupings of items, the variance of indicators is typically superior to the variance of individual items, making them more reliable and stable. The following paragraph describes the items or indicators that were used to define the measurement parameters of the structural model.

First, the latent factor for intrinsic motivation was estimated using the four individual intrinsic motivation items from the GMS. Second, the self-determined extrinsic motivation latent factor was created using indices that represent weighted averages of the scores on the remaining subscales of the GMS [identification (IDEN), introjection (INTRO), external regulation (ER), and amotivation (AMO)], the weight given to each score being defined by the position of the type of motivation it represents on the self-determination continuum (Deci & Ryan, 2002; Ryan & Deci, 2017). Specifically, these indicators were calculated using the following equation:  $[(2 \times \text{IDEN}) + (\text{INTRO}) - (\text{ER}) - (2 \times \text{AMO})] / 4$ . This formula was first applied to the 1<sup>st</sup> item of each of the four relevant subscales to produce the first global self-determined motivation index. This calculation was sequentially repeated to include the 2<sup>nd</sup> item of each subscale, then the 3<sup>rd</sup> item of each subscale, and finally the 4<sup>th</sup> items of each subscale, thereby yielding three further self-determination indices. A total of four self-determined motivation indicators were thus obtained using this technique. Third, the latent hedonic savouring factor was estimated on the basis of the four individual items of the corresponding subscale of the SCI. Fourth, the latent eudaimonic savouring factor was estimated using the average of each of the eudaimonic subscales of the SCI as indicators (i.e., eudaimonic savouring of meaning of life, spirituality, inspiration, self-reflection, appreciation, and gratitude). Finally, the latent factor representing well-being was estimated using indicators that were the average scores of the instruments that were utilized to measure each of the five

components of Seligman's model (2011): positive emotions, engagement, positive relationships, meaning, and accomplishment.

**Structural equation modeling: estimated parameters.** As in Study 2, the measurement portion of the model was designed to include conventional specifications. Five factors, corresponding to the five variables under study, were created. Estimated parameters included target loadings, individual measurement error residuals for each item or indicator, factor variances, and correlations between factors. For model identification purposes, the first target loading of each factor was fixed to 1.00. The structural components of the model were specified to test the hypothesized network of associations among intrinsic and extrinsic motivations, hedonic and eudaimonic savouring, and well-being (please refer to Figure 2, p. 36). Specifically, this network of associations was assessed by a set of three concurrent regressions (one per endogenous - or dependent - variable). The first of these regressions assessed the relationship between intrinsic motivation and hedonic savouring. The second regression assessed the relationships between intrinsic and self-determined extrinsic motivations, on the one hand, and eudaimonic savouring, on the other. The third and last regression assessed the relationships between intrinsic and extrinsic motivations, hedonic and eudaimonic savouring, on the one hand, and well-being, on the other. For all three regressions, estimated parameters included regression coefficients and remaining residual error variance for each endogenous factor. Effect sizes ( $R^2$ ), representing the percentage of explained variance for each latent dependent factors, were also obtained. As intrinsic and self-determined extrinsic motivations should theoretically be associated, the correlation between these two exogenous latent factors was also included in the model.

Likewise, an association was expected between hedonic and eudaimonic savouring, and this point deserves further explanation. Because it is technically impossible to specify

correlations between endogenous factors, and because estimating recursive regression paths has been mathematically proven (Bollen, 1989) to invalidate one of the conditions required to ensure model identification (recursive paths are a set of two simultaneous regression paths in opposite directions between two variables), the correlation between the regression residuals for hedonic savouring and eudaimonic savouring was estimated. This was done to account for the systematic covariance between these two factors that was likely to be present within the random regression residuals. Estimating covariances between regression residual terms has traditionally been frowned upon by purists. The reasoning behind this is that systematic correlated covariance between regression residuals is thought to indicate the presence of a hidden confounding source of influence. Here, the source of systematic variance within regression residuals is theoretically obvious. It is the variance pertaining to the general savouring construct, which is shared by both hedonic and eudaimonic savouring. To specify this variance in a mathematically uncontroversial way, a single regression path would have been required between hedonic and eudaimonic savouring. Conceptually though, there is no sound reason to propose that one of these forms of savouring is a temporal antecedent of the other. Indeed, theoretically, they are likely to mutually influence one another and to co-occur. As explained above, because recursive paths compromise model identification and can lead to unstable models with important convergence issues, the best available option to modelize the covariance between hedonic and eudaimonic savouring was to estimate the covariance between the regression residual terms of these constructs.

**Structural equation modeling: evaluation of model fit.** In line with the mathematical rationale presented in the Analyses section of the Method of Study 2, model fit was assessed using an array of relative and absolute fit indices that have shown useful properties, and that work well together: the Satorra-Bentler chi-square ( $SB-\chi^2$ ; Satorra &

Bentler, 2001), the Comparative Fit Index (CFI; Bentler, 1990), the Incremental Fit Index (IFI; Bollen, 1989), the Standardized Root Mean Squared Residual (SRMR, Bentler, 1995), and the Root Mean Square Error of Approximation (RMSEA, Steiger, 1990).

## **Results**

First, a set of preliminary analyses was realized to take care of missing data and outliers, as well as to allow for the verification of statistical assumptions. Second, bivariate associations among intrinsic motivation, self-determined extrinsic motivation, hedonic savouring, eudaimonic savouring, and well-being were assessed. Lastly, the network of relationships between the variables under study was tested using a structural equation model.

### **Preliminary Analyses**

**Treatment of missing data.** Two hundred and ninety four participants initially filled out the questionnaire. As missing data was randomly distributed, linear interpolation was utilized to replace missing values.

**Outliers.** Seven problematic cases of univariate outliers were identified from the sample using both statistical ( $Z \text{ score} > |3.29|$ ) and substantive criteria. Mahalanobis distances were used to locate multivariate outliers. Four multivariate outliers were identified and removed. The final sample size was 283 participants.

**Verification of statistical assumptions.** The assumption of univariate normality was verified by examining kurtosis and skewness values (see Table 5). Though some of the values fell slightly outside the conventional boundaries of -1.00 and +1.00, this was not deemed a problem because the mean kurtosis and skewness values remained within -1.00 and +1.00 ( $M_{\text{kurtosis}} = -0.42$ ;  $M_{\text{skewness}} = -0.39$ ; Muthén & Kaplan, 1985). An examination of multivariate residuals revealed that they displayed a seemingly normal distribution. Bivariate scatterplots

were obtained for all possible pairs of variables and no evidence suggesting departures from linearity or homoscedasticity were observed.

Table 5

*Descriptive Statistics*

	Mean	Std. Dev.	Skewness	Kurtosis
<b>Intrinsic motivation</b>	5.08	1.09	-0.36	-0.01
<i>MoIn1</i>	5.14	1.30	-0.69	0.34
<i>MoIn2</i>	5.01	1.29	-0.48	-0.07
<i>MoIn3</i>	4.95	1.36	-0.39	-0.34
<i>MoIn4</i>	5.23	1.41	-0.69	0.14
<b>Self-determined extrinsic motivation</b>	1.06	0.89	0.11	-0.84
<i>MoEx1</i>	1.07	1.19	-0.03	-0.26
<i>MoEx2</i>	1.05	1.06	0.26	-0.34
<i>MoEx3</i>	0.97	1.03	0.04	-0.16
<i>MoEx4</i>	1.15	1.08	-0.03	-0.13
<b>Hedonic savouring</b>	5.50	1.11	-0.66	-0.07
<i>SaHe1</i>	5.81	1.33	-1.14	0.83
<i>SaHe2</i>	5.51	1.52	-0.85	-0.16
<i>SaHe3</i>	5.29	1.45	-0.68	-0.06
<i>SaHe4</i>	5.40	1.47	-0.71	-0.22
<b>Eudaimonic savouring</b>	4.89	0.91	-0.02	-0.44
<i>SaEu1</i>	4.49	1.37	-0.13	-0.63
<i>SaEu 2</i>	3.91	1.53	0.06	-0.83
<i>SaEu 3</i>	5.25	1.01	-0.32	-0.48
<i>SaEu4</i>	4.62	1.23	-0.22	-0.47
<i>SaEu5</i>	5.37	1.31	-0.72	-0.23
<i>SaEu6</i>	5.72	1.06	-0.75	-0.24
<b>Well-Being</b>	4.80	0.69	-0.17	-0.41
<i>Wb1</i>	4.78	1.14	0.44	-0.07
<i>Wb2</i>	4.10	1.01	0.29	0.32
<i>Wb3</i>	5.87	1.05	-0.96	-0.00
<i>Wb4</i>	4.56	0.98	-0.26	0.07
<i>Wb5</i>	4.68	0.98	0.08	-0.51

*Note.* The theoretical range was -6.00 to +6.00 for self-determined extrinsic motivation and 1 to 7 for all other variables.

**Screening for multicollinearity.** Pearson correlations were calculated for all possible pairs of variables. No correlations above 0.90 were discovered (Tabachnick & Fidell, 2013).

**Descriptive statistics.** The descriptive statistics of the parameters for each of the five constructs in the present study are presented in Table 5. The mean values for the parameters and the constructs fall within acceptable limits. Standard deviations values ( $0.23 < SD < 2.18$ ) denote that the scores' magnitude of dispersion in the sample are characteristic of a normal distribution for scores rated on a 1.00 to 7.00 point scale.

### **Main Analyses**

**Bivariate associations.** Interrelations among intrinsic motivation, self-determined extrinsic motivation, hedonic savouring, eudaimonic savouring, and well-being, as evaluated by Pearson zero order correlations, and phi correlations between latent constructs, are presented in Table 6. Results offered initial support for Hypotheses (6) to (9). In line with Hypothesis (6), intrinsic motivation was positively correlated with hedonic and eudaimonic savouring. As stated by Hypothesis (7), self-determined extrinsic motivation was also positively correlated with hedonic and eudaimonic savouring. As purported by Hypothesis (8), both intrinsic and self-determined extrinsic motivations were positively correlated with well-being. Lastly, in accordance with Hypothesis (9), both hedonic and eudaimonic savouring were positively correlated with well-being. This array of statistically significant correlations thus indicated that all five variables under study were positively associated from a bivariate standpoint. The following paragraph presents complementary information, by assessing the interrelations among intrinsic motivation, self-determined extrinsic motivation, hedonic savouring, eudaimonic savouring, and well-being, from a stringent multivariate perspective.

**Structural equation model.** The hypothesized network of associations among intrinsic motivation, self-determined extrinsic motivation, hedonic savouring, eudaimonic savouring, and well-being (please refer to Figure 2, p. 36), was tested by means of a full

Table 6

*Correlations among Motivation, Savouring, and Well-Being*

	Intrinsic motivation	Self-determined extrinsic motivation	Hedonic savouring	Eudaimonic savouring	Well-being
Intrinsic motivation	1.00	0.22***	0.40***	0.38***	0.53***
Self-determined extrinsic motivation	0.12**	1.00	0.19**	0.26***	0.37***
Hedonic savouring	0.31***	0.19**	1.00	0.52***	0.43***
Eudaimonic savouring	0.24***	0.18***	0.53***	1.00	0.54***
Well-being	0.38***	0.19***	0.36***	0.36***	1.00

*Note.* Pearson correlations are presented above the diagonal, and Phi correlations between latent factors below the diagonal. \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ .

structural equation model (EQS 6.1, Bentler, 2006). Please note that to achieve satisfactory model fit [ $SB-\chi^2(215) = 448.43, p < 0.001$ ; CFI = 0.90; IFI = 0.90; SRMR = 0.07;

RMSEA 0.06;  $CI(90\%)_{RMSEA} = \{0.05, 0.07\}$ ], six post hoc modifications were required<sup>2</sup>. A

posteriori inclusion of estimated parameters was based on the results of the Lagrange

multiplier test (Bentler, 2006), but only after careful consideration of their substantive

meaningfulness (Byrne, 2006). The resulting structural equation model is presented in Figure

4. It is useful to recall that regression coefficients (standard method) represent the unique

associations between each independent variable and the dependent variable, once the variance

from other independent variables has been extracted (Tabachnick & Fidell, 2013).

<sup>2</sup> The following additional parameters were estimated a posteriori: a cross-loading between the 5<sup>th</sup> indicator of well-being (accomplishment) and self-determined extrinsic motivation, a cross-loading between the 3<sup>rd</sup> indicator of well-being (enjoying positive relationships) and hedonic savouring, and 4 correlated measurement errors (between items or indicators of the same factors).

