

2018

Not the years in your life, but the life in your years: Lessons from Canadian psychology on living fully.

David J.A. Dozois
The University of Western Ontario, ddozois@uwo.ca

Follow this and additional works at: <https://ir.lib.uwo.ca/psychologypub>



Part of the [Psychology Commons](#)

Citation of this paper:

Dozois, David J.A., "Not the years in your life, but the life in your years: Lessons from Canadian psychology on living fully." (2018). *Psychology Publications*. 193.
<https://ir.lib.uwo.ca/psychologypub/193>

Running Head: LESSONS FROM CANADIAN PSYCHOLOGY ON LIVING FULLY

Not the Years in Your Life, but the Life in Your Years:

Lessons from Canadian Psychology on Living Fully

David J. A. Dozois, Ph.D.

University of Western Ontario

Author Note

The author would like to acknowledge the support of an Insight Grant from the Social Sciences and Humanities Research Council (SSHRC). Correspondence concerning this article should be addressed to David J. A. Dozois, Ph.D., Department of Psychology, The University of Western Ontario, London ON, Canada.

Email: ddozois@uwo.ca

Abstract

Over the past couple of decades, there has been an increasing focus on positive psychology in both the popular media and the scientific literature. Prior to this time, the predominant focus has been on what is aberrant or deficient, and how to ameliorate problems or dysfunction (i.e., a psychopathology orientation). Indeed, my own research has focused on cognitive vulnerability to depression and how we can understand and modify underlying core beliefs and cognitive structures. In this article, I deviate from my own 'comfort zone' to highlight some key concepts related to understanding what makes life fulfilling and meaningful. Specific lessons from research in the areas of happiness, passion, humour styles, thinking with evidence, self-compassion, mindfulness/acceptance, taking risks, and interpersonal connectedness, are reviewed. Throughout this article, I highlight how Canadian psychological science has contributed in important ways to helping us to live more fully.

Randy Pausch, a computer science professor, delivered his “Last Lecture” at Carnegie Mellon, on September 18, 2007. The idea behind this lecture series is that top academics are asked to think carefully about what matters to them and provide a hypothetical last lecture. However, Pauch did not have to imagine that it was his last lecture, because he had been told that the pancreatic cancer that he had been diagnosed with was terminal. Pauch’s lecture, titled “Really Achieving Your Childhood Dreams” wasn’t about dying; it was about overcoming obstacles, facilitating the dreams of others, and seizing every moment...it was about *living* (<http://www.cmu.edu/randyslecture/book/>). Pauch and Zaslow (2008) wrote an incredibly meaningful book called *The Last Lecture* which became a New York Times best-seller. This book is a magnificent reminder about what is important in life. In a similar manner, I would like to discuss some ways in which we can live fully.

Over the past couple of decades, there has been increasing focus on positive psychology in both the popular media and the scientific literature. Prior to this time, the predominant focus has been on what is aberrant or deficient, and how to ameliorate problems or dysfunction (i.e., a psychopathology orientation). Indeed, my own research has focused on cognitive vulnerability to depression and how depression can be effectively treated and prevented.

In this article, I deviate from the ‘comfort zone’ of my own research to highlight some key concepts related to understanding what makes life fulfilling and meaningful. Specifically, I review lessons from research in the areas of happiness, passion, humor, thinking with evidence, self-compassion, being present-focused, taking risks, and interpersonal connectedness. Throughout this article, I highlight how Canadian psychological science has contributed in important ways to helping us to live more fully.

Before embarking on this review, I would like to mention a few caveats: (1) This is not my area of expertise; (2) I don't always practice living fully (although I am more deliberate about doing it now than I have ever been); (3) I will not be able to capture all of what Canadian psychological science has contributed to living fully. Just take, as one example, the recipients of CPA Donald O. Hebb Award for Distinguished Contributions to Psychology as a Science, and the substantial contributions they have made on so many broad areas that have helped us to understand human behaviour and functioning (see Table 1). From understanding and treating problems with anxiety, depression, and insomnia to investigating psychopathy, bullying and antisocial behavior; from the management of pain to child abuse; from understanding passion to dealing with discrimination; from elucidating basic biological and cognitive processes to meta-cognition and perception; from the study of pediatric pain to memory, psycholinguistics and neuropsychology.

So why, you might ask, did I focus my presidential address on living fully? Well, there were a few reasons. One was somewhat personal: For the past 24 years, throughout graduate school and then in my academic career, I have focused on cognitive vulnerability to depression and how we can understand and modify underlying core beliefs and cognitive structures. Fortunately, I have never personally experienced a depressive episode. However, I will disclose that I don't think I have, until recently, fully lived either. Don't get me wrong, I have enjoyed my life. However, there are elements of my life in which I compartmentalized over the years and did not live as deliberately or fully as I could have. Over the past couple of years, I made a number of life changes that have fundamentally altered my perspective and well-being. I thought that I would elucidate some of the key elements because I believe that we could all benefit by living more deliberately. Second, an interest in living fully is not that far removed from what

contributes to a life of misery. Depression, for example, is not just the presence of high negative affect but also low positive affect (e.g., Dozois & Dobson, 2001; Dozois & Rnic, 2015). Third, although some scholars have focused on a life of meaning (for example, Irving Yalom [2015], Carl Rogers [e.g., 1977], Viktor Frankl [1984], Abraham Maslow [1943], and the like), the field has itself, until recently, been fairly negatively biased – i.e., the focus has been more on what can go wrong than what can go right (Vazquez, 2017). However, research on positive psychology and topics such as happiness and subjective well-being has increased exponentially over the past two decades.

Not surprisingly, society has also witnessed a practical obsession of this topic in the popular media. Aside from advertising secrets to success, methods to generate a hotter sex life, tips for enhancing your physical appearance, or strategies for flattening your belly, a central focus has been on happiness...how to attain it, how to maintain it, how to stumble upon it, and so on. Unfortunately, there are a number of myths about happiness (see Lyubomirsky, 2013). Psychological research, on the other hand, has contributed importantly not only to the specific area of happiness (in the form of research on subjective well-being; Diener et al., 2017) but also broadly in how individuals can live more fully.

As Oscar Wilde (1891) once stated that “To live is the rarest thing in the world. Most people exist and that is all.” I believe that there is interesting science behind living fully; a science that a number of researchers in Canadian psychology have contributed importantly to. So, how can we help ourselves and others to live more fully?

Engage in Happiness-Relevant Activities

One method is to engage in happiness-relevant activities. Psychological well-being is not simply the absence of ill-being, but also the presence of happiness, life satisfaction, and self-

growth (Diener et al., 2017; Vallerand, 2012). Two main facets of psychological well-being have been identified in the literature: hedonic and eudaimonic well-being (Ryff & Keyes 1995; Vallerand, 2012). Hedonic well-being can be defined as the person's general happiness with his/her life whereas eudaimonic well-being refers to self-realization, personal growth and meaning (Ryan & Deci, 2001).

In her book *The Myths of Happiness*, Sonja Lyubomirsky (2013) explores what happiness means and how people may not attain satisfactory levels of well-being because they have bought into societal myths about what *should* make their lives more fulfilling. For example, the book challenges deeply held notions that enduring happiness is inextricably related to the attainment of particular life goals, such as marriage, having children, professional success, and material wealth.

Lyubomirsky, Sheldon, and Schkade (2005) argue that happiness is 50% temperament (the so-called genetic set point), 10% status and 40% behavioral choices. More recent estimates, based on meta-analyses would place the heritability figure closer to 40% (Nes & Røysamb, 2015, 2016), suggesting that happiness may be even more modifiable than previously thought. A main thesis of Lyubomirsky's (2013) book, which is based on earlier research (e.g., Brickman et al., 1978) is the notion of hedonic adaptation – we tend to go back to our hedonic “set point” over time.

We can counteract the effects of hedonic adaptation in different ways. For example we tend to be happier when we look on the bright side of negative situations, when we savor our experiences, when we inject novelty into our lives, when we give to others, when we balance hedonic and eudaimonic goals, and when we pursue intrinsic, meaningful and flexible objectives.

Below, I outline a couple of examples from Canadian psychological science first having to do with savoring and simplifying and second having to do with focusing on others.

