FOSTERING PURPOSE IN LIFE/MEANING IN LIFE, ACROSS THE LIFE SPAN

A Thesis

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Abstract

This thesis addresses the idea of purpose and meaning in life and how it can be intentionally fostered across the lifespan. Purpose and meaning in life, as it relates to well-being, is considered by some scholars to be the highest-level construct from which all other lower-level constructs of well-being flow (Kashdan & McKnight, 2009). As this thesis will demonstrate, purpose is highly correlated with many other desirable outcomes that are vital for living a life of flourishing, thriving and wellness. Given the importance of purpose in life as it relates to wellness, health and psychological well-being, this thesis is concerned with whether purpose in life can be intentionally fostered within the human condition, especially for those who have a deficit of it. To achieve this, my thesis contains three studies:

I. A psychometric study that seeks to validate well-known purpose in life instruments and then create a new purpose in life instrument that is a common core that covers areas of the construct of purpose/meaning in life that exist in disparate meaning and purpose scales.

II. Test a purpose in life fostering intervention in a youth/ school based sample using a quasi-experimental design.

III. Test a purpose in life fostering instrument in an adult sample of people fifty years old and above using a randomized control trial.

Considering this my thesis seeks to satisfy the following four aims:

1. To arrive at a well-founded theoretical definition of the construct of meaning and purpose in life.
2. To find a way that purpose in life and meaning in life can be adequately and empirically measured.

3. To test whether purpose in life can be fostered in youth using an evidence based purpose-fostering coaching curriculum within a high school setting.
4. To study whether, using an evidence based intervention, purpose in life can be intentionally fostered in an adult sample.

The first two aims, a) establishing a definition for the construct of interest and b) establishing a valid instrument with which the construct of interest can be measured, were prerequisites for being able to test whether purpose in life could be intentionally fostered. Aims three and four used the first two aims as a predicate to test the main hypothesis of whether purpose in life can be intentionally fostered in the human condition across the lifespan.

To accomplish these goals, the literature, as it relates to the definition of purpose in life, was analyzed and a novel approach to defining purpose was suggested. This approach takes meaning and purpose into consideration and argues that meaning and purpose are two elements that are intrinsic to the domain space of meaning in life and purpose in life. As I argue in the thesis from both a theoretical and an empirical perspective, meaning and purpose are, in fact, two inseparable aspects of one construct. One cannot have meaning without purpose and one cannot have purpose without meaning.

To test the efficacy of any treatment on a dependent variable, it is vital to have valid instruments that can measure any potential change in the construct of interest. To accomplish this, data were collected to carry out a full scale psychometric evaluation of four well-known purpose in life survey instruments. I discovered that some of the instruments performed better than others. In addition, since youth were a primary population of interest in these studies, it was important to know whether instruments

created for adults would work well on a youth sample. Thus, psychometric analysis was carried out on data that were collected from a youth sample. Out of the four instruments that were analyzed, I was able to extract a number of items that together had solid psychometric properties, and, as a group, represented a common core of construct of purpose in life found in the individual instruments analyzed. The resulting measure is apparently the first purpose in life instrument created for, and tested on, a youth population. In addition, this new instrument apparently is the first short-form purpose in life survey designed specifically to cover full conceptual space of the domain space that makes up the construct of purpose in life.

To test whether purpose in life can be fostered across the lifespan, a specially created and internet-based purpose-fostering treatment was formulated and tested. One version of this purpose-fostering treatment was created for youth and another was created for adults. Both treatments were similar to each other in key ways. Studies to test the efficacy of this purpose-fostering intervention were then carried out with both youth populations in schools and with adults ages 50+. For the youth study, a three group quasi-experimental, pretest/posttest design was conducted in two high achieving secondary schools in Sydney, Australia. This study was able to test my hypothesis that a purpose in life intervention can intentionally foster purpose in youth within a high school educational environment. The results of the study supported this hypothesis.

For the adult study, a full randomized controlled trial with adults over 50 years of age was conducted to assess whether purpose in life can be intentionally fostered in an adult sample. The adult study had three data collection points: pretest, posttest, and long-term follow-up, which occurred twelve weeks following the conclusion of the treatment.

Key to my hypothesis was that there would be an Aptitude Treatment Interaction (ATI), where those who started lower on the construct of purpose in life would gain more from the treatment than those who already tested high on purpose in life at baseline. This hypothesis was supported in both studies. In the adult study, however, even those who started high on purpose in life benefitted from the treatment. In addition, I hypothesized that participants would gain in other areas of well-being as they gained in purpose in life. This hypothesis was supported amongst participants in the adult study but, surprisingly, was weakly supported in the youth study.

Results of the adult study similarly supported the hypothesis that purpose in life can be intentionally fostered in adults using a purpose in life treatment. In addition, it demonstrated that those who started lower on the construct of purpose in life benefited more than those who started off higher. The longitudinal nature of the data collection also allowed me to demonstrate that the treatment effect lasted well beyond the end of the treatment and was still discernable three months post-treatment.

The implications of this research from both a theoretical and practical point of view are far-ranging and impactful. From a theoretical perspective, I have shown that meaning and purpose in life are actually one construct. This finding adds weight to the argument that for one to have purpose, one must also have a sense of coherence and meaning in life. From a practical perspective, this finding will inform the work of policy makers, practitioners and educators who want to create measures to test for purpose in life. It should also inform the work of those creating interventions, workshops and treatments to foster purpose in life within the human condition.

In addition, the finding that an intervention can be used to foster purpose in life, especially within those who are low on purpose, will have significant implications for

educators, mental health workers and policy makers. The knowledge that an evidence based intervention can intentionally foster purpose in those who lack it should lead to the creation and implementation of purpose interventions in schools, senior centers and in mental healthcare workers' offices and practices the world over. Given the huge deficits associated with not having purpose in life, this finding has the potential of making a practical difference in the field of mental health and positive psychology.

Preface

Ever since teaching high school in 2004 I have been interested in how to motivate people to reach their full potential in life. While working on a book that was published in 2008 (Brackman & Jaffe, 2008), I had the opportunity to interview several highly successful individuals. Many of them reported that their success was predicated on their finding a purpose in life early on. This set me on a quest to see if I would be able to create a program to help young people identify a life purpose while in high school. After studying the scientific literature about purpose in life as well as working one-on-one and in groups with youth, I developed a purpose-fostering program that included an online application and educational martials (lesson plans and resources). Simultaneously, I created a similar purpose-fostering intervention for adults.

It was important to me that the program be evidence based (Ellis, 2005), which is why I not only made sure that each aspect of the program had real evidence behind it, but also was committed to testing the program within schools using the scientific method to empirically study the outcomes of the intervention. Thus, the goal of the studies that were carried out was twofold. First, I wanted to find out whether it was possible to use a purpose-fostering intervention to increase a sense of purpose in individuals both teenagers and older adults. Second, I wanted to discover whether the intervention I created, when implemented, resulted in an increase in purpose.

For the adult study, I recruited participants from across the globe. For the high-school study, I had two high achieving private schools in Sydney, Australia participate. The students were from Year 10. In one school, students self-elected to either participate in my purpose-fostering program or another career exploration program by the name of "Allwell" provided by a company called Academic Assessment Services.

The Allwell program was conducted in one day and is a survey-based program. For there to be a reasonable comparison between my intervention and Allwell, my intervention was modified so that the coaching portion could be completed in one day with a student teacher ratio of 1/50. While this was not optimal or recommended from a program standpoint, it served our three-group study design well. In the other school, the main intervention group, the program was implemented over the course of six to eight weeks with all year ten students and with a much smaller student/teacher ratio.

To my knowledge, this is the first high-school curriculum tool designed to increase purpose in life of high school age students to be tested in this type of scientific trial. In addition, this is the first study conducted using an in-depth propose intervention to try and intentionally foster purpose in older adults. The results seem to indicate that when using well thought-out interventions that are implemented over time, purpose can be reinforced and fostered in both youth and adults.

Advance Chapter Organizer

This thesis contains five chapters and appendices. The first chapter is a literature review that contains an overview of the scholarly material regarding purpose in life, including a brief history of purpose and how it came to be such an important element of well-being. In addition, I discuss how purpose and meaning are defined and whether meaning and purpose they are the same construct. Furthermore, in this section I discuss how purpose in life can be intentionally fostered and whether a person who lacks purpose can use a purpose discovery to gain an increase in purpose. In addition, chapter one offers a compilation of ideas and evidence found in the literature that will inform the creation of a purpose-fostering intervention from a positive psychology perspective, from a career development perspective and from a self-determination perspective. Finally, chapter one presents the architecture and layout of a proposed, evidence-based, purpose-fostering intervention that will be used throughout the studies found in this thesis. Chapter two is about how meaning in life/purpose in life are measured, and the instruments to be used in the intervention studies of this thesis are analyzed from a psychometric perspective. The chapter starts out by giving an overview of the literature as it relates to meaning in life/purpose in life instruments. I describe the different instruments that are analyzed in the chapter as well as those that I decided not to analyze and the reasons why they were left out of the analysis. In addition, chapter two discusses research questions as well as aims and hypotheses relating to how meaning in life/purpose in life are measured and presented. Methods for how those research questions are answered are given and study results are presented. As part of this psychometric analysis, a full exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) are done on all the instruments together, and a new survey instrument

emerges that covers a common core of the domain space of meaning in life/purpose in life.

In chapter three, I describe an experimental study that implements the purpose-fostering intervention on two schools using a three-group design where two groups are given a different level of the intervention and a third group is an active control. Methods and results are presented showing a significant increase in purpose for those who started lower on the main outcome of interest.

In chapter four, I present the results of a randomized control trial that I conducted on a group of adults 50+. Participants were randomly assigned to one of two groups: one, the experimental group, did the purpose-fostering intervention and the other, a wait-list control group, was offered the intervention after the three-month post intervention follow-up for the treatment group was completed. Participants completed a series of online exercises using a specially designed app. This intervention study showed significant increases in meaning in life/purpose in life and for other indicators of well-being for the experimental group versus the control group.

Chapter five is the final chapter in this thesis and it offers a discussion of all the research done over the course of my candidature together with the practical policy and research implications of the results, as well as suggested directions for future research in this area of study. In addition, chapter five goes through the limitations of this research and its results. I discuss what can and what cannot be inferred from these studies and note what additional research is needed in order to take conclusion found here further to create solid scientific theory and practice in the area of intentional purpose-fostering in both adults and youth.

Acknowledgements

There are several people who I must thank deeply for making this research possible and affording me the opportunity to come this far. There are two categories of people I need to thank here: academic advisors and colleagues who have been invaluable to me and supporters, family and friends without whom none of this would be possible. Some who are reading this thesis might not be aware that I live in the USA but carried out at least fifty percent of the research for this thesis in Australia. This involved multiple trips to Sydney, Australia for relatively long periods of time. It also involved finding schools in Australia who would be willing to take part in my research. To do this I needed to spend long periods away from my family. I could not have done any of this without the support, understanding and love of my wife Sheindy who has supported not only my academic work, but has continuously provided me the space and latitude to pursue all kinds of ambitions no matter how outlandish they may be. My partner in helping youth find their purpose in life is James (Jim) W. Williams, Jr. He funded all the work I did with youth and was a wonderful supporter and an even better friend. This PhD could not have been completed without Jim's support and I feel deeply indebted to him for all his help, advice and friendship over the years. This PhD would also not have been possible without the support of my dear friend Lou Kravitz, who has been an unwavering and loyal friend of mine for well over a decade. Lou kindly opened his air-miles account to me allowing me to make the numerous trip to Sydney, Australia that researching and writing this PhD required. Without Lou, completing this PhD would have been virtually impossible, I will remain forever grateful to him for his friendship and support.

I also need to thank two of the best PhD supervisors a doctoral candidate could ask for. When I first sent my research proposal to Herb Marsh I received a response back within a few hours. Herb had faith in my ability to carry out this research even when, at the beginning, I did not fully understand what it would entail. Along the way, Herb has been a wonderful academic guide as well as a mentor and friend to me. I have obviously learned a huge amount from Herb as it relates to psychology, social science research and statistical and analytical approaches to solving problems; but Herb has also taught me about how to approach issues beyond those that are beyond academic in nature. Some of the life lessons I have learned from Herb through osmosis will stay with me for a long time to come. I am very grateful and honored to be a student of Herb Marsh not simply because he is an internationally recognized leader in the field, but also because of how my relationship with Herb has positively impacted my life on so many levels.

As much as I have appreciated and enjoyed my ability to work with and learn from Herb Marsh I have also gained massive value from my other supervisor, Phil Parker. At the beginning of my candidature not only was I new to advanced statistics and social science research, I was also a complete novice at programming. Phil single-handedly introduced me to programing in R. He was constantly available to help me as I navigated the early days as a new PhD candidate. With Phil's help I was able to easily maneuver through a process that would have otherwise been incredibly intimidating. Phil is one of the smartest, well-read and well-rounded people I have ever met. He is not only an A+ player as an academic, he is also a most thoughtful, decent, nice guy. I feel honored to have been able to learn from Phil and am deeply thankful for all that he has given me on so many levels. It is true to say that there is no way that I would be

where I am today without having had the good fortune of meeting Phil Parker. I would also like to thank others who helped me along the way including Felicia Huppert who offered me much needed and helpful academic advice as well as much appreciated friendship throughout my candidature. I have also been incredibly grateful to be able to be a part of the Institute of Positive Psychology and Education (IPPE) of the Australian Catholic University. Not only are the academics at the IPPE world class, they are also a group of fantastic individuals. As a PhD student at IPPE I was fortunate to get to know and spend time with some of the most lively, intelligent, talented, warm and welcoming fellow PhD students imaginable. I truly feel enriched to have been able to share at least part of this journey with this cohort of truly extraordinary PhD candidates at IPPE.

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It would be strange, then, if a person should not choose the life that is his own but rather that of something else...for what is proper to each is by nature most excellent and most pleasant for each.

- Nicomachean Ethics, 1178a-5
- (Aristotle)

Chapter 1: Literature Review

Introduction

In this section, the literature regarding purpose in life and meaning in life will be reviewed from both an historical perspective as well as how it relates to current thinking in the field of positive psychology. Disagreements with regards the definition of purpose in life and meaning in life will also be discussed. A theoretical framework will be offered that will attempt to bring together the differing definitions into one coherent whole. The latest development regarding how meaning in life/purpose in life can be intentionally fostered across the lifespan will also be reviewed, and there will be a discussion with regards meaning in life/purpose in life interventions found in the literature.

The reader may notice that throughout this thesis I have not differentiated between the construct of meaning and the construct of purpose. This might seem confusing, especially given that some scholars see purpose as the high-level construct (Kashdan & McKnight, 2009) and meaning as a subcomponent, whilst (Martela & Steger, 2016; Reker & Wong, 2012; Steger, 2009; Wong, 2014) see meaning as the higher-level construct and purpose as a subcomponent of meaning. Although I discuss these different approaches below, I do so to emphasize the importance of meaning and purpose rather than to decide which view is correct. In the final analysis, my research, described in this thesis, shows that there is little empirical evidence of a substantial difference between the construct of meaning and the construct of purpose. In fact, the two factors, meaning and purpose, correlated at close to 1.0. (see chapter 2). Furthermore, other researchers who have studied this (Valentine, 2015) came to a

similar conclusion. In a Multitrait-Multimethod approach, Valentine (2015) found that, using items from the Meaning in Life Questionnaire (MLQ) (Steger, 2009) and the Purpose in Life (PIL) survey (Crumbaugh, 1968) which contain items that use the term meaning and items that use the word purpose, no individual purpose or individual meaning traits were discerned. In line with my findings, Valentine (2015) found considerable overlap between the construct of meaning and purpose and warned against treating meaning and purpose as separate constructs or traits. Thus, a model with one purpose and meaning trait had an excellent fit (TLI = .978). Whilst a main trait of meaning and subset trait of purpose model did not fit significantly improve the fit (TLI = .979). The author reported (K. D. Valentine, personal communication, August 6, 2016) that these results were not consistent across samples. In fact, in other samples a unidimensional model (with meaning and purpose items loading on a single factor) fit as well as a main meaning and one subset trait of purpose model.

It is important to note here that theoretical psychologists often create differentiators around psychological constructs based on language that does not, in the end, conform to what is found empirically. This, then, can lead to the jingle-jangle fallacy (Kelley, 1927). where instruments containing similar names may measure different constructs (jingle fallacy) and instruments containing differing names might measure the same construct (jangle fallacy). Marsh, (1994), found this phenomena with two different motivation scales and thereby demonstrated the jingle-jangle fallacy from an empirical standpoint. Because of the potential for falling for the jungle-jangle fallacy, Marsh (2018) cautions researchers to perform confirmatory factor analysis (CFA) and structural equation models (SEM) to ensure empirical support for theoretical constructs. Therefore, in this thesis a full psychometric analysis was carried out (see

chapter 2). Based on the evidence I found when I conducted a full scale psychometric analysis (detailed briefly above and in detail in chapter 2) the idea of meaning and purpose being two constructs seems to constitute the jangle fallacy. In other words, based on the evidence I have found, stating that meaning and purpose are two distinct constructs seems to be a fallacy.

Given the lack of empirical support to differentiate between meaning and purpose within my own research as well as in the research of others (Valentine, 2015), in this thesis I do not differentiate between the construct of meaning and purpose but instead use them interchangingly.

Historical perspective. For thousands of years, humans have been concerned with identifying the aspects that make life well lived (for a review see Kashdan & McKnight, 2009). The ancient Greek philosophers used the word *eudaimonia* to describe the aim of what humans should strive towards (Annas & Oxford, 1995). Exactly what *eudaimonia* consists of has been the subject of discussion throughout history. Some scholars have argued that *eudaimonia* can be translated as self-actualization (Waterman, 2013, Norton, 1976). This is based on the etymology of the word *eu* meaning "good" or "healthy" and *daimon* meaning "true self", (for a review see Huta, 2015). Per this definition, living a *eudaimonic* life means being able to live a life where one's innate abilities come to a state of true expression in given activities. This seems in keeping with what Aristotle wrote, quoted above, *It would be strange, then, if a person should not choose the life that is his own but rather that of something else...for what is proper to each is by nature most excellent and most pleasant for each,* (Nicomachean Ethics, 1178a-5). In common parlance, therefore, we might describe

living a *eudaimonic* life as the same as living a life of purpose and meaning (Ryff, 2012; Waterman, 1993). Specifically see Ryff and Singer (2013), who write that in Aristotle's words "eudaimonia translates to ''meaningful living conditioned upon self-truth and self-responsibility'' (p. xi). It is thus the essence of the two great Greek imperatives: first, to ''know thyself'' (a phrase inscribed on the temple of Apollo at Delphi), and second, to ''choose yourself'' or ''become what you are'' (p. 16)." (p. 33).

However, just as there is little agreement on the precise definition of *eudaimonia* (Tiberius, 2013) there is similarly considerable dispute amongst scholars with regards the definition of the term "purpose in life." Yet reaching an agreed upon definition of the construct of purpose in life is important (Martela & Steger, 2016) because although philosophers have always known it to be an important aspect of human flourishing, we now have empirical data that brings real evidence to those philosophical contentions (Steger, 2009; Stoyles, 2015).

Greater purpose in life is associated with numerous positive outcomes related to health and wellness. For example, it is associated with a reduced risk of Alzheimer's disease and mild cognitive impairment and reduction in the deleterious effects of Alzheimer's pathologic changes on cognitive function for people who already suffered from the disease (Boyle, Buchman, Barnes & Bennett, 2010) so that they will exhibit better cognitive function (Boyle, et al., 2012; Yu et al., 2015). Purpose in life is also associated with a reduced risk of all-cause mortality among community-dwelling older persons (Boyle, Barnes, Buchman & Bennett 2009; Sone et al., 2008). There is also a general positive relationship between purpose in life and good cardiovascular health (Kim, 2015; Skrabski, Kopp, Rózsa, Réthelyi & Rahe, 2005; Sone et al., 2008) and it has been shown that purpose in life could be a protective factor against myocardial

infarction among high-risk groups with coronary heart disease (Kim, Sun, Park, Kubzansky & Peterson, 2013). It has also been associated with higher levels of HDL cholesterol, lower hip-waist ratio, and significantly flatter slopes of salivary cortisol (Fogelman & Canli, 2015; Ryff, et al., 2006), significant reduction in depression (Westerhof, Bohlmeijer, van Beljouw & Pot, 2010) and a significantly lower prevalence of symptoms such as pain, insomnia and sleep disorders, (Haugan & Moksnes, 2013; Kim, Hershner & Strecher, 2015). From a social perspective, people whose lives are meaningful are more likely to be rated by others as being socially appealing (Stillman, Lambert, Fincham, & Baumeister, 2010).

In addition, researchers have pointed out that although many studies have focused on the positive impacts of conditions such as thriving (Benson & Scales, 2009; Lerner, Brentano, Dowling & Anderson, 2002), flourishing (Seligman, 2011), mindfulness (Huppert & Johnson, 2010) and character strengths (Peterson & Seligman, 2004), these may all be lower level constructs that are really outcomes of the higher-level construct of purpose in life (Kashdan & McKnight, 2009). Given all this, the idea of infusing and fostering meaning and purpose in the life of people across the life span is an important endeavor.

Defining Purpose. At the outset, it is important to note that there is little consensus in the literature as it relates to the definition of meaning and purpose in life. Because of this, this chapter will attempt to synthesize the differing approaches and definitions into a coherent working definition for the studies found in this thesis. Before entering the debate regarding the definition of these constructs however, it is important to note what I am not trying to define: namely the meaning *of* life. Instead I am trying to define what it means to have meaning *in* life. The former relates to comprehending a

cosmic understanding of why life exists while the latter deals with the individual's quest to find meaning in their own daily existence, activities and life aims and goals. In what has been described as one of the most influential essays on meaning (Hicks, Seto & Kim, 2016), Viktor Frank (1985), cautions that one should not seek the meaning of life in a general way, but rather, the individual should seek the meaning of *their own* life. Others have also made this distinction between the age old philosophical question about the meaning *of* life, the understanding of which is "out of reach of modern objectivist scientific methodology" (Debats, Drost & Hansen, 1995, p. 359), and meaning *in* life which is an important object of psychological research. Thus, Frankl describes the meaning in life in the following manner: "Life ultimately means taking the responsibility to find the right answer to its problems and to fulfill the tasks which it constantly sets for each individual," (Frankl, 1985, p. 77). This thesis takes Frankl's concern into account and deals exclusively with the meaning in life rather than the more general concern that relates to the meaning of life and by extension of all existence.

Frankl's Definition of Purpose. For Frankl, meaning, therefore, has two parts to it: (1) finding the right answers to life's problems; and (2) fulfilling the tasks that life sets for the individual. Scholars have agreed with Frankl that meaning has a cognitive part to it and an action or purpose component as well. Taken together, one will have meaning/purpose in life. Following from this, Battista and Almond (1973) suggested that when a person says they have a meaningful life they refer to the following four ideas, that the person is: "(1) positively committed to some concept of meaning in life; (2) that this concept of the meaning in life provides some framework or goal from which to view life; (3) that the individual perceives life as related to or fulfilling this concept of life; (4) that the person experiences this fulfillment as a feeling of

integration, relatedness, or significance," (Battista & Almond, 1973, p. 410). One might argue that this is in line with Frankl in that items 1 and 3 relate to finding the right answers to life's problems and 2 and 4 are closely identified with fulfilling the tasks that life sets for the individual. Along these same lines, Reker and Wong (2012) talk about "Global Meaning" as having three components: (1) A cognitive component where the individuals' world view and schema guides their goals and choices in life; (2) A motivational component including wants and needs; (3) Affective component informed by numbers 1 and 2, which is a sense of satisfaction and fulfillment.

This definition of meaning relates to the situational concept of meaning. Some have argued that Frankl's concept of meaning encompasses a spiritual core within the human condition (Wong, 2014). The key difference between situational meaning and spiritual meaning, also referred to as ultimate or global meaning (Park, 2005; Wong, 2014), is as described above (see page 28). According to Wong (2014) and Park (2005), it is important to have a sense of global or ultimate meaning such that one believes that there is meaning and purpose to life. I described this concept as meaning of life. Wong (2014) acknowledges that Frankl sees global meaning as something that is unknowable, yet maintains that Frankl views the belief in it as an important aspect of living a life of wellbeing. Situational meaning, conversely, refers to the idea that each moment can be pregnant with meaning if one pays attention and is mindful (Wong, 2014). This thesis deals chiefly with situational meaning defined in a manner somewhat different from that described by Wong (2014), who sees situational meaning as related to mindfulness in general. Whilst I do not disagree with this concept of situational meaning, in this thesis my intervention fosters situational meaning by helping subjects find a life aim

that offers each action and activity a sense of meaning in that it is part of a series of steps that lead to the accomplishment of a life aim or goal.

PURE Model of Purpose. Wong (2012) expanded on this paradigm using a "PURE" model of meaning in life, stating that there are four components to the construct of meaning. PURE, thus, stands for: purpose, understanding, responsible action, and evaluation. For Wong, *purpose* is the motivational component and is the most important part of the construct of meaning in life. *Understanding* is the cognitive component that allows the individual to understand him or herself. *Responsible Action* is the behavioral component including taking the correct actions in any given situation. *Evaluation* is the emotional or affective component where the individual constantly asks whether actions taken bring satisfaction.

Must Purpose be Altruistic? Missing, however, from these definitions of meaning and purpose is whether there is a need to contribute to the good of humanity or the world for life to be meaningful. This altruistic element has caused some scholars to separate the construct of meaning from that of purpose, maintaining that meaning and purpose are two separate, albeit related, constructs. Damon (2009) for example, defines purpose as "a stable and generalized intention to accomplish something that is at once meaningful to the self and leads to productive engagement with some aspect of the world beyond the self," (Bronk & McLean, 2016; Damon, 2009; Damon, Menon & Bronk, 2003). According to this definition, purpose as an independent construct contains four basic elements: (1) stable and general intention, in contrast to a specific and short-term goal such as getting to a movie on time; (2) meaningful to the self—it should be a part of the individual's search for meaning; (3) purpose involves engagement with something beyond the self; (4) for the goal to be purposeful, the

person has to be engaged with an aim towards which they can strive and make progress (Damon et al., 2003).

This definition of purpose is differentiated from meaning. Meaning "may or may not be oriented towards a defined end," whilst "purpose is always directed at an accomplishment towards which one can make progress," (Damon et al., 2003, p. 121). This then results in the conclusion that whilst a person who has purpose will also have meaning, a person who has meaning in life may not have a purpose. In fact, in an elucidation of this definition of purpose, Bronk (2011) states that "purpose is distinct from meaning in that a primary motivation for purpose is to have an impact on causes or individuals beyond the self. In other words, while seeking fame and fortune may imbue one's life with meaning, doing so does not provide a source of purpose" (p. 33). Clearly according to this definition of purpose, as distinct from meaning, the result is the claim that one can have a meaningful life that is devoid of purpose.

There is, however, an inner contradiction inherent in this definition of purpose as differentiated from meaning. The second part of this definition of purpose (mentioned above part 2 of Damon's definition of purpose) maintains that purpose is the pursuit of personal meaning in life (Damon, 2009; Damon et al., 2003). This explicitly implies that without individual purpose, life would lack a certain sense of meaning. Thus, stating that one can have meaning without purpose or vice versa is inconsistent with Damon's own definition of purpose. Clearly, according to Damon, the degree to which one feels more purposeful would also increase one's sense of having meaning and vice versa. Meaning in life and purpose in life seem to be inextricably linked and dependent on each other. Trying to separate out the construct of meaning as independent from the construct of purpose is a difficult endeavor. In fact, many purpose

researchers see meaning in life and purpose in life as interchangeable (Huppert & So, 2013; Shek, 2012). It is also worth noting that for some, a meaningful life is defined by "belonging to and serving something that you believe is bigger than the self" (Seligman 2002), a definition of meaning that also encompasses Damon's definition of purpose. King, Hicks, Krull and Del Gaiso (2006) agree with this when they state that, "Lives may be experienced as meaningful when they are felt to have significance beyond the trivial or momentary, to have purpose, or to have a coherence that transcends chaos." Thus, King et al. (2006) are also suggesting that meaning implies a beyond the self-concern.

Purpose as a Central Self-Organized Life Aim. Other scholars (Kashdan & McKnight, 2009) talk about purpose as seemingly distinct from meaning and define purpose as "a central, self-organizing life-aim." In elaborating on this definition of the construct, Kashdan and McKnight (2009) suggest three components to purpose: (1) "central," in other words the purpose is central to the individual's life and has become a fundamental part of their identity; (2) "self-organizing," that the individual's purpose impacts every other part of their life so that their everyday behavior and pursuits are automatically in service of that purpose; (3) "life-aim," so that a purpose becomes a life-long pursuit in which one is consistently engaged.

Based on this definition of the construct of purpose, one may argue that it is not distinct from meaning, and that to have a true sense of meaning in life, one also needs to have a purpose defined as "a central, self-organizing life-aim." However, it also suggests that one can have a level of meaning even in the absence of "a central, self-organizing life-aim". Yet in the final analysis Kashdan and McKnight (2009) agree that,

whilst one can have a modicum of meaning from other interests or passions, life cannot be truly meaningful without having "a central, self-organizing life-aim."

It is necessary to point out that whilst both Kashdan and McKnight (2009) as well as Damon (2009) see meaning and purpose as separate constructs, they disagree, however, with regards what purpose is: Damon's (2009) definition of purpose involves engagement with something that is beyond the self, Kashdan and McKnight (2009) do not see beyond the self as an important part of the definition of purpose. This difference would impact an individual whose "central, self-organizing life-aim" is to make money, for example, but who has no plans of using that money for a goal beyond the self. Such an individual according to Damon (2009) would be considered to lack purpose, however, Kashdan and McKnight (2009) contend that a pursuit of money may be purposeful, but not necessarily meaningful.

Meaning and Purpose: Two Constructs, or One? In fact, there are scholars who argue explicitly that one can have purpose but not meaning. George and Park (2013), for example, argue that whilst purpose and meaning are closely related, they are two separate constructs. According to George and Park (2013), meaning involves a sense that life has coherence and the feeling that life makes sense and is significant. Purpose, conversely, involves having goals and a direction in life. They therefore argue that whilst one can have a strong purpose in climbing the career ladder, for example, purpose may not necessarily imbue life with a sense of meaning (George & Park, 2013). To bring empirical evidence to their claims, George and Park (2013) conducted a longitudinal study with cancer survivors where they measured purpose using the Ryff Purpose subscale (Ryff, 1989) and meaning using the Perceived Personal Meaning Scale (Wong, 1998). The evidence they uncovered found that whilst meaning and

purpose were strongly correlated ($r = 0.61$), posttest meaning was positively related to posttest post-traumatic growth yet there was no such positive correlation with purpose. They also found that baseline optimism was correlated to posttest purpose but not meaning. In addition, they discovered that posttest meaning was positively related to baseline religiousness and spirituality. Posttest purpose, however, was not positively related to baseline religiousness and spirituality. George and Park (2013) therefore argue that meaning and purpose are, thus, two separate, albeit related, constructs.

Before exploring whether meaning and purpose are in fact one or two constructs, it is important to note that in the psychometric analysis section of this study, the Ryff Purpose subscale did not have good internal or external validity, and that in my study of whether purpose and meaning were related or not, I found evidence to support the one construct hypothesis. In my study, the correlation between purpose and meaning was close to 1 (.95, see chapter 2 of this thesis). It is important to keep in mind the lack of psychometric validity in the Ryff scale when citing George & Park (2013) who suggest that purpose and meaning are two separate constructs and use the Ryff scale as evidence for this."Since there is a consensus that meaning comes about as a result of having a sense of coherence in life (George & Park, 2013; King et al., 2006), it is unlikely that a career which does not fit into that coherence would feel like a worthwhile "central, self-organizing life-aim" (George & Park, 2013; Kashdan & McKnight, 2009). Similarly, it is unlikely that a career that lacks coherence would feel like a "stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self" (Damon, Menon & Bronk, 2003). In other words, if one has meaning in life, it is unlikely that a career that is unrelated to that personal meaning will feel purposeful.

Purpose and Meaning: One Construct. Based on the consensus literature, it seems more reasonable, therefore, to suggest, as Wong (2012) and others (Steger, 2009) have, that meaning and purpose are two elements that make up the single construct of meaning in life and purpose in life. In a similar vein, Martela and Steger (2016) argue that meaning, purpose and coherence are three facets that make up the multidimensional construct of meaning in life. It should be noted however, that there is little empirical evidence to back up this theoretical framework of the construct of purpose. Indeed, Martela and Steger (2016) state that "what is needed next is empirical research that would establish and hone operationalizations of each of these three facets of meaning." See chapter two of this thesis, where my research finds no evidence to substantiate a significant difference between the wording of meaning and purpose. It is therefore entirely plausible that, as I have argued here, one cannot separate two of these facets of the construct from each other, leading one to conclude that one cannot have meaning without purpose and one cannot have purpose without meaning.

In this context, therefore, it is worthwhile to review Frankl's definition of meaning, mentioned earlier, and reiterated by Wong (2012) and Reker and Wong (2012) that meaning is a multidimensional construct comprising two main components: purpose (the motivational component) as the most important element of the construct (Kashdan & McKnight, 2009; Wong, 2012) and understanding (the cognitive component). Based on the literature, however, it seems reasonable to add that for life to contain ultimate meaning, purpose in life ought to contain a "beyond the self" element, (Damon 2003; King et al. 2006; Seligman, 2011). Yet Damon (2003) seems to be alone in the literature to maintain that without a "beyond the self" concern life cannot be purposeful.

Beyond the Self as a Part of Purpose? A powerful argument for why meaning and purpose are intricately connected is made by Martela and Steger (2016). They point out that meaning as defined by George and Park (2013) gives life a sense of coherence and is thus inextricably linked to purpose for three reasons. First, coherence and significance are linked because one cannot have a fully significant life unless one has made sense of its coherence. Secondly, purpose and significance are linked because purpose is a tremendous source of significance. Thirdly, purpose and coherence inform each other because understanding of self and one's life is what will inform a purpose that is authentic. Thus, like Wong (2012), Steger (2009, 2012) and Martela and Steger (2016) see purpose as a vital element of meaning. Steger (2012) also sees meaning as having two distinct elements to it: cognitive and motivational, but defines the cognitive part of meaning as incorporating "understanding of self, world, and niche," (Steger, 2009, 2012). Thus, for life to be meaningful, Steger suggests that individuals must first understand themselves and the world around them, which leads to their finding their place in the world and how it fits into the grand scheme of things (purpose). Steger (2012) thus sees this cognitive element of meaning as the foundation on which the motivational aspect of meaning can be built. In other words, after a full comprehension of the self and how that self relates to the world around the self, an individual can move to the next stage of understanding, and become motivated towards what they should do in life. Like Wong (2012), Steger (2012), defines the motivational aspect of meaning as purpose.

This definition of purpose as being an element of meaning fits in well with Kashdan and McKnight's (2009) definition of the construct of purpose as "a central, self-organizing, life-aim." The meaning aspect that underpins purpose, per Steger

(2012), comes from a sense of coherence and understanding of the self and, significantly, how it relates to the world around the self. Kashdan and McKnight (2009) and Wong (2012) agree that purpose is the higher-level construct from which all other aspects of positive development are derived. Thus, a meaningful and purposeful life is achieved via an understanding of oneself and having a coherent perspective of where one is in context of place in the world. Based on that, the individual can create a purposeful "central, self-organizing life-aim," (Kashdan & McKnight, 2009). This multimodal definition of meaning and purpose may not require an explicit "beyond the self" aspect, because there is an implicit "beyond the self" element given that the individual's purpose is predicated on their understanding of the world around them. Frankl seems to also suggest this concept of meaning when writing the following:

"This uniqueness and singleness which distinguishes each individual and gives a meaning to his existence has a bearing on creative work as much as it does on human love. When the impossibility of replacing a person is realized, it allows the responsibility which a man has for his existence and its continuance to appear in all its magnitude. A man who becomes conscious of the responsibility he bears toward a human being who affectionately waits for him, or to an unfinished work, will never be able to throw away his life. He knows the 'why' for his existence, and will be able to bear almost any 'how'" (Frankl, 1985, p. 101).

Thus, the moment an individual understands their place in the world—those aims and activities that they can accomplish in a manner that is unique to them— they will find meaning in their life. Meaning, therefore, has a "beyond the self" aspect to it because it involves an understanding of the unique contribution the individual can make in the universe. Without that aspect, life as lived in the physical world with other beings

would not be coherent, significant or meaningful. Thus, life becomes meaningful the moment an individual bases their "central, self-organizing, life-aim" on a coherent comprehension of themselves and how the self exists in the context of the world around them, i.e. how they fit in and what they can uniquely contribute to the world, what their "niche" (Steger, 2012) is in the world and how they can fulfill their purpose (Wong, 2012; Steger, 2012). This relates to meaning and purpose because there is a relationship between who the individual is and what the world around them needs. In other words, there is a definite relationship between the individual's sense of coherence and understanding of their unique contribution to the world outside of the self. Thus, meaning and purpose clearly have an implicit "beyond the self" aspect. What is at stake here, however, is how "beyond the self" is defined.

Beyond the Self as Subjective Rather than Objective. To be clear, when Damon and his colleagues talk about purpose as having a "beyond the self concern," their intention is that purpose must contain a specific ultraistic or prosocial element. Yet, this notion brings up the question of whether having a 'beyond the self' element should in fact be defined in this type of objective manner. In other words, does a "beyond the self" concern have to meet some objective criteria defined by an outside party that recognizes the individual's aim as contributing to something beyond the self, in the sense of it being prosocial of ultraistic? Or perhaps a "beyond the self" concern can be subjective. In other words, if an individual's purposeful "central, self-organizing life-aim" is predicated on their subjective understanding of self and niche perhaps it can be considered to have an implicit "beyond the self" concern.

The argument for the latter assertion maintains that purpose and meaning, by their very definition, must have a basic "beyond the self" concern, simply because

finding a purpose involves a "cognitive" element which includes how the individual sees themselves in relation to the world (Steger, 2009). In other words, part of the "cognitive" aspect of meaning that leads to purpose is an understanding by the individual of themselves in relation to a world "beyond the self." Thus, having meaning translates into having a "beyond the self" concern upon which the individual builds a motivation or purpose towards a "central, self-organizing life-aim." According to this argument, it should not be relevant if by some objective standard (Yeager, Bundick & Johnson, 2012) the individual's "central, self-organizing life-aim" is not considered "beyond the self."

Thus, for example, an individual who runs a hedge fund earning millions a year in compensation may see their work as contributing unique talent to help the economy. An objective view of "beyond the self," as proposed by Yeager, Bundick and Johnson, (2012) maintains that work at a hedge fund has no "beyond the self" concern and is focused instead on making money above all else. Yet the subjective view of "beyond the self" that I am proposing maintains that a money manager who feels they are contributing to the world in a way that is uniquely matched to their passions, talents, abilities, and place in the world also has purpose.

This subjective view of "beyond the self" contrasts with Yeager and Bundick (2009) and Yeager, Bundick and Johnson (2012) who explicitly make a judgment of an Asian American student named Nguyen who wanted to become a doctor so that he could, "set an example as how Asian could take a high place [sic]", that this was a "self-oriented work goal" rather than a "beyond the self" work goal. They argue that because "Nguyen did not mention what, for many people, is the obvious reason to become a doctor: helping people feel better," (Yeager & Bundick, 2009), Nguyen did

not have a "beyond the self concern." I would, however, argue that from Nguyen's subjective perspective, he understood his place in the world and that his contribution in becoming a doctor acted as a function of how he could have a positive impact on his community. Just because it does not fit in with what "for many people is the obvious reason to become a doctor" (Yeager & Bundick, 2009) makes it no less of a meaningful and ultimate "beyond the self" concern from the individual's subjective experience.

Thus, people will feel the "beyond the self" aspect of meaning and purpose differently. "Beyond the self" does not have to mean helping others in the traditional sense such as joining the Peace Corps or volunteering in the community. As Frankl (1985) mentioned, meaning for one person might be the fact that they are a father, but for another it may be that they have an important work to finish and publish — neither of which can be done by someone else in quite the same way. In fact, I would argue that a "beyond the self" concern must be subjective. When the individual feels that their "central, self-organizing life-aim" uses what they understand as their unique talents, abilities and passions, in a way that fits into the grand scheme of things and into their niche in the world beyond themselves, their life feels purposeful and they then gain all the health and wellness benefits associated with having meaning and purpose in their life. If, however, the individual does not feel that their goals uniquely fit them, it may not feel personally purposeful no matter how objectively "beyond the self" it may be.

This subjective notion of a "beyond the self" element that is inherent in purpose is underlined by Yeager, Bundick and Johnson's (2012) research where they found that teenagers with a solely objective "beyond the self" motive rather than both a self-oriented and a subjective "beyond the self" motive had no significant positive increase in purpose or well-being from baseline to posttest of their study. Yeager and Bundick

(2009) suggest that the reason for this is because teens with an objective "beyond the self" motive may not have integrated their purpose into their identity yet and have not thought through how it matches their talents and abilities. This conclusion is compatible with the idea that purpose needs to take a sense of coherence into consideration and it also underlines why an understanding of self and niche (Steger, 2009) is so vital to the concept of meaning and purpose. It may also, however, reflect the reality that a subjective "beyond the self" concern rooted in a coherent understating of self and niche is as purposeful for the individual as an objective "beyond the self" concern. Thus, seeing purpose and meaning as containing a "beyond the self" concern that can be subjective and implicit in the concept of purpose itself is, in my view, a more viable approach to understanding the multimodal construct of meaning and purpose in life. Duffy, Allan, Bott, and Dik (2014) and Dik, and colleagues (2014) make a similar point with regards seeing one's career as a calling, i.e. if the individual sees their job as fulfilling a calling they will gain the wellness benefits associated with have a calling in life no matter the source of that sense of calling. As Dik and Duffy (2009) point out, calling and purpose are intimately related to each other.

This subjective concept of meaning and purpose opens one to the potential criticism that based on this definition notorious murderers such as Stalin and Hitler could have lived a life of meaning. Indeed, it would not be surprising that both Hitler and Stalin felt a sense of personal meaning in their evil work. It is easy to surmise that in their own demented manner they felt that murdering people was necessary for the greater good. Society and all decent people obviously see this very differently. Whilst this is a worthy discussion to be had, how society defines a life of meaning and purpose is not the topic of this thesis.

It is also important to add two additional caveats here as they relate to my definition of the construct of purpose and meaning. First, Damon (2009) would clearly disagree with the assertion that a "beyond the self" aspect can be subjective. To him, "beyond the self," by its very definition needs to be something that can be objectively measured as having a prosocial and/or an altruistic element to it. Second, and by the same token, Steger would not agree that his definition of meaning that includes the need to have a "sense of one's self, the world, and one's fit within the world" (Martela & Steger, 2016; Steger, 2012) is the same as having a "beyond the self concern." Nonetheless, my contention is that if the individual feels that their purpose contributes to the world beyond the self (Martela & Steger, 2016; Steger, 2012), it ought not make a difference whether others agree or not. In this sense, then, finding one's niche – defined as understanding how one's unique talents and abilities fit into the world – can be seen as having an implicit "beyond the self concern." This definition, then, offers a synthesis between Damon's and Steger's point of view, albeit one that perhaps neither scholar would individually be comfortable with.

In sum, the literature is divided regarding the definition of the construct of meaning and purpose. In addition, there is little agreement on whether meaning and purpose are the same construct or if they can exist independently of each other, and from an empirical standpoint, I could not find evidence that meaning was disparate from purpose (see chapter 2). However, all researchers seem to agree that purpose encompasses deliberate actions that move towards a specific aim. In addition, the benefit of a "beyond the self" focus has been well documented (Seligman, 2002). Thus, whilst acknowledging the controversy surrounding what exactly constitutes purpose as opposed to meaning, etc., and because there is a lack of clarity in the literature

regarding the definitions of meaning and purpose, in this thesis I propose a synthesis of the dichotomous views found in the literature and suggest that purpose in life combines both aspects of "a central, self-organizing life-aim" and a subjective "beyond the self" concern. This would then add both meaning, according to Seligman's (2012) definition, and purpose, according to Kashdan and McKnight's (2009) definition in one. This is the construct of meaning as defined by Steger (2009; 2012) and Wong (2012); yet, this should also satisfy Damon's (2003) definition of purpose.

Henceforth in this thesis, when I use the term "purpose in life" I am referring to the multimodal construct of meaning (a cognitive understanding of the self and where the self fits into the grand scheme of the world), and purpose (a central, self-organized life-aim).

I acknowledge that this definition may court some controversy given that there are scholars who maintain that either purpose is separate from meaning (e.g., Damon) or that purpose is a subcomponent of meaning (e.g., Steger). I also acknowledge that what I am now terming "purpose in life" may seem jarring given that it encompasses that which some scholars (Steger, 2012) describe as only one subcomponent of meaning. Yet given the disagreement found in the literature and the lack of evidence to differentiate purpose from meaning (see chapter 2 and above) this is the definition that seemed most reasonable to this author and consistent with the empirical results of my thesis. It is this synthesized and multidimensional definition of purpose that this thesis is based upon. Thus, the psychometric chapter (chapter 2) attempts to create a short form survey instrument for youth based on this definition, and the intervention chapters

(chapters 3 and 4) tests whether the intervention has fostered a meaning and purpose that fits into this definition of the construct.

Meaning, Purpose and Well-being

Having now discussed the definition of purpose and meaning in life, I now turn my attention to exploring the importance of meaning and purpose in life as it relates to health, wellness and well-being. Purpose and meaning are widely acknowledged by positive psychologists to be important elements of a productive and fulfilling life. Kashdan and McKnight (2009), for example, see purpose as the highest-level construct from which lower-level constructs of well-being such as happiness and flourishing are derived. Even those scholars, such as Seligman (2012), who view purpose as a component of flourishing or overall well-being, see it as a vital part of human flourishing (Huppert & So 2013 Seligman, 2011, p. 26-7). Since this thesis will examine the ability to intentionally foster purpose across multiple age groups I will review the literature with regard to the positive outcomes of having purpose in life, and divide it across the lifespan starting from the elderly and ending with adolescents.

The Impact of Purpose on the Elderly. In a population of community-dwelling older adults, purpose in life has been associated with a reduced risk of all-cause mortality (Boyle, et al., 2009; Sone et al., 2008) and a recent study found that nearly 30% of study participants in the lowest quartile of purpose died over an 8.5 year period compared with 9.3% of those in the highest quartile (Steptoe, Deaton, & Stone, 2015). Purpose also reduced the risk of Alzheimer's disease and mild cognitive impairment as well as reducing the deleterious effects of Alzheimer's pathologic changes on cognitive function for people who already suffered from the disease (Boyle,

et al., 2010) so that they will exhibit better cognitive function (Boyle, et al., 2012). Purpose in life was also associated with a lower chance of having more macroscopic infarcts in an elderly population (Yu, Boyle, Wilson, Levine, Schneider, & Bennett, 2015). Furthermore, there is a general positive relationship between purpose in life and good cardiovascular health (Sone et al., 2008; Skrabski et al., 2005) and it has been shown that purpose in life could be a protective factor against myocardial infarction among high-risk groups with coronary heart disease (Kim, et al., 2013). In addition, purpose has been associated with higher levels of HDL cholesterol, lower hip-waist ratio, and significantly flatter slopes of salivary cortisol (Ryff, et al., 2006), significant reduction in depression (Westerhof, et al., 2010), a significantly lower prevalence of symptoms such as pain and insomnia (Haugan & Moksnes, 2013) and optimal ageing (Woods et al., 2016). In addition, a positive correlation between achievement motivation, social participation, role expectation and purpose in life was found in community-dwelling elderly people (Sano & Kyougoku, 2016).

The Impact of Purpose on Adults. In adult populations, purpose was found to be a significant predictor of overall life satisfaction (Zika & Chamberlain, 1992; Peterson, Park & Seligman, 2005; Thoits, 2012), psychological well-being and Positive Affect, and is negatively correlated with psychological distress (Thoits, 2012) and Negative Affect (Zika & Chamberlain, 1992). There is also evidence that purpose in life protects against mortality risk across adult years (Hill & Turiano, 2014). Purpose was also found to moderate the effect of negative mood as a result of being on trains with people ethnically diverse from themselves (Burrow & Hill, 2013) and it moderates changes in Life Satisfaction due to changes in personal circumstances (Burrow, Sumner & Ong, 2014). Purpose may also be the moderating factor in why religious affiliation

seems to increase happiness and well-being (Wnuk & Marcinkowski, 2014; Aghababaei & Blachnio, 2014). Purpose was also shown to reduce perceived stress amongst menopausal women (Abdelrahman, Abushaikha & al-Motlaq, 2014). In one study, purpose was correlated with an increase in the density of right insular cortex Grey Matter volume, which is negatively correlated with depression, (Lewis, Kanai, Rees & Bates, 2014). Adults with neuromyelitis optica spectrum disorder who had higher purpose in life were shown to perform better on cognitive tests than those less purposeful with the same condition (Hollinger et al., 2016). Purpose has also been shown to have a positive relationship with positive self-concept (Phillips, Watkins & Noll, 1974; Reker, 1977; Bigler & Neimeyer & Brown, 2001). In a controlled study, greater purpose increased oral control in sufferers of Anorexia Nervosa (Tomba, Offidani, Tecuta, Shumann, & Ballardini, 2014) and purpose has been significantly positively linked to self-esteem, a sense of mastery and physical health (Thoits, 2012), as well as with Time Competency, Self-Actualizing Values, Self-Regard and Nature of Man on the Personal Orientation Inventory Scale (Phillips, Watkins & Noll, 1974). Purpose is also associated with ability to overcome life crises and stresses (Debats, Drost & Hanson, 1995; Jim, Richardsons, Golden-Kreutz, & Anderson, 2006; Stevens, Pfost & Wessels, 1987) as well as with impulse control (Burrow & Spreng 2016). Purpose has also been shown to be vital for a successful and fulfilling career (Dik, Steger, Gibson, & Peisner, 2011; Duffy & Dik, 2013). A recent study showed that the well documented positive relationship between religiosity and positive psychological functioning are fully mediated by hope and purpose in life (Aghababaei et al., 2016; Wang, Koenig & Shohaib, 2016).