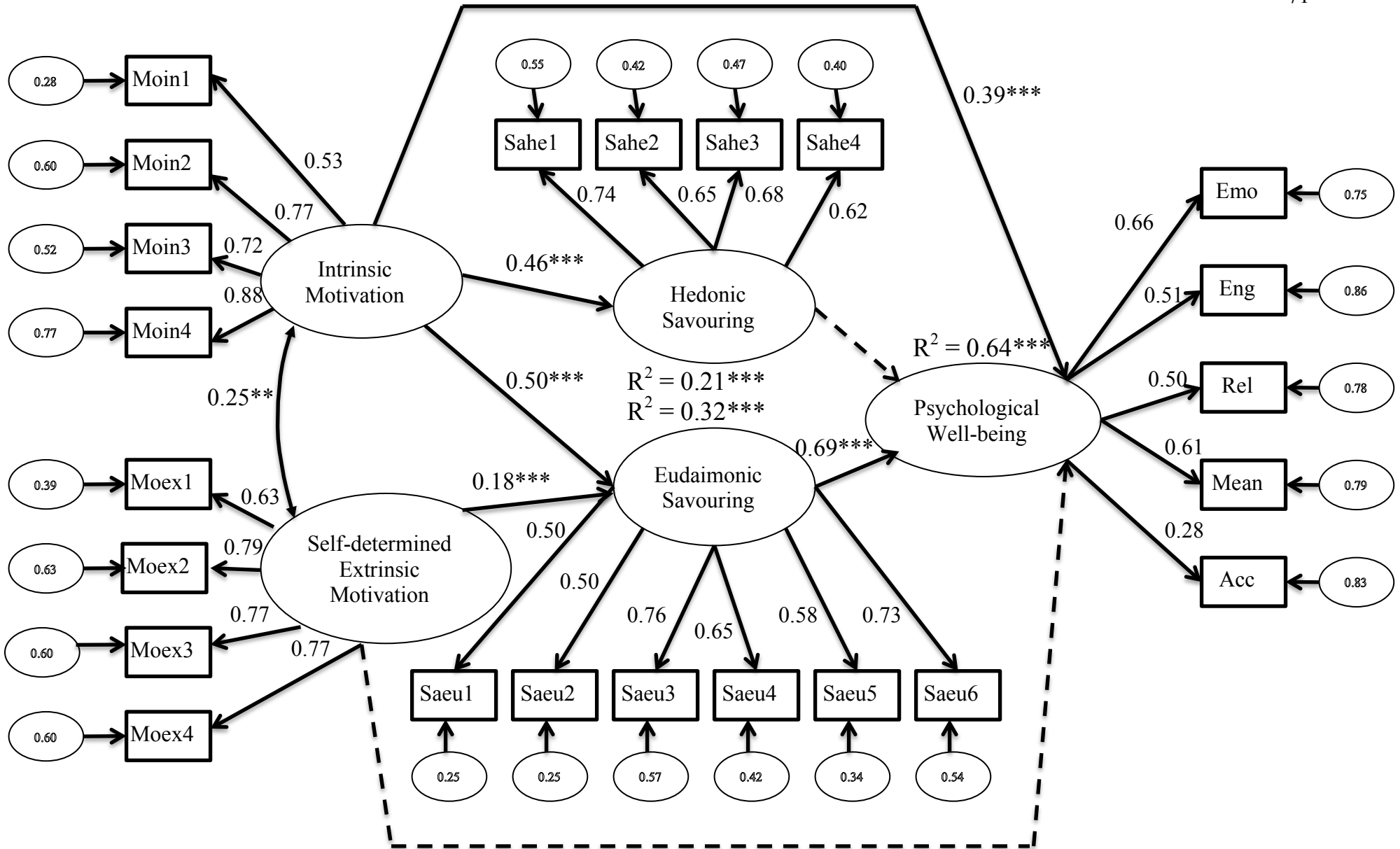


Figure 4. Relationships among Motivation, Savouring, and Psychological Well-being. All estimated parameters of the measurement model are statistically significant ( $p \leq 0.05$ ).

Results revealed that, in agreement with Hypotheses (6) and (7), intrinsic motivation was positively associated with hedonic and eudaimonic savouring, while self-determined extrinsic motivation was associated with eudaimonic savouring. Hypothesis 8 was partially supported. Intrinsic motivation was positively associated with well-being. Yet, self-determined extrinsic motivation was not uniquely associated with this factor. Hypothesis 9 was also partially supported. Eudaimonic savouring was positively associated with well-being. However, hedonic savouring was not uniquely associated with this outcome. The proportion of explained variance of all three dependent variables (hedonic savouring, eudaimonic savouring, and well-being) was high ( $R^2 > 0.14$ ; Cohen, 1988).

### **Synthesis and Discussion**

The goal of Study 3 was to evaluate the interrelations among intrinsic motivation, self-determined extrinsic motivation, hedonic savouring, eudaimonic savouring, and well-being. Bivariate correlations first revealed that these five factors were all positively, and statistically significantly, associated. Results of a full structural equation model also largely provided support for the hypothesized multivariate network of associations among these five factors. Hedonic savouring was predicted by intrinsic motivation, while eudaimonic savouring was predicted by both intrinsic and self-determined extrinsic motivations. Intrinsic motivation and eudaimonic savouring both predicted well-being significantly.

However, contrary to expectations, hedonic savouring and self-determined extrinsic motivation failed to offer a unique contribution to the prediction of well-being. As a starting point, it is useful to consider that the variance in well-being that is jointly predicted by intrinsic motivation and eudaimonic savouring is of very high magnitude ( $R^2 = 64\%$ ). Once random error variance is factored in, that does not leave much opportunity for other predictors of well-being to weigh in. However, the unexpected non-significant results could also reflect

alternative theoretical possibilities because they can be interpreted as making conceptual sense.

Firstly, it is not unusual, in motivational research, for intrinsic motivation to explain more variance than self-determined extrinsic motivation for positive outcomes, because it implies a higher level of autonomy (Deci & Ryan, 2002; Ryan & Deci, 2017). There is thus a straightforward explanation for this non-significant finding.

Secondly, it is fascinating to observe that the lion's share of the variance of well-being was predicted by eudaimonic savouring, to such an extent that hedonic savouring was edged out of the equation. This diverges from the extant literature on savouring and well-being. In this documentation, savouring has generally been conceptualized in a way that is congruent with the notion of hedonic savouring proposed herein. The results from the abundant studies on this topic have found a plethora of positive associations between a form of savouring that could be described as hedonic and well-being (Black & Areni, 2016; Chun, Diehl, & MacInnis, 2017; Hurley & Kwon, 2012; Kiken, Lundberg, & Fredrickson, 2017; Quoidbach & Dunn, 2013). In this thesis, new subtypes of savouring, termed eudaimonic and focused on various facets of experiential gratification that transcend sensory input and affect valence, have been proposed. Moreover, in sharp contrast to the current literature that pertains to savouring, the influence of eudaimonic savouring on well-being drastically superseded that of hedonic savouring. Could it be that the conceptualization of savouring elaborated in this thesis has yielded a novel aspect of this phenomenon (eudaimonic savouring) that has a more pronounced effect on well-being because it is psychologically more profound? This question is intriguing and will be addressed in more detail, along with further fundamental considerations, in the following chapter.

## **CHAPTER 5**

### **DISCUSSION**

The central aim of this thesis was to propose and validate a taxonomy that comprises two main savouring dimensions: hedonic and eudaimonic. Hedonic savouring was described here as the savouring of pleasure; whereas eudaimonic savouring was defined as the savouring of psychologically gratifying experiences. Eudaimonic savouring was further theorized to encompass six subdimensions: meaning of life, spirituality, inspiration, self-reflection, appreciation, and gratitude. A new instrument, the Savouring Configuration Inventory (SCI), was created to embody this novel taxonomy.

It was hypothesized that the SCI would comprise the seven aforementioned savouring dimensions (Hypothesis 1), that its subscales would display adequate internal consistency (Hypothesis 2), construct validity (Hypothesis 3), and concurrent validity (Hypothesis 4). It was also hypothesized that the SCI would be unrelated to social desirability (Hypothesis 5).

The secondary goal of this thesis was to investigate the associations among motivation, savouring, and well-being. It was hypothesized that intrinsic motivation would be positively associated with hedonic savouring and eudaimonic savouring (Hypothesis 6); that self-determined extrinsic motivation would be positively associated with eudaimonic savouring (Hypothesis 7); that intrinsic and self-determined extrinsic motivations would both be positively associated with well-being (Hypothesis 8); and that both hedonic and eudaimonic savouring would be positively associated with psychological well-being (Hypothesis 9). Study 1 and Study 2 were designed to test Hypotheses 1 to 5; whereas Study 3 was devised to test Hypotheses 6 to 9.

## Summary of Findings

### Study 1

The focus of Study 1 was exploratory. Its main objective was to develop an initial version of the Savouring Configuration Inventory. Results of the exploratory factor analysis, performed using an item-trimming strategy, yielded a solution with several promising features. Sound initial support was unambiguously obtained for several dimensions: hedonic savouring and eudaimonic savouring of self-reflection, appreciation, and gratitude. However, two salient problems remained to be solved: meaning of life and spirituality items merged into a single factor, and the items related to eudaimonic savouring of inspiration did not group into a distinct factor. The SCI was amended and improved on the basis of these results, and tested anew in Study 2.

### Study 2

In this study, the factorial structure of the refined (and final) version of the SCI was successfully documented by means of a confirmatory factor analysis. The results of this analysis validated the presence of seven clean factors that corresponded to the seven dimensions of the proposed savouring taxonomy. Hypothesis 1 was thus fully corroborated, thereby suggesting that the novel conceptual framework developed herein has merit. Study 2 results also revealed that the SCI subscales displayed adequate internal consistency, construct validity, concurrent validity, and were unrelated to social desirability. These results offer support for Hypotheses 2, 3, 4 and 5, respectively. Taken together, the results of these complementary and thorough analyses indicate that the SCI is a promising instrument with sound psychometric properties.

### Study 3

Whereas Study 1 and Study 2 focused on validating the novel taxonomy of savouring experiences developed in this thesis, the objective of Study 3 was to evaluate the interrelations between motivation, savouring, and well-being. Bivariate associations were first assessed by Pearson correlations, as well as Phi correlations between latent variables. Bivariate results supported Hypotheses 6 to 9. Intrinsic motivation, self-determined extrinsic motivation, hedonic savouring, eudaimonic savouring, and well-being were all positively and significantly correlated, as calculated using Pearson's or Phi statistics.

The hypothesized network of associations between these variables (please refer to Figure 2, p. 36) was further tested using structural equation modeling. From a multivariate perspective, it is important to note that regression coefficients obtained by means of this more elaborate procedure represent unique associations between independent variables and dependent variables, once the influence of all other independent variables has been partialled out. It is thus a mathematical strategy that complements the information yielded by bivariate associations, and it is liable to produce somewhat different results. Indeed, the hypothesized model (please refer to Figure 2, p. 36) was largely corroborated. In agreement with Hypothesis 6 and Hypothesis 7, hedonic savouring was predicted by intrinsic motivation, whereas eudaimonic savouring was predicted by both intrinsic and self-determined extrinsic motivations.

Partial support was obtained for Hypothesis 8 and Hypothesis 9. In line with Hypothesis 8, intrinsic motivation was positively associated with well-being. Yet, contrary to this hypothesis, self-determined extrinsic motivation was not. Also, eudaimonic savouring was

associated with well-being, thereby upholding Hypothesis 9. Yet, surprisingly, hedonic savouring was not.

To summarize, with the exception of two non-significant findings, structural equation modeling results supported the hypothesized model. It is important, however, to underscore the mathematical meaning of those findings. Bivariate associations demonstrated clearly that both hedonic savouring and self-determined extrinsic motivation are correlated significantly to well-being. What the modeling results specifically illustrate is that, when both of these variables (hedonic savouring and self-determined extrinsic motivation) are entered jointly with eudaimonic savouring and intrinsic motivation as predictors of well-being in a regression equation, they do not offer a unique contribution to well-being. That is, they share no variance with this outcome that can be distinguished from that of the other independent variables. Conversely, it is also important to note that the high regression coefficients obtained for intrinsic motivation, as well as for eudaimonic savouring, represent the covariance that is uniquely shared, by each of these independent variables, on the one hand, and well-being, on the other. Taken together, these results indicate that, whereas both global forms of motivation and savouring are associated with well-being, eudaimonic savouring and intrinsic motivation contribute variance to well-being that is uniquely theirs.

### **Fundamental Implications**

#### **Savouring**

Research pertaining to the concept of savouring is still in its infancy. Although researchers in the field of savouring have looked at its mechanisms (i.e., experiential and temporal; Bryant, 2003; Bryant et al., 2011), and at the different strategies people utilize to savour (Bryant & Veroff, 2007), no research has examined the essential nature and structure of

savouring. The current project was the first to look at the core substance of savouring dimensions. That is, a sophisticated taxonomy of savouring experiences was conceptually developed, and successfully validated. This constitutes a significant fundamental contribution. Aside from the fact that it addresses an important flaw in the savouring literature, the degree of novel theoretical elaboration that it entailed is substantial. Moreover, the new ideas that were put forth herein have the potential to dovetail or interact with the extant documentation on savouring to potentially yield rich and fascinating further conceptual developments.