Savor & Simplify

Research conducted by Elizabeth Dunn and her colleagues at the University of British Columbia has demonstrated that people tend to savor more when they consume less. Conversely, having access to abundance may impair one's ability to savor (see Dunn & Weidman, 2015). Quoidbach, Dunn, Petrides, Mikolajczak (2010), for example, found that wealthier individuals reported lower ability to savor experiences. In addition, individuals experimentally exposed to reminders of wealth spent less time savoring a piece of chocolate and enjoyed it less than did participants not exposed to this reminder. Temporarily giving up something pleasurable may also enhance happiness through savoring. Quoidbach & Dunn (2013) randomly assigned participants to three conditions: abstain from eating chocolate for the week, eat plenty of it throughout the intervening week or a no instruction condition. Those participants who temporarily gave up eating chocolate savored it more and experienced greater positive mood after eating it, than did participants in other two conditions. Simplifying and savouring may be one way to combat hedonic adaptation.

Focus on Others

There is a common belief that money can buy happiness. Humans tend to devote a considerable amount of time and energy to making money, thinking that this will somehow increase overall life satisfaction. Although there is a reliable relation between money and happiness, the effects tend to be small, particularly once basic needs are met. In short, money is important to psychological well-being, but less than you might think (Aknin, Norton, & Dunn, 2009). Kushlev, Dunn, and Lucas (2015) for instance, found that although higher income is

associated with less daily sadness, it is not related to more daily happiness. One possibility for this weak association is that people allocate their funds toward pursuits that do not provide lasting happiness (e.g., material goods; Dunn, Aknin, & Norton, 2008). Dunn and her colleagues have demonstrated that *how* people spend money could be as important as how much money they earn (Dunn, Aknin, & Norton, 2008, 2014; Dunn, Gilbert, & Wilson, 2011).

One way to greatly impact happiness is to spend on others (Dunn, Aknin, & Norton, 2014). For example, Dunn et al. (2008) found that spending on others resulted in greater happiness than spending on oneself. Participants (n = 632) were asked to rate their overall happiness, to indicate their annual income and to estimate how much they spent per month for personal (e.g., bills, expenses, gifts for themselves) or prosocial (e.g., gifts for others, donations to charity) reasons. Whereas personal spending was unrelated to general happiness, spending on others was related to significantly greater happiness. This finding was replicated in a longitudinal study of employees 6-8 weeks after receiving a bonus from their company. Participants who spent the bonus in a prosocial manner were happier after receiving it. In fact, how individuals spent their bonus was a more important predictor of happiness than was the bonus itself.

In another study, university students played a monetary game in which they were given ten \$1 coins and told that they had the option of donating their payment to another research participant who would only receive the amount that they donated (Dunn, Ashton-James, Hanson, & Aknin, 2010). Those individuals who retained more money for themselves had more negative affect and shame, and less positive affect. In addition, being miserly affected salivary cortisol levels through the process of shame.

The ability to derive joy from giving is apparent even in toddlers. Aknin, Hamlin & Dunn (2012) gave young children fish crackers and asked them to give them to a puppet monkey. The

children's facial expressions were coded for happiness. Children showed more happiness when they gave treats away to the puppet than when they ate them themselves. In addition, they demonstrated even more happiness when they gave their *own* treats away versus the “extra treat” from the experimenter.

- We all have the ability to *choose* to live happily and exert control over the trajectory of our psychological well-being by taking deliberate steps to combat hedonic adaptation and engaging in meaningful activities. Indeed, the research literature suggests that intentional involvement in activities such as savoring, expressing gratitude, performing acts of kindness, positive imagery, and spending on others, may lead people to experience greater long-term happiness and well-being (e.g., Lyubomirsky et al., 2005; Lyubomirsky & Layous, 2013). A meta-analysis of 51 positive psychology interventions (n = 4266 individuals), for instance, demonstrated that these activities significantly enhance well-being (mean $r = .29$) and decrease depressive symptoms (mean $r = .31$; Sin & Lyubomirsky, 2009).

Be Passionate – but do so harmoniously

Intentional involvement in activities seems to promote psychological well-being, but there is more to the story; it also seems to depend on how one engages in these activities (Vallerand, 2012). Research by Robert Vallerand, former CPA President and Professor at Université du Québec à Montréal has demonstrated that the type of passion you exhibit for activities will essentially determine whether you control the passion or the passion controls you.

As humans, we become involved in different activities with the intention of satisfying basic psychological needs of autonomy, competence, and relatedness (Vallerand, 2008). We are

motivated to explore our environment in order to develop and grow. In so doing, we engage in a number of activities, only a few of which become passions (i.e., they resonate with us, become preferred, and are engaged in regularly).

Passion is defined as “a strong inclination toward any activity that people like, find important, and in which they invest time and energy” (Vallerand et al., 2003, p. 757). To the extent that they are valued and meaningful to the individual, passion-oriented activities can begin to make up important aspects of one’s self-identity (for example, people don’t just play guitar, carve soapstone, or conduct research – they are guitar players, artists and researchers). Having passion has the potential to contribute importantly to well-being.

However, passion can also be a double-edged sword – on one hand it can enhance motivation, subjective well-being and meaning and, on the other, it can lead to negative affect, inflexibility, and diminished well-being. Whether passion contributes to living fully depends on the type of passion that an individual has developed (Vallerand et al., 2003). In his Dualistic Model of Passion, Vallerand distinguished what he calls harmonious passion from obsessive passion (Vallerand 2008, 2012; Vallerand et al., 2003).

Harmonious passion (HP) is the autonomous internalization in one’s identity that occurs when an individual feels that the activity is important and freely accepts it without contingencies attached. That is, the activity takes up space within the person’s identity but it is congruent with other aspects of his/her life and does not overpower it (Vallerand, 2008). Individuals with HP really love something but are able to leave the activity when it is important to do so; as such, HP is flexible and enhances rather than interferes with other aspects of one’s life. Obsessive passion (OP), on the other hand, emanates from “a controlled internalization of an activity in one’s identity” (Vallerand et al., 2003, p.757). People who are obsessively passionate are ego-invested,

cannot help but engage in the passionate activity, and derive their self-esteem and identity from it (Philippe, Vallerand, & Lavigne, 2009). OP thwarts well-being because it causes negative affect and a rigid persistence.

More than 100 studies have been conducted on this conceptualization of passion, examining myriad cognitive, affective, behavioral, relational, and performance outcomes (Vallerand, 2012). HP is associated with positive affect and correlates positively with indices of psychological adjustment and negatively with measures of anxiety and depression (Vallerand et al., 2003). Those individuals who exhibit HP tend to show greater satisfaction in interpersonal interactions (Curran, Hill, Appleton, Vallerand, & Standage, 2015; Vallerand, 2008) and greater sexual passion in romantic relationships (Philippe, Vallerand, Bernard-Desrosiers, Guilbault, & Rajotte, 2017). HP is also associated with less burn out and cynicism at work (Birkeland, Richardsen, & Dysvik, 2017) and greater satisfaction in volunteer experiences (St-Louis, Carbonneau, & Vallerand, 2016). Moreover, CEOs who demonstrate HP tend to show better leadership and company performance (Sirén, Patel, & Wincent, 2016). HP also leads to better performance across a number of domains (Vallerand, 2008; Verner-Filion & Vallerand, 2016).

Obsessive passion, in contrast, is related to negative affect and shame (Vallerand et al., 2003), positively associated with anxiety/depression, and negatively associated with life satisfaction (Vallerand, 2012). Given the inherent rigid persistence, OP predicts gambling problems (Vallerand et al., 2003), risky physical health behaviors (Vallerand et al., 2003), and incidents of injuries and self-neglect (e.g., St-Louis et al., 2016). OP is also negatively associated with partner sexual satisfaction (see Vallerand, 2007) and positively associated adverse interpersonal interactions (Vallerand, 2008). OP is also predictive of burn out and cynicism at work (Birkeland et al., 2017) and impaired performance (Vallerand, 2008).

In a cross-sectional study, Frederick Philippe (McGill University), Vallerand and Lavigne (2009, Study 1) examined two aspects of well-being – hedonic and eudaimonic – in 782 participants spanning the ages of 19 and 90 years. Those individuals who were harmoniously passionate, scored higher than did obsessively passionate and non-passionate individuals on both hedonic and eudaimonic well-being (OP and NP did not differ significantly from each other).