The Impact of Purpose on Emerging Adults. Studies of college students have shown that a lack of purpose has been linked to chronic boredom and Negative Affect (Fahlman, Mercer, Gaskovski, Eastwood, & Eastwood, 2009), negative worldviews, a lack of transcendent goals (Sharpe & Viney, 1973), depression, lack of inspiration, and external locus of control (Phillips, 1980). In common with depressed individuals, bereaved college students who lack purpose tend to use emotion-focused coping strategies to cope with the death of a significant other (Stevens, Pfost & Wessels, 1987). Purpose in life in college students has been linked to ego resiliency and openness, certainty of college major, certainty of future occupation, courting status (Tryon & Radzin, 1972), fewer symptoms of depression, increased hopefulness (Mascaro, Rosen & Morey, 2004; Mascaro & Rosen 2005; 2006; Phillips, 1980) internal locus of control (Phillips, 1980), current satisfaction with life, future aspirations, competence for self-evaluation, emphasis on intellectualism, responsibility and self-control, being cheerful, broad minded and a de-emphasis on seeking pleasure (Simmons, 1980). Purpose also seems to help mildly depressed students overcome their depression (Simon, Arndt, Greenberg, Pyszczynski, & Solomon, 1998). In a recent study of Chinese college students, it was found that purpose in life leads to lower psychological distress (Wang, Koenig & Shohaib, 2016).

The Impact of Purpose on Youth and Teenagers. Purpose in life for high school students has been linked to higher motivation for academic success (Yeager & Bundick, 2009), greater academic achievement (Pizzolato, Brown, & Kanny, 2011), psychological well-being, positive mental health (Shek, 1992), pro-social concerns (Furrow, King & White, 2004), positive sense of identity (Burrow & Hill, 2011; Erikson, 1994; Bronk, 2011), satisfaction in multiple domains including: family,

friends, school and self (Ho, Cheung & Cheung, 2010), resilience (Furlong, Gilman & Huebner, 2009) and in one recent study purpose in life consistently predicted subjective well-being in youth (Chui & Wong, 2016). Purpose is also an important developmental asset (Scales, & Leffert, 1999), and is linked to a lower impact by negative social and psychological factors (DuRant et al., 1994), a decrease in aggressive and reckless driving in teens (Taubman–Ben-Ari, 2014) and protection from drug use, sedative use, unsafe sex, lack of exercise and lack of diet control (Brassai, Piko & Steger, 2011).

Lack of purpose in teens is correlated with hopelessness, a struggle to develop a set of positive behaviors (Brassai, Piko & Steger, 2012), a likelihood to engage in antisocial and aggressive behavior (Shek, Ma & Cheung, 1994), be addicted to video games (Wu, Lei & Ku, 2013), drug and alcohol abuse (Newcomb & Harlow, 1986; Brassai, Piko & Steger, 2011, psychosocial problems such as alienation and social maladjustment (Ho, Cheung & Cheung, 2010), suicide ideation (Harlow, Newcomb, & Bentler, 1986; Heisel & Flett, 2004). and difficulty in acquiring a motivating belief system later in life (Erikson, 1968; Marcia, 1980). A lack of purpose can also lead to a sense of drift resulting in personal and social pathologies such self-absorption, depression, addictions, deviant and destructive behavior, a lack of productivity, an inability to sustain stable interpersonal relations and psychosomatic ailments (Damon, 1995; Bigler et al., 2001; Damon et al., 2003).

The Need to Increase Purpose. Only twenty percent of youth in the United States have a sense of purpose (Damon, 2009) and less than thirty percent of workers in the United States find their jobs engaging (Blacksmith & Harter, 2011). Given evidence that demonstrates the benefits of leading a life of purpose and the deficits that arise from purposelessness, there is an urgent need for interventions that can intentionally

foster purpose across the lifespan and specific educational programs that can foster individual purpose within an educational framework. Since the 1950s, the explicit teaching of purpose is rarely undertaken (Koshy & Mariano, 2011) and has been largely neglected in adolescent career exploration activities (Kosine, Sterger, & Ducan, 2008). But as Heintzelman & King point out (2014) a construct as vital for human well-being and survival such as purpose should not be so difficult to obtain.

Creating a Purpose-fostering Intervention

Fostering Purpose in Youth and Adults. In this thesis, I will evaluate a purpose intervention which, as will be demonstrated, was designed based on both theoretical and empirical literature. To be clear, the intervention described in this thesis was originally created for youth and thus, many of the ideas and methods used to create the intervention, outlined below, relate to youth. By extension, then, the intervention was also adapted for adults. The youth version of the purpose intervention evaluated was facilitated in schools in keeping with research that students often find purpose at school (Koshy & Mariano, 2011; White, Wagner & Furrow, 2009). In addition, purpose-fostering in a vacuum where a teenager does not have access to other forms of support, encouragement and education opportunities may not have as powerful an impact (Benson, 2008; Dietrich, Parker & Salmela-Aro 2012; Schneider & Stevenson, 1999). For this reason, the optimal way of implementing a purpose-fostering intervention is either in a school or in a youth program that has the ability to offer support for youth. Alternatively, although not a method evaluated in these studies, a purpose intervention for youth intervention can be coached one-on-one or in groups with youth who have a good support system at home (Benson, 2008).

There are many avenues for youth to find purpose; the focus on this intervention, however, is career focused purpose where the young person seeks a potential future career that will be purposeful and meaningful. Given time constraints of a school based intervention methods for fostering purpose was based on aspects that would be part of the curriculum already, i.e. career exploration, and that were informed by empirical evidence. In addition, based on research stated previously about the benefit of purpose for older people, I created a purpose-fostering intervention for adults 50 years and older that will also be evaluated in these studies. The adult version of the intervention similarly seeks to help the individual find meaningful and purposeful activities, hobbies or second careers as they enter the next stage of their lives and does not focus on potential other areas of purpose such as relationships or spirituality (Wong, 2014).

Underpinning of Purpose-fostering Intervention in the Literature. Based on Kashdan and McKight (2009), Steger (2012) and others mentioned above, I defined the construct of purpose as describing a person who has a central, self-organizing, life-aim based on a cognitive understanding of the self, and where the self fits in the grand scheme of the world. A question central to this thesis is whether this type of purpose can be intentionally fostered in individuals. The literature is full of discussion regarding both the definition of the construct purpose and the benefits and deficits that result from being purposeful or from lacking purpose (see above). However, there is little in the literature that describes a comprehensive approach to how purpose can be fostered. In this section, the literature with regards purpose-fostering will be reviewed and a novel and more comprehensive approach to purpose-fostering, upon which the purpose-fostering intervention is based, will be suggested.

Suggestions for Fostering Meaning and Purpose

Frankl. Frankl (1985) writes that it is important to awaken within an individual their *will to meaning*: "We should not, then, be hesitant about challenging man with a potential meaning for him to fulfill. It is only thus that we evoke his will to meaning from its state of latency" (p. 105). But how in fact to do that is not specified in detail besides to say that "each man is questioned by life; and he can only answer to life by answering for his own life; to life he can only respond by being responsible" (p. 131). Explaining this, Frankl suggests that by feeling responsible, the individual can figure out to whom, to what, and for what they are responsible. Knowing this, in turn, adds meaning and purpose to life. To Frankl, therefore, one way of fostering purpose is A. to have a will to meaning, and B. to feel uniquely responsible towards something. Details beyond these generalities, however, were not forthcoming from Frankl.

Campbell's Bliss and Maslow's Self-Actualization. There is a saying often attributed to Confucius that states "choose a job you love, and you will never have to work a day in your life." Along these lines, Joseph Campbell (Campbell & Fiske, 1959; Campbell, 1988; Campbell & Moyers, 2011) famously said that, "My general formula for my students is 'Follow your bliss.' Find where it is, and don't be afraid to follow it." (p. 189). However, as Henderson (2000) has pointed out, Campbell offered mythical metaphors and stories such as "The Hero's Journey," (Campbell, Cousineau & Brown, 1990) to guide people in finding their bliss, yet the actual path to finding bliss remained mysterious and lacked a tangible and reliable guide. Maslow (1973) described bliss as the need for self-actualization. He states that "A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy. What a man can be, he must be. This need we may call self-actualization," (Maslow, 1973, p. 162). Maslow

further suggests that "we do not know much about self-actualization, either experimentally or clinically. It remains a challenging problem for research" (Maslow, 1973, p. 164). Thus, Maslow too was unable to give a step-by-step guide on how one may become self-actualized.

Turning passion into purpose. Much of the popular wisdom with regards turning a passion into a purpose surrounds the idea that if you have a passion for playing sports, for example, then it might be a good idea to try and pursue a purpose in the business of sports, perhaps as a sports agent or the like (Denholm, 2015; Newman, 2011). The problem with this approach seems to be that the business of sports is not the same as playing a sport. A passion for one may not logically translate into the other. Another popularization of this idea comes from Robinson (2009) who suggests that people should strive to live in what he describes as their "element." According to him, the main features of living in one's element includes aptitude and passion, which require both the correct attitude and the right opportunities. Whilst these are broad outlines of how to find one's element, Robinson concurrently suggests that there is no set formula for discovering one's passions and purpose (p. 21-22). Thus, "find your passion" is advice often given to youngsters about pursuing purpose, yet it has some major flaws and is far from a comprehensive purpose-fostering program.

Other researchers and writers have attempted to theorize different avenues and provide a more comprehensive approach for how using passion one may foster purpose in the individual. Benson (2008) also argued convincingly (Damon, 2009) that each human is born with a spark that needs to be developed for them to thrive. Benson describes sparks as, "The hidden flames in your kids that light their proverbial fire, get them excited, tap into their true passions" (p. 2). Benson (2008) also equates "sparks" to

Campbell and colleagues' (1990) concept of "bliss" and suggests a four-step process for helping a teenager discover their spark. Key to this process, as it relates to youth, according to Benson, is discussing passions with one's teenager and giving them the opportunities needed to discover what they may be passionate about (Benson, 2008). Echoing the wisdom popularized by the likes of American mega church leader T.D Jakes and Oprah Winfrey that finding one's passion leads to finding one's purpose, Benson also suggests that finding "sparks" are the "keys to unlocking purpose" (Benson, 2008, p. 18). In Damon's book about youth purpose, he extrapolates upon the theme of sparks leading to purpose, suggesting that parents help their "child gain awareness of a potential 'spark' that could grow into a lasting concern" (Damon, 2009, p. 138). He advises parents to become a type of "Socratic coach" asking questions that draw "out the child's interest…helping them make connections among various issues that already have sparked the child's imagination" (Damon, 2009, p. 138). Damon, thus, makes a direct link between sparks and purpose. Step one, according to Damon, is coaching the teen to find their spark or passions. Thereafter, youth should be coached to see how their passions can develop into a purpose.

Benefits of Having a Passion. It is important for the purpose of this study to emphasize the benefits that youth attain from having a passion or a spark. Benson (2008) conducted a national study of 15-year-olds in the United States ($N = 1817$) to identify the empirical benefits of youth who have a spark. He found that youth who have a spark — coupled with opportunities, usually based on the help of adults in their life, to identify and develop those sparks and also have a sense of empowerment — do better academically, socially and psychologically (Scales, Benson & Roehlkepartain, 2011). Specifically, he found that these students benefited with higher levels in the

following domains: GPA, purpose, mastery of goals, school engagement, ethnic identity, pro-social values, civic engagement values, racial respect, and leadership. They also had less antisocial behavior and they were also more likely to engage in volunteering. Thus, Benson argues that sparks are essential for teenagers and can in fact "save" youth from living a life of disadvantage and risk (Benson, 2008, p. 13). Yet, details of exactly how a passion can develop into a purpose or the mechanism for how that can occur is left unsaid by these scholars and others (Hill, Sumner & Burrow, 2014).

Operationalizing Turning Passion into Purpose. Stepping into this void, Kashdan and McKnight (2009) suggest a model of purpose-fostering and discovery based on interpreting research literature concerning constructs related to purpose such as motivation, self-determination, interests, and meaning in life. They offer three ways in which purpose is fostered: proactive, reactive and social learning (Kashdan & McKnight, 2009). Proactive is defined as from "a deliberate searching and refining process". Reactive refers to the occurrence of "a chance event [which] transforms a person's focus and sense of personal meaning." Social learning means a process of "observing others, noting how the behaviors result in certain outcomes, and associating those behaviors with the recognized outcomes" and resulting in purpose discovery. Hill, Sumner and Burrow (2014) conducted an empirical study on the model of purpose-fostering suggested by Kashdan and McKnight (2009) and found that people who proactively engaged in a purpose discovery process had higher goal commitment than those who found purpose through social learning. They also found that people who found purpose through a reactive process, while having high purpose commitment, were less open to new experiences and had less agency in pursuit of their purpose than

the proactive group. Finally, the social learning pathway to purpose showed the weakest relationship with purpose commitment and other well-being outcomes.

Based on this empirical approach to purpose-fostering it is worthwhile analyzing which of the elements in Kashdan and McKnight's (2009) model would most optimally foster purpose. Clearly it is difficult to intentionally create a process where the individual reactively discovers their purpose, especially given that purpose discovery in this way often happens as a reaction to a traumatic experience. Furthermore, as mentioned, the social learning pathway does not seem to lead to the optimal purpose (Hill, Sumner & Burrow, 2014). Thus, the proactive model for purpose-fostering seems to be the optimal method. Expanding on the proactive pathway to purpose-fostering, Kashdan and McKnight (2009) suggest that exploration, self-reflection and synthesis are vital components that lead to purpose discovery. Although this gives a more solid suggestion for purpose discovery pathways, Kashdan and McKnight offer few concrete suggestions for how one can adapt their model to intentionally foster purpose in a formal purpose-fostering intervention.

Despite there being few concrete suggestions about this, research clearly indicates that a proactive self-exploration and self-discovery process can lead to purpose discovery. Using Campbell, Cousineau & Brown's idea of bliss (1990) and Benson's idea of "Sparks" (2008) together with Kashdan & McKnight's, (2009), idea of proactively searching for purpose in life, the framework for a purpose discovery intervention starts to gain shape. In addition, if people can identify their passions in a proactive self-discovery process and see how those passions can manifest into a purpose, they will benefit from the value associated with having both a passion and purpose. Given this, the purpose intervention used in these studies first takes the

individual through a self-discovery process where they uncover their passions, and then explore how those passions can manifest into a purpose in life.

Using Self Determination Theory (SDT) to Help Foster Purpose. Before further elaborating on the basis for the intervention, it is important to note that SDT is a fundamental pillar upon which the purpose intervention was built. SDT is one of the most researched and empirically supported theories of human motivation and posits that there are two types of human motivation: intrinsic and extrinsic (Deci, 1975; 1985; Ryan & Deci, 2000). Intrinsic motivation refers to the motivation to do an activity for the sake of the activity itself. Extrinsic motivation is when someone carries out an activity to receive something external to the activity itself such as money or recognition. According to SDT, central to intrinsic motivation is the fulfillment of three fundamental psychological needs: relatedness, competency and autonomy. *Relatedness* is the concept of connectedness to others and having a sense of being cared for and caring for others as well as a sense of belonging. *Competency* refers to the ability to be effective and having opportunities to express one's abilities and capacities. *Autonomy* is the feeling and perception that one is the origin of one's own choices and behavior (see Deci & Ryan, 2002 for reviews). Studies with regards to classroom learning have shown that teachers who encourage autonomy help students reach greater levels of intrinsic motivation, curiosity and desire for challenge (Ryan & Deci, 2000). Furthermore, there is evidence that people whose careers are guided by extrinsic motivators were less satisfied, less dedicated and had less vitality for their job than those who were intrinsically motivated (Vansteenkiste, Neyrinck, Niemiec, Soenens, Witte & Broeck, 2007). In addition, those individuals who have an extrinsic work orientation were shown to have worse job outcomes because their extrinsic motivation

detracted from their needs for autonomy, competence and relatedness (Vansteenkiste et al., 2007).

The idea of having an intrinsically motivated goal that is created in a manner that feels autonomous is congruent with the concept discussed above; that people ought to make educational and career decisions based on an understanding of themselves and their passions. Thus, the purpose-fostering intervention is designed to be autonomy-enhancing, and its end goal is the discovery of an intrinsically motivated purpose that is based on the individual's unique passions. To this end, survey instruments are hardly used in the intervention. Instead, participants are put in the driving seat of their own self-exploration starting with listing their passions. Thus, in this intervention an introspective model, shown to be an essential ingredient in self-knowledge (Hixon & Swann, 1993) is used. It should be noted that the method of self-reflection used in the intervention is directed towards gaining self-insight – something that has been linked to increased well-being – rather than rumination that is often linked to less positive outcomes (Stein & Grant, 2014).

Discovering Harmonious Passions, Avoiding Obsessive Passions. It is important to note that the passions discussed here are harmonious passions as opposed to obsessive passions. According to Vallerand (2010) and Colleagues' (2003), harmonious passions refer to the activities people enjoy doing and that fit well into all the other elements of their lives while obsessive passions are passions that completely take over an individual's life and they feel compelled to carry out, leaving little room for other aspects of life such as relationships and recreational activities. Research has shown that whilst having harmonious passions leads to positive affect, concentration and flow, obsessive passions were correlated with experiencing negative affect and

conflict with other aspects of life (Marsh and Vallerand et al., 3013; Vallerand et al., 2003).

Operationalizing turning Passions into Purpose: Aspects of Passions. The intervention used in these studies operationalizes the notion of turning passions into a purpose in the following manner. Passions are examined and broken down into their smaller parts and components. Participants are coached to ask themselves what aspects of their passions they especially enjoy. The analogy used is food. People enjoy different types of foods because they contain flavors and textures that they are used to and enjoy. They may enjoy a diverse array of foods, but when broken down, those foods will often share similar flavors and textures (for reviews see Beauchamp & Mennella 2009; Szczesniak, 2002). Flavors are universal concepts that transcend particular foods. Thus, whilst lasagna, for example, is not pizza, it shares common flavors with other foods such as pizza and spaghetti. In a similar manner, an aspect of a passion is a universal element that transcends the particular passion and also exists in other activities. People have a passion for an activity because that activity contains elements and aspects that they enjoy. For example, an individual may have a passion for skiing, but when they break it down into which aspects of skiing they enjoy, it may be the thrill, the challenge and the solitude (skiing being an activity that is mostly not done in a team and often done alone). These aspects can also be found in other activities that the individual may have a similar passion for. Some individuals might enjoy reading, for example, as part of their enjoyment of solitude. They may enjoy the challenge inherent in puzzles and they may enjoy skydiving which induces thrill. These aspects can also relate to potential careers. Knowing that solitude, for example is an aspect of a passion may help them consider a career that does not involve interactions with many people. For the

person for whom thrill is an important aspect of their passions, a career in the police may be a potential fit. Often an individual with diverse passions will find that many of their passions contain similar aspects. Once they discover the aspects of their passions that makes them enjoy that activity, they can then seek a purpose that contains similar aspects. In summary, by breaking passions down into aspects, one can then use the aspects to find a future purpose that relates to their spark, bliss or element. This then operationalizes the concept championed by Campbell & Moyers (2011), Maslow (1973), Robinson (2009), Benson (2008) and others of turning a passion into a life-long purpose. This idea is a central component of the purpose discovery intervention tested in these studies.

Abstract and Concrete. As part of self-exploration in the purpose intervention, participants were asked to assess their passions and the various aspects of their passions and to then assess overall whether they are more concrete or abstract. For this intervention, *concrete* referred to the desire to understand or experience that which is whilst *abstract* referred to the desire to create something new. The idea that people have core personality traits has long been a fixture of psychology (Costa & McCrae 1992; McCrae & Costa, 1987). There is also evidence that an individual's personality traits will have an impact on their thinking and ideology. Thus, for example, research consistently shows that those with a liberal ideology are creative, novelty-seeking, curious and open-minded, whilst people with a conservative ideology seek order, are conventional, and are more organized (for reviews see Carney, Jost, Gosling, & Potter, 2008). In a similar fashion, these ideas are used as a device in my purpose intervention. Participants are encouraged to conduct introspection and ascertain if their passions are influenced by their desire for creativity (abstract) or their desire for order and

understanding (concrete). Thus, as part of the self-exploration process, participants are asked to judge their passions and aspects to determine whether they are primarily motivated by a desire for creativity or for a desire for order and understanding. A participant who has a passion for art may find that the aspect they enjoy of art is the creative process and henceforth judge themselves as being more *abstract* in nature. A person with a passion for crossword puzzles may find that the aspect they love most is the desire for problem solving and thus judge themselves to be more concrete in nature. Participants analyze all their passions and aspects in this manner and are then asked to place themselves on a scale that is a continuum from left to right or, concrete and abstract.

This formulation of abstract and concrete is not entirely new to the field of career development theory. Holland's (1966) hexagon of vocational personality types includes artistic and conventional personality types. Artistic is defined as people who value aesthetic qualities and creativity and are innovative, open (Pike, 2006). This is in line with my definition of abstract as to the desire to create something new. Conventional personality types are conforming, orderly, and methodical and enjoy establishing and maintaining orderly routines while avoiding ambiguous or unstructured activities (Pike, 2006). This is akin to my definition of concrete as desire to understand or experience that which is. Thus, whilst the titles may be different, the ideas behind this structure to understanding underlying vocational desires are not new.

Shape discovery leads to niche finding. As suggested by Steger (2009) and Wong (2010), purpose is part of a process where the individual understands himself or herself, and based on that, finds a place where he or she uniquely fits in the world and

then pursues that niche as their purpose (Steger, 2009; Wong, 2010). Thus, part one of the intervention helps the individual identify their "shape" based on their passions and character strengths. Part two guides them to figure out where their "shape" uniquely fits in the world and what they are able to uniquely contribute to the universe as their purpose.

Autonomy Enhancing Intervention. As mentioned with regards Self Determination Theory (SDT) autonomous choice and decision making are vital parts of successful human motivation. The introspective self-discovery process discussed above is designed to be as autonomy enhancing as possible; participants are not diagnosed by a survey instrument, neither are they given pre-prepared answers. The entire process comes from within themselves so that they can make a discovery on their own in an autonomous manner about what motivates them intrinsically.

Other Elements That Research Suggest Fosters Purpose in Youth. The intervention was originally created to help foster purpose in youth. By extension, it was used in an adult study, the description and results of which are also found in this thesis. Thus, within the literature there are studies that investigate purpose and describe other elements that have been instrumental in helping increase sense of purpose in life within youth in particular (see Bundick, 2011; Koshy & Mariano, 2011; Shamah, 2011 for reviews). Whilst these strategies do not represent an overarching or complete purpose discovery framework, when I designed my purpose discovery intervention I incorporated those strategies as well. The following (Table 1) lists a summary of purpose-fostering approaches primarily for youth that are found in the literature and that were incorporated into the intervention used in these studies.

Table 0.1

List of Elements that Foster Purpose

Item Number	Elements That Research Suggests Fosters Purpose
1	In-depth discussion about purpose (Bundick, 2011; Koshy & Mariano, 2011)
2	Entire school communities, staff, families and students should engage in the purpose discovery process (Koshy & Mariano, 2011)
3	Long-term approaches to purpose interventions are needed rather than one-stop lessons. (Bundick, 2011; Koshy & Mariano, 2011)
4	Teachers should integrate purpose discovery into classes (Koshy & Mariano, 2011)
5	Positive youth development (Eccles & Gootman, 2002; Koshy & Mariano, 2011)
6	Experiential and service learning activities (Koshy & Mariano, 2011; Shamah, 2011)
7	Goal-directed activity and engagement with like-minded peers and adults (Koshy & Mariano, 2011)
8	Goal identification (Koshy & Mariano, 2011)
9	Individuals reflect on how current activities relate to purposeful goals (Koshy & Mariano, 2011)
10	Seeing connection between classroom and the community (Koshy & Mariano, 2011)
11	Identifying the steps needed to achieve purposeful goals (Koshy & Mariano, 2011; Schneider & Stevenson, 1999)
12	Individuals must be active in finding their purpose. Purpose cannot be found for them (Dik, Steger, Gibson & Peisner, 2011; Mascaro & Rosen, 2005, Yalom, 2002)
13	Knowledge of tools needed to reach purposeful goals (Koshy & Mariano, 2011; Schneider & Stevenson ,1999)
14	Seeing a direct path leading to purposeful goals (Koshy & Mariano, 2011; Schneider & Stevenson, 1999)
15	Interacting with adults who are more educated or have jobs that differ from parents (Kashdan & McKnight, 2009; Shamah, 2011).
16	Exposure to adults who model purpose and encourage them to pursue theirs (Kashdan & McKnight, 2009; Shamah, 2011)
17	Proactively engaging in a purpose finding process (Hill, Sumner & Burrow, 2014).
18	Meaningful activity increases a sense of purpose in life (Eakman, 2014)
19	A will to meaning (Frankl, 1985)

Basis for Intervention for Career and Identity Development. The method used in my purpose intervention also uses the best practices and ideas that have emerged from Career Development Theories. As various theorists have pointed out, people searching for purpose are often searching for it in the form of a meaningful and purposeful future career (Lanz, Rosnati, Marta, & Scabini, 2001; Yeager & Bundick, 2009). It is therefore important that any purpose finding intervention incorporates aspects and best practices from Career Development Theory. Dietrich, Parker and Salmela-Aro (2012) argue that overall there are four career development theories.

1. Savickas' career construction theory (Savickas & Lent 2002; Savickas, Brown & Lent 2005)
2. Hirschi's (2013), Hirschi and Lage's (2007), and van Esbroeck Tibos, and Zaman's (2005) models of career decision making
3. Vondracek and Porfeli's (2008) developmental-contextual model and Ford's motivational systems theory (Ford, 1992).
4. Young and Colleagues' (2008) model of joint action projects.

My purpose finding intervention takes into account elements from all of these career development theories.

According to Savickas (Savickas & Lent 2002; Savickas, Brown & Lent 2005) there are four dimensions of an adaptive individual as they relate to career readiness and coping:

1. Career Concern: This means that the individual is future minded and has a concern for how what they do today will impact their career prospects tomorrow.

2. Career Control: This is where the individual actively and autonomously makes their own career-related decisions, and is intentional about what they do and how they do it.
3. Career Curiosity: This is where the individual goes through a process of self-discovery and career exploration and learns how they might fit into the world around them.
4. Career Confidence: This refers to career self-efficacy where the individual has the confidence that he or she can succeed at the given career.

Elsewhere, (Savickas, 2002) terms item number three "career conception" and he describes this stage as, "when the curiosity that prompts children to explore who they are and what they want eventually ends in questions about the meaning of life and how it should be lived" (p. 170). Savickas (2002) describes exploration as the "chief coping behavior" for teenagers and the emerging adult ages 14-24 (p. 172). Savickas (2002) breaks down the career exploration stage during these years into three key types:

1. Crystallization: individuals undertake in-breadth self-exploration, leading to the development of their self-concepts. This then leads to career exploration and finally to the development of a vocational self-concept.

2. Specification: this is where an individual specifies vocational choices and then undertakes in-depth exploration of them. This helps the individual create a narrative where their understanding of themselves and their self-perception leads to a self-concept that can manifest itself in a public vocational self-concept. This step is important for comparisons of alternatives leading to the declaration of a vocational choice (Savickas, 2002, p. 174-175).

3. Actualization: This is where individuals take concrete actions in implementing their chosen career. In youth, this is often during the school-to-work transition (Savickas, 2002, p. 176-177). As I will show below, the purpose intervention helps participants go through all of these stages of career exploration and adaptability.

Savickas' theory is elaborated on by Hirschi (2013) and Hirschi and Lage (2007) in their six-phase model of career decision-making, which is:

1. Awareness: becoming concerned about career decision-making.
2. Self-exploration, based upon which they then gather careers that may fit.
3. Narrowing down the number of careers so that a more in-depth exploration of the career can take place.
4. Deciding which of the remaining few one will choose.
5. Confirming the choice and developing commitment towards it.
6. Making a firm decision and full commitment to the career choice.

Like Savickas (2002), Hirschi and Lage (2007) also maintain that career decision-making should contain two parts: in-breadth career exploration and then in-depth career exploration. In-breadth career exploration during adolescence has been shown by empirical research to have positive implication for future job satisfaction and congruence (Blustein, Phillips, Jobin-Davis, Finkelberg, & Roarke, 1997; Dik & Duffy, 2009, Dik & Duffy, 2012).

The purpose intervention operationalizes all the above aspects of Career Exploration Theory and also facilitates both in-breadth and in-depth career exploration (for reviews, see Dietrich, Parker and Salmela-Aro, 2012).

There is significant evidence that career development interventions have positive impacts on youth. For reviews, see meta-analyses done on this topic by Whiston, Li, Mitts, and Wright (2017) and Brown (2017).

Purpose Intervention and Identity Formation. Research in adolescent identity, as it relates to career development, suggests that exploration and commitment result in identity formation. Furthermore, youth stick to their career goals better based on a career exploration that is done in combination with firm career commitments rather than simply the intensity of the exploration itself (Luyckx, Goossens, Soenens & Beyers, 2006). As I will show below, in the purpose intervention, career exploration is connected directly with the making of firm and purposeful career commitments (for reviews, see Dietrich, Parker and Salmela-Aro, 2012).

Appropriate Engagement and Disengagement. Young people often set inappropriate and unobtainable goals for themselves (Schneider & Stevenson, 1999). When this occurs, they need to disengage with the previous goals and engage in appropriate goals that are attainable. Dietrich, Parker and Salmela-Aro (2012) consider this to be part of what they term Phase-Adequate Engagement. Although these authors are referring to the context of a post-high school transition, clearly this type of disengagement and engagement should be done at any appropriate time and stage. By helping individuals discover their passions and find a purpose in life that includes a career or vocational goal, my purpose intervention helps them disengage from goals that may be unrealistic and inappropriate and instead re-engage in realistic goals that are based on their passions.

Purpose Intervention and Aligned Ambitions and Plans. Schneider and Stevenson (1999) found that most teenagers did not have aligned ambitions. Misaligned

ambitions are described by Schneider and Stevenson (1999) “as students with high ambitions but no clear life plans for reaching them, these 'drifting dreamers' have limited knowledge about their chosen occupations, about educational requirements, or about the future demands of these occupations” (Schneider & Stevenson, 1999, p. 7). Students with aligned ambitions on the other hand are “described as knowing the type of job they want and how much education is needed to get it” (Schneider & Stevenson, 1999, p. 6). My purpose intervention is designed to help participants align their ambitions so that they can see their live as sequentially organized.

Purpose Intervention and Mentoring. There are numerous accrued benefits when an adult supports a student who is pursuing his or her passion and purpose in life (Benson, 2008; Scales, Benson, & Roehlkepartain, 2011). However, my purpose intervention attempts to go a step beyond by ensuring that there is positive adult support for the young person and their purpose in life. The developmental benefits of having a good and reliable mentor for youth are well documented (DuBois & Karcher, 2005; DuBois & Silverthorn, 2005; Grossman & Rhodes, 2002; Rhodes & Rhodes, 2009; Zimmerman, Bingenheimer, & Behrendt, 2005).

Purpose and Self-Concept. In the theoretical literature, career curiosity, where the student undergoes self-exploration and discovers through career exploration how he or she might fit into potential careers, is the most important element of career adaptability (Savickas & Brown, 2002; Savickas, Brown & Lent, 2005). As part of their career exploration, the individual develops their self-concept, which, according to this theory, also leads to finding meaning and purpose in life (Savickas & Brown, 2002). Thus, in the theoretical literature, finding meaning and purpose in life is directly related to a positive change in self-concept. Some empirical studies confirm that purpose in life

is correlated with a positive change in self-concept (Phillips et al., 1974; Reker, 1977; Bigler & Neimeyer & Brown, 2001).

An ability to influence self-concept using a purpose intervention would potentially have a large impact on high school students. For as Marsh, Byrne and Yeung (1999), suggested and was subsequently demonstrated by Guay, Marsh and Boivin, (2003) there is a reciprocal effect between self-concept and academic achievement. Marsh suggested (1999) there might be a mediating factor between prior self-concept and subsequent academic achievement. Testing this theory Marsh, Trautwein, Lüdtke, Köller and Baumert, (2005) suggested that academic interest might play the role of being a mediating factor. However, when they tested this in practice, they found that academic interest only had a small mediating effect. O'Mara and Marsh (2006) therefore concluded that the effect of self-concept and academic achievement are indeed reciprocal—to have a sustained impact, teachers need to work on improving self-concept and simultaneously improving academic achievement. Academic achievement can be improved with differing teaching methods and academic programs. Although self-concept is not easily amenable to manipulation by direct interventions (O'Mara & Marsh, 2006), studies on self-concept and physical fitness enhancement interventions (Marsh & Peart, 1988) and Outward Bound Programs (Marsh, Richards & Barnes, 1986a, 1986b; Marsh & Richards, 1988) as well as a meta-analysis of self-concept interventions show that intervention relevant dimensions of self-concept can be improved with targeted interventions for those individual dimensions (O'Mara, Marsh, Craven & Debus, 2006). Thus, as a student finds a purpose for a career in a specific field, the academic self-concept that is associated with that career may also increase (Savickas, 2002; Savickas & Brown, 2002; Savickas, Brown & Lent, 2005). I therefore

expected to see an increase in self-concept as it relates to the dimensions of self-concept that are needed for the purposeful career choice ultimately chosen. Now that I have demonstrated the theoretical and empirical basis for the intervention we will demonstrate how the intervention method makes use of it all.

The Intervention

The purpose intervention was designed based on grounded theory, experience, research and empirical evidence (outlined above) that relates mainly to youth. I hypothesized, and the results of the studies found in this thesis suggest, that the same methods will work, and hold true across the lifespan. I, therefore, conducted a study to ascertain the effect and efficacy of an adaptation of the youth intervention when used for an adult sample (see chapter 3). The two key differences between the youth intervention and the adult intervention are: 1. The online tool used for the adult intervention contains video instructions. 2. The youth intervention only contains career exploration whereas the adult version offers both career exploration and post retirement vocational opportunity exploration (Kim, 2012; Dorfman, 2012).

In the following pages, I outline the intervention as well as how each part of the intervention fits in with the theoretical and empirical literature as it relates to the fostering of purpose. See also the workbook in the appendixes of this thesis for actual exercises that participants completed in the intervention; also in the appendixes are lesson plans that coaches used for the youth version of the intervention. In addition, links to videos are added in the appendix.

The purpose intervention includes the following steps and activities:

Step 1 - Realizing That You Have a Unique, Positive Purpose. In this step, participants are coached through in-depth discussions/reflections and activities based upon the idea of purpose. These sessions help participants realize that there is a potential for them to live a life with purpose and that they have something unique to contribute. It also incorporates Frankl's idea that the "will to meaning" needs to be inspired from its state of latency mentioned in the first section of the theoretical basis for the intervention. This also satisfies item numbers 1 and 19 on the 19 items youth purpose-fostering list.

Step 2 - Listing Your Passions. In this step, participants are coached to make a list of their passions. This is done by asking open-ended questions, which allows them to look deep inside themselves to find the activities that they are passionate about and that they love to do. This exercise helps them identify their "sparks" or "passions." Participants then analyze each of their passions to determine the "aspect they enjoy" of each passion (explained above. p57-59). Once participants have identified all their aspects, they are coached to go one step deeper and analyze each aspect to find the "essence" of their passions. Participants are then coached to determine if each "aspect" and "essence" is *Abstract* or *Concrete* (see explanation above in the section titled "Abstract and Concrete"). Finally, participants take the Values in Action Character Strengths Assessment (Peterson, & Seligman, 2004) and note their top ten character strengths. This completes the process of discovering the "dimensions of their shape."

This incorporates the ideas mentioned by Benson (2008) and Damon (2009) about sparks and purpose. It also is in keeping with Steger (2009) and Wong's (2012) definition of purpose in life. This is also found in Savickas' (2002) "Career Curiosity"

and Hirschi and Lage's (2007) six stages of career decision making. This step satisfies items 3, 4, 12 and 18 in the 19 items purpose-fostering list.

Step 3 - Discovering Purpose. In this step, participants match "dimensions of their shape" (aspects, essences and character strengths) discovered in step 2 with a corresponding shape that exists in the universe in terms of a career or post retirement opportunity (Kim, 2012; Dorfman, 2012). Participants then visualize each vocation on their list and rank them on a scale of 1-10 to see how passionate and excited they feel about each one and how well each fits their "shape." This helps the participant narrow down their list after their in-breadth career exploration process. This step satisfies item 8, 17 and 18 on the 19 items purpose-fostering list in section 3. This is also in keeping with career development theory in regard to in-breadth exploration and narrowing the list down (Hirschi & Lage, 2007).

Step 4 - Informational Interview. Participants find professionals in fields that scored 8 or higher in their visualizations to conduct informational interviews. In the adult version, participants have the choice of either taking part in an informational interview or if that is not possible, they have an option of doing an informational worksheet as part of their in-depth exploration. The idea of the interviews/worksheets is for participants to conduct in-depth exploration of the career or opportunities they think might be a manifestation of their purpose in greater depth to make sure it fits them perfectly (Hirschi & Lage, 2007). This step satisfies item 6 and 18 on the 19 items purpose-fostering list.

Step 5 - The Road Map. In this step, participants chart a "Road Map" that is a comprehensive plan of action that details how they will reach their purposeful goal. It specifies the education, connections, knowledge and actions they will need to reach

their purposeful goal. This step satisfies items 9, 10, 11, 13, 14, 15, 16 and 18 on the 19 items purpose-fostering list. This is also in keeping with findings mentioned by Schneider & Stevenson (1999) of the benefit of having a fully developed plan.

Step 6 – The Age of Purpose. Step six is where the participants inform their friends that they also have a purpose and should try and live a purposeful life. This encourages what some have called an "Age of Purpose" (Damon, 2009). This step was not tracked in either of the intervention studies.

Schools, Teacher, Coaches and Family as Purpose Supporters. Once participants have identified a long-term goal they are passionate about and see as their purpose, it then becomes a part of their educational plan. As such, if they are high school students, everyone who comes into contact with them in school and at home is informed of what their purpose is, and together they become a support network for the student to achieve their purposeful goals. This fulfills item number 2 on the 19 items purpose-fostering list. This also gives the student the benefits, mentioned above, of having mentors. This element was also not tracked in either of the intervention studies.

Although this intervention is intended to foster a sense of situational meaning and purpose by helping the intervention participants find a career-focused or post-retirement purpose, it is important to clearly state the limitations of such an intervention. There are many potential additional sources of meaning and purpose in life, including personal relationships, self-acceptance, spirituality, self-transcendence, positive attitude in the face of suffering, appreciation of beauty, sense of achievement and many other aspects that are correlated with purpose and meaning and are enumerated at the start of this chapter. It is entirely possible that an intervention that contained elements that would individually try to foster all the other correlates of

meaning and purpose would also increase purpose in life and would be worthwhile. Any future intervention should consider adding those elements. It was my contention, however, that by fostering a career focused meaning and purpose and a post-retirement meaning and purpose I would also detect an increase in the constructs that research shows correlates with meaning and purpose.

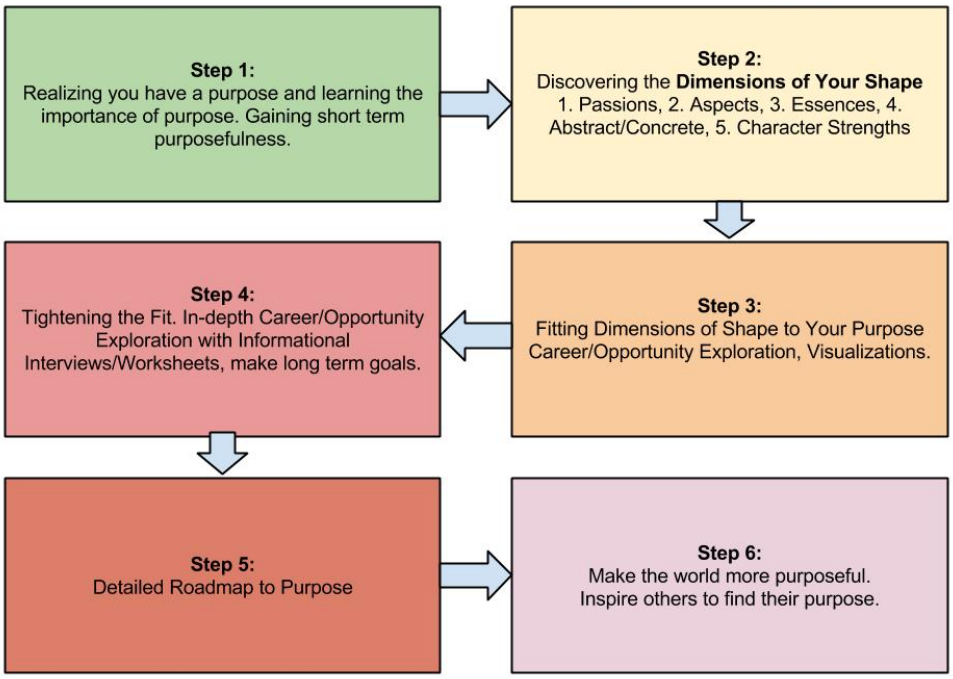


Figure 1.1. Flow of Intervention.

Summary

I have given an overview of the differing approaches to how purpose in life is defined in the literature and suggested that meaning and purpose are really two ways of expressing the exact same underlying construct that I will from now on refer to as purpose in life. I also argued that by defining purpose in life as having a "central self-organizing life-aim" that fits in with a deep understanding of self and the world around the self, it will contain an implicit, albeit subjective, beyond the self element.

I also demonstrated the importance of having purpose in life especially for older adults and youth. The deficits associated with not having purpose in life was also enumerated. Based on this I reviewed the disparate elements found in the literature that together show how, using an all-encompassing purpose in life fostering intervention, purpose in life can be intentionally fostered within the human condition. I then described how such an intervention would work in actuality.

The rest of this thesis involves testing the hypothesis that using such an intervention can indeed foster purpose in life. Key to that, I hypothesized that there would be an Aptitude Treatment Interaction (ATI) where people who start lower on purpose in life would benefit more from the purpose in life intervention than those who self-identify as high on that construct, (for reviews about ATI see Cronbach, Snow, 1977; Snow, 1991).

To do that I first needed to be able to accurately test for purpose in life. Once a valid survey instrument to test for purpose in life was found or created I set up several experiments to test my hypothesis that purpose in life can be intentionally fostered. Thus, the next chapter deals with the psychometric evaluation of survey instruments that are designed to measure purpose in life. In the end a new survey instruments emerges that is made up of select items from the other instruments and can measure more of the domain space of purpose in life than any of the instruments independently. The other two chapters describe the experiments, one on an adult population and another in a high-school setting, to test whether propose in life/meaning in life can be intentionally fostered using the intervention described in this chapter.

There is a sequential connection between the next three chapters in that they deal with measuring purpose in life and then using those measures to test an intervention to foster purpose in life. Nonetheless, I chose to present each of them in a manner that allows then to be read as standalone self-contained papers. Thus, each of the chapters have their own abstract and introduction as well as discussion section. All of this will be complemented by a final chapter that will offer a discussion and conclusion section that will cover the entire thesis. This style is designed to make it easier for the reader to follow the overall flow of the thesis and allow the reader to read each section as relatively self-contained.

Chapter 2: Measuring Purpose

Abstract

Context. In the previous chapter the vital importance for well-being of having purpose in life/meaning in life was discussed, both as it relates to youth and to adults. In addition, based on the literature, I proposed a design for a purpose-fostering intervention. Before that purpose-fostering intervention can be studied to appraise its effectiveness, it is vital that any survey instrument used to evaluate the outcome variables are psychometrically valid. It is well known, for example, that invalid surveys result in unreliable, irreproducible results (Collins, 2003; Gordis, 1979; Litwin, 2003; Marsh, 1981). This study, therefore, focuses on ensuring that all surveys used for the main outcome variable are reliable and properly validated. Furthermore, at the time of the implementation of these studies, there were no survey instruments that measured purpose in life/meaning in life that were properly validated on a youth population. In addition, the current general instruments that measure purpose were designed to cover individual aspects of the domain space of the construct of meaning and purpose. This psychometric study was designed to create an instrument that incorporated many of the existing instruments and create one common core instrument that covered the full conceptual space that existed in the individual instruments.

Design, Setting, Participants. The overall design of this psychometric study was to collect data from youth within the age range of those who would participate in the purpose-fostering treatment studies. This would then allow me to use the instruments that were found to be valid on that age group with greater confidence. Those ages were 14-17. To conduct this psychometric study, data was collected from

youth in several ways. First, I partnered with a Qualtrics Purchase Respondents service (Qualtrics, 2005), which allowed me to target a population with a specific age range for data collection (n = 514). Using this service, I targeted youth ages 14-17 to take the surveys of interest online. Second, data were collected from students of the schools who participated in the school study (n = 264). Third, data were collected from additional schools, and youth groups where studies were attempted but the intervention did not end up being implemented (n = 510). The total sample size used in these psychometric studies was n = 1288.

Interventions. Youth were asked to answer a series of survey instruments related to purpose in life/meaning in life.

Results. The results showed that some of the well-known purpose in life/meaning in life instruments lack validity when administered to this population. However, the most well-validated meaning in life instrument, the Meaning in Life Questionnaire (MLQ) (Steger, 2009), was also valid with a youth population. In addition, I validated a new purpose instrument that covered a common core of the domain space of the constructs of purpose in life/meaning in life.

Conclusion. Not all instruments that claim to accurately measure the construct of purpose in life/meaning in life do so, from a psychometric perspective. Thus, before embarking on a study to evaluate the efficacy of a treatment it is important that the instrument to be used to evaluate dependent variables is validated using the population of interest first.

Introduction

This chapter aims to analyze how purpose in life/meaning in life is defined and measured from an empirical standpoint when it comes to a youth population. In particular, this chapter contains the following research aims:

1. To ascertain whether factor structures suggested by authors of purpose in life/meaning in life instruments are supported in an adolescent sample.
2. To explore whether negatively worded survey items within purpose in life/meaning in life measures cause method effects that impact validity in a youth sample.
3. There has been a debate amongst scholars regarding whether meaning and purpose are two elements that make up the construct of meaning in life and purpose in life (Huppert and So, 2013; Kashdan and McKnight, 2013; Shek, 2012; Steger, 2009) or if they are two distinct, albeit related constructs (Cotton Bronk, 2009; Damon, 2009). This study aims to explore this question from an empirical standpoint specifically as it relates to youth.
4. To create a short version of a purpose in life/meaning in life scale that includes the entire multi-elemental domain space of the construct of purpose in life/meaning in life.

Before beginning to explore these research aims and prior to enumerating my research questions in detail, I will first outline various instruments, both scales used in the present study and those omitted, that are designed to test for purpose in life/meaning in life.

Instruments Analyzed

Scales Used in this Study. Three of the four measures analyzed in this study, the Life Engagement Test (Scheier et al., 2006), the Meaning in Life Questionnaire (Steger, 2006) and the Short-Form purpose subscale of the Psychological Well-being Scale (Ryff, 1989), were created and designed for adults. Yet, these scales have also been used extensively in studies assessing youth purpose (see Bundick & Tirri, 2014), and until very recently, none of these scales have been psychometrically analyzed for use on adolescents (see Rose, Zask, & Burton, 2016). Thus, I will give an overview of these scales first.

Ryff's Psychological Well-being (RPWB) Purpose in Life Subscale. There are four versions of Ryff's Psychological Well-being (RPWB) Scale (Ryff, 1989), all of which claim to measure the following six constructs: Self-acceptance, Positive Relations with Others, Autonomy, Environmental Mastery, Purpose in Life, and Personal Growth. The longest version has 120 items (20 per construct), another version contains 84 items (14 for each construct), the medium length rendition has 54 items (nine items per construct; the purpose subscale was used in this study), and the short version has 18 items (three per construct). In their analysis of all the six subscales together, the authors of this scale found that each subscale loaded well on its own factor when there was one higher order factor present (Ryff & Keyes, 1995). In this study, I test the purpose in life subscale taken from the medium length version of the RPWB.

The RPWB has been used widely in many studies and settings including large population studies. For example, it has been used in the United States National Survey of Families and Households (Sweet & Bumpass, 1996), the Midlife study in the United States (Brim, Ryff, & Kessler, 2004), the Canadian Study of Health and Aging (Clarke,

Marshall, Ryff, & Wheaton, 2001), and the English Longitudinal Study of Ageing (see Banks, Batty, Nazroo, & Steptoe, 2012). Similarly, the RPWB has been used in well-known smaller scale studies, such as in the study of body consciousness (McKinley, 1999), the life challenges study (McGregor & Little, 1998), the midlife work aspirations study (Carr, 1997), the outcomes of therapeutic interventions study (Fava et al., 2005) and the Lighten UP study (Friedman, Ruini, Foy, Jaros, Sampson, & Ryff, 2017).

Nonetheless, the psychometric properties of the RPWB are unclear, despite numerous psychometric studies that analyzed its multi-dimensional factor structure (Abbott et al. 2006; Abbot et al., 2010 Burns & Machin, 2009; Cheng & Chan, 2005; Clarke et al., 2001; Kafka & Kozma, 2002; Lindfors, Bertsson, & Lundberg, 2006; Ryff & Keyes, 1995; Springer & Hauser, 2006; Van Dierendonck, 2004; Van Dierendonck, Diaz, Rodriguez-Carvajal, Blanco, & Moreno-Jimenez, 2008). The reason for this seems to be the fact that there are several versions of the RPWB measure in circulation of various lengths, from 18 items to 120 items. All of these contain items that overlap to varying degrees, making it difficult to get an accurate assessment of the overall psychometric properties of the instrument(s).

Whilst there has been some support for the *a priori* six factor structure of the entire RPWB, cross loadings between factors as well as high inter-factor correlations have also been reported, leading some to suggest the existence of one higher order factor with six lower level factors (Clarke et al., 2001; Springer & Hauser, 2006). Investigations to improve model fit have since been conducted. Strategies that have been used for this include dropping items that cross load and/or have low factor loadings as well as strategies that take negatively worded item method effects into

consideration (Abbott et al., 2006; Abbott et al., 2010 Burns & Machin, 2009; Cheng & Chan, 2005; Springer & Hauser, 2006).

To date, no study has been conducted solely on the purpose in life subscale of the RPWB with adolescents, despite the fact that it has been used in numerous studies of purpose that involve youth (see Bundick & Tirri, 2014).

RPWB purpose items.