**Processes of savouring.** The proposed taxonomy differentiates itself from the processes of savouring. The latter concern the transformation of the savoured event into positive feelings, via proactive cognitive and experiential mechanisms (Bryant & Veroff, 2007). Four primary savouring processes are proposed: thanksgiving, marvelling, basking, and luxuriating. While the processes of savouring seek to answer the question of “how” do people savour, the present taxonomy aims to address the question of “what” do people savour. Although fundamentally different, the processes and types of savouring may yet be reconciled. It is plausible that different types of savouring are related to certain processes and not to others. For example, the process of luxuriating appears to be hedonically driven; whereas the process of marvelling and thanksgiving may be more eudaimonically driven. Additionally, the process of basking may be both hedonic and eudaimonic. More specifically, how do the subdimensions of savouring fit within the four processes? As mentioned above, the process of luxuriating may logically be associated with hedonic savouring given the strong association with pleasure and comfort inherent in luxuriating. Savouring through meaning and spirituality are most likely expressed through the processes of marvelling and of basking. In their seminal work on savouring, Bryant and Veroff (2007) mention that the process of basking may involve

some degree of self-reflection. The concept of savouring through inspiration is logically associated with marvelling and perhaps basking. The concepts of savouring through appreciation and gratitude fit nicely into the processes of thanksgiving and may also sometime be manifested through the process of marvelling.

**Types of savouring.** Although to date, the study of the structure of savouring has not been examined, some previous studies have alluded to the idea of distinct types of savouring. For instance, Bryant and Veroff (2007) propose the idea of the complexities of savouring, suggesting that savouring experiences can become more and more complex as the number of elements being savoured, the associations between the elements that are being savoured, and the number and types of the different savouring processes being utilized, increase. Bryant and Veroff (2007) do not, however, distinguish between the different types of elements being savoured (e.g., the difference between savouring a meal versus savouring a friendship) or the characteristics of the associations being made (e.g., one's love of chocolate versus one's love of God). In the same vein, Bryant and colleagues (2011), drawing on Bryant and Veroff (2007)'s conceptualization of the four processes of savouring, and suggesting that, developmentally speaking, children are able to experience basking and luxuriating before thanksgiving and marvelling, postulate that children will report experiences where they felt happy before they report experiences that were particularly meaningful to them. The present projects builds and expands this idea in elaborating a theory that distinguishes savouring experiences that are hedonically based from those that are eudaimonically based.

One study (Gentzler, Palmer, & Ramsey, 2016) examined the motives behind participants' responses to positive affect. Results indicated that three motivations underlie positive affect regulations: the motivation to express positive affect, to reflect on the self, and

to dampen the experience. Bryant et al. (2005) propose two types of positive reminiscing: one style referring to the employment of cognitive strategies; the other, denoting the employment of behavioural strategies. Tangentially, one study (Bryant et al., 2011) proposed that the four processes of savouring may be “associated with a unique pattern of brain activity involving the operation of different neural mechanisms” (p. 111). While few studies to date have looked at the neuropsychology of savouring directly (Speer, Bhanji, & Delgado, 2014), results from a study (Kringelbach & Berridge, 2009), conceptualizing hedonia as the experience of pleasure and eudaimonia as the cognitive appraisal of meaning, is in line with Bryant et al. (2011), showing that hedonia and eudaimonia have a distinct neural network. Consistent with Bryant et al. (2011)’s suggestion, although not measuring neural pathways, the present study offers theoretical support to the idea that two types of savouring are indeed distinct from one another. Future studies could examine this theoretical distinction further, and assess whether the difference extends to neurological profiles.

**Temporal aspects of savouring.** Findings from this project are also compatible with results from previous studies that have used the integrative framework proposed by Bryant and Veroff (2007). For example, some studies have examined the temporal conceptualization of savouring. First, most studies have examined savouring using the in-the-moment temporal facet, that is focusing on an experience while it is occurring (Hurley & Kwon, 2012). For example, Jose et al., (2012) found that savouring in the moment both mediated and moderated the impact of positive events on momentary happy mood. Hence, they conclude that savouring is indeed an important mechanism through which happiness is derived from positive events. In their longitudinal study, Hurley and Kwon (2013) examined the interaction between savouring the moment and uplifts (i.e., positive events that occur naturally everyday) in relation to

positive outcomes (i.e., satisfaction with life and positive affect). Though they did not find a significant interaction, they did find that greater savouring in the moment was positively associated with higher levels of satisfaction with life and positive affect. Sharing positive events has been associated with greater levels of satisfaction in life, whereas focusing attention on the present moment and positively ruminating has been associated with greater levels of positive affect (Quoidbach, Berry, et al., 2010). Folger (2016) examined savouring the moment in a sample of individuals who experienced trauma. Findings revealed that present focused savouring is positively related to psychological well-being and negatively related to depressive symptoms.

Although the majority of studies on savouring have looked at savouring in-the-moment, a number have also examined the other two temporal facets: that is, reminiscing, which involves the rekindling of past positive affects, and anticipatory savouring, which relies on casting one's mind on a future event; Bryant, 2003). For instance, Spears (2017) looked at all three temporal aspects in relation to resilience and well-being. One study (Speer et al., 2014) focused on the act of reminiscing and found that it is positively associated with an increase in positive affect. Other studies have examined the adaptive function of positive reminiscing in fostering the ability to enjoy life (Bryant et al., 2005), bond socially (Westerhof, Bohlmeijer, & Webster, 2010), cope with stress (Speer & Degaldo, 2017), and increase positive affect (Nelis, Holmes, Palmieri, Bellelli, & Raes, 2015). In their meta-analysis, Bohlmeijer, Roemer, Cuijpers, & Smit (2007) reviewed fifteen studies on the relationship between well-being and reminiscence in older adults, finding a moderate overall effect. In the same vein, Geiger, Morey, and Segerstrom (2017) found similar results examining perceived reminiscing and anticipatory savouring abilities, and perceived physical

health, also in older adults. Bryant & Yarnold (2014) found that Type A individuals tend to perceive themselves as having greater reminiscing and anticipating abilities compared to Type B individuals. Furthermore, Bryant and Veroff (2007) proposed that “anticipation might enrich the sense of meaning people find in positive events over time, as they realize they are now experiencing something once only hoped for” (p. 156). One study found that anticipatory savouring enhances consumption enjoyment (Chun et al., 2017). Additionally, Black and Areni (2016) found that anticipatory savouring is positively related to the pleasure of eating (e.g., a piece of chocolate) and the rate of satiation.

The findings of the present project do not allow one to specify distinct temporal aspects for each subdimensions. The SCI tasks participants to mentally put themselves in a series of scenarios, requiring them to imagine a given context and to rate the likelihood that one would savour in that particular situation. Participants can choose to draw from an actual past episode, call to mind an upcoming event, or simply conjure up fictional relevant mental images, to place themselves in the hypothetical context. The freedom offered by the self-report instrument, though methodologically convenient, does not allow the researcher to assess the chosen source that lies behind the participant’s imagination.

Nonetheless, although it is probable that each of the subdimensions of savouring can occur in all three temporal instances, it is possible to speculate about which temporal aspect would be more prevalent for each. First, it is reasonable to assume that, given its focus on the momentary experience of pleasure, hedonic savouring should be, more often than not, present-oriented. Moreover, given the central role of physiological responses, one may postulate that this type of savouring, when done through reminiscing and anticipating, may typically be less intense than when done in-the-present. Second, eudaimonic savouring of inspiration may also

be largely limited to the present, given the importance placed on the sense of being “captured by” (often unexpectedly so), and “yielding to” the evocative qualities of a stimulus.

Conversely, it may be suggested that eudaimonic savouring of self occurs more through reminiscing, since it is usually the fruit of some introspective work previously done or the realization of recent personal growth. Fourth, it is plausible to speculate that eudaimonic savouring of appreciation, with the emphasis placed on the noticing and valuing of a worthwhile event, may more prevalently occur either through reminiscing or in-the-present. Finally, one may conjecture that eudaimonic savouring of meaning, spirituality and gratitude are all subdimensions that can be as much past-, present- and/or future- oriented. Indeed, it is likely that the moments of meaningful intellectual, spiritual, and sacred insights, and events that educe thankfulness, can be remembered, experienced, or anticipated, in equal measure.

**Experiential aspects of savouring.** Furthermore, another area of research in savouring that may be reconciled with the findings of the present project pertains to the studies that have examined the focus of savouring. In their model, Bryant and Veroff (2007) propose two possible angles an individual may take to savour: by focusing inward (self-focus) and by focusing outwardly (world-focus). These two orientations are proposed to involve different processes. Specifically, as mentioned earlier, instances of basking and luxuriating are self-focused; whereas instances of thanksgiving and marvelling are world-focused (Bryant & Smith, 2015). Although future studies could empirically examine the focus of each subdimensions of savouring, it is possible to conjecture that hedonic savouring and eudaimonic savouring through self-reflection would be associated to self-focus savouring; whereas eudaimonic savouring through meaning, spirituality, inspiration, appreciation, and gratitude would be more world-focused.

**Strategies of savouring.** In their model, Bryant and Veroff (2007) identify ten savouring strategies (memory building, self-congratulation, sensory-perceptual sharpening, comparing, temporal awareness, counting blessings, absorption, sharing with others, behavioural expression and kill-joy thinking) that may be characterised as being either inherently cognitive or behavioural. These savouring responses are the “ways” in which people savour (Bryant & Veroff, 2007). Although no studies have yet – for obvious reasons – examined the relationships between each strategy and the different types of savouring proposed in this project, it is plausible to speculate on how they are inherently associated.

First, strategies that summon attention to the physical senses, like sensory-perceptual sharpening, and behavioural expression, may logically be used more often in relation to hedonic savouring. Second, memory is such an integral part of savouring. The act of remembering allows one to have the mental material necessary to focus on the positive feelings or meaningful elements of the experience. Indeed, associations have been made in the literature between making memories and meaning (Beike & Crone, 2012). Hence, it is very likely that strategies that emphasize the use of memory – for example, memory building and comparing – are utilized when savouring through meaning. Third, strategies that call forth attention to the self in relation to achievements or the past – such as self-congratulation and a more specific form of comparing – are liable to be particularly relevant in instances of savouring through self-reflection. Fourth, strategies that evoke future oriented, introspective reflections – for example temporal awareness and positive mental time-travel (Quoidbach, Wood, & Hansenne, 2009) – are likely to be predominantly associated with savouring of meaningful, spiritual, self-reflected and inspiring experiences. Fifth, strategies that involve a social component – like sharing with others, and capitalizing (Langston, 1994) – are likely

utilized when eudaimonically savouring meaning, spirituality, appreciation and gratitude. Furthermore, the strategy of counting one's blessings may also be particularly useful in cultivating a form of savouring that emphasizes meaning, since the strategy consist essentially in reframing everyday moments and events, and viewing them as meaningful and positive (Fredrickson, 2008). This strategy may also be associated with savouring of spirituality, appreciation and gratitude (Emmons & McCullough, 2003). Moreover, the strategy of absorption, which implies a gross sense of feeling positively overwhelmed by an experience, may generate to instances where one savours hedonically, or eudaimonically through meaning, spirituality, inspiration and appreciation. Conversely, dampening strategies of savouring – such as kill-joy thinking, suppression, distraction, and fault finding; Quoidbach, Berry, et al., 2010 – may potentially be used across all types of savouring indiscriminately.

### **Savouring and Well-Being**

Well-being is the correlate of savouring that has been most extensively studied. Indeed, most of the literature that pertains to savouring has focused on this topic. The tendency to savour has been examined across the lifespan, in children (Abela & Hankin, 2008; Bryant et al., 2011; Burkhart, Borelli, Rasmussen, & Sbarra, 2015); adolescents (Fredrick, 2017; Gentzler, Morey, Palmer, & Yi, 2013; Gentzler, Ramsey, Yi, Palmer, & Morey, 2014; Meehan, Durlak, & Bryant, 1993); adults (Chadwick, 2012; Gentzler et al., 2016; Palmer & Gentzler, 2017; Ramsey, 2013; Ramsey & Gentzler, 2014); and older adults (Geiger et al., 2017; Smith, 2017; Smith & Hanni, 2017; Smith & Hollinger-Smith, 2015); and is predictive of past, present, and future savouring (Bryant, 2003). Studies have also found a statistically significant relationship between savouring and various aspects of well-being (Bryant & Veroff, 2007; Jose et al., 2012). For instance, savouring was found to be positively related to

such concepts as optimism (Smith & Bryant, 2013), self-esteem (Wood et al., 2003), resilience (Smith & Hanni, 2017), life satisfaction (Livingstone & Srivastava, 2012; Quoidbach, Berry, et al., 2010; Smith & Bryant, 2016), greater positive emotion (Hurley & Kwon, 2013; Ng, 2012; Smith, Harrison, Kurtz, & Bryant, 2014), positive psychological functioning (Smith & Bryant, 2017), greater levels of positive emotion reactivity (Carl et al., 2014), greater levels of humour styles of affiliative and self-enhancing humour (Maiolino & Kuiper, 2014), greater relationship satisfaction (Borelli, Rasmussen, Burkhart, & Sbarra, 2015), increased feelings of intimacy (Otto, Laurenceau, Siegel, & Belcher, 2015), intensity and frequency of happiness (Bryant et al., 2005; Bryant & Veroff, 2007; Kurtz, 2008), present and general happiness (Bryant, 1989; Heiy & Cheavens, 2014; Quoidbach et al., 2009), and favourable interpersonal and relational outcomes (Costa-Ramalho, Marques-Pinto, Ribeiro, & Pereira, 2015; Gable, Reis, Impett, & Asher, 2004; Reis et al., 2010).