St-Louis et al. (2016) examined the relation between the type of passion one has for a humanitarian cause and one's health and subjective well-being. Local volunteers and volunteers who went on an overseas mission were studied to assess the current intrapersonal outcomes of their volunteer involvement. In the first study, a sample of 108 French Canadian volunteers completed measures of passion for a cause, satisfaction with their involvement, and physical injuries related to their volunteer experiences. Controlling for OP, the number of years engaged in the volunteer activities and the weekly hours spent engaging in the cause, HP predicted satisfaction and was not significantly related to sustaining injuries. OP was not related to satisfaction but positively predicted physical injuries. This study was replicated in a sample of French Canadians who volunteered for international organizations. Controlling for gender and length of involvement in the humanitarian mission, HP was positively associated with satisfaction whereas OP did not relate to this outcome. However, OP was associated with self-neglect which, in turn, predicted physical injuries. Finally, the third study in this article involved a cross-lagged panel design of 77 individuals who participated in a humanitarian mission (for an average of 9 weeks). HP was associated with satisfaction and positive health. OP was also associated with increased rumination which, in turn, predicted symptoms of PTSD.

So, what can you do to increase harmonious passion? It is important to be aware of the impact of an obsessive passion (e.g., schedule real breaks, don't bring work home, change your

thought patterns). Try to cultivate HP (be passionate about it but don't take yourself too seriously – rather, remove your ego-involvement). Learn from setbacks and try to improve and grow in the activity.

Experience Humor (but in an adaptive way)

A third way to live a fulfilling life is to experience adaptive forms of humor. The notion that humor has positive benefits to psychological and physical well-being is ubiquitous. Indeed, it is a common belief that laughter is good medicine. In his review of the literature, my good friend, Rod Martin, now an Emeritus Professor at the University of Western Ontario, has demonstrated that the evidence for the humour-health relation is not particularly encouraging (Martin, 2007).

These relatively weak and inconsistent findings may have been due to how the construct of humour was conceptualized previously (i.e., as a unitary construct), rather than recognizing there may be both beneficial and detrimental styles of humor. Martin, Puhlik-Doris, Larsen, Gray, & Weir (2003) developed the Humor Styles Questionnaire which identifies four such styles of humor, two of which were hypothesized to be beneficial for wellbeing (affiliative and self-enhancing) and two potentially detrimental (self-defeating and aggressive). Affiliative humor is characterized by making spontaneous humorous comments and telling jokes and humorous anecdotes in order to amuse others, facilitate relationships, and minimize interpersonal tension. Self-enhancing humor refers to the use of humor to regulate emotions and cope with stress by maintaining a humorous and cheerful outlook on life. Aggressive humor involves the use of humor for the purpose of demeaning or manipulating others (e.g., sarcasm, teasing, or ridicule). Finally, self-defeating humor involves excessively self-disparaging humor, attempts to amuse others by doing or saying funny things at one's own expense as a means of ingratiating

oneself or gaining approval, allowing oneself to be the “butt” of others’ humor, and using humor as a way of avoiding dealing constructively with one’s problems.

A considerable amount of research, conducted at the University of Western Ontario, has demonstrated that the four styles are differentially related to emotional and psychosocial well-being (e.g., Campbell, Martin, & Ward, 2008; Frewen, Brinker, Martin, & Dozois, 2008; Kuiper & Leite, 2010; Martin, Lastuk, Jeffery, Vernon, & Veselka, 2012; Maiolino & Kuiper, 2016). In particular, self-enhancing humor correlates positively with well-being variables such as self-esteem, optimism, positive affect, and cheerfulness, and negatively with depression, anxiety, rumination, perceived stress, and neuroticism. Affiliative humor, while somewhat less strongly related to emotional well-being, is particularly associated with positive relationship variables, including intimacy, relationship satisfaction, social support, interpersonal competence, secure attachment, and extraversion, and negatively related to loneliness and interpersonal anxiety. In contrast, self-defeating humor is positively correlated with anxiety, depression, psychiatric symptoms, anxious attachment, and neuroticism, and negatively associated with self-esteem and optimism. Finally, aggressive humor, although less strongly associated with emotional well-being, correlates negatively with relationship variables such as relationship satisfaction, interpersonal competence, agreeableness, and conscientiousness, and positively with hostility and neuroticism (see Martin, 2007, for review). Styles of humor have also been found to mediate the relation between depressotypic core beliefs (i.e., early maladaptive schemas) and both internalizing (Dozois, Martin, & Bieling, 2009; Rnic, Dozois, & Martin, 2016) and externalizing (Dozois, Martin, & Faulkner, 2013) problems.

Overall, then, greater use of self-enhancing humor and lower use of self-defeating humor seem to be important for emotional well-being, whereas greater use of affiliative humor and lower use of aggressive humor are predictive of more satisfactory interpersonal relationships. So use humor, but do so adaptively.

Think with Evidence

People often tout the importance of positive thinking and indeed the empirical research supports the idea that trait positive affectivity and having positive expectations about one's future are associated with several indices of psychological and physical well-being (e.g., Alarcon, Bowling, & Khazon, 2013; Diener et al., 2017; Diener, Oishi, & Lucas, 2015; Fredrickson, 2000). Interestingly, research conducted in the late 1980s has supported the idea that illusions of control and unrealistic optimism (albeit in moderation) are related to mental health and well-being (Taylor & Brown, 1988, 1994). In a meta-analytic review, Alarcon et al. (2013) found that optimism was related positively to happiness, life satisfaction, and general psychological and physical well-being and negatively associated with hopelessness, anxiety, and depression.

Consistent with Aaron Beck's cognitive theory (see Beck & Dozois, 2011, 2014), what is important in addition to positive thinking is non-negative (i.e., evidence-based) thinking. A tremendous amount of scientific evidence has emerged from Canadian psychologists over the past several decades – including my own work (e.g., Beck & Dozois, 2011, 2014; Dozois & Beck, 2008; Dobson & Dozois, 2001a, 2001b; Dozois & Rnic, 2015) and research by Drs. David Clark (e.g., University of New Brunswick), Keith Dobson (University of Calgary), David Zuroff (McGill University), Ian Gotlib (formerly at University of Western Ontario, now at Stanford University), and Zindel Segal (University of Toronto) – that has supported the idea that clinical

depression is associated with negative thinking, attention, memory, and interpretive biases, negative attributional styles, and an interconnected negative self-representational system, or self-schema. Dozois and Dobson (2001), for instance, found that negative schemas are more tightly interconnected in depressed individuals than in non-depressed individuals, whereas their positive schemas have a more diffuse organization than the positive schemas of non-depressed persons. It also appears as though these well-organized belief systems are modifiable through cognitive therapy (e.g., Dozois et al., 2009; Dozois et al., 2014; Quilty, Dozois, Lobo, Ravindran, & Bagby, 2014). In addition, evidence-based thinking is associated with psychological well-being (see Dozois & Beck, 2014) and thinking about more positive than negative things contributes to psychological well-being and stability (Luhmann, Hawkley, & Cacioppo, 2014).

Margaret Lumley (University of Guelph) used the Psychological Distance Scaling Task – a measure I developed to assess positive and negative cognitive organization in depression – to examine the unique role of positive schemas. In a study of 434 participants aged 17-25 years, Lumley and McArthur (2016) showed that having well-interconnected positive schemas was associated with lower depressive symptoms and moderated the relation between emotional maltreatment in childhood and depressive symptoms in young adulthood.

I often wonder how well we pay attention to the messages we tell ourselves and the extent to which we are evidence-based in our own thinking. The ability to monitor, test and change our thinking is important for our own well-being and something that many of us work with clients to help improve.

The techniques of cognitive therapy, including being evidence-based in your thinking, apply not just to psychopathology, but to everyday life (Dozois, Frewen, & Covin, 2006). In August 2011, I had wonderful honor and privilege of officiating a wedding for two of my former

graduate students, Roger Covin and Allison Ouimet. In addition to the official duties of my role, Roger and Allison also asked me if I would provide a reflection for them. I decided to talk about cognitive therapy for depression as a way to set the stage for a strong marriage. Briefly, I highlighted three things: First, behavioral activation - The idea here is that individuals with depression get into a vicious cycle of avoidance in which they spiral into a deeper and deeper depressed mood state. Some would argue that depression is due to avoidance as well as a lack of pleasure and a lack of mastery (or feelings of accomplishment). Behavioral activation helps the patient to systematically approach things that were previously avoided – by gradually engaging and doing more, the person experiences greater energy and eventually wants to do more. This helps to kick-start the process and begins to get the person out of depression.