1. I live one day at a time and don't really think about the future. (reverse coded)
2. I tend to focus on the present, because the future always brings me problems. (reverse coded)
3. My daily activities often seem trivial and unimportant to me. (reverse coded)
4. I don't have a good sense of what it is that I am trying to accomplish in my life. (reverse coded)
5. I used to set goals for myself, but that now seems a waste of time. (reverse coded)
6. I enjoy making plans for the future and working to make them a reality.
7. I am an active person in carrying out the plans I set for myself.
8. Some people wander aimlessly through life, but I am not one of them.
9. I sometimes feel as if I've done all there is to do in life. (reverse coded)

The Life Engagement Test (LET). The Life Engagement Test (LET) was designed to measure purpose in life (Scheier et al., 2006). The authors of the LET defined purpose in life as the extent to which an individual partakes in activities and works towards goals that they find personally valuable. LET contains six items, three positive (items 2, 4, and 6) and three negative (items 1, 3, and 5).

Psychometric investigation of the LET was conducted by Scheier and colleagues (2006) on samples of older community-dwelling men and women who participated in a study on infectious disease, as well as on female osteoarthritis patients and their spouses, and on a group of women transitioning through menopause. Thus far, no study has been conducted to test the validity of the survey instrument specifically on youth.

In their studies, Scheier and colleagues (2006) conducted exploratory factor analyses on the LET using eight samples ranging in size from 86 to 511 participants, and based on principle component analysis and selecting eigenvalues >1, they found that a one-factor solution was a good fit for the data and accounted for between 43% and 62% of the variance among the items. They also found high factor loadings, between .57 and .86 and averaging .71, for all six items across all their samples. The only measure of fit that was reported, however, was Cronbach's alpha, which ranged from .73 - .83 in their samples. Based on the evidence that indicated that the LET is a well validated measure that tests important aspects of purpose in life, I used the scale in my analysis.

LET purpose items.

1. There is not enough purpose in my life. (reverse coded)
2. To me, the things I do are all worthwhile.
3. Most of what I do seems trivial and unimportant to me. (reverse coded)
4. I value my activities a lot.
5. I don't care very much about the things I do. (reverse coded)
6. I have lots of reasons for living.

The Meaning in Life Questionnaire (MLQ). The Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi & Kaler, 2006) is one of the most widely used and validated purpose and meaning scales. It was designed to include two factors, one that addresses a sense of presence of purpose (MLQ-P), and the other that concerns the degree to which an individual is searching for purpose (MLQ-S). Each factor has five items. Steger and colleagues (2009) found support for the factors of MLQ-P and MLQ-S, with factor loadings between .63 and .77. Fit indices in three different samples ranged from acceptable to excellent, with RMSEA = .04 - .094, CFI = .93 - .99, and TLI = .91 - .98. Cronbach alpha levels for both subscales were also good, ranging from .86 to .88, and the authors also found good discriminate and convergent validity for these scales (Steger, Frazier, Oishi & Kaler, 2006). Recently, the MLQ was validated on a small (n=135) Australian adolescent population (Rose, Zask, & Burton, 2016). In that sample, standardized factor loadings for both subscales were good, ranging from .51 - .80 and fit was acceptable to good, with indices reported as $\chi^2 = 73.93$, $p < .001$; SRMR = .10; and CFI = .92. This indicates that MLQ is a solid scale that measures purpose and meaning in life and works well with both adult and youth populations.

MLQ Items.

1. I understand my life's meaning. (MLQ-P)
2. I am looking for something that makes my life feel meaningful. (MLQ-S)
3. I am always looking to find my life's purpose. (MLQ-S)
4. My life has a clear sense of purpose. (MLQ-P)
5. I have a good sense of what makes my life meaningful. (MLQ-P)
6. I have discovered a satisfying life purpose. (MLQ-P)

7. I am always searching for something that makes my life feel significant. (MLQ-S)
8. I am seeking a purpose or mission for my life. (MLQ-S)
9. My life has no clear purpose. (reverse coded) (MLQ-P)
10. I am searching for meaning in my life. (MLQ-S)

Adolescent Personal Style Inventory (APSI). The Adolescent Personal Style Inventory (APSI; Lounsbury, Saudargas, & Gibson, 2004) was designed especially for youth and its sense of identity subscale has also been used extensively in studies to test for meaning and purpose in life (Bundick & Tirri, 2014). The complete APSI contains 118 items and includes subscales that test the following constructs: aggression, agreeableness, career decidedness, conscientiousness, emotional stability, extraversion, openness, optimism, self-directed learning and sense of identity, work drive, and tough-mindedness (Gibson, Lounsbury, & Saudargas, 2004). The APSI sense of identity subscale contains many of the ideas that are seen in the literature as contributing to a sense of purpose, such as values and morals (Heine, Proulx, & Vohs, 2006) and understanding of self and fit in the world (Steger, 2012; Wong, 2012). Lounsbury Huffstetler, Leong and Gibson (2005) describe the sense of identity subscale as containing the following elements: a sense of who one is, personal values, purpose in life, knowing what one wants out of life and where one is headed. It is, therefore, plausible to suggest that this subscale is a measure of purpose in life/meaning in life, and it has been used widely by practitioners to measure purpose in adolescence as well as sense of identity accordingly (see Bundick & Tirri, 2014).

APSI sense of identity items

1. I have a definite sense of purpose in life.
2. I have a firm sense of who I am.
3. I have a set of basic beliefs and values that guide my actions and decisions.
4. I know what I want out of life.
5. I have a clear set of personal values or moral standards.
6. I don't know where I fit in the world. (Reverse coded)
7. I have specific personal goals for the future.
8. I have a clear sense of who I want to be when I am an adult.

Measures Not Included in the Present Study

There are three other well-known purpose in life scales that I did not use, which are: The Purpose in Life Test (PIL; Crumbaugh, 1968; Crumbaugh & Maholick, 1964), the Life Regard Index (LRI; Battista & Almond, 1973), and the Sense of Coherence Scale (Antonovsky, 1987). Below, I explain in detail why these scales were not used or analyzed in my studies.

Purpose-in-Life (PIL) Test. The PIL test is described by its authors as a 20-item instrument meant to quantify neurosis driven by existential frustration and thereby assess the degree of experience of meaning and purpose in life (Crumbaugh & Maholick, 1964). This instrument has been described as "somewhat awkward and bulky" (Harlow, Newcomb, & Bentler, 1986) and was therefore revised in 1987 (Harlow, Newcomb, & Bentler, 1987). In a subsequent psychometric analysis, it was found that not all items in the PIL test represented the construct of purpose (Marsh, Smith, Piek, & Saunders, 2003). In their meta-analysis of psychometric studies of the

PIL test, Schulenberg and Melton (2010) showed that a one factor model using all of the questions did not fit the data (RMSEA = .07, CFI = .88, TLI = .87), and neither did a two factor model that used various subsets of the questions (fits ranged from RMSEA = .08 - .12, CFI = .83 - .93, TLI = .80 - .90). In addition, the one subset of the items from the PIL test that demonstrated a better fit (RMSEA = .07, CFI = .95, TLI = .93) only did so when 10 of the 20 items were maintained (Schulenberg & Melton, 2010). Given the inconsistency of validation of this scale, together with the fact that some maintain that many of the items tap constructs other than purpose in life (Steger, Frazier, Oishi & Kaler, 2006), I decided not to include the PIL test in this analysis or in any of my studies

Life Regard Index (LRI). The LRI was created by Battista and Almond (1973) to measure how people actually experience purpose in life/meaning in life, without relying on a theoretical framework that offers a perceived notion of what purpose in life/ meaning in life actually is in the experience of the individual. They called this *positive life regard*, a construct which describes "an individual's belief that he is fulfilling a life-framework or life-goal that provides him with a highly-valued understanding of his life," (Battista & Almond, 1973, p. 140). Note that this is conceptually similar to the idea that I presented in the previous chapter of this thesis relating to a subjective representation of purpose in life versus an objective conceptualization of purpose in life/meaning in life defined by scholars. The LRI is meant to measure this more subjective construct of purpose in life and consists of 28 items containing two subscales of 14 items each designed to measure the framework and fulfillment parts of life regard. Both contain positively worded and negatively worded items in equal measure. However, a full factor analysis of the LRI showed that

even when divided into multiple factors and when taking positive and negatively worded items into consideration, the best fit was poor, with RMSEA = .09, CFI = .78, and TLI = .74 (Steger, 2007). The conclusion drawn by Steger (2007) is that psychologists should be cautious in their use of the LRI in both research and in psychotherapy. The reason Steger (2007) gives for this cautionary warning is that the scores on the LRI, as found in his psychometric analysis, did not reflect the expected structure as described by the instrument's authors. Thus, Steger (2007) suggests that how the authors interpreted the fit of the scale may be deficient, rendering the scale invalid. Others have come to similar conclusions with regards this scale (Chamberlain & Zika, 1988; Debats, Van der Lubbe, & Wezeman, 1993; Harris & Standard, 2001; Van Ranst & Marcoen, 1997). Given its questionable validity overall, I chose not to include the LRI in these studies.

The Sense of Coherence Scale (SOC). The SOC scale was devised by Antonovsky (1979; 1987) in order to address the following three factors: understanding life outside of the individual (cognitive) ability to manage the situation (behavioral), and meaningfulness (motivational). These three together, according to Antonovsky, form a sense of coherence. Coherence is an important element of purpose in life/meaning in life and is often used to measure meaning and purpose in life (Steger, Frazier, Oishi & Kaler, 2006). Antonovsky (1979) describes the SOC scale as a 29-item instrument that covers a number of dimensions meant to assess the view individuals take of life while experiencing stress, and how they then pinpoint and utilize inner coping mechanisms to preserve and advance their health and well-being to overcome stress. A high sense of coherence, according to this thinking, translates into a notion that life is meaningful, manageable and comprehensible. In a systematic review of

validity studies, the SOC scale has been shown to be reliable (Eriksson & Lindström, 2005). However, I chose not to use the SOC scale in this study because analysis has shown that, while a sense of coherence translates into a sense of meaning and purpose, the SOC scale is really a measure of general coping resources and does not test directly for coherence, nor for purpose or meaning in life (see Sammallahti, Holi, Komulainen, & Aalberg, 1996; Steger, Steger, Frazier, Oishi & Kaler, 2006).

The Present Investigation

To address the research aims and answer the research questions below, the present investigation analyzed the Ryff Psychological Well-being Purpose subscale (RPWB), The Life Engagement Test (LET), The Meaning in Life Questionnaire (MLQ) and the Adolescent Personal Style Inventory (APSI) Sense of Identity subscale.

Research Questions. Following a restatement of the research aims below are the research questions that I propose in service of reaching these aims.

1. Finding the factor structure of purpose in life/meaning in life measures in a youth sample.
2. Exploring whether negatively worded items impact factor structure in a youth sample.
3. Finding whether meaning and purpose are two elements that make up the construct of meaning in life and purpose in life or if they are two as some have argued.
4. Creating a short version, entire domain space purpose scale for youth.

Research Question 1. Do preexisting purpose in life/meaning in life instruments have a well-defined factor structure that is supported in a youth sample in a manner

that is consistent with the original factor structure designed by the instrument's author? If it does not, what is the underlying factor structure for that population?

Background to research question. There are multiple instruments that claim to measure purpose in life/meaning in life, but very few, if any, have been designed and validated especially for youth. Often researchers in the social sciences who want to measure a dependent variable will search for a survey instrument that claims to measure that variable. But as has been pointed out, "Bad surveys produce bad data, that is, data that are unreliable, irreproducible, or invalid or that waste resources" (Litwin, 2003, p. 1). Similar observations have been made by Gordis (1979), Marsh (1981), and Collins (2003). It is, therefore, vital that any survey used in a study is reliable and properly validated. Furthermore, a scale validated for one population does not necessarily translate well for another demographic containing disparate fundamental character traits. It is well known, for example, that different groups will interpret words in surveys differently (see Warnecke et al., 1997). This also applies to children and adolescents versus adults (Borgers et al., 2000). As De Leeuw, Borgers, and Smits (2004) point out, for adolescents age 12 and older, aside from the obvious cognitive and cultural differences they have compared to adults, peer pressure also plays a large role for them. All of this could cause youth to understand and answer survey questions differently, especially when around peers. It is therefore important that questionnaires designed for a general population are subjected to pretesting before being used exclusively with youth. Thus, it is reasonable to suggest that popular purpose in life surveys, most of which have not been validated exclusively with a youth population, will not maintain their factor structure when tested on adolescents.

Of particular interest in this study is the Sense of Identity subscale of the APSI, which has been evaluated on the level of scale scores, and has been subjected to convergent and discriminate validity validation. As such, it has been shown to correlate highly with other identity scales, such as with Bennion and Adam's (1986) Identity Achievement Subscale (r =.80), and White, Wampler and Winn's (1998) Identity Commitment subscale (r = .60). Furthermore, according to Lounsbury, Huffstetler, Leong, & Gibson, (2005). Alpha for the Sense of Identity Scale was .84. However, a review of the literature (Lounsbury, Gibson, & Hamrick, 2004; Lounsbury, Gibson, Sundstrom, Wilburn, & Loveland, 2003; Lounsbury, Hutchens, & Loveland, 2005; Lounsbury, Loveland, & Gibson, 2003; Lounsbury, Steel, Loveland, & Gibson, 2004; Lounsbury, Sundstrom, Loveland & Gibson, 2003; Lounsbury, Tatum, et al., 2003) reveals that the Sense of Identity subscale of the APSI has not been subjected to EFA or CFA at the item level. Given the fact that this instrument has not been properly validated, one might suspect that the factor structure is more complex than the authors suggest. Yet, given that many of these items are related to purpose in life, it is also reasonable to suppose that many of these questions will, together, form a solid factor structure that relates to purpose in life/meaning in life. Thus, directly related to this research question, I will seek to find whether the APSI Sense of Identity subscale holds up and finds support when subjected to a full psychometric analysis on a youth sample.

Research Question 2. Do negatively worded items in the purpose in life/meaning in life instruments of interest contain method effects that impact validity?

Background to research question. As demonstrated by Marsh (1986), surveys that contain negatively worded items will be interpreted significantly differently by children than positively worded survey questions. Borgers et al. (2004) showed that this

also extends to adolescents. Thus, based on the preponderance of negatively worded items in many of the purpose in life/meaning in life scales and based on previous studies (Borgers et al., 2004; Marsh, 1986), which suggested that negatively worded items are often interpreted differently by youth and children, I suspected that the original factor structure for at least the Ryff Psychological Well-being (RPWB) purpose subscale and the Life Engagement Test (LET) instruments would not hold up in the youth sample. I hypothesize that this will be at least in part because of negatively worded item method effects. Based on this contention, I hypothesized that the MLQ, conversely, which only has one negative item, is likely to have a more sustainable factor structure across all populations.

Research Question 3. Are purpose and meaning two separate, albeit related constructs or are they really one construct?

Background to research question. As has been amply demonstrated in the previous chapter, Kashdan and McKnight (2009) and Damon (2009) see meaning and purpose as separate constructs. George and Park (2013) also argue that whilst purpose and meaning are closely related, they should be seen as two separate constructs. Meaning, according to them, is having coherence in life, a sense that life makes sense and is significant. Purpose, conversely, according to them, is the idea of having goals and a direction in life. They argue that whilst one can have a strong purpose in climbing the career ladder, for example, such a purpose may not give life a sense of meaning. Wong (2012) and Steger (2012), however, see purpose as a vital element of meaning and argue that the two are indistinguishable from one another. I hypothesize, as mentioned previously, that meaning and purpose are two elements that make up one multi-elemental construct of meaning in life and purpose in life. In fact, they should be

very highly correlated with one another. This psychometric study endeavored to find evidence for or against this hypothesis in order to bring clarity to the research question.

Research Question 4. Can a short form purpose in life scale be created that provides a theoretically and psychometrically sound global measure of purpose in life/meaning in life?

Background to research question. Good surveys produce important information and insights into a topic of interest. Bad surveys simply yield bad data. Any study of the effectiveness of an intervention must use valid measures and survey instruments that adequately reflect the intended underlying construct. Ever since Frankl wrote about the importance of purpose in life/meaning in life for the healthy functioning of human life, there have been several attempts at creating appropriate measures to test for purpose and meaning. As was demonstrated in the first section of this thesis, there is much disagreement amongst scholars regarding what represents the domain space of purpose in life/meaning in life (see Damon, 2009; Damon et al., 2003; George and Park 2013; Kashdan & McKnight, 2009; Martela & Steger, 2016; Reker & Wong, 2012). Reflecting this disagreement, the survey instruments that measure purpose often measure different elements of the purpose in life/meaning in life domain space. Studies have shown that it is possible to take a longer survey instrument and make it shorter while maintaining its construct content (Maïano et al., 2008; Marsh et al., 2005; Marsh, Martin & Jackson, 2010). It is reasonable to assume that this method can also be used to take multiple purpose in life/meaning in life items from several different measures that represent dichotomous elements of the construct, and create a coherent short form measure that covers a much larger amount of the domain space of purpose in life/meaning in life.

Methods

Participants. Of the 1288 participants over the course of the study, 126 (9.78%) chose not to disclose their age. The mean age of those whose age was known was 16.55 years (*SD* = 2.2) and the median age was 16.20 years. Fifty-five percent of participants (226 people) did not give the grade in which they were enrolled. Of those who did, 211 were in 12th grade, 190 were in 11th grade, 413 were in 10th grade, 244 were in 9th grade, and 4 were in 7th grade. Approximately 10% of students chose not to provide their gender. Of those whose gender was known, 693 were male and 469 were female.

Missing Data. A portion of the participants completed only some of the scales. Thus, some of the instruments had fewer responses than others. To accommodate this missing data, Full Information Maximum Likelihood Estimation (FIML) was used in Lavaan (Rosseel, 2012) package in R (R Development Core Team, 2008; Becker, Chambers, & Wilks, 1988). FIML has been shown to be the most robust approach in a Structural Equation Model procedure (Enders, 2008; Graham, 2003; Enders & Bandalos, 2001). In addition, it has also been shown that FIML and multiple imputations would produce similar results if both models included similar distributional assumptions and the relationships amongst the variables was set to be the same (Collins, Schafer, & Kam, 2001). Thus, FIML was used for missing data.

Analysis. A full psychometric analysis of each of the instruments using Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) was conducted. This analysis was pertinent to answering my research questions: whether pre-existing purpose in life/meaning in life instruments are valid for a youth population (research question 1); what impact negatively worded items have on scale validity (research question 2); whether purpose and meaning are one or two constructs (research

question 3); and whether a short form purpose scale can be created from scales that cover multiple elements of purpose in life/meaning in life (research question 4).

Testing Authors' Stated Factor Structure. At the beginning of the analysis of each scale, the *a priori* factor structure specified by the instrument's author was tested in a Confirmatory Factor Analysis (CFA) using the Lavaan (Rosseel, 2012) package in R (R Development Core Team, 2008). This allowed me to test whether the original factor structure, as tested by the instrument's author, held up on a youth population (part one of research question 1). To this end, Cronbach's alpha (Cronbach, 1951) was also tested. However, because Cronbach's alpha is not the ultimate barometer of unidimensionality (Cortina, 1993), it was not used as the only test of validity and was compared to other measures of fit as well.

Exploratory Factor Analysis (EFA). If the *a priori* factor structure specified by the instrument's author did not hold up I embarked on an EFA to determine factor structure (part two of research question 1). Before conducting a full EFA, various methods were used for extracting how many factors existed within the data. Kaiser's criterion (Kaiser, 1960), suggests that only factors with eigenvalues >1 should be retained, whereas Jolliffe's criterion (Jolliffe, 1986) suggests that factors with eigenvalues > .7 should be retained. The commonly used and recommended technique for factor extraction (Hayton, Allen, & Scarpello, 2004; Garrido, Abad, & Ponsoda, 2013), however, is Horn's (1965) Parallel Analysis. Other methods include scree plots (Cattell, 1966). In my studies, all these methods were used. When results from factor extraction were inconclusive, a full EFA was conducted, taking the variety of results into consideration (Ruscio & Roche, 2012). For factor loadings, I used the .3 rule in the EFA (Osborne & Costello, 2009), and loadings < .3 were considered poor. In the EFA,

all rotations were oblique as I assumed that, given that I was dealing mostly with measures that were supposed to represent a single factor, all latent factors would naturally be correlated with each other (Pedhazur & Schmelkin, 2013, p. 615). As part of the EFA, where appropriate, a Target Rotation was carried out to clarify a hypothesized factor structure.

Confirmatory Factor Analysis (CFA). Confirmatory Factor Analysis (CFA) is similar to an EFA in the sense that it finds observed relationships between indicators that represent a smaller set of latent factors. The difference is that in a CFA one begins with an *a priori* opinion of what the factor structure should look like (Brown, 2015). Thus, in this study, a CFA was conducted when, through an EFA or by substantive reasoning, I had an already-developed idea of factor structure. For CFA, Hair and colleagues (2006) suggested that standardized loading estimates should be .5 or higher, and ideally .7 or higher. The former is the guideline I used in these studies.

Fit indices. Based on Marsh, Martin, and Jackson (2010; see also Marsh, Balla & Hau, 1996; Marsh, 2007; Marsh, Balla, & McDonald, 1988; Marsh, Hau, & Wen, 2004), I used the Tucker–Lewis Index (TLI), the Comparative Fit Index (CFI), and the Root Mean Squared Error of Approximation (RMSEA) to evaluate goodness of fit. I also reported the $\chi 2$ test statistic while taking into account the fact that its results are affected by the number of parameters in the model as well as the sample size. TLI and CFI can score anywhere from 0 to 1 where results > .90 are considered an acceptable fit and > .95 represents an excellent fit to the data. Furthermore, Marsh and colleagues (2010) suggest that while no golden rule exists for RMSEA, a score < .06 reflects a reasonable fit, whilst a RMSEA > .10 represents a poor fit to the data.

Negatively worded item method effects. In cases where the scales under analysis contained negatively word items, I followed the assumption suggested by Marsh and colleagues (2010) where they showed that negatively worded item method effects are stable over time. This contention supported the response style hypothesis, which posits that people inherently answer negatively worded items differently than positively worded items (Schimitt & Allik, 2005). The other approach to negatively worded items, which Marsh and colleagues (2010) found little evidence for, is the artifact hypothesis, which suggests that these types of method effects are fleeting and not stable. Thus, Marsh and colleagues (2010) conclude that "it is incumbent upon the developers, advocates, and users" (Marsh Scalas & Nagengast, 2010, p. 380) of measures with negatively worded items to run multiple models that check for negatively worded item method effects before accepting a single or multiple factor solution to such an instrument. Given this, I ran numerous models to attempt to discover whether wording was resulting in a method effect on scales with multiple negatively worded items and, therefore, was negatively impacting the fit.

Thus, to find out whether the negatively worded items were causing a method effect (research question 2), I used more sophisticated models such as second order models (Rindskopf & Rose, 1988), bi-factor models (Morin, Arens, & Marsh, 2016) and incomplete or partial bi-factor models (Chen, West, & Sousa, 2006) that partition out the method effects, as suggested by Marsh, Scalas and Nagengast (2010). This strategy was also helpful because the scales analyzed in these studies are all purpose scales and this strategy was more effective in testing more sophisticated models of unidi1mensionality.

The methods outlined by Marsh, Scalas and Nagengast (2010) to evaluate wording method effects is based on a mulititrait-multimethod (MTMM) approach and uses two primary methods: The Correlated Uniquenesses (CU) approach and the Latent Method Factor (LMF) strategy. The CU strategy places correlations between negatively and/or positively worded items, whilst the LMF approach inserts method factors that capture the variance found amongst items of that method (i.e., positively or negatively worded items). The CU strategy therefore partials out the method effects by taking some of the variance that is shared amongst those items and allowing the rest to load on the main trait factor. The LMF approach suggests that there are other method factors (positive and/or negatively worded items) that, when taken into consideration with the main trait factor, can lead to a better fit of the data, thus showing that the methods impact overall fit.

Using these CU and LMF methods, Marsh (1996) and Marsh, Scalas and Nagengast (2010) fit multiple models to identify negatively worded item method effects which, when accounted for, may result in a better fit. In this study, I followed that same approach. Thus, I attempted to fit the data to the following eight models (see Figure 1.1). Model 1 was a one factor trait model. Model 2 was a two factor model with negatively and positively worded items as two trait factors. Model 3 was a one factor trait model with correlated uniquenesses between the positively worded items as a group and between the negatively worded items as a group. Model 4 was a one factor trait model that has correlated uniqunesses only amongst the negatively worded items. Model 5 was a one factor trait model with correlated uniqunesses only amongst the positively worded items. Model 6 was a bi-factor model with all items as a global trait factor and two positively and negatively worded item latent method factors. Model 7

was a partial bi-factor model (Chen, West, & Sousa, 2006) with one global trait factor and one negatively worded method factor. Model 8 was one global trait factor and one positively worded item method factor. As Marsh, Scalas and Nagengast (2010) pointed out, these eight models are helpful in assessing whether a method effect associated with the negatively and/or positively worded items is causing problems with fit.

I used a bi-factor, rather than a second order approach here because empirical studies have shown that a bi-factor approach usually leads to better fit with the data and is also easier to interpret from a substantive point of view (Chen, West, & Sousa, 2006). In addition, a bi-factor approach is also very effective in identifying method effects or nuisance factors (see Stucky & Edelen, 2014). Most importantly, however, I used a bi-factor rather than a second order approach because I was mostly only dealing with two factors, and in that case a second order model is not identifiable without additional constraints, such as setting the two factor loadings from the second order factor to be identical. Therefore, second order models are not recommended when there are only two lower order latent factors.

Results

Ryff Psychological Well-being (RPWB), Purpose subscale. Because the authors (Ryff & Keyes, 1995) maintain that this scale tests one factor of purpose in life, I initially tested for Cronbach's alpha of internal consistency and it was in the good to moderate range at .78. I then conducted an analysis specifying a one factor model. This analysis resulted in a very poor fit to data; *df* for the model was 27 with $\chi^2 = 552.18$, $p = <.000$, CFI =.73, TLI = .645, RMSEA = .155 [90% CI = .143, .166]. Items seven and eight all loaded very poorly on the factor (see Table 1.1).

These results showed that the RPWB purpose scale as used with this population did not represent one factor. I concluded that for this population there was more than one factor in this instrument. I then conducted a Parallel Analysis using Maximum Likelihood, which suggested that there were as many as four factors in the measure. Eigenvalue analysis suggested that there were only two factors. The first factor had an eigenvalue of 2.7 with SD of 1.8 and explained 37% of the variance, and the second factor had an eigenvalue of .7 and SD of 1.2 and explained 17% of the variance. Given the inconclusive nature of these results I conducted a full Exploratory Factor Analysis (EFA).

*EFA***.** I first conducted an EFA that extracted two factors. This analysis resulted in a poor fit to data; *df* for the model was 19 with χ^2 = 266.7022, p = <.000; CFI =.92, TLI = .85, RMSEA = .10 [90% CI = .09 .11] (see table 2). Items seven and eight now loaded well onto the second factor, but items two, four, six and nine had moderate loadings on factor one and item six was cross loading (see Table 1.1).

This indicated that an EFA extracting three factors may result in a better fit with the data. Doing so resulted in an excellent fit, with the three factor model having 12 degrees of freedom with χ^2 = 94.93, p = <.000, CFI =.97, TLI = .92, RMSEA = .07 [90% CI = .06, .087] (see Table 1.2). The loadings were still not optimal, with items four and nine not loading higher than .48 on any of the factors. Many other items were also cross-loading (see Table 1.1). Thus, it seemed that whilst a three factor model was the best fit for the data, number 4 (“I don't have a good sense of what it is that I am trying to accomplish in my life.”) was still problematic and cross loaded on all three factors, and other items did not load in an optimal fashion on their respective factors.

I therefore tried a target rotation with an oblique rotation, after which item four loaded better on the third factor and cross loaded less on the other factors (see Table 1.1). Thus, based on the EFA analysis I concluded that on this population, the RSWB purpose subscale is better modelled using three factors, as distinct from the one factor suggested by the authors and tested on an adult population.

Factor identification. In an attempt to answer the second part of research question 1 regarding the content of the factor structure, I found that from an empirical perspective the RPWB purpose subscale contained three factors. However, from a substantive vantage point the underlying factors were more difficult to decipher. The substantive factors were as follows:

Factor 1:

1. I live one day at a time and don't really think about the future. (rs)

3. My daily activities often seem trivial and unimportant to me. (rs)

5. I used to set goals for myself, but that now seems a waste of time. (rs)

6. I enjoy making plans for the future and working to make them a reality.

This factor seems to be referring to future-mindedness (items 1 and 6), goal-setting (item 5) and meaningful current activities (items 3).

Factor 2:

7. I am an active person in carrying out the plans I set for myself.

8. Some people wander aimlessly through life, but I am not one of them.

This factor seems to relate to future-mindedness (item 7) and the meaningfulness of current activities (item 8).

Factor 3:

9. I sometimes feel as if I’ve done all there is to do in life. (rs)

2. I tend to focus on the present, because the future always brings me problems. (rs)

4. I don't have a good sense of what it is that I am trying to accomplish in my life. (rs)

This factor seems to address lack of meaningful current activities, lack of goal setting and lack of future mindedness.

Table 1.1

Factor loadings for Ryff Psychological Well-being Purpose Subscale for Exploratory Factor Analysis

	One Factor Model	**Two Factor Model**		**Three Factor Model**			**Three Factor Model Target Rotation**		
Item	**1**	**1**	**2**	**1**	**2**	**3**	**1**	**2**	**3**
RPWB 1	**.61**	**.67**	-.15	**.54**	-.17	.23	**.52**	-.21	.21
RPWB 2	**.52**	**.51**	.06	.13	.12	**.58**	**.7**	-.09	.12
RPWB 3	**.76**	**.77**	-.02	**.70**	-.07	.15	**-.71**	.08	-.12
RPWB 4	**.59**	**.51**	.26	.27	.29	**.38**	**.77**	.24	**-.33**
RPWB 5	**.77**	**.78**	0	**.72**	.05	-.15	-.04	**.83**	.12
RPWB 6	**.50**	**.43**	.3	**.69**	.23	-.28	.03	**.60**	.08
RPWB 7	.21	-.03	**.87**	.04	**.84**	.05	.02	.06	**.64**
RPWB 8	.21	.04	**.59**	.03	**.61**	.02	.21	.25	**.43**
RPWB 9	**.46**	**.46**	.02	.13	.07	**.48**	.05	.02	**.53**
SS	2.71	**2.6**	**1.32**	**2.07**	**1.29**	**1.06**	**1.99**		
Cor 1		**1**	**.19**	1	.25	.44	1	.21	.62
Cor 2		.19	1	.25	1	-.02	.21	1	.03
Cor 3				.44	-.02	1	.62	.03	1

Note. RPWB = The items in the Ryff Psychological Well-being purpose subscale; SS = Variance in all variables accounted for by the factor; Cor = Factor correlations.

Table 1.2

Fit measures for Ryff Psychological Well-being Purpose Subscale

Models	χ^2	p-value	*df*	CFI	TLI	RMSEA	SRMR
One Factor	552.2	.00	27	.73	.66	.15 [90% CI .14, .17]	.12
Two Factors	266.7	.00	19	.92	.85	.10 [90% CI .09, .11]	.05
Three Factors	94.9	.00	12	.97	.92	.07 [90% CI .06, .09]	.02

Note. DF = Degrees of freedom for the model; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation; SRMR = Standardized Root Mean Square Residual.

Based on this, all the factors overlap with each other substantively and reflect the same three underlying elements: meaningfulness of activities, goal setting, and future mindedness. Thus, from a substantive perspective, these three factors were not well defined. However, two of these factors contained mainly negatively worded items. As noted in research question 2, it was therefore germane to assess whether a negatively worded item method effect may be present.

CFA. Before attempting to answer whether there was a negatively worded item method effect, I first evaluated whether the three factor model would work in a CFA. I tested the same factor structure that seemed to fit the data in EFA moderately well. The loadings seemed to do well (see Table 3); however, the fit (CFI = .88, TLI = .82, RMSEA = .099 - .122; see Table 6) was considerably poorer than that found in the EFA. Based on this, I concluded that a simple three factor model was not an optimal fit for the data from both a substantive and an empirical perspective. I then moved on to explore whether a negatively worded method effect was impacting the fit.

Negatively worded item method effect. Based on fit indices from the CFA above, it was clear that a simple three factor solution was not a good fit for the data. I hypothesized (research question 2) that due to the large number of negatively worded items in the scale there might be a negatively worded item method effect occurring that caused the three factor model to fit poorly in the CFA. It is well known that negatively worded items can cause a negative item method effect especially in youth (Marsh, 1986; Borgers, Sikkel & Hox, 2004).

Table 1.3

Standardized Factor Loadings for Confirmatory Factor Analysis of Three Factor RPWB

	Three Factor Model		
Item	Factor 1	Factor 2	Factor 3
RPWB 1	.62		
RPWB 3	.78		
RPWB 5	.79		
RPWB 6	.50		
RPWB 7		.77	
RPWB 8		.65	
RPWB 2			.58
RPWB 9			.51
RPWB 4			.68
Cor 1	1	.18	.8
Cor 2	.18	1	.42
Cor 3	.8	.42	1

Note. RPWB = The items in the Ryff Psychological Well-being purpose subscale; Cor = Factor correlations.

Results. A summary of factor loadings and fit indices for all the models is provided (see Tables 4 and 5). As was expected from the EFA, Model 1, which suggested a one factor model, was a very poor fit for the data and had problematic factor loadings for all positively worded items. Items 6 and 7 loaded < .3 and item 8 loaded <.5. Model 2, which suggested a two factor model (one positive and one negative), had decent to good factor loadings but was a poor fit to the data. This indicated a positively and negatively worded item factor and a method effect. The poor fit, however, indicated that in addition to the method effect there may have been additional factors to take into consideration that would better explain the data. Model 3 assessed a model which correlated uniquenesses between positively and negatively worded items in addition to a global factor. This bi-factor model accounted for one global purpose factor, and two independent factors, one positive and one negative, which could explain some of the method effects. This resulted in an excellent to good fit for the data. Whilst the TLI, which penalizes many parameters in the model, was low, the CFI was excellent at .95. This provided evidence of a one factor model plus negatively and positively worded item method effects.

Models 4 and 5, which were identical to model 3 but only with correlated uniquenesses on the negatively worded items (Model 4) or the positively worded items (Model 5), had less desirable factor loadings and provided a poor fit to the data. This suggested that the method effect that existed was related to both negatively and positively worded items. Model 6 was a bi-factor model that had a global trait factor and two negatively and positively worded method factors and resulted in an excellent fit to the data, and this time the TLI was also higher (.89). Despite this, items 2, 7 and 8 loaded poorly (< .30) on the global factor and the rest mostly only loaded moderately

well on the global factor (see Table 5). Thus, the addition of the positive and negative method effects resulted in a good fit to the data and they also explained much of the variance of the positive items (Model 5), as well as some of the variance of the negatively worded items (Model 4). This suggests that the RPWB purpose subscale is a lack of purpose scale. Realistically, however, it shows that the scale is corrupted by wording issues that don't allow it to accurately measure the construct at hand: purpose in life.

Models 7 and 8, which were partial bi-factor models that only took either negatively (Model 7) or positively worded (Model 8) item method factors into consideration, did not result in as good a fit to the data as Model 6. This strongly indicated a one factor model that is severely impacted by method effects related to wording.

Table 1.4

Factor loadings for Confirmatory Factor Analysis RPWB

	Model 1	Model 2		Model 3	Model 4	Model 5	Model 6			Model 7		Model 8	
Items	Factor 1	Neg	Pos	Factor 1	Factor 1	Factor 1	Neg	Pos	Glob	Neg	Glob	Pos	Glob
RPWB 1 Neg	.61	.62		.76	.04	.63	.34		.54	.65	.34		.63
RPWB 2 Neg	.52	.54		.22	.19	.52	.86		.25	.51	.19		.52
RPWB 3 Neg	.76	.76		.82	.2	.77	.18		.77	.73	.2		.77
RPWB 4 Neg	.59	.59		.36	.41	.57	.3		.48	.48	.41		.57
RPWB 5 Neg	.77	.77		.85	.23	.78	.21		.77	.73	.22		.78
RPWB 9 Neg	.5	.48		.16	.13	.46	.34		.35	.46	.15		.46
RPWB 6 Pos	.21		.5	.46	.45	.48		.34	.53		.44	.33	.48
RPWB 7 Pos	.21		.7	.6	.76	.15		.77	.11		.76	.76	.15
RPWB 8 Pos	.46		.66	.33	.65	.15		.64	.13		.65	.64	.15
Cor 1	1	1	.35	1	1	1	1	0	0	1	0	1	0
Cor 2		.35	1				0	1	0	0	1	0	1
Cor 3							0	0	1				

Note. See Figure 1 for description of various models. RPWB = The items in the Ryff Psychological Well-being purpose subscale; Loading = Standardized factor loadings; Neg = RPWB items that are negatively worded; Pos = RPWB items that are positively worded; Glob = Global factor in the bi-factor models; Cor = Factor correlations.

Table 1.5

Fit Measures for Confirmatory Factor Analysis with Lavaan for RPWB

Models	χ^2	*df*	p-value	CFI	TLI	RMSEA	SRMR
3 Factor Model	299.698	24	0	.88	.82	.11 [90% CI .09, .122]	.06
Model 1:	643.119	27	0	.73	.64	.15 [90% CI .14, .166]	.09
Model 2:	442.762	26	0	.82	.75	.13 [90% CI .12, .141]	.09
Model 3:	131.996	9	0	.95	.79	.12 [90% CI .10, .139]	.06
Model 4:	261.228	12	0	.89	.68	.15 [90% CI .13, .164]	.08
Model 5:	297.71	24	0	.88	.82	.11 [90% CI .10, .121]	.06
Model 6:	118.5	15	0	.96	.89	.08 [90% CI .07, .10]	.03
Model 7:	357.805	21	0	.85	.75	.13 [90% CI .12, .145]	.08
Model 8:	297.71	24	0	.88	.82	.11 [90% CI .10, .121]	.06

Note. DF = Degrees of freedom for the model; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation; SRMR = Standardized Root Mean Square Residual.

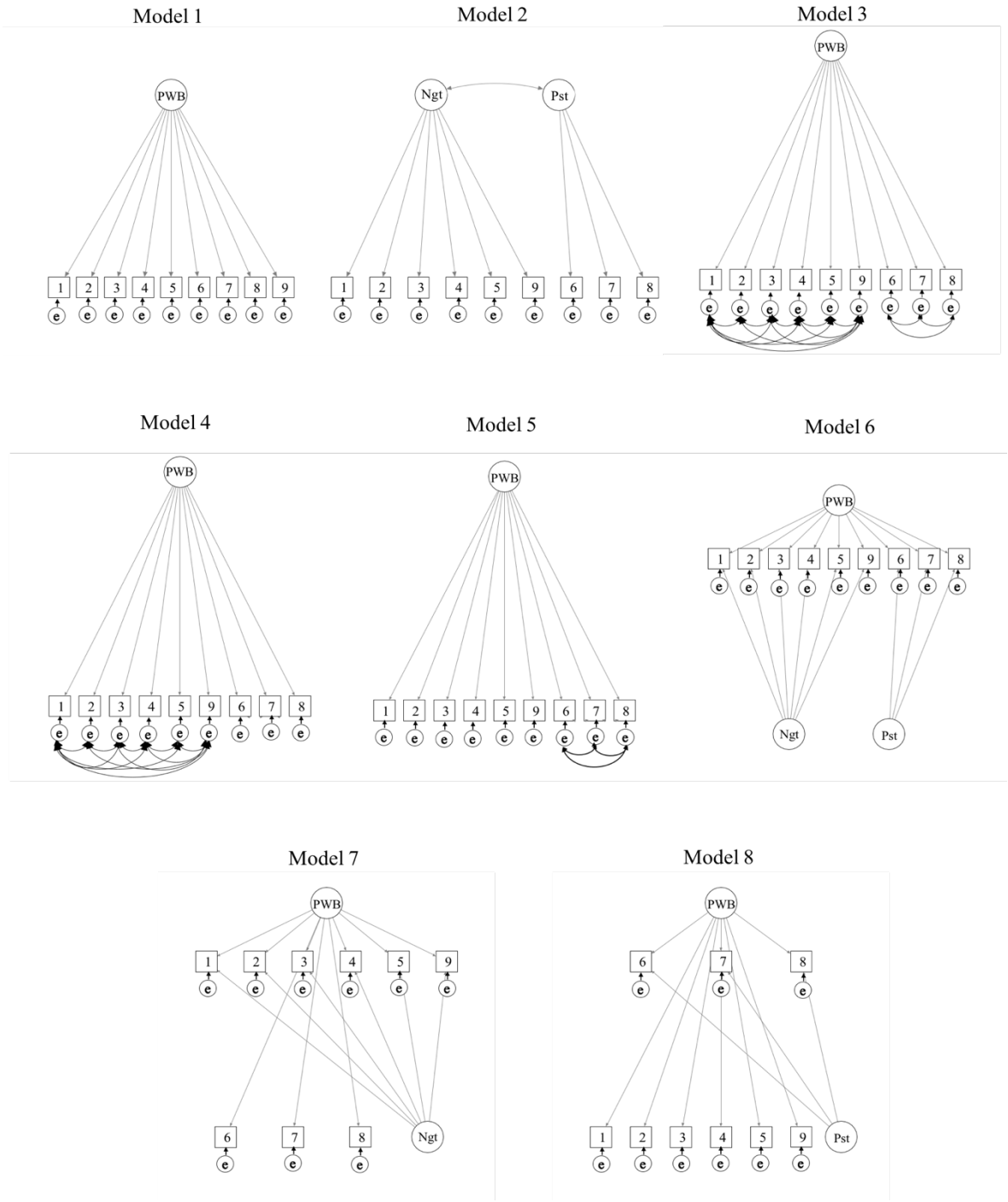


Figure 2.1. Eight models of Ryff Psychological Well-being purpose subscale (RPWB). Model 1 = one trait factor; Model 2 = two trait factors with positive and negative factors correlated; Model 3 = one trait factor, correlated uniqueness among both positive and negative items; Model 4 = one trait factor, correlated uniqueness among negative items; Model 5 = one trait factor correlated uniqueness among positive items; Model 6 = one trait factor plus positive and negative latent method factors; Model 7 = one trait factor plus a negative latent method factor; Model 8 = one trait factor plus a positive latent method factor. PWB = RPWB single factor; Pst = positive items; Ngt = negative items; e = error.

Discussion. The author of the purpose subscale of the RPWB created it to be a one factor measure of purpose in life designed for adults (Ryff & Keyes, 1995). There was no support for this conclusion based on exploratory factor analysis of the dataset collected from teenagers for the present study. The EFA indicated that there were at least three factors in this nine item scale. The three factor model had decent loadings and good fit measures. However, the substantive structure of the new three factor fit was not coherent with the content of the items themselves. When I conducted a CFA trying to replicate the three factor method, the result was a poor fit to the data. Based on the heavily weighted amount of negatively worded items in the scale and the fact that the three factor model that emerged from the EFA was split around negatively and positively worded items, I hypothesized that this was because of the many negatively worded questions in the scale and that there was, therefore, a negatively/positively worded method effect occurring, as has been suggested in the literature. After trying to fit an additional eight models that have been shown to identify method effects, the result clearly showed that the mix of negative and positively worded items had a deleterious impact on the fit of the scale. This result was in line with my original hypothesis that negatively worded items are consistently understood differently by youth. In addition, from a substantive perspective, the items are worded in a manner that can be confusing. This contrasts with the MLQ that has items that are clear and easy to understand. Thus, whilst I was able to find a good fit to the data for the RPWB purpose subscale by adding method effects, I conclude that due to the high loadings on the method factors and the poor factor loadings on the global factor, this scale did not adequately measure the construct of interest with this sample population.

Life Engagement Test. The Life Engagement Test (LET) was designed to measure purpose in life (Scheier et al., 2006). The authors of the LET defined this as the extent to which an individual partakes in activities and works towards goals that they find personally valuable (Scheier et al., 2006). LET contains six items: three positive (items 2, 4, and 6) and three negative (items 1, 3, and 5).

1. There is not enough purpose in my life.
2. To me, the things I do are all worthwhile.
3. Most of what I do seems trivial and unimportant to me.
4. I value my activities a lot.
5. I don't care very much about the things I do.
6. I have lots of reasons for living.

EFA. To find out whether LET is valid within a youth sample (research question 1), I analyzed a sample of 957 individuals (there was a considerable number of incomplete surveys and due to the missing data, this was the sample size for LET). I was unable to find support for a one factor model in an exploratory factor analysis. Parallel analysis suggested that there were two factors. Scheier and colleagues (2006) retained factors with eigenvalues >1 using Kaiser's criterion (Kaiser, 1960) and Principle Component Analysis (PCA). The analysis I conducted mirrors this and found one eigenvalue > 1 but also found two eigenvalues > .7 (the first was 2 and the second was .82). Based on Jolliffe's criterion (Jolliffe, 1986), which recommends retaining factors above .7, this would suggest two factors. A scree plot supported the contention that there were two factors. Furthermore, the first factor only explained 42% of the

variance whilst the second explained an additional 28% of the variance among the items. This further indicated that a two factor solution would be an optimal fit to the data. Furthermore, Cronbach's alpha was .72, which was lower than the lowest value found by the authors in all of their studies (Scheier et al., 2006).

Nonetheless, given the authors' contention of there being only one factor and finding only one component with an eigenvalue >1, I tried to fit a one factor solution to the data using EFA. The factor loadings for the one factor solution are shown in Table 1.6. Items 2 and 4 did not load on one factor at all and item six loaded poorly on the factor. The fit was also extremely poor (CFI= .66, TLI= .43, RMSEA = .24 - .28) and did not support a one factor solution at all (see Table 1.7). Thus, I concluded that the LET does not represent a one-dimensional factor when tested on the present sample.

To address the underlying factor structure, I tried a two factor solution. Whilst the items loaded better, aside from item 6, they divided along the negatively and positively worded items, lending support for the hypothesis that youth may be impacted by negatively worded items more than adults. Item 6 ("I have lots of reasons for living") cross loaded (see Table 6). This two factor solution provided a good fit for the data (CFI= .99, TLI= .97, RMSEA = .02 - 09, see Table 1.7). I then tried a model that removed the problematic item that was cross loading (item 6). Whilst that yielded a somewhat better fit (CFI= 1, TLI= 1, RMSEA = .01 - .09, see Table 1.6) item 4 no longer loaded as well on the second factor and the correlation between the factors were also lower (r=.07) than in the two factor solution that preserved item 6 (.14). In addition, without item 6, item 2 loaded on the second factor at 1 (see Table 1.6). Furthermore, the Chi Squared was not significant and the CFI and TLI were both 1, with the RMSEA at .01. All of this indicated a potential over-fitting of the data. I then

tried to fit a one factor model without item 6, yet that model yielded results almost identical to a one factor model that included item 6. Thus, whilst item 6 was problematic in that it cross loaded, removing it in the EFA proved to add little in terms of improving overall fit.

Table 1.6

Factor Loadings for Exploratory Factor Analysis of LET

	One Factor EFA	Two Factor EFA		Two Factor EFA w/o Item 6	
Item	Factor 1	Factor 1	Factor 2	Factor 1	Factor 2
LET 1	.66	.63	.15	.64	.15
LET 2	.12	-.03	.74	0	1
LET 3	.85	.87	-.04	.87	-.02
LET 4	.08	-.07	.74	-.01	.54
LET 5	.77	.79	-.06	.78	-.06
LET 6	.42	.33	.5		
SS	1.96	1.9	1.4	1.77	1.32
Cor 1		1	.14	1	.07
Cor 2		.14	1	.07	1

Note. EFA = Exploratory Factor Analysis; LET = Items in the Life Engagement Test; SS = Variance in all variables accounted for by the factor; Cor = Factor correlations; w/o = without .

Table 1.7

Fit Measures for Exploratory Factor Analysis of LET

Models	χ^2	*df*	p-value	CFI	TLI	RMSEA	SRMR
One Factor Model	595.42	9	0	.66	.43	.26 [90% CI .24, .28]	.19
Two Factor Model	15.66	4	0	.99	.97	.06 [90% CI .03, .09]	.02
Two Factor w/o 6	1.15	1	0.28	1	1	.01 [90% CI .00, .09]	.01

Note. DF = Degrees of freedom for the model; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation; SRMR = Standardized Root Mean Square Residual; w/o = without.

CFA. I then conducted a CFA with a two factor model without item 6 to see whether removing it from the CFA would yield a better fit. However, the results were similar to those found in the EFA. In addition, this resulted in estimated variances that were negative, and the observed variable error term matrix was not positive definite. This result was due to item 2 loading on the first factor at 1.17, suggesting an over fitted model, as was seen in the EFA. Overall, dropping item 6 was problematic on a number of levels. First, it caused problems with the model to the degree that it over fitted initially. Second, it left a two item factor, which is not optimal. Furthermore, even if I was to allow a two item factor, the loadings of the two items were 1 and .54, and this made for a less convincing or coherent factor. All of this underlined my contention that removing item six would not result in a better understanding of this scale. Based on this analysis, I concluded that for the present sample LET represented more than one factor and that whilst item 6 was somewhat problematic, removing it yielded little benefit in terms of fit and factor structure.

The two factors that emerged from this analysis were three positively worded items and three negatively worded items. This clearly showed a factor structure based on positively and negatively worded items. This allowed me to again explore whether this was a method effect which, if accounted for, would still yield a one factor solution for the data (research question 2). Given the evidence from the authors of the LET that there was only one factor, and my results from the EFA, I hypothesized that the two factors were really the result of a negatively and positively worded item method effect.

To establish whether this was in fact the case, I used Marsh (1996) and Marsh, Scalas and Nagengast's (2010) approach of dealing with negative and positive items, as I did in relation to the RPWB purpose subscale above. Based on this, I evaluated a

multiple model approach in the CFA. As was demonstrated in the previous section of this chapter, this approach yielded good fits for the data that adequately explained the traits and methods inherent in the RPWB purpose subscale. The difference was that, unlike the RPWB purpose subscale, which had three factors, the LET represented a two factor model with three items each. Thus, the correlated uniquenesses (CU) approach and the Latent Method Factor (LMF) strategy would both yield identical results in terms of factor loadings and fit indices. Thus, in the case of the LET scale, I only report the LMF approach.

I tried to fit the data to the following five models (see Figure 1.2). Model 1 was a one factor trait model. Model 2 was a two factor model with negatively and positively worded items as two trait factors. Model 3 was a bi-factor model with all LET items as a global trait factor and two positively and negatively worded item latent method factors. Model 4 was a partial bi-factor model (Chen, West, & Sousa, 2006) with one global LET trait factor and one negatively worded method factor. Model 5 was one global LET trait factor and one positively worded item method factor. Similar to the analysis of the RPWB purpose subscale, a bi-factor rather than a higher order approach was taken here.