In contrast, savouring has been negatively related to neurotism (Bryant, 2003), guilt and shame (Bryant & Veroff, 2007; Sytine, 2016), physical symptoms and sleep complaints (Friedman et al., 2017), anxiety (Carl, et al., 2014; Eisner, Johnson, & Carver, 2009), work-family conflict (Camgoz, 2014), negative affect (Otto, et al., 2015; Pound, 2015), hopelessness, and depression (Feldman, Joormann, & Johnson, 2008; Ford, 2015; Hou et al., 2016; Hou et al., 2017; Min'er & Dejun, 2001; Werner-Seidler, Banks, Dunn, & Moulds, 2013). Lower perceived savouring ability has been related to insecure attachment in parent-child relationships (Palmer & Gentzler, 2017) and romantic relationships (Bond & Borelli, 2016).

The findings of the present project contribute novel insights to the positive relationship between savouring and well-being. First, in each of these prior savouring studies, no

distinctions are made between different types of savouring. Furthermore, the way savouring is almost always assessed is congruent with the notion of hedonic savouring presented in this project. For instance, in most studies, the concept of savouring is primarily measured using the Savouring Beliefs Inventory (Bryant, 2003). This instrument measures an individual's perceived ability to savour in terms of feeling good, pleasure, enjoyment, and happiness. Furthermore, even when savouring is assessed using an experimental design, the task used often addresses the notion of savouring in terms of how much happiness/pleasure one feels, or in terms of positive emotions. In this project, savouring is assessed as being either hedonic, or eudaimonic, in nature. Moreover, results from the structural equation model conducted in Study 3 indicated that hedonic savouring's effect on well-being is supplanted by eudaimonic savouring. It is possible to offer several theoretical explanations to clarify why hedonic savouring does not uniquely contribute to the prediction of well-being. Firstly, as previously mentioned, intrinsic motivation and eudaimonic savouring, together, predict a large portion of the variance in well-being ( $R^2 = 64\%$ ). Consequently, it may be expected that other predictors of well-being included in the model do not offer unique contributions. Secondly, as it is conceptualized in here, hedonic savouring is simply one distinct and well-defined facet of savouring, whose focus is specific: namely, pleasure of the senses. In contrast, eudaimonic savouring is defined as having several facets, covering such vast notional landscapes as meaning of life, spirituality, self-reflection, inspiration, appreciation and gratitude. In this light, it may not be surprising that well-being is significantly more predicted by all of these various facets (i.e., eudaimonic), compared to one distinct facet (i.e., hedonic). Thirdly, it is also possible that the contributions to well-being by the facets of eudaimonic savouring are due, not simply to the vast domain they cover, but to their psychological depth. That is, the

predictive role of eudaimonic savouring on well-being may be owing to the level of conceptual intricacies and complexities of each facets. For instance, the notion of meaning of life has greater potential to have far-reaching and ubiquitous effects on an individual's daily experience, compared to sheer physical pleasure. Thus, one may speculate that the savouring of a eudaimonically-relevant event would be assimilated differently – perhaps more profoundly – than a hedonic-relevant event. Consequently, one may conjecture that different types of savouring would relate differently to well-being.

Furthermore, future studies should examine whether hedonic and eudaimonic savouring relate differently to well-being over time. It is possible that hedonic savouring, given its focus on momentary pleasure, is more strongly related to “in-the-moment” well-being, and its effect may not endure longitudinally. By contrast, eudaimonic savouring may be more strongly related to well-being over time. For instance, emotional self-regulation improves with age (Urry & Gross, 2010). Bryant and Veroff (2007) conjectured that the tendency to savour would also augment as one grows older, since the perception of the ephemeral nature of time increases. Their hypothesis is in line with Socioemotional Selectivity Theory (Carstensen, Isaacowitz, & Charles, 1999), which postulates that the apprehension of time as being limited, yea of life as being fragile, lead individuals to emphasize the quality of their emotional experiences. The perspective of aging individuals changes as the drawing end is evinced, leading to enhanced accentuation and appreciation of the important things in life, which, in turn, lead to beneficial psychological outcomes (Carstensen et al., 1999).

Accordingly, it is plausible to suppose that a focus on meaningful psychological experiences, as well as the self-regulation of the positive emotions that accompany such experiences (i.e. eudaimonic savouring), may also increase with age. This increasing impact of eudaimonic

savouring across the lifespan could be theorized to lead to a synchronous growth in well-being.

### **Motivation and Well-Being**

The associations between self-determined motivation and psychological well-being have also been empirically examined across the lifespan in children (Ryan & Deci, 2001; Véronneau, Koestner, & Abela, 2005); teenagers (Bagøien, Halvari, & Nesheim, 2010; Gillison, Standage, & Skevington, 2006; Williams, Cox, Hedberg, & Deci, 2000); adults (Leak & Cooney, 2001; Wehmeyer & Schwartz, 1998); and older adults (Ferrand, Nasarre, Hautier, & Bonnefoy, 2012; O'Connor & Vallerand, 1994); as well as within different research and life domains (Deci & Ryan, 2008b). Results from numerous studies lent favourable support to the tenets of Self-Determination Theory (Ryan & Deci, 2017), finding positive relationships between both concepts.

For instance, in the area of education, support of autonomous forms of motivation were found to be related with higher levels of psychological well-being (Burton, Lydon, D'Alessandro, & Koestner, 2006; Deci & Ryan, 2008b; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000) and subjective well-being (Bailey & Phillips, 2016; Ryan & Deci, 2000), more positive affect and less negative affective responses (Álvarez, Balaguer, Castillo, & Duda, 2009), lower levels of stress (Baker, 2004), heightened levels of happiness (Nowell, 2017), better psychological health (Landry et al., 2008), and greater maintenance and enhancement of subjective vitality (Nix, Ryan, Manly, & Deci, 1999; Núñez, Fernández, León, & Grijalvo, 2015).

Furthermore, in sport and physical activity, self-determined regulation has been associated with psychological well-being (Bagøien et al., 2010; Reinboth & Duda, 2006),

subjective well-being (Waalder, Halvari, Skjesol, & Bagøien, 2013), emotional well-being (Solberg & Halvari, 2009), heightened positive affect (Standage, Duda, & Ntoumanis, 2005), vitality (Gunnell, Crocker, Mack, Wilson, & Zumbo, 2014), satisfaction with life (Edmunds, Ntoumanis, & Duda, 2007), and lesser depressive symptoms (Duda, et al., 2014), and burn-out (Lonsdale, Hodge, & Rose, 2009).

Third, studies that have looked at well-being and self-determined motivation in work settings have found a positive relationship between higher levels of self-determination and engagement (Hardré & Reeve, 2009; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008), quality of life (Deci, Olafsen, & Ryan, 2017), creativity (Hon, 2012), lower stress (Trépanier, Fernet, & Austin, 2013), psychological health (Moreau & Mageau, 2012), fewer instances of somatization (Williams et al., 2014), better psychological adjustment and vitality (Baard, Deci, & Ryan, 2004), and lower levels of burnout and emotional exhaustion (Fernet, Austin, & Vallerand, 2012; Fernet, Gagné, & Austin, 2010; Fernet, Guay, & Senecal, 2004; Parker, Jimmieson, & Amiot, 2010).

In line with Self-Determination Theory, the findings of this study suggest that intrinsic motivation is more strongly related to well-being than extrinsic motivation (Ryan & Deci, 2000).

### **Limitations**

The present project contains a number of methodological limitations worthy of consideration. The first of these pertains to the cross-sectional nature of the research design. The simultaneous assessment of the associations between the variables – a hallmark of such designs – prevents the inference of causation. Hence, future studies using longitudinal design

are needed in order to examine the direction of the causal relationships between the variables under study.

Sampling is a second limitation of the method of the studies of this thesis that must be addressed. All three studies involved samples that were mainly composed of undergraduate university students. While young educated adults are presumably in a good position to provide information on savouring experiences, and on the nature of the foci of this self-regulation strategy of positive or gratifying affect, it would be important to extend the potential of generalization of the current results to more diverse populations. For instance, it could be interesting to study hedonic and eudaimonic savouring in samples of participants from different age groups, or various socio-economic backgrounds.

## **Future Studies**

### **Challenges in Measuring Savouring**

In some cases, in order to test out these aforementioned theoretical postulations, a in-the-moment appraisal of an individual's savouring experience may be necessary – or at the very least, desirable. To such an end, new and innovative instruments, measuring various aspects of savouring, will be needed. So far, prior instruments of savouring have focused on assessing beliefs concerning savouring abilities (Bryant, 2003), family savouring (Luebbe, 2009), and strategies that are used to savour (Bryant & Veroff, 2007; Chadwick, 2012). Reliance on self-report measures such as these, although useful in certain context, results in certain limitations – such as the inability to capture savouring in real time. In the present project, a new measure – the SCI – is proposed, that measures the tendency of an individual to savour according to the seven different types of savouring. While the conceptual contribution of the SCI is novel, in that it permits the assessment of the nature of savouring at a level

previously unexplored, it remains, by itself, bound to the limits mentioned above. As a possible solution to such restrictions, experimental studies using a hybrid of the SCI, as well as novel approaches, may be the ideal context to examine such questions that require the measurement of savouring in real time.

Nevertheless, the challenge in creating methods that capture savouring in real time is to invent an instrument that can be used by the participant without breaking an important component of the savouring experience, namely, absorption in the experience. This is especially true for the case of hedonic savouring. Although a degree of meta-awareness of one's delight is a central aspect of every savouring experiences (Bryant & Veroff, 2007; Smith & Bryant, 2017), excessively reasoning about one's pleasant moment can be detrimental. Indeed, studies have shown that thinking too much about how good one is feeling can be damaging to one's positive affect (Mauss, Tamir, Anderson, & Savino, 2011; Schooler, Ariely, & Loewenstein, 2003). Some researchers have labelled this "the pleasure paradox", that is, the idea that "the cognitive processes used to make sense of positive events reduce the pleasure people obtain from them" (Vittersø, Overwien, & Martinsen, 2009, p. 15). Any measures that seek to experimentally assess savouring should then take this into account, by fostering a sense of surrender to the pleasurable savouring experience while limiting access to anything that would promote the shifting of focus to, and "explaining away" of, the reasons behind the pleasure being felt (Wilson & Gilbert, 2008).

The challenge to assess more richly the phenomenon of savouring is further complicated by its multifarious nature. For instance, instruments that measure physiological responses, such as cortisol levels, sweat, and heart rate, as well as facial muscle movements,

may be used to measure an individual who is savouring; however, they would in all likelihood fail in their ability to discriminate between the various types of savouring.

An interesting venue for savouring studies may be virtual reality. Recent progress in virtual reality hints at their potential ability to create an all-immersive experience that could be controlled by the researcher and that could orient a participant to savour in a particular way by creating the proper and ideal virtual setting (Baños et al., 2004; Cummings & Bailenson, 2016). Such a context may also allow absorption to remain unaffected and for the distinct types of savouring to be deliberately induced and examined.

### **Hedonic Adaptation**

The ideas proposed in the present project are also liable to shed some additional light on our understanding of the actual province (and limits) of hedonic adaptation. Closely related to the principle of the hedonic treadmill (Pavot & Diener, 2013), hedonic adaptation involves a gradual decrease of the intensity of an emotional response (Frederick & Loewenstein 1999). The positive feelings brought about by new circumstances will – according to this concept – diminish over time due to habituation (Sheldon & Lyubomirsky, 2004). Although few studies have examined the relationship between savouring and hedonic adaptation, results seem to paint a similar portrait: namely, too much of a good thing is detrimental to savouring.

For example, results from one study found that increased financial wealth was negatively correlated with capacity to savour mundane everyday positive experiences (Quoidbach, Dunn, Petrides, & Mikolajczak, 2010). This effect was due to hedonic adaptation. One study (Quoidbach & Dunn, 2013) found that unlimited, abundant access to a pleasure (i.e., eating chocolate), compared to a temporary restricted access, decreased the ability to savour. Similarly, researchers in one study (Quoidbach, Dunn, Hansenne, & Bustin, 2015)

also examined the effect of habituation on savouring, finding that well-traveled individuals tend to: not look forward to the trip, not mindfully savour the experience as it occurs, and not think back positively on the trip, as much as individuals who travel less.