I encouraged Roger and Allison to do behavioral activation in their marriage.... to push themselves and each other to deliberately introduce pleasure and mastery into their relationship, to approach discussion rather than avoid conflict, to keep active together – to continue to make time for dates, to stimulate one another intellectually and emotionally. I noted that there will be times when you don't feel like it and I encouraged them to remember that action precedes motivation. If individuals wait for motivation to descend upon them, they may be waiting a long, long time but if they just start, motivation will follow.

I also talked about cognitive restructuring. In depression, this means changing your thinking so that it is evidence-based rather than negatively skewed; in marriage, this means the same thing. In his book, *Love is never enough*, Aaron Beck (1988) argued that in long-term relationships we can get into a mind-set such that the very things that we used to admire in our partner (or at least see as benign) become the very things we start to hate. It is important to check our thoughts about our partners – to ensure that we are evidence-based in our thinking. I

encouraged Roger and Allison to work on their thought-life in marriage. Finally, because they met in my lab as students I encouraged them to be perpetual students of each other – to learn what makes the other tick, what brings him or her joy, how he/she can best be uplifted, edified and supported.

Self-Compassion

Related to evidence-based thinking is the idea of self-compassion. It is incredibly easy for us to be hard on ourselves rather than cutting ourselves some slack and treating ourselves with compassion. Many of the patients I have worked with over the years apply a double-standard to themselves and their self-evaluation. They are able to see that they would not apply such high levels of perfectionism and criticism to others (e.g., their friends, family and loved ones) but somehow fail to see that the same care and gentleness should (and accurately could) be applied to self. Like passion and humor, there are both adaptive and maladaptive forms of perfectionism. Paul Hewitt (University of British Columbia) and Gordon Flett (York University) developed the Multidimensional Perfectionism Scale (Hewitt & Flett, 2004) which assesses three types of perfectionism: self-oriented, other-oriented and socially-prescribed. Self-oriented perfectionists adhere to strict standards for themselves; other-oriented perfectionists set unrealistic standards for others and socially-prescribed perfectionists believe that others hold unrealistic expectations for their behavior that they are unable to live up to.

Perfectionism is related to a number of variables including low positive affect, greater negative affect, worry, rumination, depressive symptoms (e.g., Flett, Coulter, Hewitt, & Nepon, 2011; Flett, Nepon, Hewitt, & Fitzgerald, 2016). For example, researchers from the University of Western Ontario, Dalhousie University, the University of Manitoba and the University of Toronto conducted a meta-analysis of 10 longitudinal studies (N=1,758) that examined the link

between perfectionism and vulnerability to depression. Perfectionism was associated with subsequent depression beyond the effect of baseline depression and neuroticism (Smith et al., 2016). Self-oriented perfectionism is also related to and other behavioural indicators like poorer test performance and reduced productivity (e.g., Flett, Blankstein, & Hewitt, 2009; Sherry, Hewitt, Sherry, Flett, & Graham, 2010). Sherry et al. (2010), for instance, examined the relation between self-oriented perfectionism and research productivity in psychology professors. An inverse relation was found between self-oriented perfectionism and the total number of publications, number of first-authored publications, number of citations, and journal impact rating.

So, decide to become your own best friend and apply the support skills you use with others to yourself, when facing challenges. In addition, help yourself and your clients by overcoming perfectionism. There are a number of excellent resources available (e.g., Egan, Wade, Shafran, & Antony, 2014; Hewitt, Flett & Mikail, 2017).

Being Present-Focused and Mindful

Man.

Because he sacrifices his health in order to make money.

Then he sacrifices money to recuperate his health.

And then he is so anxious about the future that he does not enjoy the present;

the result being that he does not live in the present or the future;

he lives as if he is never going to die, and then dies having never really lived.

– The 14th Dalai Lama

Related to self-compassion, another important strategy (or rather mindset) that we have learned a great deal about through the work of Canadian psychologists is to be present-focused and mindful. Mindfulness refers to a particular quality or form of attention, that is, “moment-by-moment, non-judgmental awareness, cultivated by paying attention...non-reactively and openheartedly” (Kabat-Zinn, 2005, p. 108).

At the forefront of this research has been the work of Zindel Segal who was formerly at the Centre for Mental Health and Addiction in Toronto and currently at the University of Toronto at Scarborough. Several evidence-based psychotherapies utilize acceptance and mindfulness-based strategies, including dialectical behaviour therapy (Linehan, 2015), mindfulness-based cognitive therapy (MBCT; Segal, Williams, & Teasdale, 2013), mindfulness-based stress reduction (Kabat-Zinn et al., 1992), and acceptance and commitment therapy (Hayes, Strosahl, & Wilson, 1999).

Rather than trying to control, push away or avoid their thoughts and feeling, individuals are instead encouraged to accept them. Indeed, Paul Frewen and his colleagues at the University of Western Ontario have demonstrated that mindfulness correlated negatively with negative thought frequency and with perceptions of the ability to let go of negative thoughts. Arguably this may, in turn, increase cognitive flexibility which would enhance problem-solving, more adaptive thinking, and the ability to take appropriate action (Frewen, Evans, Maraj, Dozois, & Partridge, 2008). Peter Bieling (McMaster University/St. Joseph's Healthcare, Hamilton) and his colleagues (2012) found that MBCT was associated with significant increases in the ability to monitor and observe thoughts and feelings and that these changes predicted lower depression scores 6 months later.

A number of randomized controlled trials (RCTs) of mindfulness- and acceptance-based interventions have emerged over the past two decades. These studies have demonstrated that mindfulness- and acceptance-based interventions improve outcomes in multiple areas, including depression relapse, addiction, and chronic pain (e.g., Antony, 2011; Lindsay & Creswell, 2017; Hawley et al., 2014; Hofmann, Sawyer, Witt, & Oh, 2010). These interventions are also associated with increased subjective well-being, reduced psychological symptoms and emotional

reactivity, and improved behavioral regulation (Fjorback, Arendt, Ørnbøl, Fink, & Walach, 2011; Keng, Smoski, & Robins, 2011) and reduced stress and anxiety (Antony, 2011; Hofmann et al., 2010; Sharma & Rush, 2014). So often we live in the past or in the future. When we are mindful, we are giving full attention to what is happening in the present and doing so helps us to live more fully.

Being Uncomfortable and Taking Risks

The purpose of life, after all, is to live it, to taste experience to the utmost, to reach out eagerly and without fear for newer and richer experience. ~Eleanor Roosevelt

Another way to live more fully is to be uncomfortable and take risks. We certainly know from the anxiety literature that taking risks via behavioral exposure leads to significant reductions in fear and improved functioning. A number of Canadian researchers, including Martin Antony (Ryerson University), Michel Dugas (Université du Québec en Outaouais), Adam Radomsky (Concordia University), Candice Monson (Ryerson University), David A. Clark (University of New Brunswick), Christine Purdon (University of Waterloo), David Moscovitch (University of Waterloo), Janel Gauthier (Université Laval), Allison Ouimet (University of Ottawa), Jack Rachman (University of British Columbia), Donald Meichenbaum (University of Waterloo), Robert Ladoucer (Université Laval), Martin Provencher (Université Laval) and many others have demonstrated the existence of threat-related processing in individuals with anxiety disorders and the impact of exposure-based interventions for the amelioration of anxiety. Uncontestable evidence suggests that exposure works for fear reduction. Taking risks and facing your fears also works in everyday life. No one likes to feel uncomfortable, but it is an important part of growing, improving your performance, and learning in the long run.