Results. The results of the five models I examined to determine whether there were negatively or positively worded item method effect were as follows (factor loadings for the models are summarized in Table 8 and fit indices are summarized in Table 1.9). The one factor model (Model 1) resulted in poor loadings for items 2 and 6 and a very poor fit for the data. The two positive and negative factor model (Model 2) resulted in decent factor loadings but was a poor fit to the data. The bi-factor model (Model 3) that had one global LET trait factor and two method factors (positive and

negative) had poor factor loadings on the global factor (items 2 and 4 loaded poorly) but good loadings on the individual method factors, thus indicating positive and negative factors. The CFI (.97) showed an excellent fit for the data, however the other fit indices indicated a less than optimal fit for the data. This suggested a positively and negatively worded item method effect, where some of the wording effects accounted for most of the model's variance. The fit indices, which were not optimal, however, suggested that there may be an alternative model that would better fit the data. A partial bi-factor model with one global LET trait factor and one negatively worded item method factor (Model 4) resulted in poor factor loadings on the negative items of the global factor and decent to good loadings on the negative method factor. The fit for this model was also good as far as the CFI (.92) was concerned. However, other fit indices were still poor to moderate. This indicated that the negative item method effect accounted for much of the variance of the model, thus indicating a strong method effect. However, the fit indices still suggested that this was not the optimal explanation of the data.

A partial bi-factor model with one global LET trait factor and a positively worded item method factor (Model 5) resulted in good factor loadings on the positive method factor (.71, .74 and .50) but very poor loadings (.07, .03 and .40) for the same items on the global factor, thus showing that almost all the variance of the positive items on the global factor could be explained by a positively worded item method effect. The fit for this model was also excellent for the CFI (.97), good for the TLI (.93) and decent for the RMSEA (.07 - .11). This model represented the best fit for the data. This result seemed to indicate that the LET instrument does not in fact represent one factor, but rather that it is beset with wording problems that can be partitioned out on

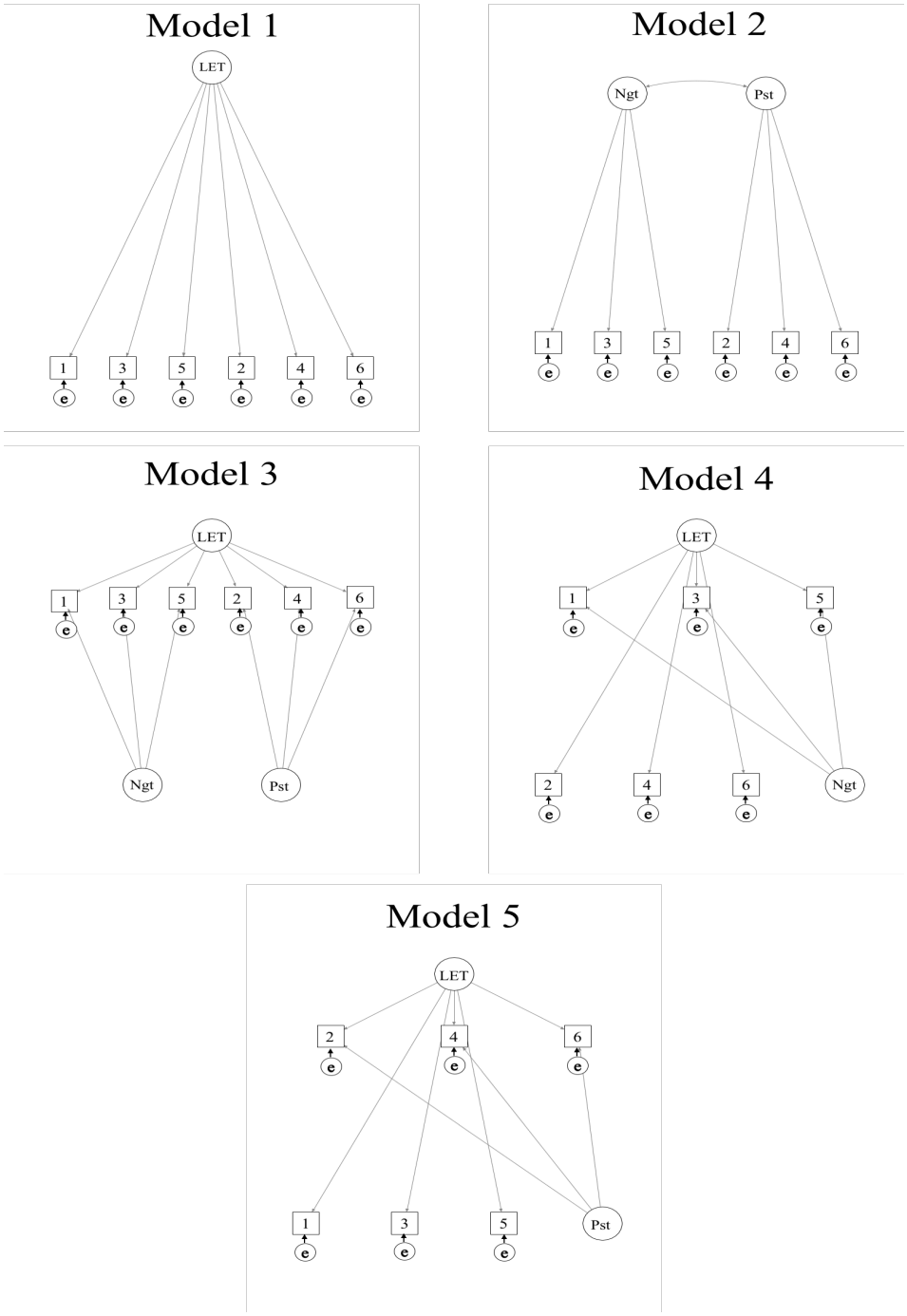


Figure 2.2. Five SEM models of LET. Model 1 = one trait factor; Model 2 = two trait factors with positive and negative factors correlated; Model 3 = one trait factor plus positive and negative latent method factors; Model 4 = one trait factor plus a negative latent method factor; Model 5 = one trait factor plus a positive latent method factor; LET = LET single factor; Pst = positive items; Ngt = negative items; e = error.

their own, and these confound the main underlying construct the instrument is attempting to measure. Specifically, the positively worded items were distinct from the negatively worded items to the degree that they were unable to load on a factor together with the negatively worded items, even when method effects were considered.

Discussion. While the authors of the LET instrument maintain that it measures purpose in life as one factor, my analysis on my sample fails to find support for that contention. This is in line with my pre-existing hypothesis that instruments designed for an adult population do not necessarily work for a youth population in the same way. This is especially so where negatively worded items make up a large part of the instrument, as discussed earlier in this chapter. The factor structure with a youth population (second part of research question 1) was as follows. In an EFA, a two factor model seemed to be the best fit for the data. These two factors clearly demarcated along positively and negatively worded items, thus indicating a wording method effect (research question 2). In the CFA, the two factor model did not result in a good fit for the data. This indicated that the LET was not a simple two factor instrument and that more sophisticated models were needed in order to explain the data. Method factors were therefore considered using bi-factor and partial bi-factor models. The results indicated that a one factor solution with a positively worded item method factor fits the data best. It may, thus, be reasonable to argue that the solution was one substantive factor based on positively worded items and a method factor (global bi-factor) based largely on negative items. In any event, this indicated serious wording problems with the LET measure as understood by a youth population, and underlines the difficulties of using positively and negatively worded items designed for an adult population and

Table 1.8

F*actor Loadings CFA for Life Engagement Test*

	Model 1	Model 2		Model 3			Model 4		Model 5	
Items	Factor	Neg	Pos	Neg	Pos	Glob	Neg	Glob	Pos	Glob
LET 1 Neg	.66	.65		.43		.48	.61	.28		.65
LET 3 Neg	.85	.87		.7		.54	.86	.13		.86
LET 5 Neg	.78	.77		.58		.5	.77	.09		.78
LET 2 Pos	.12		.72		.66	.16		.74	.71	.07
LET 4 Pos	.82		.73		.8	.08		.71	.76	.03
LET 6 Pos	.42		.56		.43	.63		.55	.5	.4
Cor 1	1	1	.18	1	0	0	1	0	1	0
Cor 2		.18	1	0	1	0	0	1	0	1
Cor 3				0	0	1				

Note. See Figure 3 for the description of the various models. LET = Life Engagement Test; Items = Items from LET; Factor = the latent factor; Load = Standardized factor loadings; Neg = LET items that are negatively worded; Pos = LET items that are positively worded; Pos = Positively worded items; Neg = Negatively worded items; Cor = Factor correlations.

Table 1.9

Fit measures for CFA of LET

Models	χ^2	*df*	p-value	CFI	TLI	RMSEA	SRMR
Model 1	598.237	9	0	.66	.43	.26 [90% CI .24, .28]	.14
Model 2	188.42	8	0	.89	.8	.15 [90% CI .13, .17]	.09
Model 3	47.67	3	0	.97	.87	.12 [90% CI, .09, .16]	.03
Model 4	151.02	6	0	.92	.79	.16 [90% CI .14, .18]	.08
Model 5	51.43	6	0	.97	.93	.09 [90% CI .07, .11]	.04

Note. See Figure 3 for the description of the various models; DF = Degrees of freedom for the model; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation; SRMR = Standardized Root Mean Square Residual.

expecting it to work with youth. In this case, the change between positively and negatively worded items may act to confuse and negatively impact the validity of the measure.

Thus, in sum, I suggest that the LET is, in fact, a one factor measure that is negatively impacted by wording issues. This causes it to be an unreliable measure when used with a youth population and dictates that it should be used in studies with youth with caution, with the understanding that the result will be somewhat unreliable.

Adolescent Personal Style Inventory: Sense of Identity Subscale.

EFA. The Adolescent Personal Style Inventory (APSI), Sense of Identity Subscale is used widely to measure sense of identity and purpose in life/meaning in life in adolescents. However, a review of the literature (Lounsbury et al., 2004; Lounsbury, Levy, Leong & Gibson) demonstrates that this scale has never been analyzed properly for its psychometric properties beyond correlational analysis as part of a convergent and discriminate validity study. Because the APSI sense of identity subscale contains items with ideas that are seen as contributing to a sense of purpose, such as values and morals (Heine et al., 2006), understanding of self and fit in the world (Steger, 2012; Wong, 2012), I see this as a scale that represents the construct of purpose in life. I therefore set out to explore whether this instrument's validity holds up when analyzed on the item level using EFA and CFA (research question 1).

Based on the authors' maintaining that this scale represents one factor (Lounsbury et al., 2004; Lounsbury et al., 2007), I first tested a one factor model. Number of observations used was $n = 935$. The fit for the one factor model was in the

poor to acceptable range; *df* for the model was 20 with $\chi^2 = 316.884$, $p < .001$; CFI =.92, TLI = .88, RMSEA = .13 [90% CI = .11, .14]. Cronbach's alpha was acceptable at .83. Loadings (see Table 10) were problematic, however, with item 6 ("I don't know where I fit in the world") not loading on the factor at all (.04) and item 3 ("I have a set of basic beliefs and values or moral standards") only marginally (.29).

Given that the authors' one factor solution resulted in problematic loadings and a less than optimal fit, I conducted Parallel Analysis (PA) using Maximum Likelihood to extract factors. The PA suggested that there were four factors in the measure. Eigenvalues analysis suggested that there was only one factor. The first factor had an eigenvalue of 3.77, with SD of 2.04, and explained 52% of the variance, while the second factor had an eigenvalue of .3, an SD of 1.1, and explained 15% of the variance. Given the inconclusive nature of these results, an Exploratory Factor Analysis (EFA) was conducted. An initial analysis with two factors was carried out. The fit was again moderate (factor loadings for all EFA models are summarized in Table 10 and fit indices for all the EFA models are summarized in Table 11). Loadings were also problematic; item 6 ("I don't know where I fit in the world") loaded fully (1.00) on factor two but item 3 ("I have a set of basic beliefs and values or moral standards") only loaded marginally on factor two (-.29).

An analysis with three factors was conducted. This resulted in a better fit of the data. Loadings, however, were still problematic; whilst item 3 ("I have a set of basic beliefs and values or moral standards") loaded fully (.99) on factor one, item 5 ("I have a clear set of personal values or moral standards") now loaded on factor two (.96) and item 3 ("I don't know where I fit in the world") cross loaded on factor one and two (-.35 and .33).

Based on the Parallel Analysis that suggested there are four factors, an analysis with four factors was conducted. This resulted in an over fit of the data and loadings were still problematic; whilst item 6 ("I don't know where I fit in the world") loaded fully (.99) on factor one, a factor on which no other item loaded. In addition, item 1 (I have a definite sense of purpose in life) was now cross loading on factors two (.31) and four (.59); item 5 (I have a clear set of personal values or moral standards) was now cross loading on factors three (.34) and four (.58); and item 3 ("I have a set of basic beliefs and values or moral standards") loaded on factor three (.70).

Based on this analysis, I determined that items 1, 2, 4, 5, 7, and 8 may be a factor on their own, whilst item six, being a negatively worded item, and item 3, which references beliefs, did not reflect the same underlying factor as the rest of the items. I then conducted an EFA with only these six items. The fit, as it related to the TLI and CFI, was excellent, although the RMSEA was still somewhat high. Nevertheless, all items loaded well onto one factor (see Table 1.10). This indicated that the remaining items, items 3 and 6, were causing problems with the overall fit of the measure and represented either an independent factor or, more likely, multiple factors, and would not fit neatly into an additional factor.

I nonetheless conducted a TR to see if a two factor model, where items 3 and 6 were set to a second independent factor, could be made to fit the data using that method. I set items 1, 2, 4, 5, 7, and 8 onto one factor and items 3 and 6 onto the other. This analysis resulted in a decent, yet not excellent, fit to the data. All items for factor one loaded well, and item 3 had a loading of .98 on factor two. However, item 6 still did not load well on the second factor (.29), or on the first factor (.12). This indicated that items three ("I have a set of basic beliefs and values that guide my actions and

decisions") and 6 ("I don't know where I fit in the world") represented distinct factors. Given that I demonstrated previously that youth view negatively worded items substantively different from positively worded items, the fact that item 6 did not fit in with the main factor was unsurprising and accorded with my initial hypothesis. In addition, item 3 is substantively different from the other items in that it references beliefs, thus containing a religious implication, and may be interpreted by youth differently from the other items in the instrument.

In any event, from this analysis it became clear from both a substantive and an empirical perspective that the APSI Sense of Identity subscale did not represent one unidimensional factor and that there was at least one item (item 3) and arguably two items (item 6) that did not represent the main factor. In addition, these two items did not represent the same factor as each other. Simple structure, therefore, could not be achieved if these two items were retained. Thus I concluded that in further analyses these two items should be dropped. Yet, even when these two items were dropped, a one factor solution was not an excellent fit to the data. In particular, the RMSEA fit index was still in the unacceptable range (see the "No 3, 6" model in Table 1.11). This allowed me to address the aims surrounding the APSI Sense of Identity subscale established in research question number one. I concluded that, at least with this sample and as it is, the APSI subscale, which was not previously analyzed on the item level, is not a psychometrically valid instrument. The APSI sense of identity subscale contains more than one factor and at least two of its items do not work at all within the instrument as it is presented by its authors.

Table 1.10

Exploratory Factor Analysis for APSI

	One Factor	Two Factor		Three Factor			Four Factor				No 3, 6	TR Two	
Items	1	1	2	1	2	3	1	2	3	4	1	1	2
APSI 1	.83	.84	-.03	.77	-.03	.09	.31	.59	-.02	-.04	.83	.84	-.05
APSI 2	.77	.77	.01	.65	0	.17	.04	.8	-.05	-.01	.77	.77	-.01
APSI 3	.29	0	1	0	.99	.02	.05	.01	-.12	.7	-	.05	.98
APSI 4	.82	.83	-.02	.86	0	-.04	.67	.2	-.04	-.03	.82	.83	-.04
APSI 5	.69	.63	.19	.03	.03	.96	.03	.58	.18	.34	.68	.64	.18
APSI 6	.04	.13	-.29	.09	-.35	.33	.01	.01	.99	-.03	-	.12	.29
APSI 7	.77	.76	.03	.79	.06	-.04	.89	-.1	.03	.08	.77	.77	.02
APSI 8	.81	.82	-.05	.85	-.03	-.04	.65	.21	0	-.05	.81	.83	-.06
SS	3.8	3.7	1.1	3.2	1.1	1.1	2.1	1.2	1	0.7	3.7	3.7	1.1
Cor 1	-	1	.28	1	.26	.65	1	.8	.05	.29	-	1	.26
Cor 2	-	.28	1	.26	1	.33	.8	1	.06	.31	-	.26	1
Cor 3	-	-	-	.65	.33	1	.05	.06	1	-.17	-	-	-
Cor 4	-	-	-	-	-	-	.29	.31	-.17	1	-	-	-

Note. APSI = The items in the APSI sense of identity subscale; SS = Variance in all variables accounted for by the factor; Cor = Factor correlations; One Factor = A one factor EFA model; Two Factor = A two factor EFA model; Three Factor = A three factor EFA model; Four Factor = A four factor EFA model; No 3, 6 = A one factor EFA model without items 3 and 6; TR Two = A Target Rotation model with two factors and item 3 and 6 on the second factor.

Table 1.11

Fit indices for EFA of APSI

Model	χ^2	p-value	CFI	TLI	RMSEA
One Factor	316.884	0	.92	.88	.13 [90% CI = .11, .14]
Two Factor	87.21	0	.96	.91	.11 [90% CI = .1, .13]
Three Factor	26.21	0	.98	.92	.99 [90% CI = .08, .12]
Four Factor	.29	.86	1	1	.003 [90% CI = NA, .05]
No 3, 6	125.49	0	.97	.95	.106 [90% CI = .09 .12]
TR Two	87.26	0	.96	.9	.11 [90% CI = .10, .13]

Note. CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation; One Factor = A one factor EFA model; Two Factor = A two factor EFA model; Three Factor = A three factor EFA model; Four Factor = A four factor EFA model; No 3, 6 = A one factor EFA model without items 3 and 6; TR Two = A Target Rotation model with two factors and item 3 and 6 on the second factor.

CFA. To explore the factor structure of this instrument (as set out in research question 1), further analysis was performed. Thus, as mentioned previously, two items were dropped from the scale (items 3 and 6) and all further analysis was conducted on the remaining six items: 1, 2, 4, 5, 7, and 8. Upon a substantive analysis of the items, it became clear that there were two underlying substantive factors here that were in line with some of the underlying concepts of what comprises purpose in life (for reviews see the literature review section of this thesis). One factor contained three items related to understanding of self and current purpose, while the second factor, made up of three items, related to future goals.

Factor One

Understanding of self and current purpose

I have a definite sense of purpose in life (item 1)

I have a firm sense of who I am (item 2)

I have a clear set of personal values or moral standards (item 5)

Factor Two

Future goals

I know what I want out of life (item 4)

I have specific personal goals for the future (item 7)

I have a clear sense of who I want to be when I am an adult (item 8)

After conducting a CFA on this two factor model, the loadings were good (see Tables 11 and 12) and the fit was excellent. The correlation between the two factors

was high (.91), which indicated that people with a good sense of current purpose also seem to have goals for the future and know what they want out of life and vice versa. This very high correlation also indicated that perhaps there was a global factor that would explain the data better than a simple two factor model.

Bi-factor model. Based on Chen, West, and Sousa (2006), who suggested that in situations such as this a bi-factor model, rather than a second order model, is the best strategy to find whether there exists a global factor in the data, I tried to fit a bi-factor model with an orthogonal rotation. This resulted in a marginally improved fit that was better than the two factor model. However, whilst the items loaded well on the global purpose factor, many of them no longer loaded well on their individual factors. In fact, only items 2 and 7 were loading higher than .3 on their individual factors. Thus, while the bi-factor model is the best fit for the data as far as fit indices are concerned, it does not explain the data as well as the two factor model. This also indicated that wording method effects here are small and that members of this sample do not see a great deal of difference between "Future Goals" and "Understanding of Self and Current Purpose."

Is there Only One Factor? Given the strong correlation between the two factors, and even though there seemed to be two factors from a substantive perspective, I tried to fit a one factor model. The loadings were all high (.68 - .83), the CFI and TLI were good, and the RMSEA fit index was in the mediocre to poor range (see Table 1.12). This seemed to indicate that whilst there is a slight difference between purpose items worded in terms of "Future Goals" and those worded in terms of "Understanding of Self and Current Purpose," the two are highly correlated and, as mentioned above, they both closely represent the same construct of purpose in life/meaning in life.

Table 1.12

Confirmatory Factor Analysis for APSI

	One Factor	Two Factor Model		Bi-factor Model		
Items		FN	FG	FN	FG	Global Factor
APSI 1	.83	.86		.19		.82
APSI 2	.77	.8		.39		.74
APSI 5	.68	.7		.27		.65
APSI 4	.82		.84		.14	.82
APSI 7	.77		.8		.43	.75
APSI 8	.81		.83		.15	.8
Cor 1	1	1	.91	1	0	0
Cor 2		.91	1	0	1	0
Cor 3				0	0	1

Note. Loadings = Standardized factor loadings; FN = Feeling Now factor; FG = Future Goals factor; Latent 1 = Higher Order factor and the second order factors; Latent 2 = the individual APSI items; GPF = Global Purpose Factor for the bi-factor model represented by all the APSI items; Second Order = A higher order model with one second order purpose factor; Bi-factor Model = A Bi-factor Model with a Global Purpose Factor represented by all the six items and then two sub-factors: Feeling Now and Future Goals; Cor = Factor correlations.

Table 1.13
Fit indices for Confirmatory Factor Analysis for APSI

Model	χ^2	*df*	p-value	CFI	TLI	RMSEA	SRMR
One Factor	93.92	*9*	0	.97	.96	.10 [90% CI .08, .12]	.03
Two Factor Model	22.04	8	.01	1	.99	.04 [90% CI .02, .06]	.01
Bi-factor Model	7.32	3	.06	1	.99	.04 [90% CI .0, .08]	.01

Note. df = Degrees of freedom for the model; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation; One Factor = A one factor model of APSI items one, two, four, five, seven and eight; Two factor Model = A two factor model with future goals and feeling now factors; Bi-factor Model = A Bi-factor Model with a Global Purpose Factor represented by all the six items and then two sub-factors: Feeling Now and Future Goals.

Discussion. While the APSI sense of identity subscale was designed as a one factor scale, in my sample I did not find evidence of a coherent one factor model. In particular, some of the items were problematic and, in order to achieve simple structure, two of them had to be dropped. It is reasonable to argue that the remaining six items represent one factor, or perhaps two highly correlated factors. However, from both a substantive and empirical perspective (finding an excellent fit based on all relevant fit indices), a two factor model, one representing a current sense of purpose and coherence and a second regarding having goals for one's life and future, offered an optimal fit for the data.

To answer research question number 1 (questioning the underlying factor structure of a pre-existing scale) with regards to the APSI Sense of Identity subscale, it can be concluded that, as was hypothesized, this subscale is not a one factor scale when all items are taken into consideration. In fact, some of the items do not work at all, even in a three or four factor solution. However, it is also clear that there are good items in this scale. Accordingly, when problematic items are removed, a clear one factor scale with two relatively weak specific factors that tests disparate aspects of purpose in life/meaning in life (sense of coherence and future plans) emerges. This scale is valuable and should provide a good measure to test for purpose in life in samples from a youth population.

Meaning in Life Questionnaire. The Meaning in Life Questionnaire (MLQ; Steger, 2012) is one of the most widely used and validated of all purpose and meaning scales. It was designed to include two factors: one representing sense of presence of purpose (MLQ-P) and the other representing searching for purpose (MLQ-S). Each factor has five items.

The purpose of this analysis was threefold. First, it was important to confirm whether this factor structure in the current sample (research question 1), second since Rose, Zask, and Burton's (2016) recent study of the MLQ conducted on youth was limited in terms of sample size (n = 135), my study on a much larger sample of youth from several different demographics will be a welcome addition in helping to determine whether the MLQ can be used on youth as well as adults. Furthermore, in the literature review of this thesis I summarized opinions regarding whether meaning in life and purpose in life were one or two factors. Based both on that literature and on arguments I made suggesting that meaning and purpose are vital to each other, a sense of purpose cannot truly exist without having a sense of meaning and vice versa. I argued that meaning cannot exist in a vacuum without purpose and purpose cannot exist independently of meaning. Thus, meaning and purpose are two integral parts of the same factor that cannot easily be separated out from each other – if an individual has meaning in life, they will also have purpose in life, and, *mutatis mutandis,* for purpose in life.

Since the MLQ uses the language of both meaning and purpose, this was a perfect opportunity to study if respondents perceived a difference between the wording of meaning in life and that of purpose in life (research question number 3). I, thus, used the MLQ to test whether there was a dichotomy between these items that use the language of meaning and items that use the language of purpose. Based on my argument in the literature review summarized above, I hypothesized that, if there was a difference, it would be small in nature and an in-depth analysis would show that they are really part of the same fundamental construct. The approach I used to test this was similar to the methods I used to test for wording method effects in the above

enumerated RPWB purpose subscale study and the LET study also described above. This allowed me to assess whether individual and independent meaning and purpose traits could be found within the MLQ scales.

*EFA/CFA***.** Based on the author's contention that the MLQ has two factors, presence of purpose (MLQ-P) and searching for purpose (MLQ-S), I first tested this contention with a two factor model using Confirmatory Factor Analysis (CFA). Number of observations used was 978 and the fit was good, with *df* for the model 34 and χ^2= 24.929, $p < .00$; CFI =.94, TLI = . 94, RMSEA = .08 [90% CI = .07, .09]. Loadings (see Table 1.13) were all above .30 and the correlation between the two factors was .16, indicating two distinct factors.

Parallel Analysis using Maximum Likelihood also suggested that there were two factors in the measure, and eigenvalues analysis suggested the same number of factors. The first factor had an eigenvalue of 3.15 with SD of 1.92 and explained 37% of the variance, while the second factor had an eigenvalue of 2 and SD of 1.68 and explained 28% of the variance. The third factor, meanwhile, had an eigenvalue of .05 and SD of .7 and explained 7% of the variance. This underscored the two factor model. An EFA was also used to analyze the two factors. Loadings (see Table 1.14) were good and items loaded well on their respective factors, and the correlation between the two was low. Thus, I concluded, based on the EFA and CFA, that there were two clear factors here, one that reflected presence of purpose and the second that indicated searching for purpose, and that they both worked well on this youth population. This supported Rose, Zask, and Burton's (2016) conclusion in their recent study that the MLQ is a measure that is suitable for use on a youth sample as well as on adults.

Table 1.14

Exploratory Factor Analysis of Meaning in Life Questionnaire

	Two factor EFA		Two Factor TR	
Items	F1	F2	F1	F2
MLQ-P 1	.01	.81	-.01	.81
MLQ-P 4	.05	.78	.03	.78
MLQ-P 5	.05	.77	.03	.78
MLQ-P 6	.02	.79	.00	.79
MLQ-P 9	-.24	.45	-.25	.44
MLQ-S 2	.81	-.08	.81	-.06
MLQ-S 3	.74	.08	.74	.09
MLQ-S 7	.72	.07	.72	.09
MLQ-S 8	.72	.09	.72	.11
MLQ-S 10	.83	-.12	.83	-.11
SS	3	2.72	2.98	2.74
Cor 1	1	.14	1	.15
Cor 2	.14	1	.15	1

Note. MLQ-P = The items in the Meaning in Life Questionnaire that represent Presence of Meaning; MLQ-S = The items in the Meaning in Life Questionnaire that represent Searching for Meaning; SS = Variance in all variables accounted for by the factor; Cor = Factor correlations; F1 = First Factor; F2 = Second factor.

Meaning and purpose: one factor or two? Based on existing literature suggesting that meaning and purpose are two distinct, albeit related, factors (Cotton Bronk, 2009; Damon, 2009), I then attempted to look for evidence of there being two constructs corresponding to meaning in life and purpose in life (research question 3) within the two MLQ factors of presence of purpose and searching for purpose. In order to test whether the language of meaning and the language of purpose represented two independent factors, I first tried to separate out the meaning and purpose items from the MLQ instrument, using both searching (MLQ-S) for purpose and presence of purpose (MLQ-P) items, with a Target Rotation (TR) method. The results, however, showed that all of the items loaded only on the presence of purpose and searching for purpose factors, and did not load on the meaning and purpose factors at all (see Table 1.15). I then conducted a CFA separating the meaning and purpose items and specifying both sets of items to their respective factors, which resulted in extremely poor fit to the data (CFI =.331, TLI = .108, RMSEA = .304 - .324, see Table 1.16), and the meaning and purpose items did not load onto the meaning and purpose factors (see Table 1.14). This underscored that the presence of purpose and searching for purpose factors were dominant and there was no evidence of a meaning and purpose factor at all.

Table 1.15

Target Rotation and CFA with Meaning and Purpose as two factors

	Target Rotation Model		CFA Model	
Items	F1	F2	Meaning	Purpose
MLQ-P 1	**.78**	.24	**.82**	
MLQ-S 2	.25	**.74**	.1	
MLQ-P 5	**.76**	.19	**.79**	
MLQ-S 10	.22	**.8**	.07	
MLQ-S 3	**.38**	**.65**		.24
MLQ-P 4	**.77**	.19		**.8**
MLQ-P 6	**.77**	.22		**.8**
MLQ-S 8	**.38**	**.61**		.24
MLQ-P 9	**.33**	**.35**		**.36**
SS	2.89	2.28		
Cor 1	1	.03	1	.95
Cor 2	.03	1	.95	1

Note. MLQ-S = MLQ searching for meaning items; MLQ-P = MLQ presence of meaning items; Meaning = items with the word meaning in it; Purpose = items that contain the word purpose. SS = Variance in all variables accounted for by the factor; Cor = Factor correlations; F1 = First Factor; F2 = Second factor.

Table 1.16

Meaning and purpose factors on MLQ-S-P

	χ^2	*df*	p-value	CFI	TLI	RMSEA
TR Meaning/Purpose Model	28.2	19	.1	98	.97	.06 [90% CI .5, .7]
CFA Meaning/Purpose Model	2609.1	27	0	.33	.11	.31 [90% CI .30, .32]

Note. df = Degrees of freedom; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation; TR Meaning/Purpose Model = Target Rotation on entire MLQ separated as meaning and purpose factors; CFA Meaning/Purpose Model = CFA on entire MLQ separated as meaning and purpose factors.

Meaning and purpose in MLQ-S. Based on the analysis of the entire MLQ scale, the MLQ-S and MLQ-P together, I was unable to find evidence of independent purpose and meaning factors. However, this could have been because of the dominance of the searching versus presence of meaning factors that existed in the scale overall. It was, therefore, worth investigating whether, on the individual scale level of MLQ-S and MLQ-P separately, any evidence of independent factors based on items with meaning wording and items with purpose wording could be found. Thus, I first tested whether the purpose and meaning items in MLQ-S could be shown to be separate factors. Item seven of the MLQ uses the word "significant" instead of meaning or purpose and, therefore, was left out of this analysis. Using a CFA approach, this model initially did not converge because it resulted in a matrix that was not a positive definite and the second eigenvalue was less than zero (-.01). This suggested that the correlation between the two factors was larger than 1 (in this case 1.01). This strongly indicated that there was no second factor to be found here. Nonetheless, I constrained the covariance between the two proposed purpose and meaning factors to 1 and ran the model again. This resulted in two eigenvalues of 2.02 and .02 and a correlation between the factors of .98, again suggesting only one factor (for loadings see Table 1.17). In addition, in this two factor meaning and purpose model, the fit as far as the CFI and TLI were concerned was acceptable to good, but the RMSEA index was poor (see Table 1.18). The one factor model, conversely, had excellent fit measurements (see Table 1.18 for the comparison) and the loadings for the one factor model were also better than for the two-factor meaning and purpose model. All of this clearly indicated that a one factor solution was a far better fit and explanation of the MLQ-S than a two-factor model, which treated purpose and meaning as distinct factors. This demonstrated definitively

Table 1.17

SEM on MLQ-S with Meaning and Purpose as two factors

	MLQ-S	MLQ-S Meaning and Purpose Factors	
Items	One Factor	Purpose	Meaning
MLQ-S 2	.79		.71
MLQ-S 10	.83		.81
MLQ-S 3	.75	.66	
MLQ-S 8	.72	.70	

Note. MLQ-S = MLQ searching for meaning items; MLQ-P = MLQ presence of meaning items; Meaning = items with the word meaning in it; Purpose = items that contain the word purpose. SS = Variance in all variables accounted for by the factor;; F1 = First Factor; F2 = Second factor.

Table 1.18

Meaning and purpose factors MLQ-S

	χ^2	*df*	p-value	CFI	TLI	RMSEA
One Factor MLQ-S Model	7.95	2	.02	1	.99	.06 [90% CI .02, .1]
Meaning/Purpose MLQ-S Model	56.67	2	0	.97	.90	.17 [90% CI .13, .21]

Note. df = Degrees of freedom for the model; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation; One Factor MLQ-S Model = One factor model of MLQ-S; Meaning/Purpose MLQ-S Model = MLQ-S separated into meaning and purpose factors.

that in the MLQ-S scale, meaning and purpose were seen by respondents as being identical to each other in content and in substance.

Meaning and purpose in MLQ-P. It is possible, however, that respondents to the MLQ-S items (relating to searching for purpose) do not differentiate between purpose and meaning because they are still "searching" for, rather than experiencing, purpose. In addition, given that in the five items searching for purpose scale there are three terms (purpose, meaning and significance), it is possible that the addition of the term "significance" acted to confuse. Furthermore, searching for meaning and presence of meaning were only marginally correlated (.14), perhaps indicating that meaning and purpose might be interpreted differently in the presence of purpose scale (MLQ-P) compared to the searching for purpose scale (MLQ-S). In trying to answer my research question of whether meaning and purpose were separate factors (number 3), I therefore explored whether a meaning and purpose difference existed in the MLQ-P scale.

Using an approach that borrowed elements from the design I used to tease out wording based method effects for the RPWB purpose subscale and the LET instrument (see above), I tried to fit the following three models (see Figure 1.5) for the MLQ-P to compare them to each other, and simultaneously tried to detect potential separate meaning and purpose factors. Model 1 was a one factor model, which would not differentiate between meaning and purpose items. Model 2 was a two factor meaning and purpose model, which tested whether there was an indication of two factors: meaning and purpose. Model 3 was a bi-factor model in which none of the factors (purpose and meaning) were set to correlate with the global trait or with each other. This final model was designed to separate out any variance that may exist between items as it relates to the other factors, and to hone in on the wording effects of meaning

versus purpose and vice versa. Concurrently, by allowing for an uncorrelated global factor, this bi-factor model allowed me to partial out any variance that might exist amongst all the items as it relates to a more global meaning/purpose factor. This type of model, when compared to the other two models, especially with the one factor model, allowed for a solid study of whether the word 'meaning' versus the word 'purpose' and, *mutatis mutandis*, 'for purpose', are distinguishable from each other in the eyes of survey respondents. Factor loadings for the models are found in Table 1.19, fit indices for the models are provided in Table 1.20, and Figure 1.3 shows graphical depictions of the models.

Results

Model 1, the one factor model, had both good factor loadings and excellent fit as was expected from the CFA (above). Model 2, the two factor meaning and purpose model, also had high factor loadings, with all except for item 9 being slightly higher than Model 1 (see Table 1.18). The fit was virtually identical (see Table 1.19), as the correlation between the two factors was very high (.95). An ANOVA test between the two models was not significant, indicating that a two factor model added little over the one factor model. In addition, the high correlation amongst the factors indicated that these two factors were really one factor. Model 3 was a bi-factor approach where none of the factors were set to correlate with each other, seeking to identify whether there might be a wording method effect between purpose and meaning. The factor loadings on the main factor remained excellent, but loadings on the meaning and purpose factors were poor, and aside for item 6 they all loaded < .3. This indicated that there was no discernable meaning and purpose method effect occurring. In addition, the fit indices were perfect, but there were zero degrees of freedom, which showed that the model was

Table 1.19

CFA for MLQ-P separated into meaning and purpose factors

	Model 1	Model 2		Model 3		
Items	Factor	Meaning	Purpose	Meaning	Purpose	Global
MLQ-P 1	.81	.83		.19		.81
MLQ-P 5	.78	.79		.16		.77
MLQ-P 4	.79		.8		.14	.77
MLQ-P 6	.79		.8		.37	.78
MLQ-P 9	.4		.39		.24	.44

Note. MLQ-P = Meaning in Life Questionnaire presence of meaning subscale; Model 1 = Just the presence of meaning scale not separated into meaning and purpose wording factors; Model 2 = MLQ-P separated into meaning and purpose factors; Model 3 = MLQ-P separated into meaning and purpose factors and with a high order global purpose factor.

Table 1.20

Meaning and purpose factors MLQ-P

	χ^2	*df*	p-value	CFI	TLI	RMSEA
Model 1	33.94	5	0	.99	.97	.08 [90%CI .05, .1]
Model 2	25.68	4	0	.99	.97	.07 [90%CI .05, .1]
Model 3	1.156	0	NA	.98	1	.0 [90% CI .0, .0]

Note. df = Degrees of freedom for the model; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation; Model 1 = Just the presence of meaning scale not separated into meaning and purpose wording factors; Model 2 = MLQ-P separated into meaning and purpose factors; Model 3 = MLQ-P separated into meaning and purpose factors and with a high order global purpose factor.

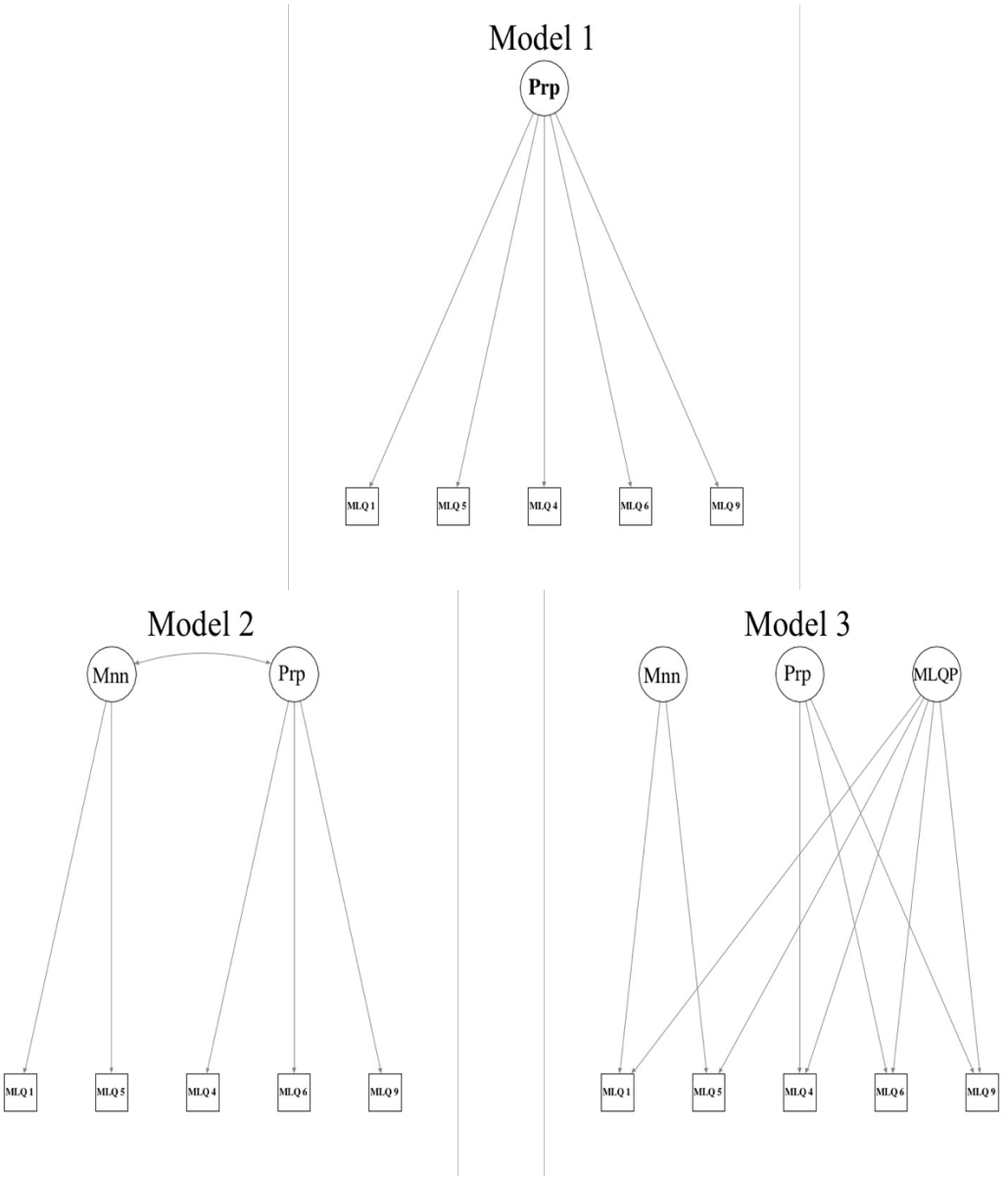


Figure 2.3. CFA analysis of MLQ-P. Model 1 = a one factor model with one global method factor; Model 2 a two trait factor model of meaning and purpose; Model 3 = a bi-factor model with the factors purpose and meaning, uncorrelated with the global factor or with each other; Mnn = Meaning items; Prp = Purpose items, MLQP = all MLQP items.

saturated and therefore only just identified, thus rendering the chi-square as well as the rest of the indices useless. I therefore concluded that there was no evidence that respondents saw a difference between questions with the words 'meaning' and those with the words 'purpose', indicating that, for youth at least, meaning and purpose are both inseparable elements of the same construct of purpose in life/meaning in life.

*Discussion***.** The Meaning in Life Questionnaire (Steger, 2009) contains two scales, both addressing the construct of meaning in life/purpose in life by testing the degree to which an individual is searching for purpose (MLQ-S) or has purpose present in their life (MLQ-P). The point of this study was threefold. First, I wanted to discover whether the overall MLQ scale would work with a diverse teenage population (research question 1). The results validated this scale on the sample of interest and indicated that both searching for purpose and presence of purpose were two distinct and reasonably uncorrelated factors, and were present for this population. Thus, my analysis (both in the EFA and in the CFA) using an adolescent sample concurs with the authors, finding that there are two clearly demarcated factors in this scale: a presence of meaning factor (MLQ-P) and a searching for meaning (MLQ-S) factor. Second, I wanted to identify whether there was a meaningful difference of factors between the proposed construct of meaning, as it might differ from the construct of purpose (research question 3) as some in the literature have suggested (Cotton Bronk, 2009; Damon, 2009. Ultimately, there was little support in this data for the contention that meaning and purpose are two distinct constructs. Thus, despite suggestions (Cotton Bronk, 2009; Damon, 2009) that meaning and purpose are two separate but connected constructs, my analysis of both of the MLQ scales (MLQ-P and MLQ-S) that contain separate meaning items and purpose items could not find any distinction between the two. Even an exploration of wording

method effects relating to a dichotomy between meaning and purpose did not produce evidence that there are two distinct latent factors of meaning and purpose. There was no evidence that meaning and purpose were not part of the exact same construct, and it seems that respondents see these two terms as entirely interchangeable. This might indicate, as some in the literature have suggested and I have maintained in the literature review section of this thesis, that meaning is a salient part of purpose and cannot be separated out from it. This study supports the idea that a unified concept of purpose is made up of both a meaning aspect (i.e., a sense of coherence) and a purpose aspect that relates to actions and goals, and most people see them both as interchangeable and inseparable from one another. This also indicates that the idea that meaning and purpose are two constructs that can be differentiated might represent what is known as the jingle-jangle fallacy (Kelley, 1927). Specifically, the jangle fallacy, where instruments containing differing names, in this case meaning and purpose measure the same exact same construct (Block, 1995; Marsh, 1994; Marsh et al., 2003).

Developing a New Purpose Scale

Whilst in the previous analysis of purpose scales I was able to find factors that loaded well in some of the scales (e.g., the MLQ and APSI), none of these scales individually seemed to tap into all of the facets of purpose. Purpose has a number of elements to it and is multi-faceted. Wong (2012), for example, used the "PURE" model of purpose, which stands for purpose, understanding, responsible action, and evaluation. For Wong, there is a motivational and a cognitive component that allows the individual to understand him or herself; a behavioral component; and an emotional or affective component, where the individual is constantly asking whether what one does in life is

really bringing satisfaction. Furthermore, Steger (2015) proposes that purpose is about understanding self, the world around the self, and the fit between the two. Ryff and Singer (2008) see purpose as part of having goals. Kashdan and McKnight (2009) see purpose as having a central, self-organizing life aim.

The scales that were valid in my analysis do not tap into all the aspects and elements of purpose in life/meaning in life. The MLQ scale, for example, discusses meaning and purpose but does not deal with goal directedness or understanding of self. The APSI sense of identity subscale, similarly, does not deal with the behavioral component of current purposeful action (Wong, 2012). Meanwhile, the LET scale and the RPWB purpose subscale, which filled in the gaps, did not alone hold good psychometric validity.

Based on this, I wanted to examine whether I could use all the items found in the above mentioned scales and analyzed in this chapter to create a new short form scale that would include these elements of purpose (research question 4).

The Present Investigation Until Now. Thus far, I have analyzed a dataset containing responses to four well known purpose in life/meaning in life instruments to assess their individual validity. Only one of them was found to be valid within my sample. Of the other three that I was unable to fully validate, the LET and RPWB purpose subscale had wording issues and the APSI sense of identity subscale had two problematic items that had to be removed before simple structure was able to be found. Yet, these three scales contain items that represent important elements of the construct of purpose in life/meaning in life. Thus, for this part of the analysis, I decided to put all the scales together to see whether I was able to create one common core scale that encompassed the aspects of meaning and purpose covered by the individual scales. To

do this, I used all 33 items from all of the scales to generate a short version that contained as many of the aspects (rather than simply the items) of the original scales as possible. Thus, whilst admittedly some of the scales on their own do not seem to have reliable psychometric properties, Smith, McCarthy, and Anderson (2000) have pointed out that the evidence of validity, or lack thereof, of an original, full-length measure does not automatically apply to an abbreviated version. Thus, it is plausible that items that have poor validity in their original form might have better validity in a short form. The goal of creating a new scale was to be able to retain one element from each scale as follows: activities that are personally valued from the LET scale; goals and plans for RPWB purpose subscale; sense of feeling purposeful from the MLQ-P; and understanding of self and what one wants to become from the APSI sense of identity subscale.

*Methods***.** The methods used to take all 33 items from the four purpose scales (MLQ, LET, APSI sense of identity subscale and RPWB purpose subscale) and create a short form version encompassing the domain space of purpose in life/meaning in life, was based on Marsh, Ellis, Parada, Richards, and Heubeck (2005), Maïano and colleagues (2008), and Marsh, Martin and Jackson's (2010) suggestions to operationalize Smith, McCarthy, and Anderson's (2000) guidelines for short-form evaluation.

Thus, I used the following criteria to select the items for the final scale.

1. I checked to see if there was a negative item method effect as has been often found in survey items given to youth (Marsh, 1986). In cases where a clear negative item method effect was found, all negative items were dropped from the analysis. This was done by performing a two factor EFA to see if negative

items loaded on their own factor. If they did, a two factor—negative and positive item—CFA was performed to confirm the negative item method effect.

2. Standardized factor loadings in CFA were recorded and only those with the highest factor loadings were retained.
3. The following substantive approach was first taken to remove duplicated items. When I found items with virtually identical substantive wording, one of those items was dropped from the analysis.
4. The following empirical approach was taken to remove two duplicate items that were highly correlated. Correlated uniquenesses based on Lavaan's (Rosseel, 2012) Modification Indices were examined. In the case where two items had high Modification Indices, only one was retained. The decision about which to retain was, mostly, dictated by which loaded higher on the factor unless there was another substantive overriding consideration.
5. Items were evaluated to ensure that the final items contained as many of the aspects of each of the individual scales as possible.
6. Sufficient items were retained to ensure a coefficient alpha estimate of reliability of at least .8.
7. The remaining items were retained if fit indices of RMSEA, TLI and CFI were in the acceptable to good range.
8. Items with factor loadings higher than .30 were retained.
9. For missing data, Full Information Maximum Likelihood (FIML) in Lavaan (Rosseel, 2012), was used.

*Results***.** Given that there were many negatively worded items, and that previous studies conducted on these scales showed negatively worded item method effects, I tried a two-factor solution in an EFA to see whether there would be an overall negative item method effect, and also if negatively worded items would load on their own factor independently of the positively worded items that get at the same latent factors. I found that, with the exception of item 6 of RPWB purpose subscale, all of the negatively worded items loaded automatically onto their own factor. A CFA resulted in the same finding (for loadings of both EFA and CFA see Table 1.21, for fit indices see Table 1.22). In addition, the two factors—negatively worded and positively worded—were poorly correlated with each other (.15 on the EFA and .20 on the CFA). Clearly, as was demonstrated in the analysis of the individual instruments, there was a negative item method effect occurring, which again confirmed pre-existing observations regarding the susceptibility of this type of sample to negatively worded item method effects (Marsh, 1986). Thus, I dropped the negatively worded items from the analysis.