But does abundance of experience always negatively affect the capacity to savour? The taxonomy of savouring proposed in this thesis separates hedonic savouring experiences from eudaimonic savouring experiences. It is not clear whether all aspects of eudaimonic savouring are disturbed by an overabundance of experiences. Although the physical senses (i.e., the backbone of hedonic savouring) may be susceptible to habituation, it remains to be seen if other psychologically-based (i.e., non-hedonic) savouring properties are as vulnerable to the lures of hedonic adaptation. In other words, can one be surfeited with eudaimonic experiences? Some lines of indirect evidence seem to suggest that at least some eudaimonic experiences may mitigate the effect of habituation. For instance, some researchers have proposed appreciation and gratitude as potential means to counteract hedonic adaptation (Emmons & McCullough, 2004; Jacobs Bao & Lyubomirsky, 2013; Sheldon & Lyubomirsky, 2004). Others have found that focusing on meaningful, present events (Lyubomirsky, 2011), pursuing what matters (Chancellor & Lyubomirsky, 2011), and attending to the sentimental value of a gift (Yang & Galak, 2014), may frustrate positive adaptation. The act of being content (Sheldon & Lyubomirsky, 2012), an integral element fostered in spiritual and sacred contexts, is also proposed to be adequate ways of counteracting hedonic habituation. Moreover, two components often present in moments of inspiration are also considered to be moderators of adaptation: namely, novelty (Fritz, Walsh, & Lyubomirsky, 2017) and surprise (Armenta, Bao, Lyubomirsky, & Sheldon, 2014).

## Conclusion

Can more of a good thing be even better? At its core, savouring is a movement toward embracing and enhancing positive experiences. In the past, research has neglected elaborating on the essential nature and structure of savouring. The present project sought to address this lacuna. The primary goal of this thesis was thus to propose and validate a multidimensional conceptualization of the nature of savouring experiences. To this effect, a theoretical framework distinguishing between seven types of savouring was put forward. The first of them, hedonic savouring, focuses on the pleasures and positive emotions gained through one or more of the five senses. The remaining six, namely eudaimonic savouring of meaning of life, spirituality, inspiration, self-reflection, appreciation, and gratitude, are psychologically, rather than physically, gratifying. The second goal of this research project was to examine interrelations between the elements of this novel taxonomy, motivation self-regulation, and well-being. Results offered strong empirical support for the proposed seven dimensions of savouring experiences. Also, whereas all forms of motivation and savouring were positively associated to well-being, eudaimonic savouring and intrinsic motivation were the strongest antecedents of well-being, and contributed unique information to the prediction of this desirable outcome that was distinct from that of all other variables. These results further our understanding of savouring experiences, and of their interrelations with motivation and well-being. Additionally, this thesis potentially sets the stage for the enhancement of interventions designed to promote or improve the optimal self-regulation of positive experiences. Following the trend of other positive psychology interventions (Sin & Lyubomirsky, 2009), designed to increase one's level of daily well-being, or prevent the onset of negative psychological symptoms, researchers have developed different savouring-related interventions (Smith et al.,

2014). This thesis offers valuable insights into our knowledge of the nature of savouring that may prove useful to such applied endeavours. It is hoped that these contributions will lead to the discovery of new information pertaining to the enhancement of positive, and gratifying, experiences that foster mental health through the delight, and fulfillment, derived from the good things in life.

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**APPENDIX A**

Instrument (Study 1)

## SAVOURING CONFIGURATION INVENTORY (SCI)

Below are a series of scenarios, each followed by three statements. Imagine that you are in the situations described, and rate the degree to which each statement correspond to what you would typically do/think in this scenario. Try to be as truthful and accurate as you can.

### *1. You rest in a hammock on a warm summer day.*

	<u>Not like me at all</u>					<u>Totally like me</u>	
	①	②	③	④	⑤	⑥	⑦
I unwind and let the breeze cradle me to the beat of the gentle wind.	①	②	③	④	⑤	⑥	⑦
I am mindful of the warm feeling of the sun on my face.	①	②	③	④	⑤	⑥	⑦
I want to do something else.	①	②	③	④	⑤	⑥	⑦

### *2. You take a moment to reflect on who you are.*

	<u>Not like me at all</u>					<u>Totally like me</u>	
	①	②	③	④	⑤	⑥	⑦
Why on earth would I do that?!	①	②	③	④	⑤	⑥	⑦
I actually enjoy the process of engaging in inward explorations of my inner-thoughts.	①	②	③	④	⑤	⑥	⑦
I consider what my thoughts, convictions and knowledge says about who I am as a person.	①	②	③	④	⑤	⑥	⑦

### *3. It dawns on you that you are well on your way to fulfilling one of your life's goal.*

	<u>Not like me at all</u>					<u>Totally like me</u>	
	①	②	③	④	⑤	⑥	⑦
I reflect on the journey it took to get me here.	①	②	③	④	⑤	⑥	⑦
I don't really dwell on it.	①	②	③	④	⑤	⑥	⑦
I picture what the fulfillment of my goal will mean for my future.	①	②	③	④	⑤	⑥	⑦

**4. You encounter an evocative spiritual work.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I experience deeply the meaning of the moment.	①	②	③	④	⑤	⑥	⑦
I let myself be moved by the moment.	①	②	③	④	⑤	⑥	⑦
I move on. I'm not big with the spiritual stuff.	①	②	③	④	⑤	⑥	⑦

**5. You receive a genuine compliment.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I think very little of it.	①	②	③	④	⑤	⑥	⑦
I receive it and feel thankful for it.	①	②	③	④	⑤	⑥	⑦
I think that such a thing speaks of the kindness of the person who gives the compliment.	①	②	③	④	⑤	⑥	⑦

**6. You hug someone you love.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I feel the person's arms holding me tight and their body amiably pressed against mine.	①	②	③	④	⑤	⑥	⑦
I'm not the touchy-feely kind of person.	①	②	③	④	⑤	⑥	⑦
I delight in the warm feeling that fills my chest.	①	②	③	④	⑤	⑥	⑦

**7. You spend some time focusing on a spiritual subject (e.g., meditation, prayers, mindfulness).**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I feel a part of something bigger than myself.	①	②	③	④	⑤	⑥	⑦
I consider how important this subject is to me.	①	②	③	④	⑤	⑥	⑦
I don't really meditate or do that stuff.	①	②	③	④	⑤	⑥	⑦

**8. An experience makes you realize how wonderful life is (e.g., hearing birds singing in spring, seeing a mother tending to her infant, holding and petting a cute puppy, etc.).**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I recognize the beauty of life.	①	②	③	④	⑤	⑥	⑦
I don't think it's a big deal.	①	②	③	④	⑤	⑥	⑦
I welcome the glories and wonders that life brings to me.	①	②	③	④	⑤	⑥	⑦

**9. You look back on a challenging situation you have had to face and consider what you learned from it.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I reflect on what that says about who I am as a person.	①	②	③	④	⑤	⑥	⑦
I don't like rehashing old stuff.	①	②	③	④	⑤	⑥	⑦
I am proud of myself.	①	②	③	④	⑤	⑥	⑦

**10. You think about what an important person in your life has brought you through the years.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I feel very blessed to have such a person in my life.	①	②	③	④	⑤	⑥	⑦
I feel indebted to that person for sharing all these years with me. I am truly honored.	①	②	③	④	⑤	⑥	⑦
I don't see the value in looking back on things.	①	②	③	④	⑤	⑥	⑦

**11. You listen to affecting music from your personal collection.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
The lovely music and melodies stirs in me the desire to create something beautiful.	①	②	③	④	⑤	⑥	⑦
The music doesn't really create emotions in me.	①	②	③	④	⑤	⑥	⑦
The song uplifts me.	①	②	③	④	⑤	⑥	⑦

**12. You sit at a table and are handed your favourite dish (e.g., a juicy steak, your favourite junk food item, a tasty salad, a scrumptious seafood platter, a delicious piece of chocolate cake, ice cream, etc.).**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I'm not a foodie. It's just another meal.	①	②	③	④	⑤	⑥	⑦
I relish the taste in my mouth as I chew wholeheartedly.	①	②	③	④	⑤	⑥	⑦
I delight in the sight, the smell and the taste of this meal.	①	②	③	④	⑤	⑥	⑦

**13. You do an activity with a group of cherished friends.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I recognize that there is an intrinsic beauty in expressing the love one feels towards another by simply "being there" with them.	①	②	③	④	⑤	⑥	⑦
I don't care too much about the time I spend with them.	①	②	③	④	⑤	⑥	⑦
I recognize the pleasant qualities of our friendship.	①	②	③	④	⑤	⑥	⑦

**14. After being worried that something really bad was going to happen to you, you receive the news that everything is ok.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
Oh well, no harm, no foul!	①	②	③	④	⑤	⑥	⑦
I whisper a “thank you” under my breath.	①	②	③	④	⑤	⑥	⑦
I feel so relieved and blessed. It’s like the world is shining down on me.	①	②	③	④	⑤	⑥	⑦

**15. You succeed in meeting an important personal goal (e.g., finishing and sending out your thesis proposal to your very patient committee members).**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I think about the impact that my work will have.	①	②	③	④	⑤	⑥	⑦
I take in the importance of this moment.	①	②	③	④	⑤	⑥	⑦
“One down, ten to go!” There’s no time for messing around.	①	②	③	④	⑤	⑥	⑦

**16. You are moved by a work of art (e.g., theater piece, book, painting, movie, etc.).**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I am easily moved to tears by this work.	①	②	③	④	⑤	⑥	⑦
I let myself be touched by the greatness of the work of art.	①	②	③	④	⑤	⑥	⑦
I’m not really into art.	①	②	③	④	⑤	⑥	⑦

**17. You experience a significant positive life event (e.g., birthday, marriage, birth of a child, etc.).**

	<u>Not like me at all</u>				<u>Totally like me</u>		
It's just another day.	①	②	③	④	⑤	⑥	⑦
I take in the magnificence of the moment.	①	②	③	④	⑤	⑥	⑦
I am taken aback by the great beauty of this moment.	①	②	③	④	⑤	⑥	⑦

**18. You take a moment and realize a good thing (e.g., personal quality) about yourself.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I reflect on other aspects I like about myself.	①	②	③	④	⑤	⑥	⑦
I don't like to think about myself.	①	②	③	④	⑤	⑥	⑦
I bask in self-pride.	①	②	③	④	⑤	⑥	⑦

**19. You take the time to take a long shower or bath.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I'm in, I'm out. I don't linger.	①	②	③	④	⑤	⑥	⑦
I focus on the pleasant effect the warm waters have on my skin.	①	②	③	④	⑤	⑥	⑦
I close my eyes, let my shoulders fall, as I embrace the warm water kissing my skin, soothing my muscles and relaxing me.	①	②	③	④	⑤	⑥	⑦

**20. You receive an unexpected favour from a friend.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I reflect on how fortunate I am to have such a good friend.	①	②	③	④	⑤	⑥	⑦
I think of the ways that friend went out of his ways to give me that favour.	①	②	③	④	⑤	⑥	⑦
That's what friends do. There's nothing to be thankful for.	①	②	③	④	⑤	⑥	⑦

**21. You read a thought-provoking piece.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I pass on to the next article.	①	②	③	④	⑤	⑥	⑦
I am captivated. I keep reading the piece till the end.	①	②	③	④	⑤	⑥	⑦
I let my own ideas and conceptions be challenged.	①	②	③	④	⑤	⑥	⑦

**22. You spend some time staring at the sky (e.g., a beautiful skyscape, a majestic star field, a lovely sunset or sunrise, beautiful clouds, etc.).**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I don't really get why people stare at the sky.	①	②	③	④	⑤	⑥	⑦
I notice the beautiful colors painted across the sky.	①	②	③	④	⑤	⑥	⑦
I recognize and value the splendor of it all.	①	②	③	④	⑤	⑥	⑦

**23. You come across ideas that you feel answer some important questions you had about life.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I am filled with inner satisfaction as I consider how these ideas legitimately answer my questions.	①	②	③	④	⑤	⑥	⑦
I don't think any more of it.	①	②	③	④	⑤	⑥	⑦
I reflect on the impact these ideas will have on me.	①	②	③	④	⑤	⑥	⑦

**24. A threat to the life of someone you care about makes you realize how precious, fragile and brief life can be.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I take in how important every moment of the day is.	①	②	③	④	⑤	⑥	⑦
I think about how everything could be gone tomorrow.	①	②	③	④	⑤	⑥	⑦
I don't dedicate much thought to life. I just live my life.	①	②	③	④	⑤	⑥	⑦

**25. You think back on an important event when you acted according to beliefs that are dear to you.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I consider what I did to be profound and consequential.	①	②	③	④	⑤	⑥	⑦
I don't see why it matters that much.	①	②	③	④	⑤	⑥	⑦
I linger on the thought that every little actions matter. My action may seem small, but in the grand scheme of things, it is making me who I am becoming.	①	②	③	④	⑤	⑥	⑦

**26. Someone makes you dinner.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I recognize the kindness of the act.	①	②	③	④	⑤	⑥	⑦
I think to myself, "How nice. That person thought of me."	①	②	③	④	⑤	⑥	⑦
It's food on a plate, so I'm skipping formalities and eating.	①	②	③	④	⑤	⑥	⑦