What do you typically regret more – the things you haven't done or things you've done? Mark Twain allegedly¹ stated that “Twenty years from now you will be more disappointed by the

things you didn't do than by the things you did." The research is consistent with this idea, and indicates that inactions produce more regret in the long run than actions (Gilovich & Medvec, 1995). To quote J. M. Barrie (the creator of Peter Pan), "The life of every man is a diary in which he means to write one story, and writes another; and his humblest hour is when he compares the volume as it is with what he vowed to make it" (p. 15). According to the literature, we regret inaction more than action for four reasons: (1) it is easier to rationalize action than inaction; (2) regrets over inactions tend to magnify over time; (3) the consequences of inactions are limitless; and, (4) we are more likely to remember and ruminate on unfinished business than on completed tasks (the Zeigarnik effect; Lyubomirsky, 2013).

Being uncomfortable allows us to explore boundaries and experiences we would never have encountered had we lived a life of comfort. It pushes us beyond what we expect of ourselves and increases mastery and self-esteem. We tend to learn more from failure than from success – think of grants you have written where you did not secure funding or articles that have been rejected; failure makes us stronger if we are able to set our ego aside and learn from it.

We tend to take more chances (with greater payoff) when we are not afraid to fail. Did you know that Babe Ruth held the all-time record for career strikeouts for 35 years (Doran, 2016)? In the 1998 baseball season, Mark McGwire of the St. Louis Cardinals hit a record-breaking 70 homeruns; what we often don't pay attention to is the fact that he also had 155 strikeouts (<https://www.baseball-reference.com/players/m/mcgwima01.shtml>)! Players who hit the most homeruns, also tend to be the ones who strike out the most (in fact, it is not just homeruns; they are also better batters generally on several performance indices; Birnbaum, 2007; Cinamon, 2006; Daley-Harris, 2016; Doran, 2016).

Although it may be an effective solution in the short term, avoidance makes things worse over the long run. So, how can we risk and approach rather than avoid? I believe that part of the answer has to do with not taking yourself too seriously and removing your ego from what you are doing. For a long time, I have tried to live by the rule “failure is feedback rather than an end product in and of itself.” As an undergraduate student, I was heavily influenced by a course on advanced motivation taught by the late Bob Frankin at the University of Calgary. During this course, I learned about the interesting research by Carol Dweck on entity and incremental theorists. Entity theorists are capacity oriented and believe that they either have a particular skill or trait or they don’t. Incremental theorists, on the other hand, view the intelligence and other skills as fluid and malleable. Not surprisingly, in the face of failure, entity theorists give up whereas incremental theorists, because they have adopted a mastery-oriented philosophy, work even harder (Dweck, 2016). The Japanese have a word for this idea: kaizen, which means “continuous improvement,” is the mentality whereby all employees from CEO to assembly line worker work to continuously improve all functions. This was first introduced following WWII and was a notable part of “The Toyota Way.” Another application of implicit person theory to work performance involves the work of Gary Latham, a former CPA President, from the Rotman School of Management. His research has shown that managers who held an incremental view were better able to recognize good performance following an employee’s poor performance review (Heslin, Latham, & VandeWalle, 2005; Study 1) and that an entity theorist could be trained to become more incremental in his or her thinking with greater acknowledgement of improvements in employee performance (Study 4). Within the organizational setting, Latham and Locke (2006) have also demonstrated that “if organizational decision-makers view errors and setbacks as transitory and as part of the learning process, high learning goals will be

repeatedly set. Conversely, if failures are judged severely, less difficult or vague abstract goals are likely to become the norm.” (p. 332). Gordon Flett and Paul Hewitt (2007) have found similar patterns with fear of failure and perfectionism (also see Flett, Stainton, Hewitt, Sherry, & Lay, 2012).

Be Connected

The final, and likely most important, way to live fully is to be connected. Because human beings are the most social of animals in the world, it is perhaps not surprising that the quality of our social relationships contribute importantly to our happiness and well-being (Dunn, Gilbert, & Wilson, 2011). In his book *Learned Optimism*, Martin Seligman (1990) argued that the reason depression is an epidemic in our society is because of the waxing of the self and the waning of the commons. We live in a society that exalts the self and ignores things that are beyond the self. Seligman has argued that the self “is a completely impoverished soil for well-being” (<https://www.youtube.com/watch?v=e0LbwEVnfJA>). Being connected with others and involved in something bigger than your self is important for our well-being. As Diener et al. (2017) recently pointed out, considerable evidence points to social connectedness and a major cause of living fully.

Holt-Lunstad, Smith and Layton (2010) demonstrated that social connection is a greater determinant to health than is smoking, high blood pressure and obesity. In contrast, having strong social connections leads to a 50% increased chance of longevity. In a meta-analysis, Holt-Lunstad, Smith, Baker, Harris, and Stephenson (2015) found that subjective loneliness (odds ratio [OR] = 1.26), social isolation (OR = 1.29), and living alone (OR = 1.32), corresponded to an average of 26%, 29%, and 32% increased likelihood of mortality, respectively. There is also evidence that the brain responds to rejection in a similar way that it responds to physical pain

(Kross, Berman, Mischel, Smith, & Wager, 2011; Slavich, Way, Eisenberger, & Taylor, 2010). Kross et al. (2011), for example, had participants, who experienced a recent unwanted break-up, view a photograph of their ex-partner as they thought about the rejection experience. These researchers found that areas of the brain that are involved in the sensory components of physical pain (i.e., secondary somatosensory cortex; dorsal posterior insula) became activated. These findings suggest that rejection hurts in a similar way as physical pain.

We are biologically, cognitively, and physically wired to be loved, to love, and to belong. I will just briefly highlight a few examples of some Canadian research that has examined the importance of interpersonal connection. Greg Moran and Dave Pederson (University of Western Ontario) have demonstrated important links between insecure attachment relationships in infancy and later biases in social information processing (Meinz, Morton, Pederson, & Moran, 2017), depression (Morley & Moran, 2011), and identity and relationship problems (Bailey, Moran, & Pederson, 2007). Using the Adult Attachment Interview, these researchers have also found that mothers' own attachment representations affect the quality of the infant-mother relationship (e.g., Bailey et al., 2007; Hawkins, Madigan, Moran, & Pederson, 2015).

William Bukowski and his colleagues (Concordia University) have highlighted the impact of peer relationships on well-being and development. For example, their research has shown that experiences with peers affect how children and adolescents come to think and feel about themselves (Bukowski, Castellanos, Vitaro, & Brendgen, 2015) and that the presence of a friend in childhood can buffer the impact of stress and depression (Brendgen et al., 2013).

Jean-Philippe Gouin (Concordia University) has shown that the quality of a couple relationship (specifically, how the dyad copes) can impact systemic inflammation and immune system functioning in individuals exposed to chronic stress (Gouin, Scarcello, da Estrela, Paquin,

& Barker, 2016). Moreover, the receipt of social support can serve as a protective factor against stress-induced immune dysregulation (Gouin, Estrela, Desmarais, & Barker, 2016). Positive social communication in married couples during a structured interaction was also associated with higher oxytocin levels and those with higher oxytocin levels healed faster from laboratory-induced blisters on the forearm. Higher vasopressin levels were related to fewer negative communications and, in the women in this study, was associated with quicker wound healing.

Numerous other Canadian researchers (e.g., Catherine Lee, University of Ottawa; Lynne Zarbatany, University of Western Ontario; Uzma Rehman, University of Waterloo; Michael Conway, Concordia University; Doug Symons, Acadia University; Kristen Dunfield, Concordia University; Chris Moore, Dalhousie University; Mark Baldwin, McGill University) have demonstrated the importance of peer, family and intimate relationships to well-being.

Conversely, interpersonal rejection is associated with a number of psychological problems including the development of depression. Research in my own lab and in Kate Harkness' lab at Queen's University has shown that core beliefs and insecure attachment styles predict excessive reassurance seeking and that excessive reassurance seeking is associated with more rapid time to partner rejection suggesting that this behavior is itself interpersonally toxic (Evraire, Ludmer, Dozois, 2014; Stewart & Harkness, 2015).

Consistent with this theory, both anxious attachment (a relationship orientation characterized by concerns regarding close others' availability and responsiveness) and core beliefs with themes of abandonment are positively correlated with trait and daily levels of ERS (Evraire & Dozois, 2014; Stewart & Harkness, 2015). Furthermore, one study found that ERS predicted increases in future depression, the crux of both Coyne's (1976) and Evraire and

Dozois's (2011) models, only among individuals with high abandonment/ instability core beliefs (Evraire & Dozois, 2014).