*Selecting the Items***.** Upon inspecting the remaining items, there were two that were worded in an almost identical manner: "My life has a clear sense of purpose" (MLQ 4) and "I have a definite sense of purpose in life" (APSI 1). In this case, I opted for the version of the question that came from the MLQ, first because the MLQ is a more highly validated instrument than the APSI, and second because it asked the question using one fewer word and was thus more concise and clear (albeit marginally so). I then compared correlated uniquenesses with factor loadings and substantive content of the items. Ten items were removed. Most of these were removed because they had high correlated uniquenesses and lower factor loadings than the item with which they were highly correlated. The exception to this was MLQ 4 and MLQ 6. While MLQ 6 had a

slightly higher factor loading (.72) than MLQ 4 (.71), since the content of MLQ 4 ("My life has a clear sense of purpose") was more directly about having a sense of purpose in life than MLQ 6 ("I have discovered a satisfying life purpose"), which also included the idea of satisfaction, I kept MLQ 4 rather than MLQ 6. Similarly, APSI 4 and APSI 8 both had high correlated uniquenesses, yet APSI 8 had slightly lower factor loadings

Table 1.21

Factor loadings of two factor model EFA and CFA highlighting negative item method effect

Variables	EFA Two Factors		CFA Two Factors	
	Factor 1 Loadings	Factor 2 Loadings	Positive Factor Loadings	Negative Factor
RPWB 6	.24	-.5	.36	
RPWB 7	.7	-.05	.72	
RPWB 8	.59	-.07	.61	
APSI 1	.84	.1	.81	
APSI 2	.78	.04	.77	
APSI 3	.28	-.3	.35	
APSI 4	.79	.08	.76	
APSI 5	.68	.15	.64	
APSI 7	.76	.1	.73	
APSI 8	.78	.11	.75	
LET 2	.62	-.02	.62	
LET 4	.57	-.02	.57	
LET 6	.41	-.41	.50	
MLQ 1	.53	-.34	.60	
MLQ 2	.17	.22	.13	
MLQ 3	.29	.18	.26	
MLQ 4	.66	-.19	.70	
MLQ 5	.53	-.37	.61	
MLQ 6	.67	-.18	.71	
MLQ 7	.21	.12	.19	
MLQ 8	.27	.11	.26	
MLQ 10	.09	.21	.05	
RPWB 1 (neg)	.19	.57		.55
RPWB 2 (neg)	-.05	.40		.43
RPWB 3 (neg)	.03	.80		.81
RPWB 4 (neg)	-.32	.50		.57
RPWB 5 (neg)	0	-.73		-.73
RPWB 9 (neg)	-.02	.36		.40
APSI 6 (neg)	.06	.79		.75
MLQ 9 (neg)	-.13	.62		.64
LET 1 (neg)	-.13	.67		.69
LET 3 (neg)	.09	.79		.78
LET 5 (neg)	.13	.77		.74
SS	7.4	5.8		
Cor 1	1	.15	1	.2
Cor 2	.15	1	.2	1

Note. APSI = The APSI scale items; LET = Life Engagement Test Items; RPWB = RPWB purpose subscale; MLQ -P = Meaning in Life Questionnaire; Negative = Negatively worded items. EFA = Exploratory Factor Analysis; CFA = Confirmatory Factor Analysis using Lavaan; Cor = factor correlations; SS = variance in all variables accounted for by the factor.

Table 1.22

Fit for full model of all items

	χ^2	*df*	p-value	CFI	TLI	RMSEA
EFA	7322.58	463	0	.73	.69	.10 [90%CI .10, .10]
CFA	8552.27	464	0	.42	.38	.15 [90%CI .14, .15]

Note. df = Degrees of freedom for the model; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square of Approximation.

Table 1.23

Correlated uniquenesses, modification indexes and items that were removed

Items	Loadings	Item 2	Loadings	MI	Item Removed
MLQ 1	.63	MLQ 5	.64	198.42	MLQ 1
MLQ 1	.63	MLQ 6	.72	135.83	
MLQ 1	.63	MLQ 4	.71	112.43	
APSI 4	.75	APSI 7	.71	106.70	APSI 7
MLQ 4	.71	MLQ 6	.72	105.50	MLQ 6
APSI 7	.71	APSI 8	.73	105.39	
APSI 4	.75	APSI 8	.73	98.26	APSI 4
LET 2	.62	LET 4	.58	87.23	LET 4
MLQ 4	.71	MLQ 5	.64	86.58	MLQ 5
APSI 5	.62	MLQ 1	.63	84.66	
RPWB 6	.38	APSI 3	.36	82.02	APSI 3
MLQ 5	.64	MLQ 6	.72	77.74	
RPWB 6	.38	LET 6	.52	72.09	RPWB 6
APSI 8	.73	LET 6	.52	7.75	LET 6
APSI 2	.76	APSI 5	.62	61.67	APSI 5

Note. APSI = The APSI scale items; LET = Life Engagement Test Items; RPWB = The Ryff purpose subscale of Psychological Well-being items; MLQ = Meaning in Life Questionnaire items. Loadings = Factor loadings; MI = Modification Index, the degree to which chi squared will improve if one of the items is removed; Removed = the item that was removed.

(.73) than APSI 4 (.75). Despite this, I kept APSI 8 rather than APSI 4 because APSI 8 ("I have a clear sense of who I want to be when I am an adult") related to youth, whilst APSI 4 ("I know what I want out of life") was more generic. Furthermore, since this is a scale designed for youth, having a specific term referring to goals related to becoming an adult seemed particularly relevant (for all correlated uniquenesses see Table 1.23).

After removing all items that were found to be duplicates, from both a substantive and an empirical perspective, I was left with six items:

1. I am an active person in carrying out the plans I set for myself. (RPWB 7)
2. Some people wander aimlessly through life, but I am not one of them. (RPWB 8)
3. I have a firm sense of who I am. (APSI 2)
4. I have a clear sense of who I want to be when I am an adult. (APSI 8)
5. My life has a clear sense of purpose. (MLQ 4)
6. To me, the things I do are all worthwhile. (LET 2)

This fit well with the aspects of purpose in life/meaning in life I was attempting to conserve in a short purpose scale, and included all of the following elements from the domain space of purpose in life/meaning in life:

Item one: carrying out plans - **Responsible action**

Item two: meaningful goals - **Life aim**

Item three: Understanding of self – **Self-understanding**

Item four: Understanding what one wants to become – **Fit/Meaning/Coherence**

Item five: Sense of Purpose – **Purpose in life**

Item six: Purposeful activities – **Personally valued activities**

Cronbach's alpha on this scale and all items was excellent (.84). I then conducted a CFA on this new scale, producing loadings which were between .61 and .77 (see Table 1.23). Loadings were: RPWB 7 = .76, RPWB 8 = .62, APSI 2 = .78, APSI 8 = .73, LET 2 = .64, MLQ 4 = .68, fit indices were also excellent with χ^2 = 45.532, *df* = 9, CFI = .98, TLI = .97, RMSEA = .065 [90% CI .047, .084] with $p > .05$.

Convergent and Discriminant Validity. I now had a series of items that together represented most of the domain space of purpose in life/meaning in life. It then was important to test whether these items, collectively, would correlate with other scales with which they are supposed to correlate based on the theoretic literature (i.e., convergent validity). I also wanted to test whether this new scale would negatively correlate or not correlate at all with constructs that the theoretic literature suggested they should negatively correlate with or not correlate with at all (i.e., discriminate validity). Henceforth, this new scale will be titled the New Purpose Scale. I tested correlations between the New Purpose Scale and several other scales that have all been well validated to test for convergent and discriminant validity. The scales used were: Meaning in Life Questionnaire presence of purpose scale (MLQ-P); Meaning in Life Questionnaire searching for purpose scale (MLQ-S); items from the APSI Sense of Identity subscale that were shown to be valid in this study; English, Math, and Science school subjects subscales from the SDQII scale (Marsh, 1990); Subjective Happiness scale (Lyubomirsky & Lepper, 1999); Life Satisfaction (Diener, Emmons, Larsen, & Griffin, 1985); and the Self Esteem, Global Self Esteem scale (Marsh 1990).

Based on previous evidence (see literature review section of this thesis) I hypothesized that the New Purpose Scale would correlate highly with happiness, resilience, self-esteem, and life satisfaction, while correlating less so with academic

self-concept and searching for purpose (given that searching for purpose and presence of purpose do not correlate highly in the MLQ). In my analysis of convergent discriminate validity, I ran one model which included the instruments from which the new scale arose and one that did not include these instruments (see Table 1.24).

Results of Convergent and Discriminant Validity. The differences between the two models, one that contained items from the scales that were used to create the New Purpose Scale and one that omitted them, were marginal (see Table 1.24). The results showed good convergent validity with other purpose scales. I found a correlation of .70 with the MLQ-P and .89 with the APSI. As I hypothesized, the analysis also showed good convergent validity with happiness and self-esteem, which have been shown to correlate with purpose in life. It also yielded good discriminant validity with academic self-concepts such as math, science and English, and showed moderate correlation with resilience and life satisfaction (see Table 1.24).

The fit of the model for the divergent and discriminant validity was reasonable, $\chi^2 = 5313.855$ ($p < .05$), $df = 1698$, TLI = .92, CFI = .925, RMSEA = .042 [90% CI .041, .044].

Conclusion

Each of the research questions I proposed at the start of this chapter were answered, and all my research aims were met. I showed that the factor structure of an instrument designed for adults is not necessarily supported in my sample of youth (research question 1), and that this is especially so when negatively worded items make up a considerable number of the questions (research question 2). I also found that using

fewer negatively worded items positively impacts factor structure in the sample of youth found in this study, as was seen from the MLQ instrument. However, this may also be attributed to the relative robustness of the instrument rather than the relative lack of negatively worded items. More research is needed in this regard to answer this more definitively.

Table 1.24

Discriminate and Convergent validity

Correlated Scale	Model 1	Model 2
MLQ-P		.81
MLQ-S	.16	.15
APSI		.91
English SC	.24	.22
Math SC	.21	.20
Science SC	.17	.16
Academic SC	.26	.24
Happiness	.59	.56
Resilience	.32	.31
Life Satisfaction	.30	.27
Self Esteem	.42	.40

Note. Model 1 = analysis that did not include scales that was used in the New Purpose Scale; Model 2 = analysis that included scales that was used in the New Purpose Scale; New Purpose Scale = the newly created scale that is being tested for discriminant and convergent validity; Correlated Scale = other scales used to validate; Correlations = standardized correlations; MLQ-P = Meaning in Life Questionnaire - presence scale; MLQ-S = Meaning in Life Questionnaire - searching scale; APSI = items from the APSI subscale that were shown to be valid in this study; English, Math, Science, Subjects = Subscales of the SDQII scale; Happiness = Happiness Scale; Self Esteem = Global Self Esteem scale.

This research also showed the importance of conducting a full psychometric analysis on an instrument (research question 2) and demonstrated, using the APSI sense of identity scale which was only validated by its authors on the scale level, that convergent and discriminate validity without an EFA and CFA on the item level often does not result in psychometrically valid instruments.

This research also attempted to contribute to the debate surrounding meaning and purpose as either separate-but-related factors or two expressions of a single underlying factor (research question number 3). I found no evidence to suggest that meaning and purpose were two factors. In fact, my analysis showed that respondents found them indistinguishable from one another, and I concluded that meaning and purpose are wordings that together are understood to make up the one-dimensional construct of purpose in life/meaning in life. In addition, since, currently, none of the purpose scales that have been created address all of the aspects that scholars have suggested contribute to purpose in life, I set out to create a new purpose scale that would take the best of the four scales I analyzed separately and create a short form purpose in life scale designed especially for youth (research question 4). I did this using a well-established method used to create short form scales from longer scales. This resulted in a six-item purpose scale that had a one factor structure and contained many of the elements that scholars argue are inherent in purpose in life.

Chapter 3: Effect of Fostered Purpose in Youth – Using a Quasi-Experimental Aptitude Treatment Interaction (ATI) Design Study

Abstract

Context. Studies show that purpose in life is positively correlated with many indicators of well-being and academic success in youth. Given this evidence, it is worthwhile exploring how purpose in life can be intentionally fostered in youth and whether a school based purpose in life fostering intervention can be effective in increasing a sense of purpose in life amongst teens.

Objective. This study was designed to determine if implementation of a school based purpose intervention can foster purpose among students. It also sought to determine if academic self-concept, positive youth development, and other areas of growth increase when purpose increases. Furthermore, this study aimed to test the hypothesis that there is an Aptitude Treatment Interaction (ATI) and thus determine the moderators of purpose development, addressing whether students who started low on purpose in life gained more from a purpose intervention than those who already had a healthy dose of purpose in life. In this case, the level of initial purpose was considered the aptitude.

Design, Setting, Participants. A quasi-experimental design was used to conduct the study with students from two schools. In both schools, all students from year 10 participated in the study. In the first school, there was a total of 75 participants. Thirty-seven students received a partial version of the purpose-fostering intervention. Another 38 students did not receive the purpose intervention but instead completed a career exploration program provided by an academic survey facilitation company titled

"Academic Assessment Services" (formerly Robert Allwell & Associates). In the second school, all 146 year 10 students received the full purpose intervention over the course of 6-8 weeks.

Interventions. A youth purpose intervention was created that involved the implementation of a purpose curriculum in the schools that was coached by teachers. The intervention consisted of in-depth self-examination, interviews in the areas of potential long-term career focused purpose in life, goal setting, and plan making.

Main Outcome Measures. An increase in purpose in life was anticipated to be the main outcome measure.

Results. A total of 221 students participated in this study across two schools. The study showed that, as hypothesized, there was a strong Aptitude Treatment Interaction and that the intervention had a positive impact in terms of an increase in purpose in life for those who started low on purpose. This was not the case for those who started relatively higher on purpose in life. As a secondary concern, I investigated whether the treatment had an overall main effect as it related to purpose in life and other measures of well-being. However, no evidence of a main effect relating to any of the outcome variables was found. In addition, there was no evidence from this study that an increase in purpose in life generalized to other indicators of well-being or academic self-concept.

Conclusion. Purpose in life can be intentionally fostered in an instructional environment such as a high school using a purpose in life fostering intervention. Such an intervention is especially impactful for those who need it most, namely, those who have lower amounts of purpose in life to begin with. The immediate impact of an

increase in purpose in life on other areas of well-being was not discernable in this limited study.

Introduction

Background. In this thesis, I have described the importance of purpose in life as it relates to health, wellness and the development and maintenance of a positive life (see chapter 1). As I introduce my youth study, I will briefly review why purpose is so vital for the psychological well-being of youth. Purpose in life has been positively linked to the following outcomes that are fundamental to the positive development of youth: motivation for academic success (Yeager & Bundick, 2009); academic achievement (Pizzolato et al., 2011); psychological well-being and positive mental health (Shek, 1992); pro-social concerns (Furrow, King, & White, 2004); positive sense of identity (Bronk, 2011; Erikson, 1968); and satisfaction as it relates to family, friends, school and self (Ho Cheung, & Cheung, 2010). Purpose in life is also seen as an important developmental asset (Scales, & Leffert, 1999) that foreshadows subjective well-being in youth (Chui & Wong, 2016) and has been connected to the lessening of the fallout of negative social and psychological factors (DuRant et al., 1994). Purpose in life is also associated with a decreased risk of aggressive and reckless driving in teens (Taubman & Ben-Ari, 2014). Purpose in life in youth also seems to act as a protector against drug and sedative abuse, unsafe sex, and lack of exercise and a lack of diet control (Brassai, Piko, & Steger, 2010).

Lack of purpose in life in youth, conversely, is correlated with hopelessness and a struggle to develop a set of positive behaviors (Brassai, Piko, & Steger, 2012); the likelihood of engaging in antisocial and aggressive behavior (Shek, Ma, & Cheung,

1994); video game addiction (Wu, Lei, & Ku, 2013); drug and alcohol abuse (Brassai, Piko and Steger, 2011; Newcomb & Harlow, 1986); alienation and social maladjustment (Hi et al., 2010); difficulty in acquiring a motivating belief system (Erikson, 1968; Marcia, 1980); and a sense of drift, self-absorption, depression, addictions, deviant and destructive behavior, lack of productivity, inability to sustain stable interpersonal relations, and psychosomatic ailments (Bigler & Neimeyer, 2001; Damon, 1995; Damon, Menon, & Bronk, 2003).

Given that purpose in life is related to many benefits and a deficit in purpose in life is associated with such significant negatives, the creation of an effective intervention that fosters purpose in life would be highly fruitful, especially as it relates to youth. Furthermore, if purpose in life could be fostered in a school environment and an effective purpose in life fostering curriculum can be implemented, young people can gain the benefits of leading a purposeful life. This could then result in the ushering in of what has been referred to as an era of purpose (Damon, 2009).

Objectives. Thus, this study was undertaken to satisfy the following objectives:

1. To identify if the implementation of an evidence based school-wide purpose in life fostering intervention can increase the level of purpose in life among teens in a high school setting.
2. Specifically, the goal was to use an aptitude treatment interaction (ATI) model to examine if a sense of purpose among students in the treatment groups change over the course of the study compared to the students in the control group over the same period.

3. To analyze if an increase in purpose results in a growth of academic self-concept as well as other indicators of positive youth development and well-being.

Research Questions. Below are the research questions that this study answers in service of reaching these research objectives.

Research Question 1. Can an evidence-based purpose in life fostering intervention, as described in chapter 1 and briefly below, when implemented in a high school instructional setting, foster purpose in youth?

Background to research question. As demonstrated above, and at length in chapter 1 of this thesis, purpose in life is vital to the well-being of youth. School is the place where youth spend a good deal of their waking hours and grow in many other areas of life, educationally, psychologically and socially (Rocque, Jennings, Piquero, Ozkan, & Farrington, 2017). School is, therefore, the natural place for them to find purpose in life as well. Thus, testing whether a purpose-fostering intervention added to the curriculum can increase the sense of purpose in youth seems natural.

Research Question 2. Can a purpose-fostering intervention that is implemented in a school instructional setting specifically increase purpose in life for youth who have a deficit in that area?

Background to research question. As has been shown in chapter 1 of this thesis, youth who lack purpose have an increased risk for a whole host of negative psychological and wellness outcomes. Based on these findings, I wanted to know if an intervention designed to foster purpose could specifically increase the purpose of that more at-risk population.

Research Question 3. Does an increase in purpose in life in youth coincide with an increase in other indicators of well-being and academic self-concept?

Background to research question. As was enumerated in chapter 1 of this thesis, there is research that suggests a connection between an increase in purpose in life and other indicators of well-being and with self-concept. This research question intended to test this potential connection in an experimental setting.

Methods

Study Design. The present study assesses the development of purpose in life in students using a school based purpose in life fostering curriculum and program as an intervention meant to foster purpose. A two school, three group, quasi-experimental design was used for this study (Shadish, Cook, & Campbell, 2002). The schools were both private schools based in Sydney, Australia. All year ten students from both schools participated in the study. One school, that will be referred to as the intervention school, acted as an experimental school where all year ten students received the purpose in life intervention in full. In the other school, which will be referred to as the control/partial intervention school, there were two groups. One an active control group that received survey based career discovery assessments titled "Allwell testing." The other group of students, due to administrative and staff limitations at the school, received a partial version of the intervention.

Aptitude Treatment Interaction (ATI). In the analysis of the data from this study an Aptitude Treatment Interaction design was used. ATI posits that "aptitudes are initial states of persons that influence later developments, given specified conditions" (Cronbach & Snow, 1977; Snow, 1989, p. 6). According to Borg and Gall (1989), "The

purpose of aptitude treatment interaction (ATI) research is to determine whether the effects of different instructional methods are influenced by the cognitive or personality characteristics of the learner," (p. 700). This approach can also be used to see how susceptible students with differing aptitudes are to a given treatment. In this study, aptitudes are levels of purpose in life. And as Borg and Gall point out, an ATI study design "allows for a more sophisticated analysis of the effects of instructional methods than would be possible by just comparing one treatment group with another," (Borg & Gall, 1989, p. 705). Thus, in this case, by taking the levels of initial purpose in life into consideration when testing for the effects of the intervention, any variance related to individual differences resulting from differing initial levels of the dependent variable is removed. This, then, allows for greater statistical sensitivity in the results (McInerney, McInerney, & Marsh, 1997; Pedhazur & Schmelkin, 2013). Thus, since ATI can offer a more nuanced approach to gauging the impact of a treatment, especially in an instructional environment such as a high school (Cronbach & Snow, 1977; Snow, 1989), in this study I use ATI as the primary method of testing for whether my treatment is effective. Using ATI to study purpose in life interventions in an instructional setting is an entirely novel approach. However, it allows for the potential of a substantial advance in our understanding of how a purpose in life can be fostered in a school and instructional environment. It is possible, for example, that in a school that is made up of students that are both high and low on purpose in life, because there is an organic decline in areas of well-being over the course of the school year (see Norrish & O'Connor, 2015), there may not be a discernable change in overall purpose in life despite the intervention. The reason for this may be that those who started low on purpose in life may have increased in their level of purpose in life, but those who

started high may not be impacted as much by the treatment and may also organically decline. By using an ATI approach, this risk is mitigated and allows the researcher to discern whether the intervention has a positive impact on those who start either low or high on the construct of meaning and purpose in life. Above all, however, this ATI approach allowed me to reach my research objective and answer my research question that relates to whether we can specifically foster purpose in those who have a deficit of purpose in life.

Study Intervention. The intervention was the same as described in detail at the end of chapter one and very similar to the one given to adults in the previous chapter, but with some minor differences that I will enumerate here. Like the adult intervention, there were six steps to the intervention. Students were coached through these steps using an online application and were assisted by the coaching of a teacher in the classroom setting. The ratio of student to coach/teacher is meant to be low. I recommended no more than 15 students to each teacher. In the Full Treatment school this was the case. In the partial control/intervention school however, that recommendation was not implemented, and there was one teacher to 38 students.

In the first step, the students were coached to realize that they have a purpose in life. This is not necessarily obvious to many young people, and they need to be taught about purpose and meaning and then learn that they too can find a purpose in life. Thus, students undertook exercises that helped them understand that they are unique and have something that they can individually contribute in their life and in the universe. This concept is akin to Frankl's notion that people need to be inspired to have a will to meaning (Frankl, 1985).

In step two, students listed their passions and the teacher coached them to make a list of the things they were passionate about and especially enjoyed doing. This way, youth identified their sparks and passions. They then analyzed each of their passions and decided which aspects they enjoyed about a given passion on their list. Unlike in the adult version (see next chapter), in the youth version of the intervention students **did not** try to find the essence of the activities they were passionate about by analyzing their listed aspects. Thinking that deeply about a given activity they enjoyed was deemed too abstract of an exercise for students in year 10 to be able to do in a classroom setting with teachers. In the final part of this step, students took the Values in Action Character Strengths Assessment (Peterson & Seligman, 2004) and noted their top ten character strengths.

In the third step of the intervention, students took everything they learned about themselves in the previous step and applied it to a potential purposeful career. In this step, therefore, students took the aspects, essences and character strengths they discovered in step two and made a list of potentially purposeful and meaningful careers that matched the aspects of current activities they listed in step two as enjoying. Participants then visualized each potential purposeful career on their list and ranked them on a scale of 1-10 to see how passionate and excited they felt about each one and how well each fit their potential purpose. They then narrowed down their list of potential purposes based on whether they scored an eight or higher on their visualization technique. This then took the participant onto step four, where they went into an in-depth exploration of their potential passionate purposes. Thus, in this step, students conducted informational interviews with professionals in the fields of their potential passionate purposes or, if that was not possible, they did an informational

worksheet to delve deep into the areas of their potential passionate, career focused purposes. In this youth intervention, these in-depth interviews took the form of work experience, as is often carried out by students in year ten in New South Wales high schools. The interviews helped youth conduct in-depth exploration of the opportunities they thought might be a manifestation of their career focused purpose, to make sure it fit them perfectly (Hirschi & Lage, 2007). Based on this in-depth exploration, they chose a purposeful career that they wanted to pursue post-college. In the fifth step of the intervention, students charted a Road Map in the form of a comprehensive plan of action that detailed how they would reach their purposeful career goal.

Teachers in both schools were trained on how to implement the intervention in their classrooms. Teachers in both schools were offered ongoing support and training throughout the implementation period. Teachers who implemented the intervention were given detailed lesson plans to follow and resources to use. The students used a specially created online application called the Purpose Navigator to follow and complete the purpose intervention.

Detail of study design. In January 2015, teachers and educators were trained in how to implement the purpose in life–fostering curriculum. Meanwhile, survey and interview measures were pilot tested and analyzed using factor and reliability analysis (for the results of this analysis see the psychometric chapter, chapter two of this thesis).

Control/partial intervention school. Students of the control/partial intervention school were told by school administrators that they had two programs to choose from: one was the Academic Assessment Services (formerly Robert Allwell & Associates) career testing program, henceforth titled Allwell testing; and the other was my purpose in life fostering curriculum. School administration presented both programs as being of

potentially equal value and students were given the option to voluntarily choose one or the other program. Just over 49% (49.3%) chose the purpose intervention (n = 37) and thus constituted the partial treatment group. Just over 50% (50.7%, n = 38) chose the Allwell testing program and were designated as the active control group. Both programs were mostly completed in one day, something not recommended for my purpose in life intervention. For this reason, together with the high student to teacher ratio, I consider this group to be a partial, rather than full, treatment group. The students who opted for the Allwell testing program were given surveys to complete and the results were based on those psychometric tests taken. Based on the Allwell testing results, student internships/work-experience were chosen. For the purpose in life intervention, students chose internships/work-experience based on the conclusions they drew from the exercises they did during the intervention. All students in the control/partial intervention school then undertook a week-long work experience program in the field of their choice. This week-long program was in place of an in-depth purpose in life interview for the partial-intervention group at the control/partial intervention school and as a validation of testing results for the active control, the Allwell testing group. Students forming the partial intervention group then chose a long-term career focused purpose and created a Road Map of how they would achieve that purposeful goal. Follow-up survey testing was conducted after the Road map was completed.

Full Treatment school. For the Full Treatment school, the entire year 10 took the completed the pretest survey instruments prior to the intervention. The intervention was conducted over the course of eight weeks in small groups that met twice a week, for a total of 16 sessions. Teachers coached the students in the classroom during time set aside for tutorials. The student teacher ratio was approximately 1:10. Towards the end

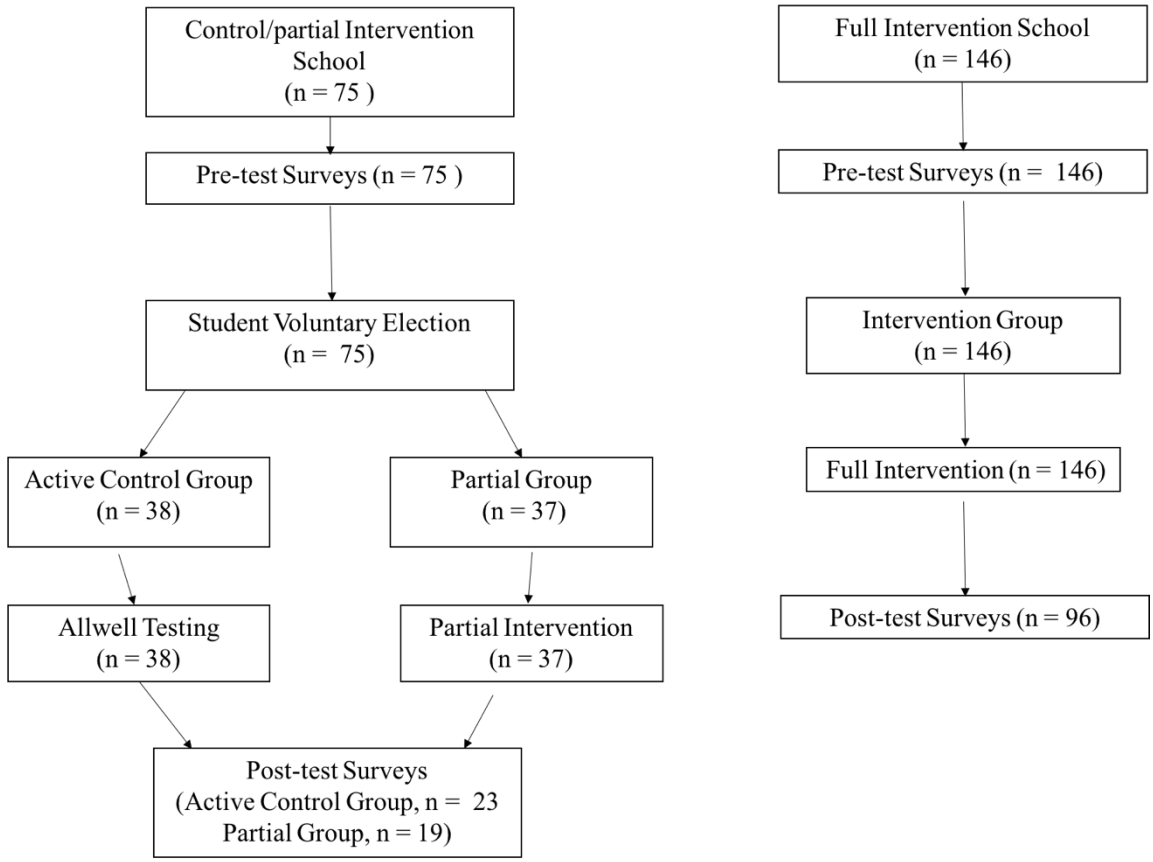


Figure 3.1. Flow of Participants Through Each Stage of Quasi-Experiment

of the intervention, students undertook a day-long work experience (in contrast to a week-long work-experience that students in the partial intervention/control school carried out). This work-experience was similarly in place of in-depth purpose finding interviews that were part of the purpose in life fostering intervention. Following their work experience, students set long-term goals and completed their Road Map in the form of a plan for how they would achieve their career-focused purpose. The posttest surveys were taken following these internships/work experiences in December 2015 (see Figure 2.1 for experiment flow).

Study Population. The study was conducted in two private schools in Sydney that serves urban populations. All students were in year 10 (*M* age = 15.5 years). Both schools were matched on baseline socioeconomic levels. The partial-intervention/control intervention school was co-ed and the intervention school was boys only.

Randomization. This was a quasi-experimental study where no real randomization was conducted. Instead, in the control/partial intervention school, students were given the choice to either join the active control group (Allwell testing) or the intervention group. School administration presented both programs as being of equal value. This was as close to randomization as the school would agree on, given standing school policies that demanded that students be given choice regarding the programs they want to take in these types of cases. In the Full Treatment school, all students participated. Thus, there was no randomization on that school level.

Study Outcomes. The primary outcome measure was an increase in purpose for at least some in the intervention groups versus the control group. I hypothesized that there are other benefits to an individual finding his or her purpose, in terms of positive

youth development and well-being (Bundick, Yeager, King, & Damon, 2010), and that we would see an increase in these measures in the intervention groups but not in the active control group. I also hypothesized that I would find an Aptitude Treatment Interaction (ATI) effect, where the aptitude was level of purpose in life that may change across differing levels of the intervention group versus the active control group. Thus, I hypothesized that students who started lower on purpose would gain more from the intervention than those who were already somewhat naturally purposeful.

Thus, to address the first research question (whether an in-school purpose in life fostering intervention can increase purpose in life in high school students), the extent to which the treatment effectively fostered students' purpose in life over time was assessed. The newly created New Purpose instrument (see psychometric portion of this thesis, chapter 2) was used to test the main dependent variable, purpose in life. This New Purpose instrument was used because, in contrast with the other purpose instruments, it spans multiple elements of the domain space of purpose in life. In addition, it was validated based on a youth population.

In addition, however, other instruments were also used to test the dependent variable of purpose in life. These instruments included the Meaning in Life Questionnaire (MLQ), developed by Steger, Frazier, Oishi, and Kaler (2006). The MLQ is considered one of the best psychometric tests for measuring meaning and purpose in life (Boyraz, Lightsey Jr., & Can, 2013) and was also found to have solid psychometric properties in my own testing (see chapter two). The MLQ measures both presence of (MLQ-P) and searching for (MLQ-S) purpose in life. Of the two, the MLQ-P, rather than the MLQ-S, was used.

Changes in purpose as it relates to aptitude, such as level of purpose in life, (research objective number two) were the primary factors of interest here. The search for purpose in life measure (MLQ-S) was also considered. To test for purpose in life, aside from the MLQ-P and my New Purpose scale, I also used the Life Engagement Test (LET) (Scheier, et al., 2006), as well as Ryff's Psychological Well-being (RPWB), Purpose in Life subscale (Ryff, 1989) and the APSI sense of identity subscale developed by Lounsbury, Huffstetler, Leong and Gibson (2005). The APSI sense of identity subscale, as mentioned in chapter two of this thesis, also contains items that directly relate to purpose in life and was developed especially for youth. It should be noted that for the APSI, the two problematic items (3 and 6) found in my psychometric analysis of that scale (see chapter 2) were removed in the analysis. Although the LET and RPWB purpose subscale demonstrated problems in terms of psychometric validity in my study of these instruments (see chapter two), I nonetheless administered them because they are so widely used in scientific studies of purpose in life. Yet, because of their questionable validity, they were only used in a secondary capacity. These instruments were administered twice over the course of the project to students at both the intervention and control/partial-intervention schools. Together, these measures addressed research objectives one and two and assessed the prevalence and change of purpose in life.

Furthermore, to assess changes in other indicators of positive youth development and self-concept, a series of other surveys were administered at the same time that the surveys of purpose were administered. Grit was assessed using the Grit Scale, (Duckworth & Quinn, 2009); to test for academic self-concept I used Marsh's (1992) Self Description Questionnaire II (SDQ-II); and for well validated (Corrigan,

Kolakowsky-Hayner, Wright, Bellon, & Carufel, 2013) life-satisfaction I used the Life Satisfaction (LS) test by Diener, Emmons, Larsen, and Griffin (1985). I used the Subjective Happiness scale (Lyubomirsky & Lepper, 1999) to measure happiness, and to measure self-esteem I used Marsh's (1990) Self Description Questionnaire I (SDQI). Each of these indicators of positive youth development has either been theoretically linked to purpose in life or has been shown to correlate with purpose in life.

Statistical Analysis. The quantitative data collected allowed for multiple advances in understanding of purpose in life in three areas. First, by comparing students' changes across the two schools and three groups, I was able to assess the efficacy of the purpose intervention for promoting purpose in life development (research objective and question 1). Second, I could answer questions directly related to Aptitude Treatment Interaction (ATI) research as it relates to purpose in life, such as whether the purpose intervention could increase purpose in life if youth who started from a more disadvantaged base on the construct of interest (research objective and question 2). Alternatively, it was possible that students who started higher on this construct were likely to gain from an instructional type purpose in life fostering intervention. Third, using data across both schools allowed me to try and gain valuable understanding of what coincides with changes in purpose, and I was also able to test, for example, if an increase in purpose in life coincided with greater academic self-concept (research aim and question 3). The survey data allowed me to test whether changes in purpose in life correlated with those on benchmarks of positive youth development and well-being (e.g., identity, grit, self-concept), as has been suggested in the literature (see chapter 1).

Intention to Treat Model (ITT). There was some attrition during the study mostly because towards the end of the school year it was difficult for the administration to get all the students to complete the posttest surveys. See Figure 1 for attrition details. For those who dropped out, an intention to treat (ITT) model was used (Hollis & Campbell, 1999). The ITT model meant that although people dropped from the study, they were not removed altogether; rather, they were treated as if they remained in the study and the missing data was estimated using full information maximum likelihood (FIML) method inbuilt into Lavaan package in R was used (Rosseel, 2012). This mitigates the possibility that only those who were motivated to complete the intervention and the posttest surveys remained in the study, thus potentially biasing the results. In other words, using an ITT strategy maintains the integrity of the study despite the attrition. The ITT model ensures that all participants, regardless of whether they actually received the full intervention because of subsequent withdrawal or deviation from the protocol, are kept in the intervention and control groups for the duration of the study. In the final analysis, it has been argued that if an ITT strategy is not conducted, treatment effectiveness may be overestimated (Hollis & Campbell, 1999). Because of this, and despite it being a rather conservative approach, an ITT strategy was used in this study.

To achieve my research objectives, I compared changes in purpose in life and changes in indicators of well-being *among* students at both schools to determine if fostering purpose in life is impacted by whether they started lower or higher on the outcome variable (in other words, the ATI method). I also compared changes in purpose in life and indicators of well-being *between* students at the control/partial intervention school and the Full Treatment school. The same type of analysis was conducted for the

other well-being variables tested. Thus, I analyzed the data as follows, testing for both a main effect and an interaction effect:

1. Time*Group Interaction: Analyzed the ATI question (research aim and question 2) addressing whether the effect of the outcome variable of interest differed at posttest for youth whose initial aptitude for (level of purpose in life) was lower.
2. Main effect: Controlling for Baseline, this analyzed whether there was an overall posttest difference between the intervention groups and the active control group as it related to the outcome of interest (research aim and question 1).

All dependent variables, including indicators of well-being and academic self-concept, were subjected to the same analysis.

Thus, the linear model I fit to the data followed this equation:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_{13} x_1 x_3 + \beta_{23} x_2 x_3$$

The dependent variable *y* represents the posttest results. The independent variables are as follows: β_0 represents the intercept which, since all values were centered, is the expected mean value for the control group. In other words, it is the mean value for the control group when the experimental groups = 0.

$\beta_1 x_1$ represents the partial treatment group variable, which was encoded using dummy variables. $\beta_2 x_2$ represents the full treatment group variable, which was also encoded using dummy variables.

$\beta_3 x_3$ represents the treatment effect, which represents the pretest at baseline. $\beta_{13} x_1 x_3$ tests for ATI and represents partial treatment by baseline, which is the

interaction term of the partial treatment group dummy variable (x_1) multiplied by baseline (x_3). $\beta_{23}x_2x_3$ represents full treatment by baseline, which is the interaction term of the full treatment group dummy variable (x_2) multiplied by baseline (x_3).

Results

Summary of results. The results of this study confirmed my original hypothesis that a school based purpose intervention can foster purpose in teenagers. The results of this study also confirm my hypothesis that aptitude (ATI) has an influence on how youth will be impacted by a purpose in life fostering intervention in an instructional setting. It showed that the impact of a purpose in life intervention is greater for students who begin lower in purpose than those who start higher in purpose (see Table 2.1). It also turned out that, based on this study, there was no support for my original hypothesis that an increase in purpose based on an in-school intervention would coincide with an increase in other areas of well-being or for academic self-concept (see Table 2).

Details of results for purpose measures. Although there was an increase in purpose from pretest-to-posttest on the New Purpose, MLQ-P and APSI scales, it was not a statistically significant main effect for any of the purpose measures (see Table 2.1). However, since those who lack purpose are at most risk for a host of psychological and overall wellness deficits, the aim of this intervention was to increase purpose in those who lack purpose in life. Thus, my hypothesis was that the impact purpose-fostering intervention implemented within an instructional setting would change based on aptitude and we would observe an ATI effect here. Aptitude, in this case, is level of initial purpose in life, and I expected the intervention to have a greater impact on those

who had low purpose aptitude than for those who had high purpose aptitude. This hypothesis was supported. Thus, the intervention proved to have an impact for those in the full treatment group who started lower on purpose, but seemed to have no impact for those who were already relatively purposeful. In fact, although the simple slopes showed that those who started higher on purpose had a slight .10 decrease in purpose (see Table 2.4), that decrease was not significant ($p = .61$). The .55 increase in purpose for those who started low on purpose, however, was significant at the $p = .05$ level for all three purpose instruments (i.e., the New Purpose, MLQ-P and APSI). This demonstrates that while there was no evidence that the treatment had any impact on those that started high on purpose in life, it had a significant impact on those who started low on purpose. There was, thus, as originally expected, a significant ATI effect (see Table 2.1 and simple slopes in Table 2.4) for three of the five purpose measures (New Purpose, MLQ-P, and APSI). These effects showed that those who started lower on purpose increased in purpose over the course of the treatment. Importantly, these results were especially strong for my New Purpose measure created specifically for this study. This, therefore, demonstrates that adding a purpose-fostering curriculum to an in-school academic program can have a positive impact as it relates to the construct of purpose in life.

Results for searching for purpose. Interestingly, for the partial treatment group, whilst there was no significant increase in purpose, there was a significant increase in searching for purpose as measured by the MLQ-S instrument. Upon closer inspection using the ATI analysis, those in the partial treatment group who started high on searching for purpose as measured by the MLQ-S increased in the level of searching for purpose. Conversely, those who started lower on searching for purpose remained low.

Table 2.1

Results for purpose measures

Measure	Intercept		Partial Treatment		Full Treatment		Baseline			Partial Treatment by Baseline		Full Treatment by Baseline		
	β	SE	β	SE	β	SE	β		SE	β	SE	β		SE
New Purpose	-.13	.17	.35	.26	.14	.19	.57		.07	-.09	.34	-.45	*	.21
MLQ-P	-.21	.18	.42	.26	.22	.20	.62		.07	-.10	.20	-.33	*	.15
MLQ-S	.22	.20	-.02	.29	-.29	.22	.32	***	.08	.40	* .19	.19		.16
Ryff Purpose	.13	.18	-.35	.30	-.08	.21	.46	***	.09	-.02	.47	-.31		.24
APSI	-.08	.17	.13	.25	.12	.19	.57	***	.07	.11	.33	-.51	*	.23
LET	.26	.17	-.57	.25	-.17	.19	.60	***	.07	-.10	.40	-.42		.30

Note. Intercept = The control group; Treatment 1 = the school group that completed the intervention during the course of one day with a large group of students and one teacher, β for this group is how much this group gained in relation to the Intercept or control group. Treatment 2 = the school in which the intervention was done with the entire year group β for this group is how much this group gained in relation to the Intercept or control group; Baseline = the average value of the variable; Treatment by Baseline 1 = the interaction of time with the variable of interest for Treatment group 1; Treatment by Baseline 1 = the interaction of time with the variable of interest for Treatment group 2; New Purpose = Purpose measure created during the course of this study and detailed in the psychometric chapter of this thesis; MLQ-P = meaning in life questionnaire presence of purpose scale; MLQ-S = meaning in life questionnaire searching for purpose scale; Ryff Purpose = The purpose subscale of the Psychological Wellbeing scale; APSI = the sense of identity subscale of the APSI which also measures purpose in life (in the analysis items 3 and 6 were dropped from this scale because of their negative impact to validity as was demonstrated in chapter 2 of this thesis); LET = The Life Engagement Test was designed to measure Purpose in life; LS = Life Satisfaction test; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

However, none of the simple slopes for the interaction were significant (see Table 2.4). Nonetheless, one may argue that this might indicate that instructing/coaching students about purpose and exposing them to the idea that purpose is an important element to have in life (which is a large part of the first step of the intervention) can result in youths' increased desire to search for purpose. In addition, the full treatment group had a non-significant decrease in searching for purpose as measured by the MLQ-S (β = -.29, SE = .22, p = .18; see Table 2.1).

This is also demonstrated in the ATI interaction term $\beta_{23}x_2x_3$ (β = .19, SE = .16, p = .25; see Table 2.1) and the simple slope, which show that all members of the full treatment group had a non-significant decrease in searching for purpose (see Table 2.4). This might subtly imply that as people start to find their purpose in life, their searching for purpose declines. In addition, it might indicate that a decrease in searching for purpose in life could be a proxy for not yet detected increase in actual purpose in life. The rationale for this is that when people start to find purpose, they probably stop searching for it (see chapter 1). A recent study by Newman, Nezlek, and Thrash (2017) also demonstrates the inverse connection between searching for purpose and presence of purpose. Thus, the fact that this decrease in searching purpose in life coincided with a non-significant moderate increase in purpose in life as measured by MLQ-P (β = .22, SE = .20, p = .27, see Table 2.1) may be an indicator of an underlying, brewing increase in purpose in life.

Results for other indicators of well-being. I found a significant increase in life satisfaction for the partial treatment group versus the other two groups (see Table 2.2). Despite what I originally hypothesized, there was no evidence of a significant increase

Table 2.2

Results for measures of wellbeing

Measure	Intercept		Partial Treatment			Full Treatment			Baseline			Partial Treatment by Baseline		Full Treatment by Baseline	
	β	SE	β		SE	β	SE	β		SE		β	SE	β	SE
Happiness	.06	.20	.01	*	.28	-.08	.21	.48	***	.07		.29	.36	.27	.28
Grit	.17	.18	-.33		.26	-.23	.19	.49	***	.07		.17	.13	-.16	.09
Self Esteem	-.07	.18	.22		.26	.80	.20	.52	***	.07		.39	.39	-.06	.27
LS	-.12	.18	.68	**	.27	.11	.20	.50	***	.08		-.05	.28	-.22	.18

Note. Intercept = The control group; Treatment 1 = the school group that completed the intervention during the course of one day with a large group of students and one teacher, β for this group is how much this group gained in relation to the Intercept or control group. Treatment 2 = the school in which the intervention was done with the entire year group β for this group is how much this group gained in relation to the Intercept or control group; Baseline = the average value of the variable; Treatment by Baseline 1 = the interaction of time with the variable of interest for Treatment group 1; Treatment by Baseline 1 = the interaction of time with the variable of interest for Treatment group 2; Happiness = subjective happiness test; Grit = Grit scale; Self Esteem = global self-concept scale; LS = Life Satisfaction test; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

or decrease in life satisfaction, grit, happiness or self-esteem for any of the treatment groups versus the control group (see Table 2.2).

Results related to academic self-concept. I had hypothesized that an increase in purpose would also coincide with an increase in academic self-concept. However, there was no indication that an increase in purpose was related to a change in academic self-concept in any of the major subjects of math, English, science or general academics (see Table 2.3). This, again, could be because there is a lag between the increase in purpose and the increase in self-concept related to that area of purpose, and due to the limitations of this study that only collected pretest and posttest data, this was not detected here. Thus, while there is no evidence from this study that purpose has an impact on academic self-concept, there is also not enough evidence to definitively conclude from this study that purpose does not impact academic self-concept and more research is needed in this regard.

Table 2.3

Results of academic self-concept measures (ASDQII)

Measure	Intercept		Partial Treatment		Full Treatment		Baseline			Partial Treatment by Baseline		Full Treatment by Baseline	
	β	SE	β	SE	β	SE	β		SE	β	SE	β	SE
Science	.01	.14	.05	.21	-.10	.16	.82		.07	-.19	.18	-.09	.13
English	-.03	.16	.14	.23	.08	.18	.72	***	.06	-.08	.21	-.08	.16
Math	.03	.13	.03	.23	-.12	.15	.80	***	.07	-.15	.25	-.07	.14
Academic	.05	.15	-.06	.22	-.10	.16	.78	***	.07	.44	.28	.01	.21

Note. Intercept = The control group; Treatment 1 = the school group that completed the intervention during the course of one day with a large group of students and one teacher, β for this group is how much this group gained in relation to the Intercept or control group. Treatment 2 = the school in which the intervention was done with the entire year group β for this group is how much this group gained in relation to the Intercept or control group; Baseline = the average value of the variable; Treatment by Baseline 1 = the interaction of time with the variable of interest for Treatment group 1; Treatment by Baseline 1 = the interaction of time with the variable of interest for Treatment group 2; Science = Science subscale of ASDQII; English = English subscale of ASDQII; Math = Math subscale of ASDQII; Academic = General Academic Self-Concept subscale of ASDQII; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 2.4

Simple slopes, purpose in life measure

Measure	SD	Partial Treatment Group	SE	Full Treatment Group	SE
New purpose	-1	.44	.47	.59	.30
	0	.35	.26	.14	.19
	1	.27	.38	-.32	.27
MLQ - P	-1	.51	.37	.55	.29
	0	.42	.26	.22	.20
	1	.32	.27	-.10	.21
APSI	-1	.03	.47	.63	.31
	0	.13	.25	.12	.19
	1	.24	.36	-.39	.28
MLQ-S	-1	-.41	.36	-.48	.30
	0	-.02	.29	-.29	.22
	1	.38	.35	-.10	.25

Note. SD = Scaled levels of the given measure in terms of Standard Deviations; Partial Treatment Group = the school group that completed the intervention during the course of one day with a large group of students and one teacher; Full Treatment Group = the school in which the intervention was done with the entire year group; New Purpose = Purpose measure created during the course of this study and detailed in the psychometric chapter of this thesis; MLQ-P = meaning in life questionnaire presence of purpose scale; APSI = the sense of identity subscale of the APSI which also measures purpose in life (in the analysis items 3 and 6 were dropped from this scale because of their negative impact to validity as was demonstrated in chapter 2 of this thesis); MLQ-S = meaning in life questionnaire searching for purpose scale.

Discussion

In this chapter, I set out to find whether, using an evidence based purpose-fostering intervention, purpose in life could be fostered in a high school instructional setting. Further, I wanted to discover whether such an intervention could be especially impactful for youth who are low on purpose in life. To that aim, I implemented an ATI approach in my analysis of the data. I also wanted to learn whether an increase in other indicators of well-being would coincide with any increase in purpose in life. Answering these questions has the potential to impact how educators, mental health workers and youth workers treat at-risk, unmotivated and low-purpose youth.

Due to the nature of this study following a quasi-experimental design, any assertions regarding causation must be interpreted with great caution. However, this study demonstrates a clear association between the implementation of a purpose in life fostering curriculum within the high school instructional framework and an increase in purpose for students with low levels of purpose. There was no indication that the purpose intervention had any impact on youth who are already purposeful. One might argue that, given that those with already high levels of purpose in life have already gained the benefits associated with having a purpose, the intervention had no substantial impact on them at all. I note that a non-significant, marginal decline in purpose in life was found for those who were already high on purpose at baseline. The fact that the change was not statistically significant, however, seems to support the concept that most indicators of well-being are stable over time (Hawkins et al., 2011). Alternatively, this slight, statistically non-significant decrease in purpose may be associated with an overall decline in well-being that often occurs during the course of the school year (Norrish & O'Connor, 2015). I would argue, however, that the current results represent

the optimal outcome for this study. Given what we know about the positive impacts of having a sense of purpose in life and the deficits associated with a lack thereof, especially as it relates to youth (see chapter 1), the ability to intentionally foster purpose in life for those who have a deficit of purpose in life is a very important finding.

With regards to the question of whether other indicators of well-being and academic self-concept increase as purpose increases, I found no evidence that supported that hypothesis.

The theoretical implications of the results of this study relate to how educators might view the role of school. School is primarily a place of education; however, recent studies have found that schools are an effective place to implement Positive Youth Development (PYD) programs (for reviews see Curran & Wexler, 2017). Few of these programs, however, try to increase purpose directly; mostly, they aim at increasing overall well-being (Curran & Wexler, 2017). However, based on the view that purpose is the highest-level construct out of which all other areas of well-being flow (Kashdan & McKnight, 2009), this study implies that school PYD and well-being interventions should also focus on fostering purpose directly.

From a practical and policy standpoint, the implications of this study are also important. Now that it has been demonstrated that a school based purpose intervention can be effective in fostering purpose in youth with low levels of purpose in life, policy makers and educators should begin to make room within the school day, perhaps as part of career exploration curriculum, to instill and foster a sense of purpose in their students. The results of this study also have implications for programs meant to support at-risk youth. Given that low purpose in life has been correlated with many indicators of ill-being and psychological impairments, programs that are meant to cater to at-risk

youth should seriously consider adding a purpose-fostering intervention to their repertoire of supportive programs and interventions.