**27. You indulge in your favorite guilty pleasure (e.g., shopping, watching television, spending hours at the library, drinking your preferred beverage, etc.).**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I let myself be taken away by the pleasant sensations I'm feeling as I treat myself.	①	②	③	④	⑤	⑥	⑦
I kind of feel guilty so I don't enjoy it as much as I could.	①	②	③	④	⑤	⑥	⑦
I feel fully the positive emotions this gratification brings me.	①	②	③	④	⑤	⑥	⑦

**28. You observe someone showing gentleness, grace and patience to someone else.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I think nothing of it.	①	②	③	④	⑤	⑥	⑦
I wholeheartedly approve and value the action of that person.	①	②	③	④	⑤	⑥	⑦
I recognize how good this moment is.	①	②	③	④	⑤	⑥	⑦

**29. You read a book that makes you reflect on aspects of yourself.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I take stock of my own values and ideas about life.	①	②	③	④	⑤	⑥	⑦
The book promotes in me a reflection on my own ephemeral existence.	①	②	③	④	⑤	⑥	⑦
It's just a book.	①	②	③	④	⑤	⑥	⑦

**30. You meet someone you admire.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I am never overly enthused when I meet someone.	①	②	③	④	⑤	⑥	⑦
I get caught up in the excitement of my meeting that person.	①	②	③	④	⑤	⑥	⑦
I want to become like that person.	①	②	③	④	⑤	⑥	⑦

**31. You have a comforting or enlightening spiritual experience.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I consider how this experience will influence the way I see the world.	①	②	③	④	⑤	⑥	⑦
I don't really have these types of experiences.	①	②	③	④	⑤	⑥	⑦
I take time to consider the very personal nature of this spiritual experience.	①	②	③	④	⑤	⑥	⑦

**32. You practice your favorite hobby.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I stop, take a breath, and let the moment wash over me.	①	②	③	④	⑤	⑥	⑦
I'm thinking that there are other things I should be doing.	①	②	③	④	⑤	⑥	⑦
I feel excited at the thought that I get to do this right now.	①	②	③	④	⑤	⑥	⑦

**33. You hear a talk or presentation that speaks to you.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I see this talk impacting me for the better.	①	②	③	④	⑤	⑥	⑦
In light of what I hear, I consider what kind of person I am.	①	②	③	④	⑤	⑥	⑦
I don't try to read too much into it. The speaker is talking to everyone, not just me.	①	②	③	④	⑤	⑥	⑦

**34. Someone gives you a smile.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
A smile is a very small thing.	①	②	③	④	⑤	⑥	⑦
"What a kind thing to do", I think to myself.	①	②	③	④	⑤	⑥	⑦
The smile brightens my mood.	①	②	③	④	⑤	⑥	⑦

**35. You have just achieved something dear to your heart.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I relish in my sense of accomplishment.	①	②	③	④	⑤	⑥	⑦
I consider the significance of my work.	①	②	③	④	⑤	⑥	⑦
“Ok,” I tell myself, “on to the next thing!”	①	②	③	④	⑤	⑥	⑦

**36. You witness a touching altruistic act (a kind and selfless action for someone else).**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I feel great respect for the person who did the kind act.	①	②	③	④	⑤	⑥	⑦
I don't think the act was a big deal.	①	②	③	④	⑤	⑥	⑦
I see the beauty in that act of kindness.	①	②	③	④	⑤	⑥	⑦

**37. After receiving negative feedback, you realize personal shortcomings that you need to work on.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I reflect on how I like the fact that I am mature enough to tackle sides of my personality that are in need of improvement.	①	②	③	④	⑤	⑥	⑦
Receiving negative feedback sucks.	①	②	③	④	⑤	⑥	⑦
I commend myself, because being open to feedback and criticism is a strength of character that I admire.	①	②	③	④	⑤	⑥	⑦

**38. You listen to someone give a heartfelt speech.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
Tears well up in my eyes. I am touched by the genuineness of the speaker.	①	②	③	④	⑤	⑥	⑦
I feel a knot in my throat.	①	②	③	④	⑤	⑥	⑦
I don't feel much. I move on with my day.	①	②	③	④	⑤	⑥	⑦

**39. You receive thoughtful advice from someone you love.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I recognize kindness in that person's voice.	①	②	③	④	⑤	⑥	⑦
I treasure those words and take them to heart.	①	②	③	④	⑤	⑥	⑦
I can't say for sure what the person was thinking when they offered their advice.	①	②	③	④	⑤	⑥	⑦

**40. You witness an awesome display of nature's might (a lightning storm, torrential rain, snow storm, etc.).**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I stand in awe of the scene.	①	②	③	④	⑤	⑥	⑦
I admire the breath-taking display.	①	②	③	④	⑤	⑥	⑦
I move on to the next order of business, lunch!	①	②	③	④	⑤	⑥	⑦

**41. You get a backrub from your boyfriend/girlfriend or you receive a massage from a registered therapist.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I zone out and think of something else.	①	②	③	④	⑤	⑥	⑦

I am conscious of the pleasant effect of the massage upon my body.      ①      ②      ③      ④      ⑤      ⑥      ⑦

I close my eyes and let myself relax.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**42. You look back on the last few years and consider how much you've grown.**

Not like me at all

Totally like me

I marvel at the thought that I could have changed this much.      ①      ②      ③      ④      ⑤      ⑥      ⑦

Generally, I do not tend to be introspective.      ①      ②      ③      ④      ⑤      ⑥      ⑦

I contemplate on who I am becoming and what kind of person I want to be.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**43. Your hands are full of heavy things, you have a long way to go, and a good soul offers to help you carry your load and gives you a lift home.**

Not like me at all

Totally like me

I don't tell the person how much helpful their actions were to me.      ①      ②      ③      ④      ⑤      ⑥      ⑦

The generosity of the person does not escape my notice.      ①      ②      ③      ④      ⑤      ⑥      ⑦

I feel fortunate to receive such help.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**44. You have a stimulating conversation with someone.**

Not like me at all

Totally like me

I am mentally aroused. My intellect is kindled.      ①      ②      ③      ④      ⑤      ⑥      ⑦

I will probably start feeling bored very soon.      ①      ②      ③      ④      ⑤      ⑥      ⑦

New ideas come to my mind. I am moved to share them.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**45. You reflect on how you have learned about the value of self-care.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I bring to mind the fact that I have not always been good at valuing self-care.	①	②	③	④	⑤	⑥	⑦
I give myself a mental pat on the back. This is not an easy thing to learn.	①	②	③	④	⑤	⑥	⑦
I don't see the use of such an exercise.	①	②	③	④	⑤	⑥	⑦

**46. You sit comfortably by a fireplace on a cold winter's night.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
Looking at wood burning is boring.	①	②	③	④	⑤	⑥	⑦
The sound of the logs burning fills me with tranquility.	①	②	③	④	⑤	⑥	⑦
I gaze mindfully into the nice warm glow of the flames.	①	②	③	④	⑤	⑥	⑦

**47. You hear a stirring story about someone doing something important for someone else.**

	<u>Not like me at all</u>				<u>Totally like me</u>		
I am suddenly and easily caught up in the emotion of the moment.	①	②	③	④	⑤	⑥	⑦
I don't really care.	①	②	③	④	⑤	⑥	⑦
I am moved to do something good for another person.	①	②	③	④	⑤	⑥	⑦

**48. You find something that you want to do with your life.**

	<u>Not like me at all</u>					<u>Totally like me</u>	
I have enough responsibilities as it is. I don't see the value in adding another one to the bunch.	①	②	③	④	⑤	⑥	⑦
I reflect on my commitment to the mission and resolve anew to be faithful to my calling.	①	②	③	④	⑤	⑥	⑦
I consider myself a small part of something greater.	①	②	③	④	⑤	⑥	⑦

**APPENDIX B**

Instruments (Study 2)

## SAVOURING CONFIGURATION INVENTORY (SCI)

Below are a series of scenarios, each followed by a statement. Imagine that you are in the situations described, and rate the degree to which the statement correspond to **what you would typically do/think in this scenario**. Try to be as truthful and accurate as you can.

**1. You spend some time focusing on a spiritual subject (e.g., you meditate or pray or read on a spiritual subject, etc.).**

Not like me at all

Totally like me

I am mindful of how important this subject is to me.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**2. You watch your favourite artist perform live.**

Not like me at all

Totally like me

I yield to the excitement I feel.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**3. Someone makes you dinner.**

Not like me at all

Totally like me

I recognize and cherish the kindness of the act.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**4. You have a comforting or enlightening spiritual experience.**

Not like me at all

Totally like me

I am enthralled by this very personal experience.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**5. You spend some time gazing at the sky (e.g., a splendid skyscape, a majestic star field, a lovely sunset or sunrise, etc.).**

Not like me at all

Totally like me

I marvel at the colors painted across the sky.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**6. You have just achieved something dear to your heart.**

Not like me at all

Totally like me

I relish the sense of accomplishment.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**7. Your hands are full of heavy things, you have a long way to go, and a good soul offers to help you carry your load.**

Not like me at all

Totally like me

I take the time to feel thankful for this person's generosity.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**8. You attend a spectacular Broadway show or musical.**

Not like me at all

Totally like me

I tune into the enthusiasm evoked by this performance.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**9. You witness an awesome display of nature's might (a lightning storm, torrential rains, snow storm, etc.).**

Not like me at all

Totally like me

I admire the breath-taking display.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**10. A friend does you an unexpected favour.**Not like me at allTotally like me

I feel fortunate to have such a friend.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**11. You encounter an evocative spiritual work.**Not like me at allTotally like me

I immerse myself in this meaningful experience.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**12. You come across intriguing ideas about the meaning of life.**Not like me at allTotally like me

I am captivated by these fascinating new insights about life.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**13. An experience makes you realize how wonderful nature is (e.g., hearing birds sing, seeing and hearing a waterfall, petting a cute puppy, etc.).**Not like me at allTotally like me

I take in the beauty of nature.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**14. You discover you have learned something new about the value of self-care.**Not like me at allTotally like me

I bring to mind the satisfaction derived from this self-improvement.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**15. You sit at a table and are handed your favourite dish (e.g., a juicy steak, your favourite junk food item, a tasty salad, a scrumptious seafood platter, etc.).**

Not like me at all

Totally like me

I delight in the sight, the smell and the taste of this meal.

①    ②    ③    ④    ⑤    ⑥    ⑦

**16. You watch a moving dance performance.**

Not like me at all

Totally like me

I embrace the emotions and beauty of the choreography.

①    ②    ③    ④    ⑤    ⑥    ⑦

**17. You stare at an impressive seascape.**

Not like me at all

Totally like me

I am awed by the power and beauty of the sea.

①    ②    ③    ④    ⑤    ⑥    ⑦

**18. You listen to sacred or spiritual music.**

Not like me at all

Totally like me

I attend to the transcending feelings this music elicits.

①    ②    ③    ④    ⑤    ⑥    ⑦

**19. You look back on a challenging situation you faced and consider what you learned from it.**

Not like me at all

Totally like me

I reflect on how I have grown from this challenge.

①    ②    ③    ④    ⑤    ⑥    ⑦

**20. You reflect on the ultimate meaning of life.**Not like me at allTotally like meI am aware of the interesting twists and turns  
of this existential exploration.

①    ②    ③    ④    ⑤    ⑥    ⑦

**21. You lie on a cozy bed or sofa, wrapped in a soft blanket.**Not like me at allTotally like me

I let myself unwind and luxuriate in comfort.

①    ②    ③    ④    ⑤    ⑥    ⑦

**22. You realize something new about yourself.**Not like me at allTotally like meI attend to the satisfaction of having improved  
my self-knowledge.

①    ②    ③    ④    ⑤    ⑥    ⑦

**23. A friend helps you move to your new place.**Not like me at allTotally like meI am so pleased that my friend went out of  
his/her way for me.

①    ②    ③    ④    ⑤    ⑥    ⑦

**24. You ponder whether there is an overarching purpose to life.**Not like me at allTotally like meI concentrate on the profound ideas incited  
by this question.

①    ②    ③    ④    ⑤    ⑥    ⑦

**25. You sip your preferred drink (a gourmet coffee, a flavourful smoothie, a nice glass of beer or wine, etc.).**

Not like me at all

Totally like me

I relish the exquisite taste.

①    ②    ③    ④    ⑤    ⑥    ⑦

**26. You go to an exciting circus show.**

Not like me at all

Totally like me

I am enchanted by the physical feats and visual spectacle I witness.

①    ②    ③    ④    ⑤    ⑥    ⑦

**27. You soak in a hot whirlpool or a spa.**

Not like me at all

Totally like me

I take in the luxurious feeling of comfort, as the water soothes my muscles and relaxes me.

①    ②    ③    ④    ⑤    ⑥    ⑦

**28. You read a philosophical text on the finality of existence.**

Not like me at all

Totally like me

I give free rein to my curiosity and engage in deep thoughts on this meaningful issue.