How can we connect more with others? Sometimes these are just simple activities - the practice of kindness; allowing yourself to be vulnerable with others; acknowledging strengths in others; smiling; making eye contact; taking time to connect with others and ensuring that this is a priority; digging deeper in conversations; being authentic. Sandstrom and Dunn (2014) found that even weak social ties can make people happier. These researchers found that people who bothered to have a social interaction with a barista while ordering a cup of coffee (i.e., they smiled, had a brief conversation, made eye contact) experienced more positive affect than did people who operated as efficiently as possible.

Conclusion

In this article, I have outlined a number of lessons from Canadian psychological science on how to life fully. Specifically, the literature reviewed focused on engaging in happiness-relevant activities (particularly those which focus on others), harmonious passion, adaptive uses of humour, thinking with evidence, self-compassion, being mindful, taking risks and being connected with others. A common thread among many of these is balance; for example, ensuring that you are harmoniously passionate, not obsessively passionate, having goals and focusing on achievement, but cutting yourself some slack; engaging in healthy forms of humour, and so on.

Another important theme is that *other people matter* -- anything that builds connection with other people is going to make you happy and life fulfilling (Diener et al., 2017). The happiness literature outlined helps us to understand that we are happier with experiences with others rather than material goods and when we are giving to others rather than spending on

ourselves. Very happy people have rich and satisfying social relationships. As such, living fully in relationships is important way to live fully.

People are always looking for the shortcuts, but these are not necessarily simple things to apply – you have to work at it and make it part of your everyday life to foster this within your fibre... your character...small steps that if you do them over and over again, you will find more meaning and happiness and fulfillment in life. In his book, *The Road to Character*, David Brooks' (2015) outlines what he calls resume virtues and eulogy virtues. Resume virtues are the skills we bring to the marketplace; eulogy virtues are deeper and refer to who you are and the nature of your relationships (are you dependable, loving, trustworthy?). Most of us would say that eulogy virtues are the most important but they are usually not the ones we think about the most or put our effort into developing. The lessons I have outlined today from Canadian psychological research align more with the eulogy virtues and will ultimately bring us toward a happier and more fulfilling life.

I would like to close with this quote:

I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived...I wanted to live deep and suck out all the marrow of life.” — Henry David Thoreau

It's not the years in your life but the life in your years that matter most...I am thankful for the many Canadian contributions to helping us suck the marrow out of life.

Footnotes

1. The specific source of this quote cannot be verified (see <https://quoteinvestigator.com/2011/09/>)

References

- Aknin, L.B., Hamlin, J.K., Dunn, E.W. (2012) Giving leads to happiness in young children. *PLoS ONE*, 7(6): e39211. <https://doi.org/10.1371/journal.pone.0039211>
- Aknin, L. B., Norton, M. I., & Dunn, E. W. (2009). From wealth to well-being? Money matters, but less than people think. *Journal of Positive Psychology*, 4, 523-527.
- Alarcon, G. M., Bowling, N., & Khazon, S. (2013). Great expectations: A meta-analytic examination of optimism and hope. *Personality and Individual Differences*, 54, 821-827.
- Antony, M. M. (2011). Recent advances in the treatment of anxiety disorders. *Canadian Psychology*, 52, 1-9.
- Bailey, H., Moran, G., & Pederson, D. R. (2007). Childhood maltreatment, complex trauma symptoms, and unresolved attachment in an at-risk sample of adolescent mothers. *Attachment & Human Development*, 9, 139-161.
- Barrie, J. M. (1981). *The little minister*. Fort Worth, Texas: RDMc Publishing.
- Beck, A. T. (1988). *Love is never enough*. New York: Harper & Row.
- Beck, A. T., & Dozois, D. J. A. (2014). Cognitive theory and therapy: Past, present and future. In S. Bloch, S. A. Green, & J. Holmes (Eds.), *Psychiatry – past, present and prospect* (pp. 366-382). Oxford, England: Oxford University Press.
- Beck, A. T., & Dozois, D. J. A. (2011). Cognitive therapy: Current status and future directions. *Annual Review of Medicine*, 62, 397-409.
- Bieling, P. J., Hawley, L. L., Bloch, R. T., Corcoran, K. M., Levitan, R. D., et al. Treatment-specific changes in decentering following mindfulness-based cognitive therapy versus antidepressant medication or placebo for prevention of depressive relapse. *Journal of Consulting and Clinical Psychology*, 80, 365-372.

- Birkeland, I. K., Richardsen, A. M., & Dysvik, A. (2017). Harmonious passion for work was related to a decrease in exhaustion and cynicism over time, whereas obsessive passion for work was stably and positively related to exhaustion and cynicism. *International Journal of Stress Management*. Advance online publication. <http://dx.doi.org/10.1037/str0000057>
- Brendgen, M., Vitaro, F., Bukowski, W. M., Dionne, G., Tremblay, R. E., et al. (2013). Can friends protect genetically vulnerable children from depression? *Development and Psychopathology*, 25, 277-289.
- Brickman, P., Coates, D. and Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology*, 36, 8, 917-927.
- Brooks, D. (2015). *The road to character*. New York: Random House.
- Bukowski W. M., Castellanos M., Vitaro F, Brendgen M. (2015). Socialization and experiences with peers. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 228–250). New York: Guilford.
- Campbell, L., Martin, R. A., & Ward, J. R. (2008). An observational study of humor use while resolving conflict in dating couples. *Personal Relationships*, 15, 41-55.
- Cinamon, L. W. (December 23, 2006). The trade-off between home runs and contact rate. Available at SSRN: <https://ssrn.com/abstract=953409>
- Coyne, J. C. (1976). Depression and the response of others. *Journal of Abnormal Psychology*, 85, 186-193.
- Curran, T., Hill, A. P., Appleton, P. R., Vallerand, R. J., & Standage, M. (2015). Meta-analysis - The psychology of passion: A meta-analytical review of a decade of research on intrapersonal outcomes. *Motivation and Emotion*, 39, 631-655.

Daley-Harris, M. Power and strikeouts (August 25, 2016). Retrieved from

<https://www.fangraphs.com/community/power-and-strikeouts/>

Diener, E., Heintzelman, S. J., Kushlev, K., Tay, L., Wirtz, D., Lutes, L. D., et al. (2017).

Findings all psychologists should know from the new science on subjective well-being.

Canadian Psychology, 58, 87-104.

Diener, E., Oishi, S., & Lucas, R. E. (2015). National accounts of subjective well-being.

American Psychologist, 70, 234-242.

Doran, N. Good hitters strike out more than bad hitters do (April 28, 2016).

<https://redlegnation.com/2016/04/28/good-hitters-strike-out-more-often-than-bad-hitters-do/>

Dozois, D. J. A., & Beck, A. T. (2008). Cognitive schemas, beliefs and assumptions. In K. S.

Dobson & D. J. A. Dozois (Eds.), *Risk factors in depression* (pp. 121-143). Oxford,

England: Elsevier/Academic Press.

Dozois, D. J. A., Bieling, P. J., Evraire, L. E., Patelis-Siotis, I., Hoar, L., Chudzik, S., McCabe,

K., Westra, H. A. (2014). Changes in core beliefs (early maladaptive schemas) and self-

representation in cognitive therapy and pharmacotherapy for depression. *International*

Journal of Cognitive Therapy, 7, 217-234.

Dozois, D. J. A., Bieling, P. J., Patelis-Siotis, I., Hoar, L., Chudzik, S., McCabe, K., & Westra,

H. A. (2009). Changes in self-schema structure in cognitive therapy for major depressive

disorder: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 77,

1078-1088.

Dozois, D. J. A., Frewen, P. A., & Covin, R. (2006). Cognitive theories. In M. Hersen & J. C.