Study Limitations and Future Directions. There were some aspects of how this study was conducted that suggest limitations of the present results. The initial plan was for both schools to fully implement the purpose intervention as specified in the design. In the end, however, because of conflicts of schedules, it turned out that in the full treatment school not all the teachers instructing/coaching the program were able to go through the full program training course. Instead, those teachers read the training materials and were brought up to speed by their colleagues who did go through the training. The teachers who underwent the training led the coaching sessions for the intervention. In addition, there was considerable attrition in the post intervention data collection (see Figure 2.1). Furthermore, as has been mentioned, in the partial intervention/control school the treatment was not carried out as was specified. For example, in the partial intervention/control school, the entire instructional/coaching portion of the program, including all the exercises, was carried out in one day rather than over several weeks or months. In addition, the teacher to student ratio was more than double the recommended amount. In addition, in both schools the in-depth interviews were carried out as work-experience, which did not allow students to conduct interviews in more than one of their potentially purposeful careers. Given all of this, the results of this study are limited. Had the schools implemented the intervention entirely as specified, it is possible that the results would be stronger. Nonetheless, even this incomplete implementation of a purpose in life fostering intervention resulted in a significant increase for those who started lower on purpose. This, the most important result of the study, is a clear indication that a school based purpose intervention

integrated into the school curriculum in an instructional environment will act to foster purpose in life in students. Nonetheless, more research is needed to assess the full potential of such a school based purpose in life intervention when implemented as designed and specified.

Another limitation of this study is its pretest-posttest design without a longitudinal follow-up data collection point. It is possible that it takes longer for purpose to develop amongst youth and one would see a stronger result had more data been collected at additional data points. In addition, it is also plausible to argue that there may be a lag in time before other indicators of well-being could catch up to the increase of purpose in life. Thus, had there been an additional round of data collected, other indicators of well-being may also have arisen, at least for those who started low on those indicators. More research is needed in this regard, especially given that in the adult study (see next chapter) an increase in purpose did coincide with an increase in other indicators of well-being. It would be fruitful to see whether results here that do not show an increase in well-being are related to this study being on a sample of youth rather than adults or whether it is due to the inherent limitations of this study.

The limitations inherent in the current study are in a large part because it was conducted within educational institutions. This made it difficult to properly randomize, so a quasi-experimental design was chosen. The school setting also meant that a huge amount of organizational corporation was needed amongst teachers, administration, parents and students. In addition, since two schools were involved in the study, coordination with regards to timing and implementation was needed between the schools. This created challenges in the implementation of the study and therefore limited the results as described above. In addition, the fact that this study relates

exclusively to high school age youth and to an intervention that was carried out in an instructional setting, makes it especially important that future studies do not contain those inherent challenges and limitations. Thus, further research seeking to find whether purpose can intentionally be fostered in an adult sample, outside of an instructional environment and using a randomized control study, rather than a quasi-experimental design, would further our understanding of whether and how purpose can be fostered within the human condition. The next study, therefore, takes many of the limitations inherent in the current study into consideration and aims to address them.

Chapter 4: Effect of Intervention to Foster Purpose in Older Adults – A Randomized Control Trial

Abstract

Context. Presence of purpose in life is a construct that can enhance health and well-being of people, ultimately increasing the life span of older adults. Given this evidence, it would be worthwhile to have an intervention that can intentionally foster purpose within the human condition. There is, however, a significant gap in our knowledge of how purpose can be intentionally fostered in the long run. To date, there are very few actual interventions designed to foster purpose in an older population.

Objective. To determine if purpose in life could be intentionally fostered in adults 50 years and older and whether a purpose-fostering intervention can increase an individual's sense of purpose, as well as other indicators of well-being, such as happiness, life satisfaction, positive emotion, etc. The theoretical literature suggests all of these are correlated with an increased purpose in life.

Design, Setting, Participants. A randomized controlled trial was conducted with 89 people recruited through notices posted on online forums, email lists and newspaper articles. Participants were randomly assigned to an intervention group or to a wait-list control group, each comprising approximately 44 people.

Intervention. An adult purpose intervention was created that involved online video coaching and online exercises to be completed over the course of three months. The treatment group was given an in-depth purpose discovery coaching tool to complete, which was comprised of a self-analysis component and an element that helped them match their newfound understanding of themselves with a niche and purpose in the universe.

Main Outcome Measures. The primary outcome measure was the identification of presence of purpose in life. This primary expected outcome measure was evaluated using the Meaning in Life Questionnaire (MLQ), (Steger, Frazier, Oishi & Kaler, 2006), specifically the MLQ-P which measures presence of purpose. Other measures of purpose and general well-being were also assessed.

Results. A total of 89 participants were selected and randomized into control and intervention groups. I used regression analysis to test my primary hypothesis that there would be a main treatment effect related to the intervention from baseline data collection prior to the intervention, to posttest data collection post-intervention. Regression was also used to test a main treatment effect from baseline prior to the intervention to long-term follow-up, not controlling for posttest. Long-term follow-up was three months following the end of the treatment. Finally, I used the same statistical technique to test for a main effect from baseline to long-term follow-up controlling for posttest. The groups were significantly different ($p < .05$) at posttest and long-term follow-up in the main outcome variable measuring purpose (MLQ-P) when controlling for any pre-treatment differences at baseline. There was, however, no significant difference at long-term follow-up when controlling for posttest. Other measures of purpose showed similar results. There was also a significant impact on positive emotion, happiness, grit, and achievement.

An additional concern for this study (like the intervention study of the prior chapter) was that I hypothesized that there would be an Aptitude Treatment Interaction (ATI) (Cronbach & Snow, 1977; Snow, 1989), where purpose in life was considered the aptitude of interest. Thus, those who started lower on purpose, I hypothesized, would gain more from the intervention than those who started higher on

purpose. The results confirmed this and I found an interaction effect of treatment by baseline for the main variables of interest, which supported my hypothesis that those who started lower on purpose gained significantly from the intervention in terms of an increase in sense of purpose. For MLQ-P, a significant interaction effect was found for posttest controlling for baseline, and for long-term follow-up controlling for baseline. Unlike the main effect mentioned above in the ATI model, there was also an effect at long-term follow-up when baseline and posttest were controlled for.

Conclusion. Analysis of the data demonstrated a significant increase in sense of purpose in the treatment group versus the control group. It also showed that those who started lower on purpose in life gained more from the intervention than those who started higher on purpose. Thus, based on this study, one can conclude that it is possible to intentionally foster purpose within the human condition using a purpose in life fostering intervention, and that such an intervention impacts those who are low on purpose more than those who already have a higher amount of purpose.

Introduction

Background. "Purpose is a central, self-organizing life aim that organizes and stimulates goals, manages behaviors, and provides a sense of meaning," (McKnight & Kashdan, 2009). The elements of purpose in life are vital and make up eudemonic, subjective well-being, which, along with health, is closely linked to improved and healthy aging (Steptoe, Deaton, & Stone, 2015). Researchers have cited purpose in life as an indicator of health and have often provided evidence that it is a construct that could improve health behaviors and the health of adults progressing into old age

(Boyle, et al., 2009; Boyle, et al., 2012; Sone et al., 2008; Steptoe, Deaton & Stone, 2014).

Purpose in life has also been shown to reduce mortality risk and increase the longevity of older adults (Hill & Turino, 2014; Steptoe, Deaton, & Stone, 2014). An analysis by the English Longitudinal Study of Ageing showed an association between sense of purpose in life and survival amongst older adults (Steptoe, Deaton, & Stone, 2014). Hill and Turino (2014) demonstrated that purpose in life can act as a buffer to reduce risk of death among community-dwelling older persons (see also Boyle, et al., 2009; Sone, et al., 2008). Furthermore, purpose in life has also been associated with improved health outcomes in the case of diseases that afflict older people such as Alzheimer's and heart disease (Boyle, et al., 2012; Kim, et al., 2013). For example, it has been shown that when people who are already suffering from Alzheimer's have an increase in their level of purpose in life, they exhibit better cognitive function, thus reducing the effects of the disease's pathological changes in the brain (Boyle, et al., 2010; Boyle, et al., 2012). Also, a positive correlation exists between purpose in life and good cardiovascular health (Skrabski et al., 2005; Sone et al., 2008). Purpose in life could also be a protective factor against myocardial infarction among high-risk groups with coronary heart disease (Kim, et al., 2013) and has been associated with higher levels of HDL cholesterol, lower hip-waist ratio, and significantly flatter slopes of salivary cortisol (Ryff, et al., 2006). Purpose in life is also negatively correlated with psychological distress (Thoits, 2012) and is positively associated with significant reduction in depression (Westerhof, et al., 2010), as well as lower prevalence of pain and insomnia (Haugan, 2013), and is correlated with an increase in overall life satisfaction and psychological well-being (Peterson, Park, & Seligman, 2005; Thoits,

2012; Zika & Chamberlain, 1999). It is well known that psychological well-being and health are closely related, and the link may become more important at older ages, as the prevalence of chronic illness increases with advancing age.

In addition to accelerating a healthy lifestyle, purpose in life could also increase the prospect of having a more peaceful planet. For example, people with purpose in life reported less stress when travelling on trains with ethnically diverse people compared to those without purpose (Burrow & Hill, 2013). Purpose in life can also serve to moderate effects of perceived changes in life, fostering positive emotions and promoting emotional and behavioral consistency (Burrow, Sumner, & Ong, 2013; Kashdan and McKnight, 2009). Purpose in life may also be the moderating factor in why religious affiliation seems to increase happiness and well-being (Aghababaei & Blachnio, 2014; Wnuk & Marcinkowski, 2012).

Purpose in life is also correlated with reduction in perceived stress amongst menopausal women (Abdelrahman & Abushaikha, 2013) and is also associated with an increase in the density of right insular cortex grey matter volume, which is also negatively correlated with depression (Lewis, Kanai, Rees, & Bates, 2013). Purpose in life has also been shown to have a strong relationship with positive self-concept (Phillips, Watkins & Noll, 1974; Reker, 1977; Bigler & Neimeyer, 2001). It has also been shown to correlate with increases in oral control in sufferers of Anorexia Nervosa (Tomba, et al., 2014), as well as increases in self-esteem, sense of mastery, physical health (Thoits, 2012), time competency, self-actualizing values, self-regard and nature of man on the personal orientation inventory scale (Phillips, Watkins, & Noll, 1974). Purpose in life has also been shown to be instrumental in overcoming life crises and stresses (Debats, Drost, & Hanson, 1995; Jim, et al., 2006; Stevens, Pfost, & Wessels,

1987). Purpose in life is also vital for a successful and fulfilling career (Dik et al., 2015; Dik & Duffy, 2012; Duffy & Dik, 2013; Dik, Steger, Gibson, & Peisner, 2011). In a recent meta-analysis of studies that address the impact of purpose in life on all-cause mortality and cardiovascular events, Cohen, Bavishi and Rozanski (2016) found that having a high sense of purpose in life is associated with a reduced risk for all-cause mortality and cardiovascular events. They suggest that future research should focus on finding interventions that foster an increased sense of purpose in older adults.

Thus, given the importance of purpose in life and the positive effects associated with it, it is important to examine if it can be intentionally fostered in an adult population, specifically over the age of fifty where survival and longevity are at risk (Cohen, Bavishi, & Rozanski, 2016; Steptoe, Deaton, & Stone, 2014). Yet, there is a significant gap in our knowledge of how purpose can be intentionally fostered over the long-term and there are even fewer actual interventions designed to foster purpose in an older population (Cohen, Bavishi, & Rozanski, 2016). Hence, in this study, I test an especially designed purpose-fostering intervention (for details of the intervention see the end of the first chapter of this thesis and more briefly below) to increase a sense of purpose in older adults to see whether purpose can be intentionally fostered in this population. In the current study, people of 50 years of age or older were examined using a randomized control experimental design to determine whether a purpose-fostering intervention can intentionally increase an individual's sense of purpose, as well as other indicators of well-being, over time. It also aimed to determine whether there is an ATI effect, where those lower on purpose gain more from the treatment. Participants were recruited through advertisements and were then randomly assigned to either an

experimental intervention group or a wait-list control group. Different measures of well-being were measured along with the level of fostered purpose in life.

Objectives

This study was undertaken to satisfy the following objectives:

1. To identify whether an evidence based purpose intervention can intentionally foster and increase the sense of purpose in a group of adults ages 50 and older.
2. To test, by using an aptitude treatment interaction (ATI) model, whether an evidence based purpose intervention has a greater impact on those who start lower on purpose than on those who starter higher on purpose in life.
3. To analyze if an increase in purpose results in an increase in other indicators of psychological well-being and flourishing.

Research Questions. Below are the research questions that this study answers in service of reaching these research objectives.

Research Question 1. Can an evidence-based purpose in life fostering intervention, as described in chapter 1 and below, foster purpose in a sample of adults 50+?

Background to research question. Finding a post-retirement purpose is vital as people retire (O'Brian, 1981; Wang, 2007; Schlossberg, 2009) and becomes more important as they age (Pinquart, 2002 and see above and chapter 1 at length). Thus, testing whether an evidence-based purpose-fostering intervention can increase the purpose of adults as they get older is a vital area of research.

Research Question 2. Can an evidence based purpose-fostering intervention increase purpose in life for adults 50+ who have a deficit in that area?

Background to research question. As has been shown in chapter 1 of this thesis, older adults who lack purpose are more likely to suffer from poor health and are at risk of mortality. Based on this, I wanted to know if an intervention designed to foster purpose can specifically increase the purpose of low purpose adults so that their health and wellness prospects are increased.

Research Question 3. Does an increase in purpose in older adults also coincide with an increase in other indicators of well-being?

Background to research question. As was enumerated in chapter 1 of this thesis, there is research that suggests a connection between an increase in purpose in life and other indicators of well-being. This research question probes at this potential connection using a randomized control experiment.

Method

Study Design. In a sample of 89 adults (50 years old and above), selected through advertisements in online forums and newspapers, participants were randomly assigned to an intervention group or to a wait-list control group. The control group consisted of 43 participants and the intervention group had 46 participants. A randomized experimental study using a pretest-posttest wait-list-control group design (Shadish, Cook, & Campbell, 2002) was followed to test whether the purpose intervention resulted in an increase in purpose in life, as well as in other indicators of psychological well-being in the participants.

Study Population. To be accepted into the study, participants had to be 50 years old or older. Participants provided informed consent via an online form. I recruited participants through stories placed in local newspapers, as well as by using an email list of three thousand subscribers that I had built up over many years. In total, 89 participants (n = 89) were accepted into the study. Eighty-two of the 89 participants were from twenty states within the United States. The other seven were from other countries around the world: two from Israel, three from the United Kingdom, and two from Nigeria. Participants' ages ranged between 50 and 85 (mean = 62.80, SD = 6.43). Among these, 42 (47.2%) were male and 47 (52.8%) were female. Additionally, 82 (92.1%) identified as white, 3 (3.4%) identified as Hispanic or Latino, and 4 (4.5%) as other. The mean age of participants in the control group was 63.2 (SD = 6.95) compared to 62.44 (SD = 5.93) in the intervention group. Baseline demographic characteristics were similar in both the groups and blocking was conducted where appropriate, such as where husbands and wives joined the study together (Box, Hunter, & Hunter, 2005). All participants in the intervention group received the intervention. Participants were tested at three different time intervals: before intervention (the pretest period), after intervention (the posttest period), and a sleeper effect test (three months after the intervention was completed), the long-term follow-up period. Participants were given a link to the online application that contained all the instructions and exercises that were used in the intervention. Details, both in the form of a video and written instructions, were given regarding how to log in and create an account.

Four participants in the intervention group were non-completers. They were not excluded from the study and an Intention to Treat (ITT) analysis was performed. Intention to Treat is an important strategy for the analysis of randomized controlled

trials and it ensures that participants remain in the groups to which they were originally randomly assigned, regardless of whether they complete the intervention or not. This strategy maintains treatment and control groups that are similar to each other, aside from variation that comes about randomly. In this case, all participants, regardless of whether they actually received the full intervention because of subsequent withdrawal or deviation from the protocol, were kept in the intervention group for the duration of the study. This is an important strategy because treatment effectiveness may be overestimated if an ITT strategy is not conducted (Hollis & Campbell, 1999).

Study Intervention. The intervention was the same as described in detail at the end of chapter 1 of this thesis and again in brief in chapter 3, but I will summarize it here. There are six overall steps to the intervention. Step one helps the participant realize that they have a purpose in life. In this step, participants partake in exercises that help them understand that they are unique and have something that they can individually contribute in the world. This step incorporates Frankl's idea that people need to develop "a will to meaning." Step two is where participants list their passions. Participants are coached via a video imbedded in the online intervention application and by a list of open-ended type questions to seek out and list the things they are passionate about doing. This helps them identify their sparks or passions. They are then coached to analyze each of their passions to determine the aspect they enjoy of each passion. Once they have identified the aspects they enjoy of their passions, participants analyze each one to find the core essences of the activities they enjoy. Finally, participants take the Values in Action Character Strengths Assessment (Peterson & Seligman, 2004) and note their top ten character strengths.

The third step in the intervention involves discovering a purpose. In this step, participants match the aspects, essences and character strengths they discovered in step two with a corresponding purpose in life, in terms of post retirement opportunities (Kim, 2012; Dorfman, 2012). They then make a list of the opportunities they think fit their purpose best. Participants then visualize each potential purpose on their list and rank them on a scale of 1-10 to see how passionate and excited they feel about each one and how well each fits their potential purpose. They then narrow down their list of potential purposes based on whether they scored an eight or higher on their visualization technique. This then takes the participant onto step four where they go into an in-depth exploration of their potential purposes. Thus, in step four, in areas that the participant felt might represent their purpose in life, and that they scored eight or higher in their visualizations, they conduct informational interviews with professionals in the fields of their potential purpose in life. If an interview was not possible, they completed an informational worksheet to delve deep into the areas of their potential purpose in life. The idea of the interviews/informational worksheets is for participants to conduct in-depth exploration of the opportunities they think might be a manifestation of their purpose in life to make sure it fits them perfectly (Hirschi & Lage, 2007). Based on this in-depth exploration, they choose the opportunities or vocations that they want to pursue as their purpose in life as they move into the next stage of their lives. In the fifth step of the intervention, participants chart a Road Map that is a comprehensive plan of action that details how they will reach their purposeful/meaningful goal.

This intervention involved online, pre-recorded, video coaching. No one-on-one or group coaching was offered. The entire intervention was done online at participants' own convenience. Phone and email support was offered on an as-needed basis and was

rarely sought out in practice. The control group was offered the intervention following the completion of the intervention by the treatment group.

Randomization. As mentioned, a total of 89 adults were selected and randomized into two groups, the control group (Group 1, n = 43) and the intervention group (Group 2, n = 46). Blocking was conducted so that in the case where husband and wives or close friends joined the study together, they were randomized as one unit. Random assignment was conducted in R using the "sample" function (R Core Team, 2013). A wait-list control model was used so both groups would have an opportunity to receive the purpose intervention.

Study Outcomes. As described above, participants were tested at three varying time intervals: baseline, before the intervention, in the pretest period; posttest, after the intervention, in the posttest period; and the long-term follow-up, which was to detect the sleeper effect in the posttest period, three months after the end of the intervention. The primary outcome sought was a significant increase in purpose from baseline to posttest and from baseline to long-term follow-up in the treatment group compared to the control group. In addition, an ATI approach was implemented to assess whether the level of purpose at baseline impacted how much the individual gained from the intervention. To assess the primary outcome of whether the intervention increased purpose in life, the Meaning in Life Questionnaire (MLQ), developed by Steger, Frazier, Oishi, and Kaler (2006) was used. As mentioned in chapter two, the MLQ is one of the most stable psychometrical tests for measuring meaning and purpose in life (Boyraz, Lightsey Jr., & Can, 2013). This test measures both the presence of purpose in life (MLQ-P) and the searching for purpose in life (MLQ-S). In this study, the presence of purpose in life was the primary factor of interest and searching for purpose in life

was considered as a secondary concern. Of all the purpose in life instruments, the MLQ-P most closely represents the definition of the construct of purpose in life that my intervention endeavors to foster, such as an understanding of what makes one's life meaningful and purposeful, rather than one that is focused on purposeful/meaningful activities.

Nonetheless, purpose in life was also measured using other instruments designed to measure that construct. For example, the Life Engagement Test (LET) survey (Scheier, et al., 2006) was also used. The LET survey defines purpose in terms of meaningful activities using statements such as, "Most of what I do seems trivial and unimportant to me," and "I value my activities a lot," and focuses on purposeful activities, which reflects less clearly the definition of purpose in life my intervention was attempting to foster (i.e., an understanding of personal purpose in life). I also used Ryff's Psychological Well-being (RPWB), Purpose in Life subscale (Ryff, 1989), which, although well validated, is not good at discriminating at high levels of well-being (Abbot, et al., 2010), and also focuses on activities rather than sense of meaning and purpose as has been defined by this study and the intervention being tested. Furthermore, the LET and RPWB demonstrated problems in terms of psychometric validity on my own study of the instruments (see chapter two), albeit on a youth sample. I also used the New Purpose instrument that was developed in the psychometric portion of this thesis (chapter two). Granted that the New Purpose instrument was developed using data collected from a youth sample, but in contrast with the other purpose in life instruments, it spanned multiple elements of the domain space of purpose in life. I, therefore, thought it appropriate to use the New Purpose as a dependent variable for this study as well.

Another purpose in life measure that I used as a dependent variable was the APSI Sense of Identity subscale developed by Lounsbury, Huffstetler, Leong, & Gibson (2005) which, as mentioned in chapter two, also contains items that relate directly to purpose in life. As mentioned in chapter two, items 3 and 6 of the APSI subscale did not load onto one factor with the other items of the scale, and also when included negatively impacted fit. Thus, as was the case in the youth study found in chapter 3 of this thesis, items 3 and 6 were not included in this analysis. Furthermore, although the APSI subscale was developed for youth, the authors of the APSI Sense of Identity subscale, Lounsbury, Huffstetler, Leong, & Gibson (2005) state that the scale strongly correlates with both Bennion and Adam's (1986) Identity Achievement subscale (combined) of their Objective Measure of Ego Identity Status ($r = .80$, $p < .01$) and with White, Wampler, and Winn's (1998) identity commitment subscale of the Identity Style Inventory ($r = .60$), which were both designed for adults. I therefore felt comfortable using that scale in this study. Another salient point to mention is that since the purpose intervention used in this adult study was almost identical in content to the one tested on youth (see chapter 3), using the same purpose in life scales as dependent variables ensured a consistency across both studies.

Secondary well-being outcomes tested were life satisfaction, using the Life Satisfaction survey (Diener, 1985), which has been shown to have strong validation in a meta-analysis study (Vassar, 2008), and other aspects of well-being such as Positive Emotion, Engagement, Relationships, Meaning and Accomplishment (PERMA), which were tested using PERMA profiler (Butler & Kern, 2016). To measure tertiary outcomes of different types of emotions such as happiness, I used two scales, the highly validated Subjective Happiness scale (Lyubomirsky & Lepper, 1999), as well as a

happiness measure found in the PERMA profiler (Butler & Kern, 2016). Grit and resilience were also tested using the Short Grit survey (Duckworth & Quinn, 2009) and PERMA profiler (Butler & Kern 2016), respectively.

Sample Size and Statistical Analysis. A test of statistical power was conducted using the "pwr" package in R (Champely, et al., 2015) for multiple regression. Degrees of freedom in the numerator was 1, degrees of freedom in the denominator was 78, f^2 was set to .20, and significance level was set to .05. The resulting statistical power was .97. Based on this, a sample size of 80 was more than enough to obtain a statistical power of 80% to avoid excessive Type II errors (Cohen, 1988).

The two groups, treatment and control, were compared for baseline characteristics using the Welch's *t*-test (see Table 3.1). Normality was tested using qqplot found through the qqnorm function (Becker, Chambers, and Wilks, 1988) in R (R Core Team, 2016).

A multivariate linear model was used to analyze the data. In this regard, for each dependent variable, two aspects were tested for:

1. Main effect: is there a difference between the intervention group and the control group as it relates to the outcome of interest?
2. Time*Group Interaction: This tested for Aptitude Treatment Interaction (ATI) to assess whether the effect of the outcome variable of interest differs depending on the level within each group.

For the main effect, a between subject design was used, testing for the difference in the mean of the outcome variable between the various times that data was collected (baseline, posttest, long-term follow-up). The ATI interaction effect was within subjects, where changes in the dependent variable were tested within each group

to gauge the degree to which individuals within each group were impacted by the treatment. This method was used successfully to test whether people who start lower on purpose are more impacted by the intervention than those who start higher on the construct of purpose. Thus, the efficacy of the purpose intervention for promoting purpose development was assessed by comparing changes across the two groups over time using regression analysis.

This analysis was conducted in three ways:

1. Baseline – Posttest: in this analysis, baseline was the covariate and posttest was the dependent variable. This tested whether there was a difference between the groups from baseline to posttest.
2. Baseline – Long-term follow-up: in this analysis, baseline was added as a covariate and long-term follow-up was the dependent variable. This tested whether the effect was still there three months after the treatment ended.
3. Baseline – Posttest – Long-term follow-up: in this analysis, data from baseline and posttest were covariates, and long-term follow-up was the dependent variable. This tested for whether the sleeper effect was there when posttest was controlled for.

Valuable understanding of what coincides with changes in purpose was also tested for in this way. Thus, the survey data assessed whether changes in purpose coincide with other benchmarks of well-being, as has been frequently suggested in the literature (for reviews, see the literature review section of this thesis, chapter one). There was some attrition during the study. For those who dropped out, an intention to treat model (ITT) was used (Hollis, & Campbell, 1999). For missing data the full information maximum likelihood method (FIML) inbuilt into Lavaan package in R

(Rosseel, 2012) was used. Formally, I fitted the following three linear models. These models are akin to those in the study found in chapter 3 but with some key differences related to the longitudinal nature of the study, and the fact that there were three data collection points in this study and only two in the youth school based study.

Model 1.

The first linear model I fit followed this equation:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_{12} x_1 x_2$$

The dependent variable y represents the posttest results. The independent variables are as follows. β_0 represents the intercept which, since all values were centered, is the expected mean value for the control group; in other words, it is the mean value for the control group when the experimental group = 0.

$\beta_1 x_1$ represents treatment effect and is the group variable, which was encoded using dummy variables 0 for the control group and 1 for the experimental group. $\beta_2 x_2$ is baseline, which represents the pretest baseline and $\beta_{12} x_1 x_2$ represents treatment by baseline, which tests for ATI and is the interaction term of the group dummy variable (x_1) multiplied by baseline (x_2).

Model 2.

I then also fitted an additional equation as follows:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_{12} x_1 x_2$$

The dependent variable y represents long-term follow-up, which was a test administered three months following the end of the intervention. This was examining whether there was an effect at long-term follow-up in relation to baseline. β_0 represents

the intercept which, since I scaled the values, is the expected mean value for the control group when the experimental group = 0.

$\beta_1 x_1$ represents the treatment effect, which is the group variable that was encoded using dummy variables 0 for the control group and 1 for the experimental group. $\beta_2 x_2$ represents baseline, which is the pretest baseline. $\beta_{12} x_1 x_2$ tests for ATI and represents treatment by baseline, which is the interaction term of the group dummy variable (x_1) multiplied by baseline (x_2).

Model 3.

I then fitted one other linear model that had long-term follow-up as the dependent variable but controlled for posttest and baseline and followed this equation:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_{12} x_1 x_2$$

The dependent variable y represents the long-term follow-up test that was administered three months following the end of the intervention. The independent variables are as follows. β_0 is the intercept which, based on the fact the all variables were scaled, represents the expected mean value for the control group when the experimental group = 0.

$\beta_1 x_1$ represents the treatment effect, which is the group variable that was converted into dummy variables, where 0 is the control group and 1 is the experimental group. $\beta_2 x_2$ represents baseline, which is the pretest baseline. $\beta_3 x_3$ represents posttest, and this is the additional independent variable added into this model to test whether the effect remained or increased at long-term follow-up even when posttest was controlled for. $\beta_{12} x_1 x_2$ tests for ATI and represents treatment by baseline, which is the interaction term of the group dummy variable (x_1) multiplied by baseline (x_2).

Results

Results for main dependent variable, purpose in life. I first conducted Welch's two sample *t*-test (see Table 3.1) between the means of the control and treatment groups pretest dependent variables. None of them was statistically significant, indicating no difference between the two groups and a successful random assignment. I anticipated that the main effect of the current study would be an increase in levels of purpose in life. Levels of purpose in life were tested during three different times, as mentioned previously, using several scales, including the Meaning in Life Questionnaire, Presence of Meaning subscale (MLQ–P), Life Engagement Test (LET), the APSI sense of identity subscale (with items 3 and 6 removed), Ryff's Psychological Well-being purpose subscale (RPWB) and my own New Purpose scale (developed based on the psychometric evaluation enumerated in chapter 2). In the intervention group, there was significant increase in purpose levels at posttest for all the purpose measures used, but not for the control group (see Table 3.2). This effect was also there when long-term follow-up was the dependent variable. This showed that the intervention's impact continued beyond the end of the intervention period. However, when posttest was added as a covariate into the equation, the treatment effect was not significant for most of the measures of purpose tested. This indicated that intervention participants' sense of purpose remained steady after the intervention but did not grow beyond the intervention from posttest to long-term follow-up (see Table 3.2). All effects were statistically significant at the $\alpha = .05$ significance level. The exception to this was the RPWB purpose subscale, which showed that the treatment gained in purpose from baseline to posttest and then continued to gain from posttest to long-term

Table 3.1

T-test for pre-treatment means for control and treatment groups

Measure	Group		95% CI for Mean Difference	t	df
	Control M	Treat M			
New Purpose	4.15	3.92	-.16, .62	1.2	85
MLQ-P	4.95	4.7	-.33, .84	.86	84
MLQ-S	4.87	5.02	-.85, .56	-.42	84
APSI	3.96	3.74	-.08, .53	1.4	82
Ryff Purpose	3.66	3.37	-.12, .70	1.4	85
Life Engagement Test (LET)	3.82	3.59	-.11, .57	1.4	83
Life Satisfaction (LS)	4.46	4.63	-.74, .40	-.60	85
Happy	6.81	6.70	-.72, .93	.26	85
Lonely	4.16	4.07	-1.0, 1.2	.16	85
Engagement	7.19	6.61	-.21, 1.4	1.5	85
Relationships	6.46	6.90	-1.3, .41	-1.0	85
Achievement	6.95	6.66	-.45, 1.0	.8	84
Positive	6.39	6.50	-.91, .66	-.30	84
Negative	4.25	3.86	-.40, 1.2	.98	85
Grit	3.26	3.32	-.18, .07	-.90	82
Resilience	6.52	6.73	-1.0, .58	-.54	82

Note. Measure = the scales used as dependent variables in the study; Group = The Treat (treatment group) and Control (control group); M = mean; t = critical t-score; df = degrees of freedom; New Purpose = Purpose measure created during the course of this study and detailed in the psychometric chapter of this thesis; MLQ-P = meaning in life questionnaire presence of purpose scale; MLQ-S = meaning in life questionnaire searching for purpose scale; APSI = the sense of identity subscale of the APSI which also measures purpose in life; Ryff Purpose = The purpose subscale of the Psychological Wellbeing scale; LET = The Life Engagement Test was designed to measure Purpose in life; Life Satisfaction = Life Satisfaction (LS) test; Happy = Happiness items from Perma profiler; Lonely = loneliness items from Perma profiler; Engagement = Engagement items from Perma profiler; Relationships = Strength of relationships items from Perma profiler; Achievement = Sense of achievement items from Perma profiler; Positive Emotion = Positive emotion items from Perma profiler; Negative = Negative emotion items from Perma profiler; Grit = Grit scale; Resilience = various resilience questions.

Table 3.2

Results purpose Instruments

Measure	Model	Intercept		Baseline		Treatment Effect Posttest		Treatment Effect LT Follow-up		Posttest Covariate		Treatment by Baseline	
		β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
New purpose	1	-.48 ***	.09	.81 ***	.07	.66 ***	.14					-.53 **	.16
	2	-.59 **	.19	.71 ***	.14			.62 *	.25			-.55	.30
	3	-.29	.20	.20	.21			.22	.27	.62 **	.23	-.23	.30
MLQ - P	1	-.52 ***	.10	.80 ***	.08	.74 ***	.14					-.26 *	.11
	2	-.74 ***	.14	.89 ***	.11			.81 ***	.18			-.55 ***	.16
	3	-.45 **	.14	.44 **	.15			.40	.21	.55 ***	.15	-.40 **	.15
MLQ - S	1	.04	.12	.68 **	.08	-.04	.17					.15	.11
	2	.02	.16	.56 **	.12			.12	.22			.16	.15
	3	-.05	.14	.11	.13			.15	.20	.66 ***	.12	.06	.14
Ryff Purpose	1	-.37 *	.13	.72 ***	.10	.46 **	.18					-.29	.22
	2	-.57 **	.16	.66 ***	.13			.74 **	.22			-.53	.28
	3	-.36 *	.16	.24	.17			.47 *	.21	.58 ***	.15	-.36	.26
APSI	1	-.51 ***	.10	.82 ***	.07	.78 ***	.14					-.72 **	.20
	2	-.54 *	.17	.67 ***	.13			.67 **	.23			-.91 **	.35
	3	-.19	.21	.10	.22			.13	.28	.70 ***	.21	-.41	.36
LET	1	-.24 *	.10	.82 ***	.08	.31 *	.15					-.01	.19
	2	-.43 *	.17	.67 ***	.12			.61 *	.23			.03	.30
	3	-.23	.16	-.02	.20			.35	.22	.84 ***	.21	.02	.27

Note. Baseline = pretest data collected immediately prior to intervention. Treatment Effect Posttest (Model 1) = the intervention effect at posttest controlling for pretest (how much the experimental group gained in relation to the control group at posttest); Treatment Effect LT Follow-up (Model 2) = the intervention effect at the Long-term follow-up controlling Pretest but not Posttest; Treatment Effect LT Follow-up (Model 3) = the intervention effect at the Long-term follow-up controlling both Pretest and Posttest (a test of sleeper effects); Posttest Covariate = posttest data collected immediately after intervention (added as a covariate when testing for treatment effect for LT follow-up controlling for posttest); Treatment by Baseline = interaction between treatment and pretest (a test of the aptitude-treatment interaction (ATI) interaction); New Purpose = Purpose measure created during the course of this study and detailed in the psychometric chapter of this thesis; MLQ-P =meaning in life questionnaire presence of purpose scale; MLQ-S = meaning in life questionnaire searching for purpose scale; Ryff Purpose = The purpose subscale of the Psychological Wellbeing scale; APSI = the sense of identity subscale of the APSI which also measures purpose in life; LET = The Life Engagement Test was designed to measure Purpose in life; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

follow-up. This suggested that for the scale, at least the intervention's effect kept growing from posttest to the long-term follow-up three months after the end of the intervention.

Results for ATI analysis of purpose measures. As far as the ATI interaction effect was concerned, the results from the MLQ-P, New Purpose and APSI subscale showed that those who started lower on purpose gained more from the intervention than those who started higher on purpose, and this result was consistent for Models 1 and 2. Thus, the results showed that the ATI effect remained when posttest was tested as a result of baseline (Model 1), as well as when long-term follow-up was tested as a result of baseline (Model 2) (see Table 3.2 and Table 3.5). Regarding Model 3, testing for long-term follow-up as a result of posttest and baseline, the effect remained only for the MLQ-P (see Table 3.2 and Table 3.5). This indicated that, whilst overall the impact of the intervention stayed steady from posttest to long-term follow-up, those who started lower on purpose continued to gain in purpose even during the three months following the end of the intervention (see Table 3.5).

In addition, although the ATI effect was not statistically significant for RPWB purpose subscale, when simple slopes were analyzed (see Table 3.5) there was a clear and significant increase for those who started lower in purpose and all the slopes for the lowest group (one standard deviation below the mean) were significant below $\alpha = .05$. For the New Purpose scale, simple slopes were significant for those who started low in purpose in Model 1 and 2 but not in Model 3. This indicates that for the New Purpose scale, those who started low on purpose gained in purpose and that gain remained at long-term follow-up but did not increase between posttest and long-term follow-up. A similar pattern existed for APSI subscale except that the interaction effect itself was

significant for Model 2 (see Table 3.2 and Table 3.5). Interestingly, there was no change in searching for purpose as measured by MLQ-S either between the groups or amongst the groups and for the Life Engagement Test (LET); none of the ATI effects were significant and neither were the simple slopes (see Table 3.2 and Table 3.5). Based on my findings in chapter 2 regarding the unreliability of LET and that it tests for meaningful activities rather than purpose in life overall, these results, as they relate to LET and in contrast with other purpose in life measures, are not surprising.

Results for other indicators of well-being. The results of the indicators of well-being that coincide with purpose in life were mostly as predicted. The intervention had positive effects on sense of achievement, happiness, grit and life satisfaction when posttest was tested for as a result of baseline (Model 1, see Table 3.3 and Table 3.4). When long-term follow-up was tested for as a result of baseline (Model 2) there was a positive treatment effect for happiness, life satisfaction, positive emotion and sense of achievement (see Table 3.3 and Table 3.4). The results of Model 3 showed that sense of achievement continued to increase from posttest to long-term follow-up (see Table 3.3).

Results for ATI analysis of well-being measures. As with the purpose measures, I also performed an ATI analysis on other measures of well-being to check if the treatment's effect differed depending on the aptitude of the individual as it related to the indicators of interest. The most pronounced ATI effect was for those who started low on sense of achievement. For Model 1 (posttest predicted by baseline), Model 2 (long-term follow-up predicted by baseline), and for Model 3 (posttest and long-term follow-up predicted by baseline), there was a significant ATI effect (see Table 3.3). All the simple slopes for those starting low on sense of achievement were significant at $\alpha = .01$ (see Table 3.6).

For happiness, the ATI effect was only significant for Model 2, long-term follow-up predicted by baseline (see Table 3.3). However, the simple slopes for those who started low on happiness were significant for both Model 1 and Model 2 at $\alpha = .01$ (see Table 3.6). For life satisfaction there was a significant ATI effect for both Model 1 and for Model 2, simple slopes were significant at the $\alpha = .001$ level for these the first two models. For resilience, there was a significant ATI affect for Model 1; from baseline to posttest, those who started higher on resilience gained more than those who started lower at baseline. However, none of the simple slopes for resilience were significant (simple slope for those who started low in Model 1 was $\alpha = .07$).

For loneliness, although there was no main effect of the intervention, there was an ATI effect when long-term follow-up was tested and posttest was controlled for (Model 3, baseline-posttest-long-term follow-up). Thus, those in the control group who started off higher on loneliness decreased in loneliness more than those who started off lower in loneliness (see Table 3.4 and Table 3.6). This seemed to indicate that people who were lonelier when they started the intervention were less lonely at the three month, long-term follow-up. This would be an attractive benefit of the intervention; the simple slope, however, was not significant ($\alpha = .10$).

Another anomaly was the finding of a marginally significant decrease in grit for the intervention group versus the control group, when I predicted that there would be an increase in grit (see table 3.4).

Table 3.3

Results select elements of Perma (Butler & Kern, 2015)

Measure	Model	Intercept		Treatment Effect Posttest		Treatment Effect LT Follow-up		Baseline		Posttest		Treatment by Baseline	
		β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
Lonely	1	.14	.14	-.18	.20			.56 ***	.11			.09	.08
	2	.21	.15			-.29	.22	.56 ***	.11			-.15	.09
	3	.16	.15			-.22	.21	.40 **	.13	.41 **	.12	-.19 *	.09
Happy	1	-.33**	.12	.53 **	.18			.61 ***	.10			-.17	.10
	2	-.37*	.15			.50 *	.22	.53 ***	.12			-.28 *	.13
	3	-.16*	.14			.16	.21	.14	.14	.64 ***	.13	-.17	.13
Engagement	1	-.17	.15	.21	.21			.52 ***	.11			-.11	.12
	2	-.37	.21			.53	.29	.39	.19			-.20	.21
	3	-.27	.19			.41	.26	.10	.20	.53 **	.17	-.14	.21
Positive Emotion	1	-.26	.12	.37	.17			.64 ***	.09			-.16	.10
	2	-.47**	.15			.57 *	.22	.66 ***	.13			-.16	.15
	3	-.29	.15			.31	.21	.22	.14	.68 ***	.15	-.05	.15
Achievement	1	-.29*	.13	.39 *	.19			.62 ***	.10			-.29 *	.11
	2	-.60**	.17			.78 **	.23	.69 ***	.13			-.47 **	.15
	3	-.46*	.17			.59 *	.22	.39 *	.16	.49 **	.15	-.33 *	.16
Negative	1	.20	.13	-.29	.19			.63 ***	.10			.03	.11
	2	.18	.13			-.33	.19	.66 ***	.10			-.13	.10
	3	.09	.12			-.19	.18	.36 ***	.12	.47 ***	.12	-.15	.10
Relationships	1	-.20	.13	.27	.20			.58 ***	.10			.05	.10
	2	-.32	.17			.51	.25	.43 **	.14			-.08	.14
	3	-.15	.14			.28	.20	-.07	.15	.87 ***	.13	-.13	.12

Note. Baseline = pretest data collected immediately prior to intervention. Treatment Effect Posttest (Model 1) = the intervention effect at posttest controlling for pretest (how much the experimental group gained in relation to the control group at posttest); Treatment Effect LT Follow-up (Model 2) = the intervention effect at the Long-term follow-up controlling Pretest but not Posttest; Treatment Effect LT Follow-up (Model 3) = the intervention effect at the Long-term follow-up controlling both Pretest and Posttest (a test of sleeper effects); Posttest Covariate = posttest data collected immediately after intervention (added as a covariate when testing for treatment effect for LT follow-up controlling for posttest); Treatment by Baseline = interaction between treatment and pretest (a test of the aptitude-treatment interaction (ATI) interaction); Perma = stands for Positive Emotion, Engagement, Relationships, Meaning and Accomplishments which are a series of aspects some theories suggest are vital for wellbeing (Seligman, 2012); Lonely = loneliness items from Perma profiler; Happy = Happiness items from Perma profiler; Engagement = Engagement items from Perma profiler; Positive Emotion = Positive emotion items from Perma profiler; Achievement = Sense of achievement items from Perma profiler; Negative = Negative emotion items from Perma profiler; Relationships = Strength of relationships items from Perma profiler; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 3.4

Results other indicators of well-being

Measure		Intercept		Treatment Effect Posttest		Treatments Effect LT Follow-up		Baseline		Posttest		Treatment by Baseline	
	Model	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
Resilience	1	-.11	.10	-.09	.15			.94 ***	.08			.24 **	.09
	2	-.19	.14			.15	.20	.77 ***	.14			-.08	.15
	3	-.16	.14			.18	.20	.47	.24	.32	.20	-.16	.15
Grit	1	.17	.14	-.41 *	.20			.56 ***	.11			-.60	.78
	2	-.04	.20			.02	.29	.21	.17			.47	1.2
	3	-.05	.20			.04	.30	.18	.21	.54	.19	.50	1.2
Life Satisfaction	1	-.30 **	.10	.62 ***	.15			.60 ***	.07			-.52 ***	.11
	2	-.37 *	.15			.58 *	.22	.58 ***	.11			-.50 **	.17
	3	-.14	.14			.11	.21	.12	.14	.77 ***	.17	-.10	.18

Note. Baseline = pretest data collected immediately prior to intervention. Treatment Effect Posttest (Model 1) = the intervention effect at posttest controlling for pretest (how much the experimental group gained in relation to the control group at posttest); Treatment Effect LT Follow-up (Model 2) = the intervention effect at the Long-term follow-up controlling Pretest but not Posttest; Treatment Effect LT Follow-up (Model 3) = the intervention effect at the Long-term follow-up controlling both Pretest and Posttest (a test of sleeper effects); Posttest Covariate = posttest data collected immediately after intervention (added as a covariate when testing for treatment effect for LT follow-up controlling for posttest); Treatment by Baseline = interaction between treatment and pretest (a test of the aptitude-treatment interaction (ATI) interaction); Resilience = various resilience questions; Grit = Grit scale; Life Satisfaction = Life Satisfaction (LS) test; T2 control T1 = Time 2 as predicted by Time 1; T3 control T1 = Time 3 as predicted by Time 1 (not controlling for Time 2); T3 control T1, T2 = Time 3 as predicted by Time 1, controlling for Time 2; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 3.5

Simple slopes purpose measure

Measure	SD	Model 1		Model 2		Model 3	
		Treatment Effect	SE	Treatment Effect	SE	Treatment Effect	SE
New purpose	-1	1.2	.22	1.2	.44	.44	.48
	0	.66	.14	.62	.25	.22	.27
	1	.13	.20	.07	.33	-.01	.31
MLQ - P	-1	1	.20	1.4	.27	.81	.30
	0	.74	.15	.81	.19	.40	.21
	1	.48	.17	.26	.21	-.0	.21
Ryff Purpose	-1	.75	.30	1.3	.39	.81	.30
	0	.46	.18	.74	.22	.40	.21
	1	.17	.26	.21	.33	-.0	.21
APSI	-1	1.5	.26	1.6	.46	.54	.54
	0	.78	.14	.67	.23	.13	.28
	1	.06	.23	-.24	.38	-.28	.34

Note. New Purpose = Purpose measure created during the course of this study and detailed in the psychometric chapter of this thesis; MLQ-P = meaning in life questionnaire presence of purpose scale; Ryff Purpose = The purpose subscale of the Psychological Wellbeing scale; APSI = the sense of identity subscale of the APSI which also measures purpose in life; LET = The Life Engagement Test was designed to measure Purpose in life; Model 1 = Posttest controlling for Baseline; Model 2 = Long-term follow-up controling for Baseline; Model 3 = Long-term follow-up Controlling for Baseline and Posttest.

Table 3.6

Simple slopes select Perma measures

Measure	SD	Model 1		Model 2		Model 3	
		Treatment Effect	SE	Treatment Effect	SE	Treatment Effect	SE
Achievement	-1	.68	.23	1.3	.31	.91	.32
	0	.39	.19	.78	.23	.59	.22
	1	.10	.21	.31	.24	.26	.22
Lonely	-1	-.28	.21	-.14	.22	-.03	.21
	0	-.18	.20	-.29	.22	-.22	.21
	1	-.09	.23	-.48	.26	-.41	.25
Happy	-1	.70	.23	.78	.27	.33	.29
	0	.53	.18	.5	.22	.16	.21
	1	.36	.19	.22	.23	-.00	.2

Note. Perma = stands for Positive Emotion, Engagement, Relationships, Meaning and Accomplishments which are a series of aspects some theories suggest are vital for wellbeing (Seligman, 2012); Achievement = Sense of achievement items from Perma profiler; Lonely = loneliness items from Perma profiler; Happy = Happiness items from Perma profiler; Engagement = Engagement items from Perma profiler; Model 1 = Posttest controlling for Baseline; Model 2 = Long-term follow-up controling for Baseline; Model 3 = Long-term follow-up Controlling for Baseline and Posttest.

Table 3.7

Simple slopes other measures of wellbeing

Measure	SD	Model 1		Model 2		Model 3	
		Treatment Effect	SE	Treatment Effect	SE	Treatment Effect	SE
Resilience	-1	-.33	.19	.23	.28	.81	.30
	0	-.09	.15	.15	.20	.40	.21
	1	.14	.16	.07	.22	-.0	.21
Life Satisfaction	-1	1.14	.20	1.1	.30	.21	.33
	0	.62	.15	.58	.22	.11	.21
	1	.10	.17	.08	.25	.0	.21

Note. Resilience = various resilience questions; Life Satisfaction = Life Satisfaction test; Model 1 = Posttest controlling for Baseline; Model 2 = Long-term follow-up controling for Baseline; Model 3 = Long-term follow-up Controlling for Baseline and Posttest.

Discussion

In this study, I set out to discover whether purpose in life can be intentionally fostered in an adult population fifty years and older. As I demonstrated in chapter 1, there is huge value in having purpose in life, especially as people age. Purpose in life has a direct impact on mortality across the lifespan but especially for people as they age. It also impacts cardiovascular health and seems to protect against Alzheimer's disease (see the beginning of this chapter and chapter 1 for reviews). Given this, an intervention that can intentionally foster and increase an older individual's sense of purpose would be incredibly valuable for the health, well-being and longevity of older people. To test whether purpose could intentionally be fostered in an older population I created an evidence based purpose intervention and then implemented a randomized control trial where one group received the intervention and the other acted as a wait-list control group. There were three data collection points: one at baseline, one after the intervention, and a longitudinal data collection point three months post the intervention. This way I could test for whether the intervention was able to increase purpose in life in the treatment group as opposed to the control group. Because of the longitudinal nature of this study, I was also able to test for whether the impact of the intervention remained three months' post treatment and whether it increased from after the treatment to the long-term follow-up data collection point. In addition, due to the statistical methods used in analyzing the data, I could look for interaction effects to see whether the intervention had a greater impact on people who started lower on purpose in life than for those already high on purpose in life – the Aptitude Treatment Interaction (ATI) in my hypothesis. Because I collected data on other indicators of well-being I was able to test for whether any potential increase in purpose coincided with increases on other

elements of well-being, as has been suggested and demonstrated in the literature (for reviews see the beginning of this chapter and in chapter one).

The results of this randomized control trial clearly support the hypothesis that purpose can be intentionally fostered in an adult population using an evidence based purpose intervention. Furthermore, there was clear support that other indicators of well-being increase as purpose in life increases. Thus, as purpose also increased, I saw an increase of life satisfaction, happiness, sense of achievement and positive emotion. In addition, the study demonstrated that those who are low on purpose benefit most from participating in a purpose in life intervention. The results also showed that people who started low on other indicators of well-being benefited in those areas more than those who started high on those indicators. This clearly showed that, as hypothesized, this intervention had an ATI effect. This study also demonstrated that when an intervention results in the increase in purpose in life, that result remains well beyond the end of the intervention and, in some cases, when an individual starts off low on purpose in life, it can continue to grow as the individual pursues that purpose.

Study Limitations and Future Directions. This study was conducted as a randomized control trial and as such causality *can* be inferred. However, since the population was not randomly sampled, rather participants volunteered for the study on their own, generalization of the results is limited. In addition, this study was constrained to adults 50 years and older. Given this, the results may not apply to people of other ages. Nonetheless, given the importance of purpose in life to well-being and longevity, the results of this study suggest that more research and additional studies are clearly warranted to see if interventions such as this can benefit a broader swath of the population as well. Thus, future research should focus on whether purpose can be

intentionally fostered in populations of other age groups, such as youth, post-college age, middle age, etc.