①    ②    ③    ④    ⑤    ⑥    ⑦

## THE DISPOSITIONAL POSITIVE EMOTION SCALES (Shiota et al., 2006)

### Awe

Strongly disagree

Strongly agree

- |  |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|
| 1. I often feel awe.   | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 2. I see beauty all around me.   | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 3. I feel wonder almost every day.   | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 4. I often look for patterns<br>in the objects around me.                  | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 5. I have many opportunities to see<br>the beauty of nature.               | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 6. I seek out experiences that challenge<br>my understanding of the world. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |

### Joy

Strongly disagree

Strongly agree

- |  |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|
| 1. I often feel bursts of joy.                                     | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 2. I am an intensely cheerful person.                              | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 3. I am often completely overjoyed<br>when something good happens. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 4. On a typical day, many events<br>make me happy.                 | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 5. Good things happen to me<br>all the time.                       | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 6. My life is always improving.                                    | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
-

**FLOW**

	<u>Never</u>			<u>Always</u>			
1. I keep my attention focused on what I am doing.	①	②	③	④	⑤	⑥	⑦
2. I don't worry about how others are evaluating me.	①	②	③	④	⑤	⑥	⑦
3. I engage in an activity for its own sake.	①	②	③	④	⑤	⑥	⑦

---

**SATISFACTION WITH LIFE SCALE (Diener et al., 1985)**

Directions: Below are five statements with which you may agree or disagree. Using the 1-7 scale below, please indicate your agreement with each item.

	<u>Strongly disagree</u>			<u>Strongly agree</u>			
1. In most ways my life is close to my ideal.	①	②	③	④	⑤	⑥	⑦
2. The conditions of my life are excellent.	①	②	③	④	⑤	⑥	⑦
3. I am satisfied with my life.	①	②	③	④	⑤	⑥	⑦
4. So far I have gotten the important things I want in life.	①	②	③	④	⑤	⑥	⑦
5. If I could live my life over, I would change almost nothing.	①	②	③	④	⑤	⑥	⑦

---

### THE ADULT HOPE SCALE (adapted from Snyder et al., 1991)

Read each item carefully. Using the scale shown below, please select the number that best describes YOU.

	<u>Definitely false</u>						<u>Definitely true</u>
1. I can think of many ways to get out of a jam.	①	②	③	④	⑤	⑥	⑦
2. I energetically pursue my goals.	①	②	③	④	⑤	⑥	⑦
3. There are lots of ways around any problem.	①	②	③	④	⑤	⑥	⑦
4. I can think of many ways to get the things in life that are important to me.	①	②	③	④	⑤	⑥	⑦
5. Even when others get discouraged, I know I can find a way to solve the problem.	①	②	③	④	⑤	⑥	⑦
6. My past experiences have prepared me well for my future.	①	②	③	④	⑤	⑥	⑦
7. I've been pretty successful in life.	①	②	③	④	⑤	⑥	⑦
8. I meet the goals that I set for myself.	①	②	③	④	⑤	⑥	⑦

### THE SNAITH-HAMILTON PLEASURE SCALE (adapted from Snaith et al., 1995)

This questionnaire is designed to measure your ability to experience pleasure in the last few days. It is important to read each statement very carefully. Tick *one* of the boxes to indicate how much you agree or disagree with each statement.

	<u>Strongly disagree</u>						<u>Strongly agree</u>
1. I would enjoy my favorite television or radio program.	①	②	③	④	⑤	⑥	⑦
2. I would enjoy being with my family or close friends.	①	②	③	④	⑤	⑥	⑦

- |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 3. I would find pleasure in my hobbies or pastimes.   | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 4. I would be able to enjoy my favorite meal.   | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 5. I would enjoy a warm bath or refreshing shower.  | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 6. I would find pleasure in the scent of flowers or the smell of a fresh sea breeze or freshly baked bread. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 7. I would enjoy seeing other people's smiling faces.   | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 8. I would enjoy looking good when I have made an effort with my appearance.                                | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 9. I would enjoy reading a book, magazine, or newspaper.  | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 10. I would enjoy a cup of tea or coffee or my favorite drink.  | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 11. I would find pleasure in small things (e.g., a bright sunny day or a telephone call from my friend.     | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 12. I would be able to enjoy a beautiful landscape or view.   | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 13. I would get pleasure from helping others.   | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 14. I would feel pleasure when I receive praise from others.  | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
-

### SAVOURING BELIEFS INVENTORY (Bryant, 2003)

Instructions: For each statement listed below, please circle the one number that best indicates how true the particular item is for you. There are no right or wrong answers. Please be as honest as you can.

	<u>Strongly disagree</u>				<u>Strongly agree</u>		
1. Before a good thing happens, I look forward to it in ways that give me pleasure in the present.	①	②	③	④	⑤	⑥	⑦
2. It's hard for me to hang onto a good feeling for very long.	①	②	③	④	⑤	⑥	⑦
3. I enjoy looking back on happy times from my past.	①	②	③	④	⑤	⑥	⑦
4. I don't like to look forward to good times too much before they happen.	①	②	③	④	⑤	⑥	⑦
5. I know how to make the most of a good time.	①	②	③	④	⑤	⑥	⑦
6. I don't like to look back at good times too much after they've taken place.	①	②	③	④	⑤	⑥	⑦
7. I feel a joy of anticipation when I think about upcoming good things.	①	②	③	④	⑤	⑥	⑦
8. When it comes to enjoying myself, I'm my own "worst enemy."	①	②	③	④	⑤	⑥	⑦
9. I can make myself feel good by remembering pleasant events from my past.	①	②	③	④	⑤	⑥	⑦
10. For me, anticipating what upcoming good events will be like is basically a waste of time.	①	②	③	④	⑤	⑥	⑦

11. When something good happens, I can make my enjoyment of it last longer by thinking or doing certain things. ① ② ③ ④ ⑤ ⑥ ⑦
12. When I reminisce about pleasant memories, I often start to feel sad or disappointed. ① ② ③ ④ ⑤ ⑥ ⑦
13. I can enjoy pleasant events in my mind before they actually occur. ① ② ③ ④ ⑤ ⑥ ⑦
14. I can't seem to capture the joy of happy moments. ① ② ③ ④ ⑤ ⑥ ⑦
15. I like to store memories of fun times that I go through so that I can recall them later. ① ② ③ ④ ⑤ ⑥ ⑦
16. It's hard for me to get very excited about fun times before they actually take place. ① ② ③ ④ ⑤ ⑥ ⑦
17. I feel fully able to appreciate good things that happen to me. ① ② ③ ④ ⑤ ⑥ ⑦
18. I find that thinking about good times from the past is basically a waste of time. ① ② ③ ④ ⑤ ⑥ ⑦
19. I can make myself feel good by imagining what a happy time that is about to happen will be like. ① ② ③ ④ ⑤ ⑥ ⑦
20. I don't enjoy things as much as I should. ① ② ③ ④ ⑤ ⑥ ⑦
21. It's easy for me to rekindle the joy from pleasant memories. ① ② ③ ④ ⑤ ⑥ ⑦
22. When I think about a pleasant event before it happen, I often start to feel uneasy or uncomfortable. ① ② ③ ④ ⑤ ⑥ ⑦

23. It's easy for me to enjoy myself when I want to. ① ② ③ ④ ⑤ ⑥ ⑦

24. For me, once a fun time is over and gone, it's best not to think about it. ① ② ③ ④ ⑤ ⑥ ⑦

**THE MINDFUL ATTENTION AWARENESS SCALE**  
(adapted from Brown & Ryan, 2003)

Instructions: Below is a collection of statements about your everyday experience. Using the 1-7 scale below, please indicate how frequently or infrequently you have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

- |   | <u>Never</u> |   |   |   |   |   | <u>Always</u> |
|---|--------------|---|---|---|---|---|---------------|
| 1. I could be experiencing some emotion and not be conscious of it until some time later                      | ①            | ② | ③ | ④ | ⑤ | ⑥ | ⑦             |
| 2. I break or spill things because of carelessness, not paying attention, or thinking of something else.      | ①            | ② | ③ | ④ | ⑤ | ⑥ | ⑦             |
| 3. I find it difficult to stay focused on what's happening in the present.                                    | ①            | ② | ③ | ④ | ⑤ | ⑥ | ⑦             |
| 4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way. | ①            | ② | ③ | ④ | ⑤ | ⑥ | ⑦             |
| 5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.       | ①            | ② | ③ | ④ | ⑤ | ⑥ | ⑦             |
| 6. I forget a person's name almost as soon as I've been told it for the first time.                           | ①            | ② | ③ | ④ | ⑤ | ⑥ | ⑦             |
| 7. It seems I am "running on automatic," without much awareness of what I'm doing.                            | ①            | ② | ③ | ④ | ⑤ | ⑥ | ⑦             |
| 8. I rush through activities without being really attentive to them.  | ①            | ② | ③ | ④ | ⑤ | ⑥ | ⑦             |

9. I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there. ① ② ③ ④ ⑤ ⑥ ⑦
10. I do jobs or tasks automatically, without being aware of what I'm doing. ① ② ③ ④ ⑤ ⑥ ⑦
11. I find myself listening to someone with one ear, doing something else at the same time. ① ② ③ ④ ⑤ ⑥ ⑦
12. I drive places on "automatic pilot" and then wonder why I went there. ① ② ③ ④ ⑤ ⑥ ⑦
13. I find myself preoccupied with the future or the past. ① ② ③ ④ ⑤ ⑥ ⑦
14. I find myself doing things without paying attention. ① ② ③ ④ ⑤ ⑥ ⑦
15. I snack without being aware that I'm eating. ① ② ③ ④ ⑤ ⑥ ⑦

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### THE MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE (Crowne & Marlowe, 1960)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is *true* or *false* as it pertains to you personally.

- |   | <u>True</u>              | <u>False</u>             |
|---|--------------------------|--------------------------|
| 1. Before voting I thoroughly investigate the qualifications of all the candidates. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I never hesitate to go out of my way to help someone in trouble.                 | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. It is sometimes hard for me to go on with my work if I am not encouraged.        | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I have never intensely disliked anyone.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. On occasions I have had doubts about my ability to succeed in life.              | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. I sometimes feel resentful when I don't get my way.                              | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. I am always careful about my manner of dress.                                    | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. My table manners at home are as good as when I eat out in a restaurant.          | <input type="checkbox"/> | <input type="checkbox"/> |

9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
10. On a few occasions, I have given up something because I thought too little of my ability.
11. I like to gossip at times.
12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
13. No matter who I'm talking to, I'm always a good listener.
14. I can remember "playing sick" to get out of something.
15. There have been occasions when I have taken advantage of someone.
16. I'm always willing to admit it when I make a mistake.
17. I always try to practice what I preach.
18. I don't find it particularly difficult to get along with loudmouthed, obnoxious people.
19. I sometimes try to get even rather than forgive and forget.
20. When I don't know something I don't mind at all admitting it.
21. I am always courteous, even to people who are disagreeable.
22. At times I have really insisted on having things my own way.
23. There have been occasions when I felt like smashing things.
24. I would never think of letting someone else be punished for my wrongdoings.
25. I never resent being asked to return a favor.
26. I have never been irked when people expressed ideas very different from my own.
27. I never make a long trip without checking the safety of my car.

28. There have been times when I was quite jealous of the good fortune of others.
29. I have almost never felt the urge to tell someone off.
30. I am sometimes irritated by people who ask favors of me.
31. I have never felt that I was punished without cause.
32. I sometimes think when people have a misfortune they only got what they deserved.
33. I have never deliberately said something that hurt someone's feelings.
-

**APPENDIX C**

Instruments (Study 3)

## SAVOURING CONFIGURATION INVENTORY (SCI)

Below are a series of scenarios, each followed by a statement. Imagine that you are in the situations described, and rate the degree to which the statement correspond to **what you would typically do/think in this scenario**. Try to be as truthful and accurate as you can.

**1. You spend some time focusing on a spiritual subject (e.g., you meditate or pray or read on a spiritual subject, etc.).**

Not like me at all

Totally like me

I am mindful of how important this subject is to me.

①    ②    ③    ④    ⑤    ⑥    ⑦

**2. You watch your favourite artist perform live.**

Not like me at all

Totally like me

I yield to the excitement I feel.

①    ②    ③    ④    ⑤    ⑥    ⑦

**3. Someone makes you dinner.**

Not like me at all

Totally like me

I recognize and cherish the kindness of the act.

①    ②    ③    ④    ⑤    ⑥    ⑦

**4. You have a comforting or enlightening spiritual experience.**

Not like me at all

Totally like me

I am enthralled by this very personal experience.

①    ②    ③    ④    ⑤    ⑥    ⑦

**5. You spend some time gazing at the sky (e.g., a splendid skyscape, a majestic star field, a lovely sunset or sunrise, etc.).**

Not like me at all

Totally like me

I marvel at the colors painted across the sky.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**6. You have just achieved something dear to your heart.**

Not like me at all

Totally like me

I relish the sense of accomplishment.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**7. Your hands are full of heavy things, you have a long way to go, and a good soul offers to help you carry your load.**

Not like me at all

Totally like me

I take the time to feel thankful for this person's generosity.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**8. You attend a spectacular Broadway show or musical.**

Not like me at all

Totally like me

I tune into the enthusiasm evoked by this performance.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**9. You witness an awesome display of nature's might (a lightning storm, torrential rains, snow storm, etc.).**

Not like me at all

Totally like me

I admire the breath-taking display.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**10. A friend does you an unexpected favour.**Not like me at allTotally like me

I feel fortunate to have such a friend.