Thomas (Series Eds.), J. C. Thomas & D. L. Segal (Vol Eds.), *Comprehensive handbook of*

- personality and psychopathology: Volume 1. Personality and everyday functioning* (pp. 173-191). New York: Wiley.
- Dozois, D. J. A., & Dobson, K. S. (2001). Information processing and cognitive organization in unipolar depression: Specificity and comorbidity issues. *Journal of Abnormal Psychology, 110*, 236-246.
- Dozois, D. J. A., Martin, R. A., & Bieling, P. J. (2009). Early maladaptive schemas and adaptive/maladaptive styles of humor. *Cognitive Therapy and Research, 33*, 585-596.
- Dozois, D. J. A., Martin, R. A., & Faulkner, B. (2013). Early maladaptive schemas, styles of humor and aggression. *Humour: International Journal of Humour Research, 26*, 97-116.
- Dozois, D. J. A., & Rnic, K. (2015). Core beliefs and self-schematic structure in depression. *Current Opinion in Psychology, 4*, 98-103.
- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. *Science, 319*, 1687-1688.
- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2014). Prosocial spending and happiness: Using money to benefit others pays off. *Current Directions in Psychological Science, 23*, 41-47.
- Dunn, E. W., Ashton-James, C. E., Hanson, M. D., & Aknin, L. B. (2010). On the costs of self-interested economic behavior: How does stinginess get under the skin? *Journal of Health Psychology, 15*, 627-633.
- Dunn, E. W., Gilbert, D. T., & Wilson, T. D. (2011). If money doesn't make you happy, then you probably aren't spending it right. *Journal of Consumer Psychology, 21*, 115-125.
- Dunn, E. W., & Weidman, A. C. (2015). Building a science of spending: Lessons from the past and directions for the future. *Journal of Consumer Psychology 25*, 172-178.

- Dweck, C. S. (2016). *Self-theories: Their role in motivation, personality, and development*. New York: Routledge.
- Egan, S. J., Wade, T. D., Shafran, R. & Antony, M. M. (2014). *Cognitive behavioral treatment of perfectionism*. New York: Guilford.
- Evraire, L. E., & Dozois, D. J. A. (2014). If it be love indeed tell me how much: Early core beliefs associated with excessive reassurance seeking in depression. *Canadian Journal of Behavioural Science, 46*, 1-8.
- Evraire, L. E. & Dozois, D. J. A. (2011). An integrative model of excessive reassurance seeking and negative feedback seeking in the development and maintenance of depression. *Clinical Psychology Review, 31*, 1291-1303.
- Evraire, L. E., Ludmer, J. A., & Dozois, D. J. A. (2014). The influence of priming attachment styles on excessive reassurance seeking and negative feedback seeking in depression. *Journal of Social and Clinical Psychology, 33*, 295-318.
- Fjorback, L. O., Arendt, M., Ørnbøl, E., Fink, P., & Walach, H. (2011). Mindfulness-Based Stress Reduction and Mindfulness-Based Cognitive Therapy—A systematic review of randomized controlled trials. *Acta Psychiatrica Scandinavica, 124*, 102-119.
- Flett, G. L., Blankstein, K. R., & Hewitt, P. L. (2009). Perfectionism, performance, and state positive affect and negative affect after a classroom test. *Canadian Journal of School Psychology, 24*, 4-18.
- Flett, G. L., Coulter, L., Hewitt, P. L., & Nepon, T. (2011). Perfectionism, rumination, worry, and depressive symptoms in early adolescents. *Canadian Journal of School Psychology, 26*, 159-176.

- Flett, G. L., & Hewitt, P. L. (2007). Perfectionism and self-regulation; fear of failure. Cognitive and self-regulation aspects of perfectionism and their implications for treatment: Introduction to the special issue. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 25*, 227-236.
- Flett, G. L., Nepon, T., Hewitt, P. L., & Fitzgerald, K. (2016). Perfectionism, components of stress reactivity, and depressive symptoms. *Journal of Psychopathology and Behavioral Assessment, 38*, 645-654.
- Flett, G. L., Stainton, M., Hewitt, P. L., Sherry, S. B., & Lay, C. (2012). Procrastination automatic thoughts as a personality construct: An analysis of the Procrastinatory Cognitions Inventory. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 30*, 223-236.
- Frankl, V. E. (1984). *Man's search for meaning*. New York: Pocket Books.
- Fredrickson, B. L. (2000). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218-226.
- Frewen, P. A., Brinker, J. K., Martin, R. A., & Dozois, D. J. A. (2008). Humor styles and personality-vulnerability to depression. *Humour: International Journal of Humour Research, 21*, 179-195.
- Frewen, P. A., Evans, E. M., Maraj, N., Dozois, D. J. A., & Partridge, K. (2008). Letting go: Mindfulness and negative automatic thinking. *Cognitive Therapy and Research, 32*, 758-774.
- Gouin, J., Estrela, C., Desmarais, K., & Barker, E. T. (2016). The impact of formal and informal support on health in the context of caregiving stress. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 65*, 191-206.

- Gouin, J., Scarcello, S., da Estrela, C., Paquin, C., & Barker, E. T. (2016). Dyadic coping and inflammation in the context of chronic stress. *Health Psychology, 35*, 1081-1084. –
- Hawley, L. L., Schwartz, D., Bieling, P. J., Irving, J., Corcoran, K., Farb, N. A. S., et al. (2014). Mindfulness practice, rumination and clinical outcome in mindfulness-based treatment. *Cognitive Therapy and Research, 38*, 1-9.
- Hawkins, E., Madigan, S., Moran, G., & Pederson, D. R. (2015). Mediating and moderating processes underlying the association between maternal cognition and infant attachment. *Journal of Applied Developmental Psychology, 39*, 24-33.
- Hayes, S. C., Strosahl, K., & Wilson, K. G. (1999). *Acceptance and Commitment Therapy: An experiential approach to behavior change*. New York: Guilford.
- Heslin, P. A., Latham, G. P., & VandeWalle, D. (2005). The effect of implicit person theory on performance appraisals. *Journal of Applied Psychology, 90*, 842-856.
- Hewitt, P. L., & Flett, G. L. (2004). *Multidimensional Perfectionism Scale (MPS): Technical manual*. Toronto, Canada: Multi-Health Systems.
- Hewitt, P. L., & Flett, G. L., & Mikail, S. F. (2017). *Perfectionism: A relational approach to conceptualization, assessment, and treatment*. New York: Guilford.
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 78*, 169-183.
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science, 10*, 227-237.

- Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine*, *7*, e1000316. doi:10.1371/journal.pmed.1000316
- Kabat-Zinn, J. (2005). *Coming to our senses*. New York: Hyperion.
- Kabat-Zinn, J., Massion, A. O., Kristeller, J., Peterson, L.G., Fletcher, K.E., Pbert, L., et al. (1992). Effectiveness of a meditation-based stress reduction program in the treatment of anxiety disorders. *American Journal of Psychiatry*, *149*, 936-943.
- Keng, S., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review*, *31*, 1041-1056.
- Kross, E., Berman, M. G., Mischel, W., Smith, E. E., & Wager, T. D. (2011). Social rejection shares somatosensory representations with physical pain. *Proceedings of the National Academy of Sciences*, *108*, 6270-6275.
- Kuiper, N. A., & Leite, C. Personality impressions associated with four distinct humor styles. *Scandinavian Journal of Psychology*, *51*, 115-122.
- Kushlev, K., Dunn, E. W., & Lucas, R. E. (2015). Higher income is associated with less daily sadness but not more daily happiness. *Social Psychological and Personality Science*, *6*, 483-489.
- Latham, G. P., & Locke, E. A. (2006). Enhancing the benefits and overcoming the pitfalls of goal setting. *Organizational Dynamics*, *35*, 332-340.
- Lindsay, E. K.; Creswell, J. D. (2017). Mechanisms of mindfulness training: Monitor and Acceptance Theory (MAT). *Clinical Psychology Review*, *51*, 48-59.
- Linehan, M. M. (2015). *DBT Skills training manual* (2nd. ed.). New York: Guilford.