The implications of this study on both theory, practice and policy are far-reaching. With regards to theory, the idea that a person can undertake a treatment that does not include any active one-on-one coaching or therapy to increase purpose in life will have implications for the theoretical literature about interventions. It will also give impetus to, and inform, interventions designed to foster other indicators of well-being, such as resilience, grit, empathy, happiness, etc. As far as practice is concerned, since the lack of purpose in life is associated with negative health and mental health outcomes and adequate purpose in life is correlated with increased health and wellness overall, the ability to intentionally foster purpose in therapy or within senior dwelling communities is vital. Thus, using this type of treatment, which has proven especially effective for those low on purpose to begin with, mental health practitioners and social workers will have an additional tool to improve the health and wellness of older people and seniors. With regard to policy, it is clear that a lack of purpose at any age should be a public health concern. However, as people age, healthcare becomes costlier. Given the outcome of this study and the vast association drawn between positive health and purpose in life, it would behoove policy makers to seriously consider promoting evidence based purpose in life fostering interventions to people as they retire and move into the next stage of their lives (Kim, 2012; Dorfman, 2012).

Chapter 5: Overall Discussion, Limitations, and Implications for Future Research

Focus of the Thesis

This thesis focused on the construct of purpose and meaning in life and how it can be intentionally fostered across the lifespan using an evidence based purpose-fostering intervention. From both a theoretical and empirical perspective, as luminaries such as Viktor Frankl (1985) have pointed out, a life full of meaning and purpose is vital to well-being. Frankl noted that one who lives life with purpose and meaning will enjoy the aging process, as he elegantly states:

> The person who attacks the problems of life actively is like a man who removes each successive leaf from his calendar and files it neatly and carefully away with its predecessors, after first having jotted down a few diary notes on the back. He can reflect with pride and joy on all the richness set down in these notes, on all the life he has already lived to the fullest. What will it matter to him if he notices that he is growing old? Has he any reason to envy the young people whom he sees, or wax nostalgic over his own lost youth? What reasons has he to envy a young person? (Frankl, 1985, p. 124)

This is reflective of what the ancient philosophers stated about life, that Eudaimonia must be the highest of aims (*Nicomachean Ethics*, Book 1, Chapter 2). As mentioned in Chapter 1 of this thesis, Eudaimonia has been understood by scholars as self-actualization (Norton, 1976; Waterman, 2013) which, as can be seen from the passage just quoted from Frankl, is a vital element of living a life of meaning and purpose. Empirical research corresponds with this and it has shown that purpose in life is key to psychological well-being and health across the lifespan (for reviews see Chapter 1).

Given the vital importance of meaning and purpose in life, the central research aim of this thesis was to discover whether purpose in life can be intentionally fostered in both youth and older adults and to what degree other indicators of well-being increase as purpose is intentionally fostered. To this aim I created an evidence based, multi-step, purpose-fostering intervention to be used by youth in an educational setting as well as by adults independently. I then designed studies to test the efficacy of the purpose-fostering intervention to intentionally increase the level of purpose within groups of study participants.

As a prerequisite of studying whether an intervention is successful at fostering purpose in life, it is important to define the construct of purpose in life (Stenner, Smith, & Burdick, 1983) and to select valid survey instruments that measure purpose (Collins, 2003; Gordis, 1979; Marsh, 1981). Thus, I first surveyed the scholarly literature and, based on the work of those who preceded me, I worked to refine a working definition of the construct of purpose (see Chapter 1). To measure purpose in life, I tested four well-known purpose in life surveys from a psychometric perspective. The four instruments tested were as follows: the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, 2006), The Life Engagement Test (LET; Scheier et al., 2006), Psychological Well-being Scale, Purpose Subscale (RPWB; Ryff, 1989) and The Adolescent Personal Style Inventory (APSI; Lounsbury, Saudargas, & Gibson, 2004). Out of all the items from these four instruments, I created a new, properly validated, purpose in life instrument that I entitled the New Purpose scale (see Chapter 2). Once I had a robust definition of the construct of purpose, valid tools to measure purpose and an intervention that would attempt to foster purpose, the elements necessary to study purpose in life were in place. Thus, the first part of this thesis reports my in-depth

analysis of the construct of purpose in life, which resulted in a solid working definition of the construct of purpose in life. Having clearly defined the construct of purpose in life, I created an evidence based purpose in life intervention that was designed to foster a sense of purpose. Then, I undertook a psychometric evaluation of purpose instruments so that I would have valid survey instruments to use in my intervention studies. In all, three empirical studies were conducted for this thesis:

1. A psychometric study seeking to validate purpose in life instruments and then create a new instrument that would cover much of the domain space of the construct of purpose in life.

2. An intervention study that was conducted in schools to test whether an evidence based purpose in life fostering intervention would increase a sense of purpose in life in the intervention groups.

3. An intervention that was conducted with an adult population 50 years of age and older. This was a longitudinal randomized control study.

What resulted was a comprehensive study that delved into the theory, measurement, practice, and fostering of purpose in life across the lifespan.

The Current Chapter

In this chapter, in addition to reviewing the major aims of the thesis (stated above), I will review the important elements, studies and results found in this thesis. I will explain how each element and study in the thesis complements and builds on the other, and I will summarize how they contribute to the field and meet my stated research objectives. I will also enumerate the strengths and the weaknesses of each element and study, as well as make recommendations for, directions of further research.

The chapter ends with a discussion regarding the implications for theory, measurement, research, and practice that resulted from findings of this thesis.

Major Elements and Studies

Defining Purpose. In my quest to define the construct of purpose in life I suggested that meaning and purpose should not be seen as two separate constructs but rather one latent meaning/purpose factor. In the psychometric chapter of this thesis (Chapter 2), I presented empirical evidence to support this claim. This view contrasts with the view of other scholars such as Yeager and Bundick (2009) and Damon, Menon, and Bronk (2003) who view purpose as connected yet distinct from meaning (see Chapter 1).

I also suggested that purpose in life should be defined as the individual's *subjective* sense that *their* understanding of themselves, their life, and their life aims are compatible with, and fit, how they see the overall scheme of things in the universe. This theoretical view of purpose then offers a *subjective* view of having a "beyond the self concern" (Damon, 2009) as part of the person's sense of purpose in life. This contrasts with the *objective* view of purpose expressed by other scholars such as Damon, Menon, and Bronk (2003). An example of an *objective* beyond the self concern might be one that relates to a socially accepted social justice aim. A *subjective* beyond the self concern might be one in which an individual feels they can uniquely contribute to the world by doing something that is not generally seen by society as contributing to the greater good.

Creating a Purpose Fostering Intervention. Having defined the construct of purpose in life, I then systematically reviewed the literature as it relates to how purpose

in life can be intentionally fostered. Based on a proposed theoretical framework that implements, in practice, the fundamental elements that research and theory suggest fosters purpose in life, I created a purpose-fostering intervention. The intervention incorporated career development theory, Self Determination Theory (Deci, 1975; 1985; Ryan & Deci, 2000), and also most aspects of purpose and meaning theory found in the theoretical and practical literature (see Chapter 1). What resulted was a multistep, in-depth, self-paced, and potentially self-coached (in the adult version of the intervention) purpose in life fostering intervention that was then used in the experimental studies found in this thesis. It was this intervention that was used in the intervention studies of this thesis.

Measuring purpose. As noted, in any intervention study the quality of the survey instruments used to test a dependent variable is important. Therefore, I evaluated four well-known purpose in life instruments from a psychometric perspective. Three of these instruments had previously only been validated on adult samples, and one of them had yet to be validated with a full evaluation based on Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). I reported significant issues with some of the instruments (i.e., RPWB, LET and APSI) which included method effects and poor factor structures. Only the MLQ had an excellent factor structure. I then used the items from all four instruments to create a new short-form purpose in life survey instrument that covered much of the domain space of purpose in life. The result was a short-form purpose in life survey instrument that contained six items which I called the New Purpose scale. The New Purpose scale represents the first ever short-form instrument validated exclusively on a youth sample. I was also able to show, from a psychometric and empirical perspective, that there is no difference between meaning

and purpose, and that these two terms represent one unified factor. After an evidence based purpose-fostering intervention had been created and a survey instrument had been validated, intervention studies were carried out.

Testing the intervention for youth. The youth study tested whether the purpose-fostering intervention could increase sense of purpose in youth and was carried out in an educational setting in a high school. This was a three-group, quasi-experimental design that was conducted in two high schools in Sydney, Australia that had similar baseline demographics. The results showed that purpose increased for those who started lower on purpose in life. This indicated that purpose in life can be intentionally fostered using an evidence based purpose-fostering intervention as part of a school curriculum.

Testing the intervention for adults. An adult study was also conducted on a sample of adults 50 years old and above. Blocking procedures were followed and participants were randomly assigned to intervention and control groups. There were three data collection points: pretest, posttest, and long-term follow-up. The intervention was offered to the control group at the end of the long-term follow-up period. Results showed a statistically significant increase in purpose in life in the intervention group versus the control group, and these results were more pronounced for those who started lower on purpose. Similar results were found for other areas of well-being. These results showed that as purpose increased for this sample, so did other indicators of well-being.

As I have demonstrated, each section of this thesis built on the other, step by step. Defining the construct of purpose in the first section of the thesis allowed for the creation of an intervention that was designed to foster that definition of purpose. A

robust definition of purpose and an evidence based intervention to foster purpose allowed for the possibility of designing experiments to test the efficacy of the intervention. Prior to intervention studies, however, it was necessary to ensure that any instruments used to test for an increase in purpose in life were psychometrically valid. Thus, my psychometric study validated purpose in life survey instruments that were to be used in the intervention studies that followed. Finally, the two intervention studies, one for youth and one for adults, tested whether the purpose fostering intervention can indeed be used to foster purpose across the lifespan. All of this allowed me to answer the primary question of this thesis: can purpose be intentionally fostered across the lifespan?

The results of the two empirical studies, one with youth in an educational setting and the other with older adults, showed that by using an evidence based purpose-fostering intervention, purpose in life can indeed be intentionally fostered across the lifespan. In addition, the results showed that, in the case of the adult study, when purpose increases, other indicators of well-being also seem to increase. Given the overall lack of purpose in life intervention studies found in the literature, knowledge that one can intentionally foster purpose using an intervention has wide ranging implications, as I will demonstrate in the continuation of this chapter.

Strengths, Limitations, and Directions for Future Research

Theory of Purpose

I surveyed the literature with a critical eye to fully understand the theory of purpose and to make thoughtful contributions to it. One of the strengths of this part of the thesis was that I tested, empirically, whether purpose and meaning were one

construct or two. The results clearly showed that meaning and purpose were really tapping into one meaning/purpose construct. Nonetheless, there were limitations to this part of the thesis. First, since this section of the thesis dealt primarily with theory, not all assumptions were tested empirically. Thus, while I, for example, differentiated between a *subjective* versus an *objective* beyond the self concern, I brought little empirical evidence to bear on that question.

Future research on theory of purpose in life. Future research should focus on the difference between a *subjective* versus an *objective* beyond the self concern as it relates to purpose in life. The focus of further research should be on questions regarding whether there is a difference in level of purpose if an individual follows a more objective type of beyond the self concern rather than a subjective beyond the self concern.

It might also be interesting to look at how purpose in life theoretically differs from life aspirations. It seems that there might be some overlap between purpose in life and life aspirations, especially as they relate to career aspirations and career focused purpose in youth. Although there may be key differences between the two, additional theoretical work should be undertaken to differentiate these two constructs. Clarity in these two domains will allow for additional advances in our understanding and measurement of human motivation.

Measuring purpose. The sample size for the psychometric evaluation of the purpose instruments was relatively large (N=1288) and thus the results can be expected to be robust. Nonetheless, the data were collected from youth and therefore the results might not generalize well to other populations. In addition, my analysis as it relates to whether meaning and purpose are one factor or two was limited to a small pool of

survey items that were found in the five item MLQ-P and the four meaning and purpose items found in the MLQ-S, while a more robust approach would include more items, as well as other items not related to meaning and purpose in life. In addition, my findings and models were not tested on an additional validation sample, so it can be argued that overfitting may be an issue here.

Future research in measuring purpose. It would be important for researchers to confirm my findings that meaning and purpose are terms that represent one latent factor and construct by using a larger pool of survey items that contain the terms meaning and purpose. Future research should be done using additional items. It may also be advisable to add items that contain additional terms such as coherence, hope, and aspiration to test for factor structure as it relates to the sameness or difference of the meaning and purpose items.

Further research should test my findings and models on a validation group to see if the same factor structure is found. Furthermore, since the New Purpose scale was only validated on a youth sample, it would be important to test its factor structure on additional populations including emerging-adults, adults, and seniors.

Youth study. One of the main strengths of the youth study was that it was conducted in two high schools that were matched on baseline demographics. In addition, in the full-intervention school the entire year group undertook the intervention. This allowed for a robust comparison to the other school in which one group did the intervention on a partial basis and the other group, as an active control group, did another survey-based career discovery program.

There were, however, also certain limitations to the youth study. First, the participants were not randomly assigned to the treatment and control groups. Second,

there was no long-term follow-up data collected. Third, there was missing data at the posttest. In addition, in one of the groups, the partial intervention group, the intervention was not implemented as designed. Finally, because the intervention was carried out in a private school attended mostly by a more privileged population, it is possible that the results will not generalize well. It is also possible that because of the limitations of the youth study, any indication of an increase in other areas of well-being were not discernable.

Further research for youth purpose-fostering interventions. Researchers in the field of youth purpose now have a basis to conduct further research as it relates to intentionally fostering purpose in life in an educational setting. Any future research should focus on finding how an increase in purpose in life in youth can also be parlayed into an increase in other aspects of overall well-being and thriving in youth. Future research should also focus on the following areas: testing this type of intervention in broader, random control trials both on the school level, where schools are randomly assigned to treatment and control groups; and on the individual level, where youth, in and out of a school setting, are randomly assigned to treatment and control groups and are coached through the intervention either individually or in groups. In addition, research should be conducted to assess which part of the intervention is most effective in fostering purpose. It is possible, for example, that the most effective part of the intervention is the goal setting rather than the self-exploration aspect, or vice-versa. In designing future interventions, it will be important to know which aspects are key to fostering purpose. This direction of research will also allow for creating a shorter version of an evidence based purpose-fostering intervention for youth.

Adult study. The adult study was a robust randomized control trial. Blocking was carried out and all participants that were recruited to the trial were given the same information. The robust nature of the study design allowed for making legitimate causal inference based on the results. Based on the results one can, therefore, confidently say that the intervention caused an increase in purpose in life and other indicators of well-being in the experimental group versus the control group. The main limitation of the adult study was that because the participants were not randomly drawn from a specific population, but rather volunteered for the study, the results do not necessarily generalize to other populations.

Future research and directions related to fostering purpose in adults 50 years and older. It would be valuable for future research to create a larger study where participants are randomly selected from the population to ascertain generalizability from such a study. Furthermore, it may also be worthwhile to look at what aspects of the intervention were most effective in increasing purpose in life versus those elements that were least effective and can therefore perhaps be left out of future versions of this intervention. This type of analysis would also allow for an understanding of what elements are vital to foster purpose in an older population. Another direction of future research may be related to the online nature of the intervention where the participant was not coached personally, but rather followed a set of exercises and watched instructional videos. The following questions are examples of what should be the focus of further research: would a one-on-one or group coaching model be more effective in fostering purpose or would it make no difference; and would in-person coaching impact other areas of well-being that were not affected by the online coaching approach? In addition, it would be interesting to learn of the long-term impacts of this intervention;

thus, it would be worthwhile to follow up with participants three or five years following the intervention to see whether the impact of the intervention is still there.

Implications for Theory, Measurement, Research and Practice

Implications for Theory of Purpose in Life. Given that purpose in life has such a powerful impact on human health and wellness, both physical and psychological (for reviews see Chapter 1), it is vital that when researchers study this construct they have a common understanding of what they are referring to. By having a clearly defined definition of purpose that unites different strands within the literature, as I have done, researchers as well as practitioners may be able to rally around this definition, allowing a common language around this important aspect of human well-being. Furthermore, by making the case from a theoretical perspective that meaning and purpose are really one factor and one cannot exist without the other, researchers will be able to clearly define what they mean when they talk about purpose and meaning.

Implications of measurement of purpose. As mentioned in Chapter 2, in order to measure any construct, it is vital that the instruments used are valid. The results of my psychometric study showed that, at least on the youth sample, two of the survey instruments I tested, LET and RPWB, were not psychometrically valid and had significant method effect issues. The other instrument, the ASPI sense of identity subscale, which had not been subjected to a full psychometric evaluation but was still widely used, had significant issues with two of its items. In my study, only the MLQ was sound from a psychometric perspective. These findings will have wide implications for those researchers conducting studies in which they need to test for purpose and

meaning in life. It will inform the researchers in the way they measure purpose and the instrument they seek to use for that aim, especially when the sample of interest is youth.

Furthermore, the creation of the New Purpose instrument will allow for an advancement in the measurement of purpose in life. By having a short-form purpose in life survey instrument that covers multiple aspects of the domain space of purpose, researchers will be able to easily measure for purpose in life within their own studies, especially those that include a youth sample.

Policy makers and practitioners will also benefit from this New Purpose survey instrument. Policy makers will now have an easy-to-administer measure to use when they want to test the level of purpose of their youth in multiple settings. Given that purpose is so highly correlated with other areas of well-being, practitioners wanting to see whether a lack of purpose is a contributing factor in a mental health diagnosis will now have an easy way to administer a highly-validated measure.

Contributions to practice of fostering purpose. As far as practice is concerned, the contributions here are also significant. To my knowledge, based on my survey of the literature, the studies in this thesis represent the first ever systematic, evidence based, purpose-fostering intervention to be tested on both a youth and adult sample. This is the first purpose-fostering intervention that has been subjected to a randomized control trial using a longitudinal study design.

Results indicated that purpose in life can be intentionally fostered in a youth population within an educational setting, especially for those who are low on purpose in life. Given the importance of purpose in life as it relates to well-being and health in general, this is an important finding and one that will have implications for educators, mental health professionals, and policy makers. If purpose can be intentionally fostered

in an educational setting, then this type of intervention should be an additional tool to help youth thrive and avoid the negative consequences that are correlated with a lack of meaning and purpose.

Implications of youth study. As I enumerated in Chapter 1 in detail, purpose in life is vital for the well-being of youth and is correlated with a plethora of positive outcomes in youth. The opposite is also true; youth who lack purpose suffer from deficits in multiple domains. As with any deficit that has a negative impact on human functioning, it is important to find ways to help individuals fill that void. Whilst there have been numerous studies that show the efficacy of youth mentoring programs (Benson, 2008; Scales, Benson, & Roehlkepartain, 2011), for example, this is the first purpose intervention that has undergone an empirical study with results showing that it increases sense of purpose in life for those who are lower on purpose at pre-test. The implications of this for youth workers, educators and policy makers are not insignificant. Given the benefits of having increased purpose, coupled with the deficits inherent in lacking purpose, an intervention that can help the most disadvantaged youth, as it relates to a lack of purpose in life at least, is highly beneficial. Youth workers and educators can use an intervention such as the one tested in this thesis as part of their curriculums and programs. Furthermore, because the intervention tested in this thesis was implemented in an educational setting (i.e., in a high school), it demonstrates that, as has been demonstrated in the literature (Koshy & Mariano, 2011; White, Wagner, & Furrow, 2009), school can in fact be a good place to foster increased purpose in youth. Thus, educators and school principals will now have a resource they can use to help the most disadvantaged youth to gain purpose in life. Similarly, on the level of education policy, I have long argued that in addition to hard skills such as knowledge of science,

mathematics and English, State and National curriculums should incorporate purpose finding and fostering programs within the school setting. The results of this study show that interventions such as the one tested here are effective in this regard; therefore, policymakers should certainly take heed and think about implementing a program such as this within State and National Curriculums.

How youth study will further the field. There is substantial literature that describes the benefits of having an increased sense of purpose in life and the deficits inherent in having a lack of purpose (see Chapter 1). There is also an abundance of disparate ideas regarding the drivers of purpose within the literature (for reviews see Table 0.1 in Chapter 1). However, up to this point, to the best of my knowledge, there has not been a unified, coherent, school-based, purpose-fostering intervention that has been empirically tested using an experimental design. The results of this study, therefore, can be considered a significant advancement in our understanding of how purpose can be intentionally fostered in youth, especially in an educational environment. Other researchers can now build upon the foundation that has been laid here to further our understanding of how, in practice, purpose can be fostered using the school curriculum as a vehicle.

Implications of adult study. Given how important purpose in life is for human well-being and health, especially for an older population, the finding that by using an evidence based purpose-fostering intervention one can intentionally increase purpose in life is significant. The implications of these results for theory, practice, and policy are extensive. Theoretically, many interventions include meetings with therapists either one-on-one or in a group. My intervention was self-paced and involved an online tool including videos. It was an online-coaching strategy, and it showed that such online

therapy/coaching interventions that do not use in-person contact can be effective in fostering purpose and other indicators of well-being such as resilience, grit, empathy, happiness, and others. This finding will impact how other interventions are designed.

In addition, as I have enumerated in Chapter 1, purpose in life is vital for the health and well-being of adults, especially as they age. Those who lack purpose as they get older are susceptible to a whole host of potentially negative consequences, while those with purpose are more likely to have greater well-being and longevity. As health workers and therapists grapple with older clients experiencing ill-being, given the results of this study, an intervention to increase a sense of purpose may be a tool used to help these people. Policy makers may also be informed by the results of this study. Given the increasing cost of providing health care for an ageing population, and the fact that older people with greater levels of purpose in life are, on average, healthier than those who lack purpose, policy makers might want to think about policies they can implement to increase the level of purpose in the older population. The results of this study demonstrate that this is possible. As such, offering this type of program to people as they age may be a wise policy decision.

How adult study will further the field. Based on my research, this is the first ever full scale, online application based, purpose-fostering intervention that has been tested in a randomized control trial. The results show that such an intervention is effective. This will inform researchers who study purpose and would like to understand how purpose is fostered, what the potential precursors to purpose are, and the impact an increase of purpose can have on the human condition. Researchers now have a solid method to impact the level of purpose in an adult population so that they can study purpose in life in a more controlled manner. The results of this study will therefore

allow for an advancement in our ability to study purpose by using a proven intervention to increase the level of purpose in one group, while holding the level of purpose in the other group steady. This will allow for further advancements for those who study purpose and well-being.

Conclusion

In summary, this thesis has taken a comprehensive and disciplined approach to the study of purpose in life across the lifespan. It examined multiple populations (i.e., youth, and adults), and ensured that the interventions created were based on solid data and evidence. This thesis took steps to reinforce the theoretical underpinnings of the research as it related to the definition of the construct of purpose and meaning in life. Finally, the full psychometric evaluation of survey instruments used ensured that the results would be valid, solid, and legitimate. The final results of these studies showed that purpose can be intentionally fostered in both a youth population and an adult population. Given the importance of having purpose in life as it relates to health and wellness, these results will have an impact, not only on the work of future researchers, but also on theory, practice, and policy used today.

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APPENDIX

Survey Instruments

Purpose in Life

The Meaning in Life Questionnaire (Steger, 2009)

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:

1 = Absolutely untrue, 2 = Mostly Untrue, 3 = Somewhat untrue, 4 = Can't say true or false, 5 = Somewhat true, 6 = mostly true, 7 = absolutely true

1. I understand my life's meaning. 1
2. I am looking for something that makes my life feel meaningful. 2
3. I am always looking to find my life's purpose. 2
4. My life has a clear sense of purpose. 1
5. I have a good sense of what makes my life meaningful. 1
6. I have discovered a satisfying life purpose. 1
7. I am always searching for something that makes my life feel significant. 2
8. I am seeking a purpose or mission for my life. 2
9. My life has no clear purpose. 1
10. I am searching for meaning in my life. 2

MLQ syntax to create Presence and Search subscales:
Presence _ 1, 4, 5, 6, 9-reverse-coded, 11, 13 14 &16
Search _ 2, 3, 7, 8, & 10
Lack of Purpose_12,15

Short-Form Psychological Well-being – Purpose in Life (Ryff, 1989)

Circle the number that best describes the degree to which you agree or disagree with each statement.

1 – Strongly disagree
2 – Disagree
3 – Disagree slightly
4 – Agree slightly
5 – Agree
6 – Strongly agree

1. I live one day at a time and don't really think about the future. (rs)
2. I tend to focus on the present, because the future always brings me problems. (rs)
3. My daily activities often seem trivial and unimportant to me. (rs)
4. I don't have a good sense of what it is that I am trying to accomplish in my life. (rs)
5. I used to set goals for myself, but that now seems a waste of time. (rs)
6. I enjoy making plans for the future and working to make them a reality.
7. I am an active person in carrying out the plans I set for myself.
8. Some people wander aimlessly through life, but I am not one of them.
9. I sometimes feel as if I've done all there is to do in life. (rs)

Life Engagement Test (Scheier et al., 2006)

Please answer the following questions about yourself by indicating the extent of your agreement using the following scale

1 – Strongly Disagree; 2 – Disagree; 3 – Neutral; 4 – Agree; 5 – Strongly Agree

1.There is not enough purpose in my life. 2
2. To me, the things I do are all worthwhile. 1
3. Most of what I do seems trivial and unimportant to me. 2
4. I value my activities a lot. 1
5. I don't care very much about the things I do. 2
6. I have lots of reasons for living. 1

APSI, Sense of Identity Subscale, (Lounsbury, Saudargas, & Gibson, 2005)

Circle the number that best describes the degree to which you agree or disagree with each statement.

1 – Strongly disagree
2
3 – Neutral/undecided
4
5 – Strongly agree

1. I have a definite sense of purpose in life.
2. I have a firm sense of who I am.
3. I have a set of basic beliefs and values that guide my actions and decisions.
4. I know what I want out of life.
5. I have a clear set of personal values or moral standards.
6. I don't know where I fit in the world.
7. I have specific personal goals for the future.
8. I have a clear sense of who I want to be when I am an adult.

New Purpose Scale (Brackman, 2017)

1. I am an active person in carrying out the plans I set for myself. (RPWB 7)
2. Some people wander aimlessly through life, but I am not one of them. (RPWB 8)
3. I have a firm sense of who I am. (APSI 2)
4. I have a clear sense of who I want to be when I am an adult. (APSI 8)
5. My life has a clear sense of purpose. (MLQ 4)
6. To me, the things I do are all worthwhile. (LET 2)

Other Indicators Well-being

From ASDQII - Academic Self Description Questionnaire II, (Marsh)

1 Definitely False	2 Mostly False	3 False	4 More false than true	5 More true than false	6 Mostly true	7 True	8 Definitely True

1. I get good marks in ENGLISH LANGUAGE classes.
2. Work in ENGLISH LANGUAGE classes is easy for me.
3. I learn things quickly in ENGLISH LANGUAGE classes.
4. Compared to others my age I am good at ENGLISH LANGUAGE classes.
5. I have always done well in ENGLISH LANGUAGE classes.

6. I learn things quickly in MATHEMATICS classes.
7. I have always done well in MATHEMATICS classes.
8. Compared to others my age I am good at MATHEMATICS classes.

9. Work in MATHEMATICS classes is easy for me.
10. I get good marks in MATHEMATICS classes.

11. I get good marks in SCIENCE classes.
12. Work in SCIENCE classes is easy for me.
13. I learn things quickly in SCIENCE classes.
14. Compared to others my age I am good at SCIENCE classes.
15. I have always done well in SCIENCE classes.

16. I have always done well in SCHOOL SUBJECTS classes.
17. Compared to others my age I am good at SCHOOL SUBJECTS classes.
18. I get good marks in SCHOOL SUBJECTS classes.
19. Work in SCHOOL SUBJECTS classes is easy for me.
20. I learn things quickly in SCHOOL SUBJECTS classes.

Taken from SDQI (Marsh)

1 Definitely False	2 Mostly False	3 False	4 More false than true	5 More true than false	6 Mostly true	7 True	8 Definitely True

1. I do lots of important things
2. Overall I am no good
3. In general, I like being the way I am
4. Overall I have a lot to be proud of
5. I can't do anything right
6. I can do things as well as most other people
7. Other people think I am a good person
8. A lot of things about me are good
9. I am as good as most other people
10. When I do something, I do it well

From Julie Butler and Peggy Kerns PERMA & EPOCH (Butler, Kern, 2016)

Question

0 = not at all,
10 = completely

1. How much of the time do you feel you are making progress towards accomplishing your goals?
2. How often do you become absorbed in what you are doing?
3. In general, how often do you feel joyful?
4. To what extent do you receive help and support from others when you need it?
5. In general, how often do you feel anxious?
6. How often do you achieve the important goals you have set for yourself?
7. In general, how often do you feel positive?
8. In general, to what extent do you feel excited and interested in things?
9. How lonely do you feel in your daily life?
10. In general, how often do you feel angry?
11. To what extent have you been feeling loved?
12. How often are you able to handle your responsibilities?
13. How satisfied are you with your personal relationships?
14. In general, how often do you feel sad?
15. How often do you lose track of time while doing something you enjoy?
16. In general, to what extent do you feel contented?
17. Taking all things together, how happy would you say you are?

Life Satisfaction (Diener et al., 1985)

Using the 1-7 scale below, indicate your agreement with each item by choosing the appropriate number for each line. Please be open and honest in your responding.

1 – Strongly Disagree, 2 – Disagree, 3 – Slightly Disagree, 4 – Neither Agree nor Disagree, 5 – Slightly Agree, 6 – Agree, 7 – Strongly Agree

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

Resilience, (Marsh, Unpublished)

1. How quickly do you feel you return to normal after setbacks in your life
2. How much time does it generally take you to get back to normal when things go wrong in your life
3. Do you in general quickly get over and recover from significant life difficulties

Short Grit (Duckworth & Quinn, 2009)

Circle the number below with respect to how much each statement describes you.

1 – Not at all like me
2
3
4
5 – Very much like me

1. I often set a goal but later choose to pursue a different one.
2. I have been obsessed with a certain idea or project for a short time but later lost interest.
3. I have difficulty maintaining my focus on projects that take more than a few months to complete.
4. New ideas and projects sometimes distract me from previous ones.
5. I finish whatever I begin.
6. Setbacks don't discourage me.
7. I am diligent.
8. I am a hard worker.

Subjective Happiness (Lyubomirsky & Lepper, 1999)

For each of the following statements and/or questions, please circle the point on the scale that you feel is most appropriate in describing you.

1. In general, I consider myself…

1	2	3	4	5	6	7
Not a very happy person						A very happy person

2. Compared to most of my peers, I consider myself…

1	2	3	4	5	6	7
Less happy						More happy

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?

1	2	3	4	5	6	7
Not at all						A great deal

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?

1	2	3	4	5	6	7
Not at all						A great deal

Videos Describing App for Youth Intervention

YouTube Link to Playlist

https://www.youtube.com/playlist?list=PLnHzBHUgOXMFGd9qbklmCgQwxrvRuBnjF

Purpose Finding Workbook

Teachers Guide to Conducting the Purpose Intervention

youthdirections

PURPOSE FINDING WORKBOOK

CREATED & WRITTEN BY LEVI BRACKMAN, M.A.

Name_____

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WITH GRATITUDE TO

JAMES W. WILLIAMS, JR.

WITH THANKS TO

SARAH SURREY

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A WORD OF WELCOME

Welcome to Youth Directions' Passion/Purpose Finding Workbook. Congratulations on beginning this process! This workbook will take you through the six steps that will lead you to a fuller and deeper understanding of yourself, your purpose and the long-term goal you passionately want to achieve in your life. We highly recommend you do this process with a Youth Directions certified coach and that you read the instructions carefully before attempting an exercise. For best results we suggest you also use the Youth Directions Guidebook Companion as you work through each step.

We are excited for you to embark on this passion/purpose seeking journey of self-discovery. We have no doubt that what you'll discover during the course of this process will have an immensely positive impact on the rest of your life.



SESSION-TRACKING PAGE

Name:_____

Coach:_____

Session 1: Date_____Time_____Stage #_____

Session 2: Date_____Time_____Stage #_____

Session 3: Date_____Time_____Stage #_____

Session 4: Date_____Time_____Stage #_____

Session 5: Date_____Time_____Stage #_____

Session 6: Date_____Time_____Stage #_____

Session 7: Date_____Time_____Stage #_____

Session 8: Date_____Time_____Stage #_____

Session 9: Date_____Time_____Stage #_____

Session 10: Date_____Time_____Stage #_____

Session 11: Date_____Time_____Stage #_____

Session 12: Date_____Time_____Stage #_____

Session 13: Date_____Time_____Stage #_____

Session 14: Date_____Time_____Stage #_____

Session 15: Date_____Time_____Stage #_____

ASSESSMENT

1

PASSION SELF-ASSESSMENT

Date_____Score_____

1. Do you have a special talent or interest that gives you joy and energy and is an important part of who you are?

   a. Definitely

   b. I think so

   c. Maybe

   d. No

2. Which of the following best describes you?

   a. I feel happy and energized all the time.

   b. I feel happy and energized when I do one or two special things.

   c. I sometimes feel happy and energized.

   d. I hardly ever feel happy and energized.

3. Some people have a special talent or interest that they love; we sometimes say that they have a “passion” in their life. It is something that really fires them up, gives them joy and energy, and is an important part of who they are. It does not really matter what it is, just as long as it gives life direction, purpose, meaning, or focus. How often do you have a passion in your life?

   a. Everyday

   b. Most days

c. Sometimes

d. Hardly ever

4. How many passions do you think you have? A passion can be doing art, learning another language, volunteering, playing a sport or a musical instrument, taking care of an animal, reading, using a computer to do creative things, fixing or building something, and so on.

   a. 3 or more

   b. 2

   c. 1

   d. 0

5. How often do you develop, use, or express your interests, talents, or passions?

   a. Everyday

   b. Most days

   c. Sometimes

   d. Hardly ever

6. How much do you agree or disagree with this statement? *I set goals about developing and getting better at my passions.*

   a. Strongly agree

   b. Agree

   c. Disagree

   d. Strongly disagree

7. How much do you agree or disagree with this statement? *I am not afraid to talk about my passions or show people what my passions are.*

a. Strongly agree

b. Agree

c. Disagree

d. Strongly disagree

8. How much does this statement describe you? *I have a sense of purpose in life.*

a. This is a lot like me.

b. This is sort of like me.

c. This is a little like me.

d. This is not at all like me.

9. How much does this statement describe you? *I believe I am going to make a difference in the world.*

a. This is a lot like me.

b. This is sort of like me.

c. This is a little like me.

d. This is not at all like me.

10. When I say I have a passion for something, I mean:

a. Something that is a constant in my life, that I am willing to make sacrifices for and gives me tremendous joy and energy. It is an important part of who I am.
b. Something that I enjoy doing from time to time or try to do when I get a chance.
c. If my friends were doing it, I would enjoy doing it with them.
d. Something that entertains me, like playing video games or watching a movie.

Use the guide found on the next page to score your assessment and find out what the results mean.

End Date_____

RESULTS

For each of the questions:

A = 10 points

B = 8 points

C = 6 points

D = 4 points

E = 4 points

Add up your total score and write it on the top of the assessment.

WHAT IT MEANS

82-100 points **excellent**. You have a good idea of what you are passionate about and are pursuing it. Continue to move forward. Learn more about your passion. Find support. Go even deeper. Focus on mastering your skills to make your passion shine even more.

62-80 points **good going**. You have a good idea of what you are passionate about, but you could spend more time pursuing it. What's holding you back? Identify any barriers and try to work around them.

42-60 points **you're just getting started**. You may have a sense of what you are interested in, but right now you are just dipping a toe into the water. What do you need to do to dive in to find out more about your passion? Who can help you along the way?

Less than 42 points **what are you overlooking**? Maybe you have never thought that you had a passion. Maybe you had a passion at one time but don't have one anymore. Having a passion will add more joy and excitement to your life.

Whatever your score, this process will guide you towards the path of your own unique direction in life and help you become a more purposeful and passionate human being.

The Passion Self-Assessments found in the Workbook have been adapted, with permission, from the late Dr. Peter Benson's "Spark Self-Assessment" found on page 54 of his book entitled, "Sparks: How Parents Can Help Ignite the Hidden Strengths of Teenagers" (Jossey-Bass 2008).



STEP ONE

Realizing that You Have a Unique, Positive Purpose

EXERCISE 1.0

Start Date_____

In this process you will learn what your passions are and how they relate to your unique, positive purpose in life. Based on that, you will then make a ten-year goal that you can be passionate about achieving.

To fully embrace the idea that everyone has a unique, positive purpose we need to first realize that everything exists for a reason—including us.

Take the body for example; which body part do you think a human could do without?

_____

After some research, what is the purpose of the body part that you mentioned above?

_____

_____

_____

_____

For many years doctors thought that there was no real purpose for the appendix or the tonsils. According to the latest studies, what have medical researchers found out about the purpose of:

the appendix?

_____

_____

_____

_____

the tonsils?

_____

_____

_____

_____

What does this tell us about the importance of each item in the universe and its purpose?

_____

_____

What does this tell us about your unique purpose?

_____

_____

_____

_____

End Date_____

EXERCISE 1.1

Start Date:_____

This exercise will help you better understand the idea that each person has a unique, positive purpose in the universe and something specific and special to contribute. Pick two well-known people who you feel are **not** fulfilling their unique, positive purpose in the universe. These can be sports personalities, celebrities, or anyone else.

1._____

2._____

How would the world be better off if they did fulfill their unique, positive purpose?

Person number 1:_____

_____

_____

Person number 2:_____

_____

_____

Now pick two people who you feel **are** fulfilling their unique, positive purpose in the world.

1._____

2._____

How **is** the world better off because they **are** fulfilling their unique, positive purpose?

Person number 1:_____

_____

_____

Person number 2:_____

_____

_____

How do you think the world would be different if all people would fulfill their unique, positive purpose in the universe?

_____

_____

What has this step taught you about the importance of knowing and following your purpose?

_____

_____

_____

_____

End Date_____

STEP

2

STEP TWO

Listing Your Passions

EXERCISE 2.0

Start Date_____

YOUR PASSION LIST

In this exercise you will be making a 'Passion List' in which you will list of all the things you like to do and experience. The 'Passion List' is a vital foundation block of our passion/purpose finding process. It is therefore important to take your time when making this list. If you're not sure whether or not an item belongs on the list, put it on. You can always remove it later.

Note: the list should not be completed in one sitting. Take your time—you can keep coming back to it. When you have finished with the list, put it down and make sure to review it again a number of times over the next few days. Add any items you may have missed.

A. What are some of the things you enjoy doing in life (i.e. hobbies, for fun, in your free time, when you're snowed in etc.)?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

B. What holds your attention/engages you for long periods of time?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

C. What things do you spend a lot of time thinking, doodling, or daydreaming about?

1. _____
2. _____
3. _____

4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

D. When you search the Internet, what do you search for?

1. _____
2. _____
3. _____
4. _____
5. _____

E. What are your favorite subjects in school?

1. _____
2. _____
3. _____
4. _____
5. _____

F. What subjects at school have you always done well in?

1. _____
2. _____
3. _____
4. _____
5. _____

G. What do ***you think*** you're good at?

1. _____
2. _____
3. _____
4. _____
5. _____

H. What have ***other people*** told you that you are good at?

1. _____
2. _____
3. _____
4. _____
5. _____

I. If you could do any activity anywhere you wanted, what and where would that be?

1. _____
2. _____
3. _____
4. _____
5. _____

J. List things you have done from childhood onwards that you have enjoyed to the extent that you lose all sense of time and self.

1. _____
2. _____
3. _____
4. _____

5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

K. List unique opportunities or experiences that you have enjoyed (it is OK if it is only unique for your circle, family, environment or town).

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

L. List unique opportunities that came your way that you would have loved to pursue but, for one reason or another, you did not.

1. _____
2. _____
3. _____
4. _____
5. _____
6.

M. List work, jobs or hobbies that family, friends or acquaintances have done that you would love to do.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

N. List work, jobs or hobbies that you have read about or seen in movies that you feel attracted towards.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Remember: don't leave anything out of this list. If you're not sure that it belongs on the list, put it on. You can always remove it later. Now that you have finished writing your List, make sure to review it again tomorrow and add items you may have missed.

End Date_____

EXERCISE 2.1

Start Date_____

Look around and you'll notice that most objects are made from a combination of other aspects. Similarly, each thing you like to do or experience contains many aspects. The exact aspect that you enjoy will tell you a lot about who you are and what your unique, positive purpose in life is. This exercise is designed to help you understand this idea.

Look around you and choose two objects.

Object number 1:_____

Object number 2:_____

What aspects are the objects you chose made from (list at least two aspects)?

Object number 1:

a. _____

b. _____

c. _____

Object number 2:

a. _____

b. _____

c. _____

As this exercise has demonstrated, most items are made from other aspects. The same applies to things we like to do and experience. For example: a person who loves science may enjoy the problem solving aspect; a person who loves building Legos, may enjoy the creative aspect. This will help you understand the next stage of this process—finding out what are the 'Aspects you Enjoy' of the things you like to do and experience.

End Date_____

EXERCISE 2.2

Start Date_____

In this exercise you will make a 'Master Passion List'. To do this, take all the items that you placed on your 'Passion List' (exercise 2.0) and write them on the left column on the next page. Be sure to combine the items and have been mentioned more than once and that are ***exactly the same***.

For example, if in List J of your 'Passion List', you wrote that as a child you really enjoyed ***acting*** at school and then in List L you wrote that in high school you had an opportunity to ***act*** in your school play, but did not do so, combine these two in this exercise, listing ***acting*** as one item. If, however, in List L, you wrote that in high school you had an opportunity to ***direct*** a school play but did not do so, then please list acting and directing as two separate items.

In the middle column (Aspects You Enjoy) try to pinpoint what part—the aspects—you enjoy most about these things. Note that you want to put the "aspects" you enjoy rather than the "actions" you enjoy. For example, if you had ***being outdoors*** on your 'Passion List' we want to know what you enjoy about the outdoors. Is it nature? Is it the freedom? Or possibly it is a different aspect.

If, however, you answer that the thing you like about being outdoors is that you enjoy sitting on the grass, we would say that is an "action you enjoy" and not an "aspect you enjoy." If you find yourself answering with an "action you enjoy" rather than an "aspect you enjoy" then ask yourself what aspect you enjoy of that action and then place that answer in the middle column.

Each of the 'Aspects You Enjoy' will fall into one of two main categories: creativity and authenticity. 'Creative' is defined as the enjoyment of creating something new either through art or through some other creative form. 'Authentic' is defined as the pursuit of understanding or uncovering what already exists.

A person's passion can be a combination of the two—creativity and authenticity. In this exercise, however, we are looking for which is dominant within you. With the help of your coach, in the right hand column (C/A), mark whether the 'Aspects you Enjoy' are more creative or authentic—mark a C for creative and A for authentic. For more explanation about this ask your coach and refer to the Guidebook.

Master Passion List Item	Aspects You Enjoy	C/A
1. _____		
	a. _____	_____
	b. _____	_____
	c. _____	_____
	d. _____	_____
	e. _____	_____
2. _____		
	a. _____	_____
	b. _____	_____
	c. _____	_____
	d. _____	_____
	e. _____	_____
3. _____		
	a. _____	_____
	b. _____	_____
	c. _____	_____
	d. _____	_____
	e. _____	_____
4. _____		
	a. _____	_____
	b. _____	_____
	c. _____	_____
	d. _____	_____
	e. _____	_____
5. _____		
	a. _____	_____
	b. _____	_____
	c. _____	_____
	d. _____	_____
	e. _____	_____
6. _____		
	a. _____	_____

b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

7. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

8. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

9. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

10. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

11. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

12. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

13. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

14. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

15. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

16. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

17. _____

a. _____ _____
b. _____ _____
c. _____ _____

d. _____ _____

e. _____ _____

18. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

19. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

20. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

21. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

22. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

23. _____

a. _____ _____

b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

24. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

25. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

26. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

27. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

28. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

29. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

30. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

31. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

32. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

33. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

34. _____

a. _____ _____
b. _____ _____
c. _____ _____

d. _____ _____

e. _____ _____

35. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

36. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

37. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

38. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

39. _____

a. _____ _____

b. _____ _____

c. _____ _____

d. _____ _____

e. _____ _____

40. _____

a. _____ _____

b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

41. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

42. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

43. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

44. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

45. _____

a. _____ _____
b. _____ _____
c. _____ _____
d. _____ _____
e. _____ _____

46. _____

a. _____ ____
b. _____ ____
c. _____ ____
d. _____ ____
e. _____ ____

47. _____

a. _____ ____
b. _____ ____
c. _____ ____
d. _____ ____
e. _____ ____

48. _____

a. _____ ____
b. _____ ____
c. _____ ____
d. _____ ____
e. _____ ____

49. _____

a. _____ ____
b. _____ ____
c. _____ ____
d. _____ ____
e. _____ ____

50. _____

a. _____ ____
b. _____ ____
c. _____ ____
d. _____ ____
e. _____ ____

End Date_____

EXERCISE 2.2a

Start Date_____

Note: This exercise is optional. It is not strictly necessary to complete it in order to succeed at this process. It will, however, give you a deeper understanding of yourself and your passions. Consult your coach whether to complete it or not.

The first part of this exercise will help you understand that each thing in the universe has an essence. Turn back to exercise 2.1 (page 23) and identify, below, the essence of one of the aspects you listed in that exercise. For example: the essence of wood is a tree etc.

Essence number 1:_____

Essence number 2:_____

Now list four other items that could have been made from those same essences (for example, trees can be used to make 1. a desk, 2. walking stick, 3. a chair, 4. a door).

Essence number 1:

1._____

2._____

3._____

4._____

Essence number 2:

1._____

2._____

3._____

4._____

Clearly each item in the universe has an essence from which can be produced a multitude of other items.

Now, you are going to try and identify the essences of the ‘Aspects you Enjoy’ of the things you like to do and experience. To do this, take all the items you placed in the second column of Exercise 2.2 (Aspects you Enjoy) and list them in the first column of this exercise (Aspects you Enjoy). In the second column (Essences), with the help of your coach, identify and write down the ‘Essence’ of each ‘Aspect you Enjoy’. In the right hand column specify whether you think the essence is creative (C) or authentic (A).

	Aspects You Enjoy	Essences	C/A
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____

17. _____ _____ _____

18. _____ _____ _____

19. _____ _____ _____

20. _____ _____ _____

21. _____ _____ _____

22. _____ _____ _____

23. _____ _____ _____

24. _____ _____ _____

25. _____ _____ _____

26. _____ _____ _____

27. _____ _____ _____

28. _____ _____ _____

29. _____ _____ _____

30. _____ _____ _____

31. _____ _____ _____

32. _____ _____ _____

33. _____ _____ _____

34. _____ _____ _____

35. _____ _____ _____

36. _____ _____ _____

37. _____ _____ _____

38. _____ _____ _____

39. _____ _____ _____

40. _____ _____ _____

41. _____ _____ _____

42. _____ _____ _____

43. _____ _____ _____

44. _____ _____ _____

45. _____ _____ _____

46. _____ _____ _____

47. _____ _____ _____

48. _____ _____ _____

49. _____ _____ _____

50. _____ _____ _____

End Date_____

EXERCISE 2.3

Start Date_____

YOUR CREATIVE - AUTHENTIC SCALE

Aspects You Enjoy (and Essences—if you completed exercise 2.2a) fall into one of two main categories: creativity and authenticity. This exercise is designed to help you figure out if you are primarily creative or if you are primarily authentic. 'Creative' is defined as the enjoyment of creating something new either through art or through some other creative form. 'Authentic' is defined as the pursuit of understanding or uncovering what already exists.

A person's passion can be a combination of the two—creative and authentic. In this exercise, however, we are looking for which is dominant within you.

Go back to exercise 2.2 (if you completed 2.2a go back to that exercise as well) and based on your analysis of how creative or authentic all of your 'Aspects' (and 'Essences') are combined; mark your position on the Creative-Authentic Scale below.

Creative |----------|----------| Authentic

End Date_____

EXERCISE 2.4

Start Date_____

You now know all the 'Aspects You Enjoy' (and the 'Essences' if you completed exercise 2.2a) of the things you like to do and experience. You have also figured out whether you are primarily 'Creative' or 'Authentic'. This exercise will now help you identify your top character strengths and requires Internet access. Go online to complete the VIA Me Character survey at www.viame.org. Sign up at the website and take the "VIA Survey for Youth."

Results

Review your results with your coach and list your top ten strengths from the test below:

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

10._____

End Date_____

ASSESSMENT

2

PASSION SELF-ASSESSMENT

Date_____Score_____

1. Do you have a special talent or interest that gives you joy and energy and is an important part of who you are?

   a. Definitely

   b. I think so

   c. Maybe

   d. No

2. Which of the following best describes you?

   a. I feel happy and energized all the time.

   b. I feel happy and energized when I do one or two special things.

   c. I sometimes feel happy and energized.

   d. I hardly ever feel happy and energized.

3. Some people have a special talent or interest that they love; we sometimes say that they have a “passion” in their life. It is something that really fires them up, gives them joy and energy, and is an important part of who they are. It does not really matter what it is, just as long as it gives life direction, purpose, meaning, or focus. How often do you have this type of thing in your life?

   a. Everyday

   b. Most days

c. Sometimes

d. Hardly ever

4. How many passions do you think you have? A passion can be doing art, learning another language, volunteering, playing a sport or a musical instrument, taking care of an animal, reading, using a computer to do creative things, fixing or building something, and so on.

   a. 3 or more

   b. 2

   c. 1

   d. 0

5. How often do you develop, use, or express your interests, talents, or passions?

   a. Everyday

   b. Most days

   c. Sometimes

   d. Hardly ever

6. How much do you agree or disagree with this statement? *I set goals about developing and getting better at my passions.*

   a. Strongly agree

   b. Agree

   c. Disagree

   d. Strongly disagree

7. How much do you agree or disagree with this statement? *I am not afraid to talk about my passions or show people what my passions are.*

a. Strongly agree

b. Agree

c. Disagree

d. Strongly disagree

8. How much does this statement describe you? *I have a sense of purpose in life.*

a. This is a lot like me.

b. This is sort of like me.

c. This is a little like me.

d. This is not at all like me.

9. How much does this statement describe you? *I believe I am going to make a difference in the world.*

a. This is a lot like me.

b. This is sort of like me.

c. This is a little like me.

d. This is not at all like me.

10. When I say I have a passion for something, I mean:

a. Something that is a constant in my life, that I am willing to make sacrifices for and gives me tremendous joy and energy. It is an important part of who I am.
b. Something that I enjoy doing from time to time or try to do when I get a chance.
c. If my friends were doing it, I would enjoy doing it with them.
d. Something that entertains me, like playing video games or watching a movie.