① ② ③ ④ ⑤ ⑥ ⑦

**11. You encounter an evocative spiritual work.**Not like me at allTotally like me

I immerse myself in this meaningful experience.

① ② ③ ④ ⑤ ⑥ ⑦

**12. You come across intriguing ideas about the meaning of life.**Not like me at allTotally like me

I am captivated by these fascinating new insights about life.

① ② ③ ④ ⑤ ⑥ ⑦

**13. An experience makes you realize how wonderful nature is (e.g., hearing birds sing, seeing and hearing a waterfall, petting a cute puppy, etc.).**Not like me at allTotally like me

I take in the beauty of nature.

① ② ③ ④ ⑤ ⑥ ⑦

**14. You discover you have learned something new about the value of self-care.**Not like me at allTotally like me

I bring to mind the satisfaction derived from this self-improvement.

① ② ③ ④ ⑤ ⑥ ⑦

**15. You sit at a table and are handed your favourite dish (e.g., a juicy steak, your favourite junk food item, a tasty salad, a scrumptious seafood platter, etc.).**

Not like me at all

Totally like me

I delight in the sight, the smell and the taste of this meal.

①    ②    ③    ④    ⑤    ⑥    ⑦

**16. You watch a moving dance performance.**

Not like me at all

Totally like me

I embrace the emotions and beauty of the choreography.

①    ②    ③    ④    ⑤    ⑥    ⑦

**17. You stare at an impressive seascape.**

Not like me at all

Totally like me

I am awed by the power and beauty of the sea.

①    ②    ③    ④    ⑤    ⑥    ⑦

**18. You listen to sacred or spiritual music.**

Not like me at all

Totally like me

I attend to the transcending feelings this music elicits.

①    ②    ③    ④    ⑤    ⑥    ⑦

**19. You look back on a challenging situation you faced and consider what you learned from it.**

Not like me at all

Totally like me

I reflect on how I have grown from this challenge.

①    ②    ③    ④    ⑤    ⑥    ⑦

**20. You reflect on the ultimate meaning of life.**Not like me at allTotally like me

I am aware of the interesting twists and turns of this existential exploration.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**21. You lie on a cozy bed or sofa, wrapped in a soft blanket.**Not like me at allTotally like me

I let myself unwind and luxuriate in comfort.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**22. You realize something new about yourself.**Not like me at allTotally like me

I attend to the satisfaction of having improved my self-knowledge.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**23. A friend helps you move to your new place.**Not like me at allTotally like me

I am so pleased that my friend went out of his/her way for me.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**24. You ponder whether there is an overarching purpose to life.**Not like me at allTotally like me

I concentrate on the profound ideas incited by this question.      ①      ②      ③      ④      ⑤      ⑥      ⑦

**25. You sip your preferred drink (a gourmet coffee, a flavourful smoothie, a nice glass of beer or wine, etc.).**

Not like me at all

Totally like me

I relish the exquisite taste.

①    ②    ③    ④    ⑤    ⑥    ⑦

**26. You go to an exciting circus show.**

Not like me at all

Totally like me

I am enchanted by the physical feats and visual spectacle I witness.

①    ②    ③    ④    ⑤    ⑥    ⑦

**27. You soak in a hot whirlpool or a spa.**

Not like me at all

Totally like me

I take in the luxurious feeling of comfort, as the water soothes my muscles and relaxes me.

①    ②    ③    ④    ⑤    ⑥    ⑦

**28. You read a philosophical text on the finality of existence.**

Not like me at all

Totally like me

I give free rein to my curiosity and engage in deep thoughts on this meaningful issue.

①    ②    ③    ④    ⑤    ⑥    ⑦

## THE GLOBAL MOTIVATION SCALE

(adapted from Guay et al., 2003)

Indicate to what extent each of the following statements corresponds generally to the reasons why you do different things.

<b>In general, I do things...</b>	<u>Does not corresponds accordingly</u>				<u>Corresponds completely</u>		
1. in order to feel pleasant emotions.	①	②	③	④	⑤	⑥	⑦
2. because I do not want to disappoint certain people.	①	②	③	④	⑤	⑥	⑦
3. in order to help myself become the person I aim to be.	①	②	③	④	⑤	⑥	⑦
4. because I like making interesting discoveries.	①	②	③	④	⑤	⑥	⑦
5. because I would beat myself up for not doing them.	①	②	③	④	⑤	⑥	⑦
6. because of the pleasure I feel as I become more and more skilled	①	②	③	④	⑤	⑥	⑦
7. although I do not see the benefit in what I am doing.	①	②	③	④	⑤	⑥	⑦
8. because of the sense of well-being I feel while I am doing them	①	②	③	④	⑤	⑥	⑦
9. because I want to be viewed more positively by certain people.	①	②	③	④	⑤	⑥	⑦
10 because I chose them as means to attain my objectives.	①	②	③	④	⑤	⑥	⑦
11. for the pleasure of acquiring new knowledge.	①	②	③	④	⑤	⑥	⑦
12. because otherwise I would feel guilty for not doing them.	①	②	③	④	⑤	⑥	⑦

13. for the pleasure I feel mastering what I am doing. ① ② ③ ④ ⑤ ⑥ ⑦
14. although it does not make a difference whether I do them or not. ① ② ③ ④ ⑤ ⑥ ⑦
15. for the pleasant sensations I feel while I am doing them. ① ② ③ ④ ⑤ ⑥ ⑦
16. in order to show others what I am capable of. ① ② ③ ④ ⑤ ⑥ ⑦
17. because I chose them in order to attain what I desire. ① ② ③ ④ ⑤ ⑥ ⑦
18. for the pleasure of learning new, interesting things. ① ② ③ ④ ⑤ ⑥ ⑦
19. because I force myself to do them. ① ② ③ ④ ⑤ ⑥ ⑦
20. because of the satisfaction I feel in trying to excel in what I do. ① ② ③ ④ ⑤ ⑥ ⑦
21. even though I do not have a good reason for doing them. ① ② ③ ④ ⑤ ⑥ ⑦
22. for the enjoyable feelings I experience. ① ② ③ ④ ⑤ ⑥ ⑦
23. in order to attain prestige. ① ② ③ ④ ⑤ ⑥ ⑦
24. because I choose to invest myself in what is important to me. ① ② ③ ④ ⑤ ⑥ ⑦
25. for the pleasure of learning different interesting facts. ① ② ③ ④ ⑤ ⑥ ⑦
26. because I would feel bad if I do not do them. ① ② ③ ④ ⑤ ⑥ ⑦
27. because of the pleasure I feel outdoing myself. ① ② ③ ④ ⑤ ⑥ ⑦

28. even though I believe they are not worth the trouble.      ①    ②    ③    ④    ⑤    ⑥    ⑦

### THE SCALE OF POSITIVE AND NEGATIVE EXPERIENCE

(Diener et al., 2009)

Please think about what you have been doing and experiencing during the past four weeks. Then report how much you experienced each of the following feelings, using the scale below.

	<u>Never</u>						<u>Always</u>
1. Positive	①	②	③	④	⑤	⑥	⑦
2. Good	①	②	③	④	⑤	⑥	⑦
3. Pleasant	①	②	③	④	⑤	⑥	⑦
4. Happy	①	②	③	④	⑤	⑥	⑦
5. Joyful	①	②	③	④	⑤	⑥	⑦
6. Contented	①	②	③	④	⑤	⑥	⑦

### THE ORIENTATIONS TO HAPPINESS QUESTIONNAIRE

(adapted from Peterson et al., 2005)

	<u>Very much unlike me</u>						<u>Very much like me</u>
1. Regardless of what I am doing, time passes very quickly.	①	②	③	④	⑤	⑥	⑦
2. I seek out situations that challenge my skills and abilities.	①	②	③	④	⑤	⑥	⑦
3. Whether at work or play, I am usually “in a zone” and not conscious of myself.	①	②	③	④	⑤	⑥	⑦

4. I am always very absorbed in what I do. ① ② ③ ④ ⑤ ⑥ ⑦

5. In choosing what to do, I always take into account whether I can lose myself in it. ① ② ③ ④ ⑤ ⑥ ⑦

6. I am rarely distracted by what is going on around me. ① ② ③ ④ ⑤ ⑥ ⑦

### THE UNIDIMENSIONAL RELATIONSHIP CLOSENESS SCALE

(Dibble et al., 2012)

Please take a moment to think about the closest relationship you have with a person outside of your workplace. For many people, this would be a family member, significant other, or close friend, but it may be any person you consider important in your personal life. Please think about your relationship with this person when responding to the following questions.

Please respond to the following statements using the scale below.

	<u>Strongly disagree</u>			<u>Strongly agree</u>			
1. My relationship with this person is close.	①	②	③	④	⑤	⑥	⑦
2. When we are apart, I miss this person a great deal.	①	②	③	④	⑤	⑥	⑦
3. This person and I disclose important personal things to each other.	①	②	③	④	⑤	⑥	⑦
4. This person and I have a strong connection.	①	②	③	④	⑤	⑥	⑦
5. This person and I want to spend time together.	①	②	③	④	⑤	⑥	⑦
6. I'm sure of my relationship with this person.	①	②	③	④	⑤	⑥	⑦

- |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 7. This person is a priority in my life.                              | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 8. This person and I do a lot of things together.                     | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 9. When I have free time I choose to spend it alone with this person. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 10 I think about this person a lot.                                   | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 11. My relationship with this person is important in my life.         | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 12. I consider my _____ when making important decisions.              | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |

### THE MEANING IN LIFE QUESTIONNAIRE (Steger et al., 2006)

Please take a moment to think about what makes your life feel important to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below.

- |   | <u>Absolutely untrue</u> |   |   | <u>Absolutely true</u> |   |   |   |
|---|--------------------------|---|---|------------------------|---|---|---|
| 1. I understand my life's meaning                                 | ①                        | ② | ③ | ④                      | ⑤ | ⑥ | ⑦ |
| 2. I am looking for something that makes my life feel meaningful. | ①                        | ② | ③ | ④                      | ⑤ | ⑥ | ⑦ |
| 3. I am always looking to find my life's purpose.                 | ①                        | ② | ③ | ④                      | ⑤ | ⑥ | ⑦ |
| 4. My life has a clear sense of purpose.                          | ①                        | ② | ③ | ④                      | ⑤ | ⑥ | ⑦ |
| 5. I have a good sense of what makes my life meaningful.          | ①                        | ② | ③ | ④                      | ⑤ | ⑥ | ⑦ |

- |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 6. I have discovered a satisfying life purpose.                             | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 7. I am always searching for something that makes my life feel significant. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 8. I am seeking a purpose or mission for my life.                           | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 9. My life has no clear purpose.  | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 10. I am searching for meaning in my life.                                  | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |

### THE LIFE REGARD INDEX-REVISED (adapted from Debats, 1998)

Below you find 14 statements with which you can agree or disagree. Indicate each time the answer that best represents your opinion.

- |  | <u>Do not agree</u> |   |   |   |   |   | <u>Agree</u> |
|--|---------------------|---|---|---|---|---|--------------|
| 1. Living is deeply fulfilling.  | ①                   | ② | ③ | ④ | ⑤ | ⑥ | ⑦            |
| 2. I really feel good about my life.   | ①                   | ② | ③ | ④ | ⑤ | ⑥ | ⑦            |
| 3. I spend most of my time doing things that really aren't important to me.            | ①                   | ② | ③ | ④ | ⑤ | ⑥ | ⑦            |
| 4. I don't seem to be able to accomplish those things that are really important to me. | ①                   | ② | ③ | ④ | ⑤ | ⑥ | ⑦            |
| 5. Other people seem to feel better about their lives than I do.                       | ①                   | ② | ③ | ④ | ⑤ | ⑥ | ⑦            |
| 6. Something seems to stop me from doing what I really want to do.                     | ①                   | ② | ③ | ④ | ⑤ | ⑥ | ⑦            |
| 7. I have a lot of potential that I don't normally use.                                | ①                   | ② | ③ | ④ | ⑤ | ⑥ | ⑦            |

8. When I look at my life I feel the satisfaction of really having worked to accomplish something.      ①   ②   ③   ④   ⑤   ⑥   ⑦

9. I have real passion in my life.      ①   ②   ③   ④   ⑤   ⑥   ⑦

10. I feel that I'm really going to attain what I want in life.      ①   ②   ③   ④   ⑤   ⑥   ⑦

11. I don't really value what I'm doing.      ①   ②   ③   ④   ⑤   ⑥   ⑦

12. I get so excited by what I'm doing that I find new stores of energy I didn't know that I had.      ①   ②   ③   ④   ⑤   ⑥   ⑦

13. Nothing outstanding ever seems to happen to me.      ①   ②   ③   ④   ⑤   ⑥   ⑦

14. I feel that I am living fully.      ①   ②   ③   ④   ⑤   ⑥   ⑦

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