- Luhmann, M. Hawkley, L. C., & Cacioppo, J. T. (2014). Thinking about one's subjective well-being: Average trends and individual differences. *Journal of Happiness Studies, 15*, 757-781.
- Lumley, M. N., & McArthur, B. A. (2016). Protection from depression following emotional maltreatment: The unique role of positive schemas. *International Journal of Cognitive Therapy, 9*, 327-343.
- Lyubomirsky, S. (2013). *The myths of happiness*. New York: Penguin.
- Lyubomirsky, S. & Layous, K. (2013). How do simple positive activities increase well-being? *Current Directions in Psychological Science, 22*, 57-62.
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology, 9*, 111-131.
- Martin, R. A. (2007). *The psychology of humor: An integrative approach*. Burlington: Elsevier.
- Martin, R. A., Lastuk, J. M., Jeffery, J., Vernon, P. A., & Veselka, L. (2012). Relationships between the dark triad and humor styles: A replication and extension. *Personality and Individual Differences, 52*, 178-182.
- Martin, R. A., Puhlik-Doris, P. Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality, 37*, 48-75.
- Maiolino N., Kuiper N. A. (2016). Examining the impact of a brief humor exercise on psychological well-being. *Translational Issues in Psychological Science, 2*, 4-13.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*, 370-396.

- Meinz, P., Morton, J. B., Pederson, D. R., & Moran, G. (2016). Biases in attention for social stimuli in children are associated with patterns of infant attachment: A brief report. *Social Development, 26*, 80-90.
- Morley, T. E., & Moran, G. (2011). The origins of cognitive vulnerability in early childhood: mechanisms linking early attachment to later depression. *Clinical Psychology Review, 31*, 1071-1082.
- Nes, R. B., & Røysamb, E. (2015). The heritability of subjective wellbeing: Review and meta-analysis. In I. M. Pluess (Ed.), *The genetics of psychological wellbeing: The role of heritability and genetics in positive psychology* (pp. 75–96). Oxford: Oxford University Press.
- Nes, R. B., & Røysamb, E. (2016). Happiness in behaviour genetics: An update on heritability and changeability. *Journal of Happiness Studies*. DOI 10.1007/s10902-016-9781-6
- Pausch, R. & Zaslow, J. (2008). *The last lecture*. Hyperion: New York.
- Philippe, F. L., Vallerand, R. J., Bernard-Desrosiers, L., Guilbault, V., & Rajotte, G. (2017). Understanding the cognitive and motivational underpinnings of sexual passion from a dualistic model. *Journal of Personality and Social Psychology, 113*(5), 769-785.
- Philippe, F., Vallerand, R.J., & Lavigne, G. (2009). Passion does make a difference in people's lives: A look at well-being in passionate and non-passionate individuals. *Applied Psychology: Health and Well-Being, 1*, 3-22.
- Quoidbach, J., & Dunn, E. W. (2013). Give it up: A strategy for combating hedonic adaptation. *Social Psychological and Personality Science, 4*, 563-568.

- Quoidbach, J., Dunn, E. W., Petrides, K. V., & Mikolajczak, M. (2010). Money giveth, money taketh away: The dual effect of wealth on happiness. *Psychological Science, 21*, 759-763.
- Rnic, K., Dozois, D. J. A., & Martin, R. A. (2016). Cognitive distortions, humor styles, and depression. *Europe's Journal of Psychology, 12*, 318-362.
- Rogers, C. R. (1977). *Carl Rogers on personal power*. Oxford, England: Delacorte.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52*, 141-166.
- Ryff, C.D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*, 719-727.
- Sandstrom, G. M., & Dunn, E. W. (2014). Social interactions and well-being: The surprising power of weak ties. *Personality and Social Psychology Bulletin, 40*, 910-922.
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2013). *Mindfulness-based cognitive therapy for depression* (2nd. ed.). New York: Guilford.
- Seligman, M. E. P. (1990). *Learned optimism*. New York: Pocket Books.
- Sharma, M., & Rush, S. E. (2014). Mindfulness-based stress reduction as a stress management intervention for healthy individuals: A systematic review. *Journal of Evidence-Based Complementary & Alternative Medicine, 19*, 271-286.
- Sherry, S. B., Hewitt, P. L., Sherry, D. L., Flett, G. L., & Graham, A. R. (2010). Reduced productivity - Perfectionism dimensions and research productivity in psychology professors: Implications for understanding the (mal)adaptiveness of perfectionism. *Canadian Journal of Behavioural Science, 42*, 273-283.

- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology, 65*, 467-487.
- Sirén, C., Patel, P. C., & Wincent, J. (2016). How do harmonious passion and obsessive passion moderate the influence of a CEO's change-oriented leadership on company performance? *The Leadership Quarterly, 27*, 653-670.
- Slavich, G.M., Way, B.M., Eisenberger, N.I., & Taylor, S.E. (2010). Neural sensitivity to social rejection is associated with inflammatory responses to social stress. *Proceedings of the National Academy of Science, 107*(33):14817-22. doi: 10.1073/pnas.1009164107. Epub
- Stewart, J. G., & Harkness, K. L. (2015). The interpersonal toxicity of excessive reassurance-seeking: Evidence from a longitudinal study of romantic relationships. *Journal of Social and Clinical Psychology, 34*, 392-410.
- St-Louis, A. C., Carbonneau, N., & Vallerand, R. J. (2016). Passion for a cause: How it affects health and subjective well-being. *Journal of Personality, 84*, 263-276.
- Taylor, S. E. & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin, 103*, 193-210.
- Taylor, S. E. & Brown, J. D. (1994). Positive illusions and well-being revisited: Separating fact from fiction. *Psychological Bulletin, 116*, 21-27.
- Vallerand, R. J. (2008). On the psychology of passion: In search of what makes people's lives most worth living. *Canadian Psychology, 49*, 1-13.
- Vallerand, R. J. (2012). The role of passion in sustainable psychological well-being. *Psychology of Well-Being: Theory, Research and Practice, 2:1*.

- Vallerand, R. J., Blanchard, C. M., Mageau, G. A., Koestner, R., Ratelle, C. F., Léonard, M. et al. (2003). Les passions de l'ame: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, *85*, 756–767.
- Vazquez, C. (2017). What does positivity add to psychopathology? An Introduction to the special issue on ‘positive emotions and cognitions in clinical psychology’. *Cognitive Therapy and Research*, *41*, 325-334.
- Verner-Filion, J., & Vallerand, R. J. (2016). On the differential relationships involving perfectionism and academic adjustment: The mediating role of passion and affect. *Learning and Individual Differences*, *50*, 103-113.
- Wilde, O. (1891). *The soul of man under socialism*. First publication in *Fortnightly Review* (February 1891).
- Yalom, I. D. (2015). *Existential psychotherapy*. New York: Basic Books.

Table 1. Recipients of CPA Donald O. Hebb Award for Distinguished Contributions to Psychology as a Science (1980-2017).

Date	Recipient	Research
2017	Michel Dugas	Generalized anxiety disorder
2016	Joel Katz	Management of pain
2015	Debra Pepler	Bullying and aggression
2014	Gordon Asmundson	Anxiety
2013	Keith Dobson	Depression
2012	Colin MacLeod	Memory/attention
2011	Robert Vallerand	Social motivation/passion
2010	Robert Hare	Psychopathy
2009	Charles Morin	Insomnia
2008	Vernon Quinsey	Antisocial and violent behavior
2007	Barbara Sherwin	Human psychoendocrinology
2006	Patrick McGrath	Pediatric pain
2005	David Wolfe	Child abuse
2004	Albert Bregman	Perceptual organization of sound
2003	David Regan	Visual and auditory perception
2002	Kenneth Craig	Pain in infants and children
2001	Kenneth Dion	Prejudice and discrimination
2000	Bryan Kolb	Neuroplasticity
1999	Byron Rourke	Neuropsychology of learning disabilities
1998	John Berry	Acculturation
1997	Norman Endler	Stress, anxiety and coping
1996	Peter Suedfeld	Challenging and stressful environments
1995	Anthony Phillips	Neuropsychopharmacology
1994	Franco Lepore	Neuroplasticity/audiovisual
1993	Mark Zanna	Attitudes
1992	Peter Dodwell	Visual perception
1991	Adrien Pinard	Meta-cognition
1990	Zenon Pylyshyn	Short-term memory/visual indexing
1989	Not awarded	---
1988	Philip Bryden	Visual and auditory perception
1987	Fergus Craik	Levels of processing in memory
1986	Ronald Melzack	Gate control theory of pain
1985	Doreen Kimura	Human cognition
1984	Wallace Lambert	Psycholinguistics
1983	Endel Tulving	Episodic memory
1982	Allan Paivio	Dual-coding theory
1981	Brenda Milner	Neuropsychology
1980	Donald Hebb	Neuropsychology/Hebbian learning