RESULTS

For each of the questions:

A = 10 points

B = 8 points

C = 6 points

D = 4 points

E = 4 points

Add up your total score and write it on the top of the assessment. Compare your answers on this assessment with the previous one to see how you may have changed.

WHAT IT MEANS

82-100 points **excellent**. You have a good idea of what you are passionate about and are pursuing it. Continue to move forward. Learn more about your passion. Find support. Go even deeper. Focus on mastering your skills to make your passion shine even more.

62-80 points **good going**. You have a good idea of what you are passionate about, but you could spend more time pursuing it. What's holding you back? Identify any barriers and try to work around them.

42-60 points **you're just getting started**. You may have a sense of what you are interested in, but right now you are just dipping a toe into the water. What do you need to do to dive in to find out more about your passion? Who can help you along the way?

Less than 42 points **what are you overlooking**? Maybe you have never thought that you had a passion. Maybe you had a passion at one time but don't have one anymore. Having a passion will add more joy and excitement to your life.

Whatever your score, this process will guide you towards the path of your own unique direction in life and help you become a more purposeful and passionate human being.

The Passion Self-Assessments found in the Workbook have been adapted, with permission, from the late Dr. Peter Benson's "Spark Self-Assessment" found on page 54 of his book entitled, "Sparks: How Parents Can Help Ignite the Hidden Strengths of Teenagers" (Jossey-Bass 2008).

End date _____

STEP

3

STEP THREE

Discovering Your Potential Passionate Ambitions

EXERCISE 3.0

Start Date_____

In the previous steps you examined yourself and discovered the 'Aspects You Enjoy' (and, if you completed exercise 2.2a, the 'Essences') of your passions. You also learned about your top character strengths, and determined your place on the creative-authentic scale.

In this exercise you will explore how this new-found self-knowledge can express itself in your life. You will now research vocations, jobs, professions, etc. that express your essences and that you will be passionate about. Please list your findings below. (Use www.khake.com, www.jobresponsibilities.org, www. careerbuilder.com, www.myfuture.edu.au, and other websites and books supplied by your coach to help you create this list.)

This step will bring you closer to creating a ten-year goal you will be passionate about achieving.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

End Date_____

EXERCISE 3.1

Start Date_____

This exercise is meant to ensure that you fully understand what each item on your list (Exercise 3.0) entails in real life. Please research each item on the list so that you are able to identify at least three things that it involves each day. After you complete your research, answer the questions below.

Note: if you did not complete exercise 2.2a skip the three 'essences' question in this exercise.

Item 1:

What is the item?_____

Name three things that this item involves each day:

1. _____

   _____

2. _____

   _____

3. _____

   _____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 2:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 3:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 4:

What is the item?_____

Name three things that this item involves each day:

1. _____

   _____

2. _____

   _____

3. _____

   _____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 5:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 6:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 7:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 8:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 9:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 10:

What is the item?_____

Name three things that this item involves each day:

1. _____

   _____

2. _____

   _____

3. _____

   _____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 11:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 12:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 13:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 14:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 15:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 16:

What is the item?_____

Name three things that this item involves each day:

1. _____

   _____

2. _____

   _____

3. _____

   _____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 17:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 18:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 19:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

Item 20:

What is the item?_____

Name three things that this item involves each day:

1. _____

_____

2. _____

_____

3. _____

_____

List the Aspects You Enjoy that are included in this item:

1._____

2. _____

3. _____

4. _____

5. _____

6. _____

List three essences this item represents:

1._____

2._____

3._____

List at least three character strengths that are needed for this item:

1._____

2._____

3._____

4._____

5._____

What parts of it do you feel attracted towards?_____

_____

_____

End date _____

EXERCISE 3.2

Start Date_____

This exercise involves using your imagination to visualize actually doing the items that you have on your list in exercise 3.1. Now that you're educated about what each item on your list involves in real life, spend some time visualizing yourself doing it. You will then score, on a scale of 1-10, how excited and passionate each item makes you feel during your visualization.

Item Number 1:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 2:_____

On the scale, below rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 3:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 4:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 5:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 6:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 7:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 8:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 9:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 10:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 11:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 12:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 13:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 14:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 15:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 16:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 17:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 18:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 19:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

Item Number 20:_____

On the scale below, rate how excited and passionate you feel when visualizing this item.

1 2 3 4 5 6 7 8 9 10

End Date_____

EXERCISE 3.3

Start Date_____

Make a list below of the items which scored 8 and up on the scale in the previous exercise.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

End Date_____

ASSESSMENT

3

PASSION SELF-ASSESSMENT

Date_____ Score_____

1. Do you have a special talent or interest that gives you joy and energy and is an important part of who you are?

   a. Definitely

   b. I think so

   c. Maybe

   d. No

2. Which of the following best describes you?

   a. I feel happy and energized all the time.

   b. I feel happy and energized when I do one or two special things.

   c. I sometimes feel happy and energized.

   d. I hardly ever feel happy and energized.

3. Some people have a special talent or interest that they love; we sometimes say that they have a "passion" in their life. It is something that really fires them up, gives them joy and energy, and is an important part of who they are. It does not really matter what it is, just as long as it gives life direction, purpose, meaning, or focus. How often do you have this type of thing in your life?

   a. Everyday

b. Most days

c. Sometimes

d. Hardly ever

4. How many passions do you think you have? A passion can be doing art, learning another language, volunteering, playing a sport or a musical instrument, taking care of an animal, reading, using a computer to do creative things, fixing or building something, and so on.

   a. 3 or more

   b. 2

   c. 1

   d. 0

5. How often do you develop, use, or express your interests, talents, or passions?

   a. Everyday

   b. Most days

   c. Sometimes

   d. Hardly ever

6. How much do you agree or disagree with this statement? *I set goals about developing and getting better at my passions.*

   a. Strongly agree

   b. Agree

   c. Disagree

   d. Strongly disagree

7. How much do you agree or disagree with this statement? *I am not afraid to talk about my passions or show people what my passions are.*

    a. Strongly agree

    b. Agree

    c. Disagree

    d. Strongly disagree

8. How much does this statement describe you? *I have a sense of purpose in life.*

    a. This is a lot like me.

    b. This is sort of like me.

    c. This is a little like me.

    d. This is not at all like me.

9. How much does this statement describe you? *I believe I am going to make a difference in the world.*

    a. This is a lot like me.

    b. This is sort of like me.

    c. This is a little like me.

    d. This is not at all like me.

10. When I say I have a passion for something, I mean:

    a. Something that is a constant in my life, that I am willing to make sacrifices for and gives me tremendous joy and energy. It is an important part of who I am.
    b. Something that I enjoy doing from time to time or try to do when I get a chance.
    c. If my friends were doing it, I would enjoy doing it with them.
    d. Something that entertains me, like playing video games or watching a movie.

RESULTS

For each of the questions:

A = 10 points

B = 8 points

C = 6 points

D = 4 points

E = 4 points

Add up your total score and write it on the top of the assessment. Compare your answers on this assessment with the previous one to see how you may have changed

WHAT IT MEANS

82-100 points **excellent**. You have a good idea of what you are passionate about and are pursuing it. Continue to move forward. Learn more about your passion. Find support. Go even deeper. Focus on mastering your skills to make your passion shine even more.

62-80 points **good going**. You have a good idea of what you are passionate about, but you could spend more time pursuing it. What's holding you back? Identify any barriers and try to work around them.

42-60 points **you're just getting started**. You may have a sense of what you are interested in, but right now you are just dipping a toe into the water. What do you need to do to dive in to find out more about your passion? Who can help you along the way?

Less than 42 points **what are you overlooking**? Maybe you have never thought that you had a passion. Maybe you had a passion at one time but don't have one anymore. Having a passion will add more joy and excitement to your life.

Whatever your score, this process will guide you towards the path of your own unique direction in life and help you become a more purposeful and passionate human being.

The Passion Self-Assessments found in the Workbook have been adapted, with permission, from the late Dr. Peter Benson's "Spark Self-Assessment" found on page 54 of his book entitled, "Sparks: How Parents Can Help Ignite the Hidden Strengths of Teenagers" (Jossey-Bass 2008).

End date _____



STEP FOUR

Gaining Experience in Your Potential Passionate Ambitions

EXERCISE 4.0

Start Date_____

Your coach will help create an opportunity for you to spend time with, and shadow, someone who actually does the remaining items on your list. Based on Exercise 3.3 please list below the top three professions, vocations, careers, jobs etc. you would like to explore further:

1._____

2._____

3._____

End Date_____

EXERCISE 4.1

Start Date_____

Make a list of at least 20 questions to ask each of the three people you will meet and shadow.

Name of Person Meeting With_____

Person's Position_____

Date_____ Time of Meeting_____ Place_____

Question 1:

_____

_____

_____

Answer:

_____

_____

_____

_____

_____

_____

Question 2:

Answer:

Question 3:

Answer:

Question 4:

Answer:

Question 5:

Answer:

Question 6:

Answer:

Question 7:

Answer:

Question 8:

Answer:

Question 9:

Answer:

Question 10:

Answer:

Question 11:

Answer:

Question 12:

Answer:

Question 13:

Answer:

Question 14:

Answer:

Question 15:

Answer:

Question 16:

Answer:

Question 17:

Answer:

Question 18:

Answer:

Question 19:

Answer:

Question 20:

_____

_____

Answer:

_____

_____

_____

_____

_____

_____

Name of Person Meeting With_____

Person's Position_____

Date_____ Time of Meeting_____ Place_____

Question 1:

_____

_____

_____

Answer:

_____

_____

_____

_____

Question 2:

Answer:

Question 3:

Answer:

Question 4:

Answer:

Question 5:

Answer:

Question 6:

Answer:

Question 7:

Answer:

Question 8:

Answer:

Question 9:

Answer:

Question 10:

Answer:

Question 11:

Answer:

Question 12:

Answer:

Question 13:

Answer:

Question 14:

Answer:

Question 15:

Answer:

Question 16:

Answer:

Question 17:

Answer:

Question 18:

Answer:

Question 19:

Answer:

_____

_____

Question 20:

_____

_____

_____

Answer:

_____

_____

_____

_____

_____

_____

Name of Person Meeting With_____

Person's Position_____

Date_____ Time of Meeting_____ Place_____

Question 1:

Answer:

Question 2:

Answer:

Question 3:

Answer:

Question 4:

Answer:

Question 5:

Answer:

Question 6:

Answer:

Question 7:

Answer:

_____

_____

Question 8:

_____

_____

_____

Answer:

_____

_____

_____

_____

_____

_____

Question 9:

_____

_____

_____

Answer:

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_____

_____

_____

Question 10:

Answer:

Question 11:

Answer:

Question 12:

Answer:

Question 13:

Answer:

Question 14:

Answer:

Question 15:

Answer:

Question 16:

Answer:

Question 17:

Answer:

Question 18:

Answer:

Question 19:

_____

_____

Answer:

_____

_____

_____

_____

_____

_____

Question 20:

_____

_____

_____

Answer:

_____

_____

_____

_____

_____

_____

End date _____

EXERCISE 4.2

Start Date_____

In this exercise you will answer three questions which will summarize three things you learned of your experiences while meeting the people who share your passions. The first question will test to see how clearly you really understand what they do. The second will help clarify the extent to which you are attracted to that particular item. The third will help you gain clarity as to whether you can actually see yourself working for up to ten years to achieve that same (or a similar) level of success in that area.

Name of Person_____

Passion they represented_____

What does that person do and what part of it did you find most interesting and exciting?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

On a scale of 1-10, how attracted did you feel towards the passion that this person represents after meeting them?

1 2 3 4 5 6 7 8 9 10

What would you be prepared to give up and what sacrifices would you be willing to make to be able to reach the goal the person you met represents?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name of Person_____

Passion they represented_____

What does that person do and what part of it did you find most interesting and exciting?

_____

_____

_____

_____

On a scale of 1-10, how attracted did you feel towards the passion that this person represents after meeting them?

1 2 3 4 5 6 7 8 9 10

What would you be prepared to give up and what sacrifices would you be willing to make to be able to reach the goal the person you met represents?

Name of Person_____

Passion they represented_____

What does that person do and what part of it did you find most interesting and exciting?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

On a scale of 1-10, how attracted did you feel towards the passion that this person represents after meeting them?

1 2 3 4 5 6 7 8 9 10

What would you be prepared to give up and what sacrifices would you be willing to make to be able to reach the goal the person you met represents?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

End Date_____

EXERCISE 4.3

Start Date_____

In this exercise, reexamine your journey through this process and choose the one thing that you feel most passionate about. You will now create a ten-year goal that culminates in becoming successful in the area of this passion.

Please share this goal below:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Youth Directions will now try to find you a mentor who has already been successful in the area of your passion and will help you succeed in achieving your ten-year goal.

End Date_____

ASSESSMENT

4

PASSION SELF-ASSESSMENT

Date_____ Score_____

1. Do you have a special talent or interest that gives you joy and energy and is an important part of who you are?

   a. Definitely

   b. I think so

   c. Maybe

   d. No

2. Which of the following best describes you?

   a. I feel happy and energized all the time.

   b. I feel happy and energized when I do one or two special things.

   c. I sometimes feel happy and energized.

   d. I hardly ever feel happy and energized.

3. Some people have a special talent or interest that they love; we sometimes say that they have a “passion” in their life. It is something that really fires them up, gives them joy and energy, and is an important part of who they are. It does not really matter what it is, just as long as it gives life direction, purpose, meaning, or focus. How often do you have this type of thing in your life?

   a. Everyday

   b. Most days

c. Sometimes

d. Hardly ever

4. How many passions do you think you have? A passion can be doing art, learning another language, volunteering, playing a sport or a musical instrument, taking care of an animal, reading, using a computer to do creative things, fixing or building something, and so on.

   a. 3 or more

   b. 2

   c. 1

   d. 0

5. How often do you develop, use, or express your interests, talents, or passions?

   a. Everyday

   b. Most days

   c. Sometimes

   d. Hardly ever

6. How much do you agree or disagree with this statement? *I set goals about developing and getting better at my passions.*

   a. Strongly agree

   b. Agree

   c. Disagree

   d. Strongly disagree

7. How much do you agree or disagree with this statement? *I am not afraid to talk about my passions or show people what my passions are.*

a. Strongly agree

b. Agree

c. Disagree

d. Strongly disagree

8. How much does this statement describe you? *I have a sense of purpose in life.*

a. This is a lot like me.

b. This is sort of like me.

c. This is a little like me.

d. This is not at all like me.

9. How much does this statement describe you? *I believe I am going to make a difference in the world.*

a. This is a lot like me.

b. This is sort of like me.

c. This is a little like me.

d. This is not at all like me.

10. When I say I have a passion for something, I mean:

a. Something that is a constant in my life, that I am willing to make sacrifices for and gives me tremendous joy and energy. It is an important part of who I am.
b. Something that I enjoy doing from time to time or try to do when I get a chance.
c. If my friends were doing it, I would enjoy doing it with them.
d. Something that entertains me, like playing video games or watching a movie.

RESULTS

For each of the questions:

A = 10 points

B = 8 points

C = 6 points

D = 4 points

E = 4 points

Add up your total score and write it on the top of the assessment. Compare your answers on this assessment with the previous one to see how you may have changed

WHAT IT MEANS

82-100 points **excellent**. You have a good idea of what you are passionate about and are pursuing it. Continue to move forward. Learn more about your passion. Find support. Go even deeper. Focus on mastering your skills to make your passion shine even more.

62-80 points **good going**. You have a good idea of what you are passionate about, but you could spend more time pursuing it. What's holding you back? Identify any barriers and try to work around them.

42-60 points **you're just getting started**. You may have a sense of what you are interested in, but right now you are just dipping a toe into the water. What do you need to do to dive in to find out more about your passion? Who can help you along the way?

Less than 42 points **what are you overlooking**? Maybe you have never thought that you had a passion. Maybe you had a passion at one time but don't have one anymore. Having a passion will add more joy and excitement to your life.

Whatever your score, this process will guide you towards the path of your own unique direction in life and help you become a more purposeful and passionate human being.

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End date _____

STEP

5

STEP FIVE

The Roadmap

EXERCISE 5.0

Start Date_____

Now that you have found a purpose and made a ten-year goal you are passionate about achieving, you need to map out a path to succeeding in your goal. This exercise will help you create that roadmap.

Starting Point:

Are you in school? Yes/No

Which school do you/did you attend? _____

What year are you in?_____

What are your grades like? (Please list subjects and grade for each)

_____

_____

_____

What subjects/education do you need to gain in order to achieve your ten-year goal?

_____

_____

_____

Which experiences/internships would help you achieve your ten-year goal?

_____

_____

_____

Which people would it be helpful to get to know to achieve your ten-year goal?

_____

_____

_____

List three short-term goals that you would like to achieve each year that will lead directly to reaching your long-term, ten-year goal. It does not have to be exact, but you should try to write a plan; knowing that parts of it will change as time goes on.

Year 1:

1. _____

_____

2. _____

_____

3. _____

_____

Year 2:

1. _____

_____

2. _____

_____

3. _____

_____

Year 3:

1. _____

_____

2. _____

_____

3. _____

_____

Year 4:

1. _____

_____

2. _____

_____

3. _____

_____

Year 5:

1. _____

_____

2. _____

_____

3. _____

_____

Year 6:

1. _____

_____

2. _____

_____

3. _____

_____

Year 7:

1. _____

_____

2. _____

_____

3. _____

_____

Year 8:

1. _____

_____

2. _____

_____

3. _____

_____

Year 9:

1. _____

_____

2. _____

_____

3. _____

_____

Year 10:

1. _____

_____

2. _____

_____

3. _____

_____

End date _____

STEP

6

STEP SIX

Spreading the Message about Purpose

EXERCISE 6.0

Now that you have found your passion and purpose in life and made a ten-year goal, you are well on your way to success. We now ask you to tell others that they also have a unique, positive purpose in their lives. By putting in the time and effort, they too can uncover their purpose. In this step, list ten people that you intend to inspire to help find their unique, positive purpose. You will help them either by coaching them yourself or by pointing them in the direction of a coach. Please list the names of these people below:

Start Date_____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Teachers's/ Coaches' Guide

to

Youth Directions Purpose Finding Coaching

Levi Brackman
M.A. (UCL)

Coaches' Guide to Youth Directions
Purpose Finding Coaching

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INTRODUCTION

Congratulations on becoming a certified coach for Youth Directions Purpose Finding Coaching. You now have the know-how and the tools to help your coachees change their lives by finding a passionate and purposeful path in life. Your coachees will discover this path by finding the dimensions of their shape and discovering where their shapes fit in the universe.

This Coaches' Guide contains everything you need to facilitate the process for your coachees. But before we delve into the coaching process, let's take a few moments to review what you should know about this guide, who should use it, and also clarify your title for this process.

How To Use This Guide

This guide is designed to be used in conjunction with the Purpose Navigator. Each exercise in the Purpose Navigator contains introductions, stories, anecdotes, and pieces of life wisdom that coachees explore on their own during the sessions. You should be familiar with the Purpose Navigator materials along with the information in this guide.

Who Uses This Guide

This guide should be used by certified Youth Directions coaches. They may use this in their classrooms, youth development organizations, places of worship, or any other place conducive to properly facilitating Purpose Finding Coaching. It is strongly recommended that you have read my book *Fostering Purpose* before reviewing this Coaches Guide.

Teaching, Counseling and Coaching

This is a "coaching process." Although you may be a teacher, counselor or a youth leader, during this process you act as a coach, and the youth participants are your coachees. You may think that this is only semantics, but there are important distinctions between teaching, counseling and coaching that should be made clear to your coachees.

According to strict definitions, teachers have knowledge to impart to their students. Counselors provide advice to direct the judgement or behavior of another person. The relationships between teachers and students as well as counselors and clients is top down; meaning teachers and counselors have knowledge or advice to fill deficiencies in knowledge, judgement or behavior.

Coaches have a different relationship with their coachees. Coaches are not meant to teach or counsel, although they often do that too. Their primary role is to bring out the best in their coachees, helping them reach their potential. Clearly successful teachers, counselors and coaches use elements from all three -- here however we are focusing on your primary role as a Purpose Finding Coach.

As the coach of your coachee's purpose finding journey, your job is to help them complete their own process of self-discovery. You provide the framework of the journey and motivate them to travel through it. However, to quote Herman Hesse in *Damien,* "Each of us is able to interpret himself to himself alone." Thus, your coachees can interpret themselves better than anyone. It is not your role as a coach, therefore, to analyze your coachees or put words into their mouths. You help them find the answers within themselves. We elaborate further on your role as a coach in the overview of Session 1.

Empowering Your Coachees

The notion that they are in the driver's seat and have control over this process is very empowering and motivating for youth. We recommend, therefore, that you introduce yourself as a coach and explain your role at the beginning of the first session, making the point that your role here is not to teach or counsel. They need to understand that there are no right or wrong answers here, only true and false answers, honest or dishonest. Your coachees are the only ones who really know if their answers are honest or not.

In this process, even spelling correctly is not important because this is your coachees' journey. They are not graded on it at all. As long as they have traveled this journey with honesty and are fully engaged in the process, they will get the desired results. It is your role to motivate and coach them to travel through this journey. To help you with this, we have provided this Coaches' Guide to assist you in facilitating your coachees' journeys.

Jobs, Careers, Vocations, Callings

Youth Directions uses the term purpose or a calling in life, rather than job or career. We do this to illustrate that your coachees are searching for something much more fulfilling and meaningful than simply a job or career. We believe a job is something you do purely for remuneration. Careers are engaged in to gain advancement or a promotion. Surveys show that only about twenty percent of adults in North America find their jobs fulfilling. Research shows that people who see their careers as a calling are much more fulfilled, better team players, and more successful overall. We are, therefore, trying to help youth find their calling and purpose in life rather than their future career. Their calling and purpose may in fact incorporate a career, but the career is not the focus in this process.

Navigating This Journey

In this Coaches' Guide you will find the following items:

- Session plan overviews
- Session plans
- Session plan resources

Session Plan Overview

The session plan overview provides concepts you should be familiar with before you begin planning the session. The overview explains in detail what the session is meant to achieve, how to meet the objectives, and the resources available to do so.

Session Plans

Each session comes with a detailed plan that was created using the "Backward Design" model. This means that each session is planned around its objective(s). The plans list coaching objectives and success criteria that help you determine if your coachees have fulfilled the session objectives. Each session plan is fifty-five minutes long.

In addition, the session plans provide detailed instructions on how every minute of the session should be used both by the coach and the coachee. You will find four columns on this section of the session plan. Here is a description of each column's contents from left to right:

Column 1

This lists the time each segment should take (this is based on our experience coaching sessions).

Note: As a professional, we encourage you to adapt each session and make changes that fit your schedule, creativity, personality and style, as well as the dynamics and size of your group. However, there are certain "core" exercises without which the Purpose Finding Coaching process cannot be completed. Exercises and session activities marked "CORE" on the session plans should not be skipped.

Column 2

This lists the coach's activities for each time segment.

Column 3

This lists the corresponding coachee activities for each time segment.

Column 4

This lists the resources available for each time segment.

Session Plan Resources

We have provided multiple resources to help you deliver this content. After reviewing all of the resources, you can choose which are most suitable for you and your coachees. Each resource has detailed instructions to properly facilitate the activity. Some of the resources include stories that help coachees understand concepts and exercises. We suggest that you share these stories, or your own personal stories, with your coachees to help convey the more challanging concepts and exercises.

The resources provided in this coaches'guide have successfully helped our coachees on their journey. We strive to ensure the efficacy of this Purpose Finding Coaching. We encourage you to develop resources of your own that will improve this process. If you find or develop an effective resource, please submit it to us so we can review it and share it with other certified coaches and update our curriculum.

SESSION 1 OVERVIEW

The goal of Session 1 is for the coachees to become aware that by virtue of the fact that they exist, they have an innate purpose. Comprehension of this idea is vital to their success in finding their purpose. This process can be challenging and will take effort by the coachee. The more inspired they are to find their innate purpose, the easier it will be for them to complete the introspective parts of this process.

Purpose Navigator Activities Associated With This Session

Sign up for Purpose navgator at PurposeNavigator.com, Exercise 1.0, Purpose Self-Assessment 1.

Concepts With Which You Should Be Familiar For Session 1

Get To Know Your Coachees

We provided an ice-breaker activity (Resource #1) for you to use, but please feel free to improvise and use your own ice-breakers. Take time to build rapport with your coachees. Share things about your own life. As a coach, your relationship with your coachees is an important element of their success.

The Process

We use a shape sorting game of a jigsaw puzzle (Resource #2) to help coachees understand the two main parts of our Purpose Finding Coaching:

1. Finding the dimensions of their shape
2. Discovering where their shape uniquely fits in the universe -- their purpose

Difference Between a Teacher, a Counselor and a Coach

Although you may be their teacher, counselor or youth leader, when you facilitate Purpose Finding Coaching you are acting as a coach. A teacher by definition is someone who has knowledge to impart that the student does not yet have. This makes the relationship unequal because the teacher is the giver of knowledge and the student the receiver. A counselor has a similar role. The counselor has advice, or counsel, from which the student can benefit.

A coach has a completely different relationship with the coachee. Even Tiger Woods has a coach. As the world's best golfer, his coach does not teach him how to play golf. His coach is there to help him achieve peak performance -- to bring out the best in him.

In a similar way, this Purpose Finding Coaching is not about teaching or counseling. The coachee is in driver's seat here. It is their process of self-discovery and our only role is to help them discover themselves. We do not have the answers, nor are we the experts. They are the only ones who know themselves and can answer the questions about themselves. Our role is to help them find it within themselves.

Purpose is Innate

Everything in the universe has a purpose even if you don't yet know what that purpose is. For a long time doctors thought that tonsils had no purpose and were just a nuisance. Now we know that they form the first line of defense against germs that enter the respiratory system. They also thought that the appendix had no purpose, yet now they have found that it contains bacteria that are important for the healthy function of the colon. These doctors mistakenly thought because they did not know the purpose of the tonsils or appendix, it therefore did not have a purpose. The truth is that purpose is innate, everything has a purpose even if we don't yet know what it is. The Purpose Matching Game (Resource #3) is

designed to open up this conversation.

Furthermore, our purpose exists even if we don't fulfill our purpose. The purpose of our hands, for example, is to do functions that require the use of fine motor skills. Even if we decide never to use our fingers for their purpose, that purpose still remains. The same goes for our cell phone, we can put it in the bottom drawer and never use it, yet its purpose still remains.

The Purpose Self-Assessment

The Purpose Self-Assessment is for coachees to track the progress they make throughout their Purpose Finding Coaching. They will take four of these assessments during the coaching process. It is imperative that they understand there are no right or wrong answers, only true and false, honest or dishonest. The more honest they are with themselves during the coaching, the greater the benefits they will gain.

The most successful people in the world score 100 on this self-assessment because they are very purposeful and passionate in their lives. The goal is for coachees to score as close to 100 as possible on this self-assessment by the end of their Purpose Finding Coaching.

Session: 1	Stage: 1	Aim: For coachees to understand the Purpose Finding Coaching process and realize they innately have a purpose.	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Know where we are going during this process and that everything, including them, has a purpose.

By the end of the lesson coachees will:

- Know what to expect in this process and understand that everything has a purpose even if they don't yet know what that purpose is.

Know/Understand:

- Why the Purpose Finding Coaching is important. Just because we do not know the purpose of something, or our own purpose, does not mean it or we don't have a purpose.

Have Reflected Upon:

- The concept of personal purpose.

Success Criteria:

- Answer questions in a way that demonstrates they have understood the concept of having an innate purpose.
- Participation in game activity.

Asesssment opportunities:

- Self-Assessment 1

Homework:

- None

Time:	Coach Activity:	Coachee Activity:	Resources:
1	Introduce yourself and what they should call you.	Coachees listen.	
6	Explain that you want to get to know them. Walk around the room and ask coachees their name and to pick a question. Spread questions out face down in front of them so they can pick.	Coachees say their name and answer the question.	R1 - Icebreaker
6	Give a short overview of the coaching process and goals. Use the shape sorting game to illustrate the process.	Coachees participate in the shape sorting game and give suggestions about how it works.	R2 - Shape Sorting
5	Instruct coachees to log in to the Purpose Navigator app.	Coachees log in to the Purpose Navagator	
4	Tell coachees that you are a coach. Ask coachees to explain the difference between coaching and teaching (and counseling if necessary).	Coachees listen and answer questions.	
2	CORE - Explain the Self-Assessment: this is a statement of where they are. There are no right and wrong answers. It is important that they answer honestly since the assessment is only for them.	Coachees listen.	

Session:	Stage:	Aim:
1	1	For coachees to understand the Purpose Finding Coaching process and realize they innately have a purpose

Time:	Coach Activity:	Coachee Activity:	Resources:
1	Ask coachees if they have any questions. Explain that some questions might be challenging and that they can ask questions along the way.	Coachees ask questions.	
9	Instruct coachees to begin Self-Assessment 1. Be available as students take the assessment.	Coachees complete Self-Assessment 1	
6	CORE - Facilitate the Purpose Matching Game.	Coachees play the game.	R3 - Purpose Matching Game
3	Briefly discuss the purpose of each item in the game. Ask a couple of students to share their answers.	Coachees listen and participate in discussion.	
7	Get deeper into the concept of purpose. Talk about the purpose of hands. Talk about the purpose of a cell phone. Use other analogies until coachees understand that purpose is innate, even if they don't know what their purpose is, they still have it.	Coachees participate in the discussion.	
5	Wrap up by asking questions to review this session then talk about goals for the next session. Sample questions for review: 1. What did we learn about (name of coachee) today? 2. What is a body part that was once thought to be useless but has a unique purpose? 3. What is the purpose of (item from game)? 4. What have we learned about our purpose today?	Coachees listen and answer questions.	

SESSION 1 RESOURCES

Resource 1: Icebreaker

Follow the steps below to facilitate this activity:

1. Prior to the session make as many copies of the question cards sheet (on next page) as necessary. Then cut out each card.
2. Spread the cards face down in front the coachees
3. Each coachee selects one card
4. Go around the room having everyone answer the question on their card

Who is your favorite musician or band?	What is your nickname and why?
If you could live anywhere in the world, where would it be and why?	What is your favorite pet animal and your favorite wild animal?
Who is your favorite famous athlete?	What is your favorite movie and/or who is your favorite actor?
What is your favorite color?	Where were you born? Where did you grow up?
Do you or your parents speak other languages? If no, what language would you like to learn?	Where is the coolest place you have been?

Resource 2: Shape Sorting Activity

We use a shape sorting game or a jigsaw puzzle to help coachees understand the two main parts to the purpose finding process:

A. Finding the dimensions of thier shape
B. Discovering where their shape uniquely fits in the universe -- their purpose

Follow the steps below to facilitate the activity (they are the same for jigsaw puzzle):

1. Set up the shape sorting game in an area visible to the entire group
2. Remove the shapes from the box or pieces from the puzzle.
3. Ask a few volunteers to each select a shape. Once they all have their shapes, one by one they should put the shape into its corresponding shape on the box.
4. Tell them to pay attention to the steps they are taking to correctly fit the shape into the right hole in the box.
5. Ask the volunteers to give you a step-by-step account of what they had to do to succeed at the shape matcher game.
6. Here are the four steps necessary to put the correct shape in the correct hole.
   Step 1: Pick up a block
   Step 2: Identify its shape
   Step 3: Identify its corresponding shape on the box
   Step 4: Put the block into the box through its corresponding shape
7. Discuss how missing one of the steps would mean failing at the game. Explain how each step relates to this purpose finding coaching
   Steps 1 and 2 illustrate the first phase of the purpose finding process -- discovering the dimensions of their shape.
   Steps 3 and 4 illustrate the second phase of the purpose finding process -- finding out where they fit in the universe -- their purpose.
8. Discuss how finding the dimensions of their shapes, then discovering where they fit in the universe, leads to a lifetime of happiness, fulfillment and meaning.

This seems like a childish activity since toddlers can successfully put the blocks into the box. But it is very useful here. It illustrates that the same process applies to life. Before your coachees can discover their purpose, they need to discover themselves. This is what the Purpose Finding Coaching process does. It helps them learn the dimensions of their own shape and then discover where that shape fits in, and therefore, helps them find their purpose in the universe.

Story: Edward Bulwer Lytton popularized the saying "forcing a square peg into a round hole" in his 1873 book *Kenelm Chillingly, His Adventures and Opinions.* In the book a farmer expects his son to follow in his footsteps and become a farmer. The son, however, has no desire to become a farmer. The wise man tells the father: "Does it not prove that no man, however wise, is a good judge of his own case? Now, your son's case is really your case—-you see it through the medium of your likings and dislikings, and insist upon forcing a square peg into a round hole, because in a round hole you, being a round peg, feel tight and comfortable."

Note: Youth Directions has found that the shape sorting game illustrates our process better than a jigsaw puzzle. We use the **Melissa and Doug Shape Sorting Cube** available on Amazon.com and other retail stores. This cube has a few similar shapes through which coachees invariably try to place the wrong block. It's a good metaphor. They still need to carefully analyze their shape and possible corresponding shapes in the universe so they won't put themselves into the wrong slot. They shouldn't try to fit themselves into a round hole if they are a square peg, as the saying goes.

Resource 3: Purpose Matching Game

The game is designed to help coachees think about the concept that everything in the world has an innate purpose. Just because they might not know the purpose of an item doesn't mean it's purposeless. Everything has a purpose, including the coachee. If we aren't sure about the purpose of an item, we need to investigate it to discover its purpose.

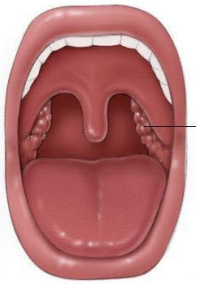
There are two columns of images (see the next page). The left column are items and the right column represents the purpose of each item. Coachees are meant to match the item with its corresponding purpose. There is also an image of a garbage can. If the coachee thinks the item has no purpose, they should draw a line from the item to the garbage can.

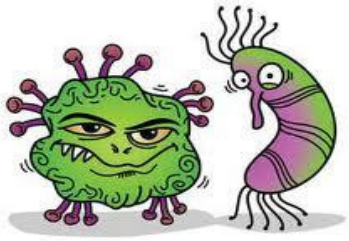
The more of coachees that throw items away, the more impact the game and subsequent conversation will have. The mistake they are making is that since they dont know the purpose of an item they think it is purposeless. Doctors made the same mistake. For decades they thought that the tonsils and appendix had no purpose. Similarly, the phone jack component (item 5) and finger print mold (item 2) have a purpose, although most people say they would throw them away if they found them while cleaning their house. Most adults have a junk drawer because we have made the mistake of throwing away items like these, only to discover a few days later that they were important. Use stories from your own life about objects you may have thrown away, only to discover their purpose and that you needed them a few days later.

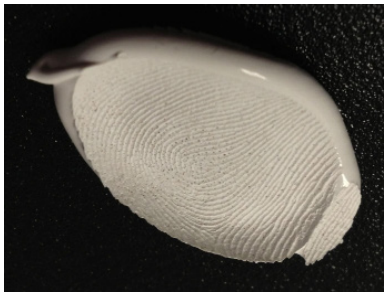
Story: A number of years ago I bought one of those robotic vacuum cleaners that vacuums your entire house for you while you sleep. It worked great for a long time until one day it stopped working. As the techie at home I examined the vacuum cleaner and noticed that there was a part missing. I looked high and low for the missing piece and could not find it. Then it hit me — I had thrown it out two days prior, so the garbage collectors had already taken it to the dump.

Here is how it happened. It was a Sunday afternoon and the kids had been home all day. I was fed up with the mess and eager to get things clean. After bribing my kids to lend a hand in the enterprise of getting the house to rights, we set about cleaning up. My older son was cleaning downstairs when he came across an object with which he was unfamiliar. He ran upstairs and showed it to me, "What's this dad?" he asked, "Is it important?"

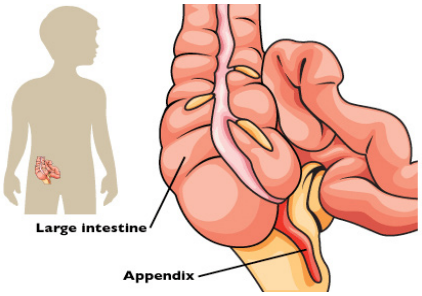
I looked at it and said, "For the life of me I have no idea what it is." After asking all the rest of the family, including my wife, if they knew what it was from, we were still unable to identify its purpose. "Just throw it out," I told my son. It turned out that my ten-year-old son had cleaned the wheels of the robot a week earlier and had inadvertently neglected to replace that specific part, and then when he found it a week later he had completely forgotten what it was.





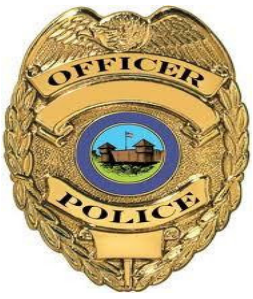


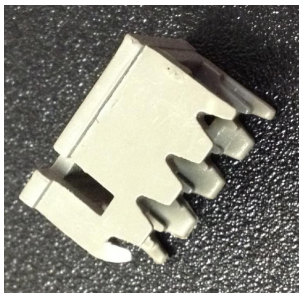


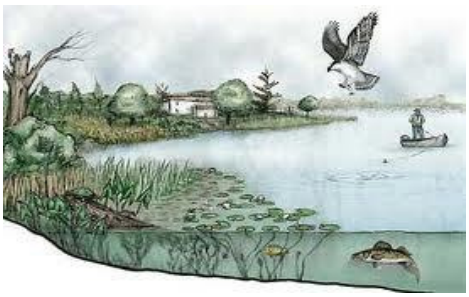

Large intestine
Appendix






OFFICER
POLICE





Paper and pencil instructions:

The coach facilitates the game. Follow the instructions below:

1.Make copies of the columns of images on the previous page.

2. Hand out the copies and tell the coachees that we will now spend a little time thinking about purpose

3. Tell coachees to take a minute to think about each item, then draw a line from the item on the left to the picture on the right that you think corresponds to its purpose. If they can't think of a purpose for the item and think it is purposeless, they may draw a line from it to the garbage can.

4. Once the coachees have completed their sheeets, review the purpose of each item in the game. (Tonsils help combat germs; the appendix fosters good bacteria; the fingerprint mold helps the police locate missing persons; the piece that looks like a lego is a component of a phone jack, and mosquitoes are needed for biodiversity.)

This will allow you to now delve into a conversation about the concept of purpose. Remember to share a story about a time you threw away something only to discover its purpose a few days later.

Purpose Navigator Instructions:

This is Exercise 1.0 in the Purpose Navigator. Tell coachees to think about the purpose of each item on the left. Then they should drag and drop the item onto the picture that they think corresponds to its purpose. If they can't think of a purpose for the item and think it is purposeless, they can drop it into the garbage.

Coachees follow automated prompts until the game concludes. If they place an item into the garbage can, a prompt will alert them that everything has a purpose and give them a clue about the item's purpose. The coach oversees the activity. This then gives you the opportunity to discuss the concept that everything has an innate purpose after the game. Review the purpose of each item in the game, then delve into a conversation about the concept of purpose after coachees finish the activity. Remember to share a story about a time you threw away something only to discover its purpose a few days later.

Here are the purpose of the items in more detail:

Purpose of tonsils: tonsils serve as the first line of defense against bacteria that enter the respiratory system.

Purpose of the phone jack component: this little piece of plastic, about the size of a Lego, that separates and holds phone and Internet wires in place. Without it your phone and Internet will not work.

Purpose of mosquitoes: mosquitoes are a very important part of the ecosystem. They are part of the food chain that makes life possible.

Purpose of the appendix: recently doctors discovered that the appendix stores good bacteria that helps humans digest food.

Purpose of the fingerprint mold: no two people have the exact same fingerprint pattern, so police use them to identify people.

NOTES

NOTES

SESSION 2 OVERVIEW

The first part of this session is meant to further motivate coachees to set out on their purpose finding journey. During the second part of the session they embark on the beginning of their purpose finding journey by starting their Passion List.

Purpose Navigator Activities Associated With This Session

Exercise 1.1, Exercise 2.0

Concepts With Which You Should Be Familiar For Session 2

Unique, Positive Purpose:

Unique

Just as no two people are exactly alike -- we all have different faces, fingerprints, DNA, etc. -- no two people's purpose is exactly alike. This is why we call it a *unique*, positive purpose.

Positive

In the Purpose Finding Coaching we help our coachees find their *positive* purpose. Scholars agree that purpose must also included an aspect that serves something beyond the self. We, therefore, do not consider a negative purpose such as criminality or undertaking something that is purely selfish as purposeful. Thus, we talk about unique, *positive* purpose.

Purpose

We discussed innate purpose at length in the previous session. Here we will talk about how fulfilling your unique, positive purpose has an impact on the universe.

To do this coachees will work on Exercise 1.1. In this exercise students contrast people who are (or have) fulfilling their unique, positive purpose with those who are (or have) not. There is a huge difference. For example, consider the impact Hitler had on the world compared with the impact Nelson Mandela or Martin Luther King, Jr. had.

This exercise asks coachees to consider a world where all people are fulfilling their unique, positive purpose. They are asked to imagine what their own life would be like if they woke up each morning to fulfill their unique, positive purpose in the universe.

Exercise 1.1 is designed to open a conversation about unique, positive purpose. Facilitate a discussion about the importance of everyone pursuing a unique, positive purpose. Have your coachees share examples from their exercise. (For more details see Resource #4)

The Purposeful House activity (Resource #5) is an optional, stand alone activity, with its own session plan, that can be used to further underline and reinforce this important point.

This concludes the sessions that focus on the concept of purpose. The coachees should now be highly motivated to embark on the journey of finding their unique, positive purpose.

The Passion List:

The Passion List is the foundation upon which coachees figure out the dimensions of their shapes. It is the items on this list that they will analyze during this process of self-discovery. They should list at least one item for each question. Explain that each passion will be analyzed to determine what "aspect" they enjoy of that passion. To illustrate the idea of "aspects" use the Food and Flavors activity (Resource #6).

Note: we use the word passion here loosely to mean anything that the coachee enjoys doing.

Session: 2	Stage: 1.1-2.0	Aim: For coachees to understand the meaning and importance of achieving their unique, positive purpose in the world. To comprehend the importance of the Passion List.	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Learn that people have a choice to either fulfill their unique, positive purpose and improve the world, or to not fulfill their unique, positive purpose. To fully comprehend the idea of making a Passion List including the idea of aspects.

By the end of the lesson coachees will:

- Be highly motivated to find and fulfill their unique, positive purpose.

Know/Understand:

- The world would be a better place if everyone fulfilled their unique, positive purpose. That it is not the passions they love, but "aspects of them"

Have Reflected Upon:

- Their potential unique, positive impact on the world. Flavors and aspects.

Success Criteria:

- Completed Exercise 1.1
- Participated in game
- Began exercise 2.0

Assessment opportunities:

- None

Homework:

- None

Time:	Coach Activity:	Coachee Activity:	Resources:
2	Review last session and assess the coachees' understanding of the concept of purpose by asking questions.	Coachees listen and answer questions about the concept of purpose.	
3	CORE - Exercise 1.1: Tell coachees to read the short instructions quietly to themselves.	Coachees read silently.	
1	Ask coachees spot feedback questions to ensure understanding.	Coachees answer questions.	
3	Instruct coachees to begin the first section of Exercise 1.1 about famous people not fulfilling their unique, positive purpose. Tell students to only choose one person. Be available for help. Coachees who finish quickly can choose a second person. *It is better that they not write about their family or friends.	Coachees listen then fill out first section about those not fulfilling their unique positive purpose.	R4 - Purposeful People Optional: R5 - Purposeful World
4	Ask two coachees to explain their answers.	Coachees called upon explain their answers.	
4	Instruct coachees to answer the questions in the next section of Exercise 1.1 and pick one person who is fulfilling their unique, positive purpose. Be available for help. Coachees who finish quickly can choose a second person.	Coachees listen then work on the section about a person fulfilling their unique, positive purpose.	

Session: 2 | **Stage:** 1.1-2.0 | **Aim:** For coachees to understand the meaning and importance of achieving their unique, positive purpose in the world. To comprehend the importance of the Passion List.

Time:	Coach Activity:	Coachee Activity:	Resources:
	Coachees complete the entire section, including the last two questions.		
4	Ask two coachees for their answers. Discuss the concept of unique, positive purpose.	Coachees participate in the discussion.	
	Instruct the coachees to close their books.	Coachees close their books.	
7	Introductory activity: Have coachees choose their favorite candy from an assortment. Next, have coachees describe in writing what flavors and textures they like about their favorite candy. The candy represents their passions and the flavors represent the aspects and essences of their passions.	Coachees listen then pick their favorite candy and write in detail the flavor and texture they taste. They then read what they have written.	R6 - Food and Flavors
2	CORE - Exercise 2.0: Explain the importance of the Passion List. It is the anchor and how we are going to discover what they love to do and why they love to do it. *This next step can seem tedious, so it is important that they feel inspired about the work they are about to do.	Coachees listen.	
2	Have the coachees read the passion list instructions.	Coachees answer questions.	
	Ask spot feedback questions to ensure the coachees understand the purpose of the passion list.	Coachees begin listing their passions.	
18	Have coachees begin Exercise 2.0.		
	(If necessary, coachees move to places that will allow them to concentrate while they work on their Passion List. Instruct them to begin Passion List as soon as they are seated.)		
	Conduct mini brainstorming sessions with each coachee to help them with their lists.	Coachees finish what they're working on.	
	Give coachees a one minute warning before wrapping up, and let them know that we will continue working on this next session.	Coachees listen.	
1	Wrap up by reviewing what was just done. Instruct coachees to continue thinking about their passions so that they have more to add next session.		

SESSION 2 RESOURCES

Resource 4: Purposeful People

This activity is designed to help coachees understand the impact people who are fulfilling their unique, positive purpose have on the world. It also help them understand how they would be better off if they were fulfilling their unique, positive purpose.

Here are examples of people past coachees suggested have fulfilled their unique, positive purpose:

- Martin Luther King, Jr.
- Nelson Mandela
- Ghandi
- Justin Beiber
- Steve Jobs
- Oprah
- Mother Teresa
- Einstein
- Buddy the Elf
- Elvis

Examples of people coachees have suggested as not having fulfilled their unique, positive purpose:

- Charlie Sheen
- Snooki
- Adolph Hitler
- Osama Bin Laden
- Benito Mussolini
- Saddam Hussein
- Lil Boosie

Coachees may disagree on some of the names they will discuss. It's important to keep the conversation constructive and focused on the purpose of the activity.

There are several ways to facilitate this activity:

- Show the coachees or pass around pictures or names of famous individuals to help them think about people
- Have a discussion without showing pictures or listing people

Instructions for this activity are provided in the Purpose Navigator.

Resource 5: Purposeful House

The Purposeful House activity is designed to help coachees contemplate the concept that humanity will be far better off if people individually fulfill their unique, positive purpose.

Draw or create a house large enough for each coachee to place a household item. The house represents the world and the household items represent individual purposes.

There are countless ways to create a house. Coaches can draw the house on the whiteboard or use large pieces of paper. You can create a house on a PowerPoint, Word or other digital programs. Get creative to make the activity as engaging as possible.

For household items use clip art or another image resource such as clippings from magazines. Items that have been used in the past include

- Couch
- Lawnmower
- Beds
- TV
- Kitchen
- Exercise Equipment
- Stereos
- iPad
- Garden Furniture
- Bathrooms
- Toilets
- Computers
- Theater

See the following page for an entire session plan that provides detailed instructions for this activity.

Session: 2	Stage: Resource 5	Aim: For coachees to understand the importance of achieving their unique, positive purpose.	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Coachees will learn the impact that their unique, positive purpose can have on the world.

By the end of the lesson coachees will:

- Learn how to make their unique, positive purpose shine.

Know/Understand:

- Understand how finding and contributing their unique, positive purpose makes a difference in the world.

Have Reflected Upon:

- The importance of finding and fulfilling their unique, positive purpose.

Success Criteria:

- Participated in activity
- Comprehend the concept of having a unique, positive purpose

Time:	Coach Activity:	Coachee Activity:	Resources:
3	Ask the coachees to imagine a new empty house.	Coachees listen	R4 - Purposeful House
	Q: What does that house look like?	Coachee answers question.	
	Q: What would it look like if a rich celebrity moved in?	Coachee answers question.	
	Some of those houses can be really awesome and perfect! I have never been in a celebrity's house but I have been in some nice houses. Raise your hand if you have ever been in a really nice house.	Coachees listen.	
	Q: (Choose someone) What was something cool that they had in their house?	Coachee answers question.	
	Q: (same student) Was that house perfect?	Coachee answers question. (No)	
	Good, we are talking about houses because we are using houses as a metaphor for something.	Coachees listen.	
1	Q: Does anyone know what a metaphor is? (if no one knows explain)	Coachee answers question.	
1	In our metaphor a house is going to represent the world. *At this point,		

Session: 2 | **Stage:** Resource 5 | **Aim:** For coachees to understand the importance of achieving their unique, positive purpose.

Time:	Coach Activity:	Coachee Activity:	Resources:
	reveal or draw the blank house. Explain that the cool things in the house, like ___ and ___(the items you have prepared) are going to represent purposes.		
2	Each item is unique and has a unique purpose in the house, just as WE do in the world.		
	Pass out the household items that represent "unique purpose" to everyone.	Coachees get their "unique purpose."	
3	Now, that we all have our "purposes," who wants to fulfill their purpose in the world, by adding it to our house?	Coachees raise their hands and come to the house to "fulfill their purpose" if called.	
	*The point is for only a few coachees to raise their hands to go first. Call on the coachees 2 or 3 at a time to come to the house and "fulfill their purpose" – end result is that items are just stuck all over the house.		
	Now, the house is pretty much perfect, we have a pretty perfect world.	Coachees listen.	
3	Q: What happens if (select two coachees) decide not to fulfill their purposes? How is the world now?	Coachees answer question. (i.e. the world is less perfect?)	
	Q: Is it better than before, when no one was fulfilling their purpose?	Coachees answers question. (i.e. yes)	
	Q: So, if some people are not fulfilling their unique, positive purpose, why should we?	Coachees answer question. (because we can still help to make the world better)	
	The world will also improve by us spending some time to think about how our purposes would best be fulfilled.	Coachees listen.	
3	Instruct all coachees to come to the front of the class and use their house board to better make their purposes shine.	Coachees go to the front of the class and work together putting the household items in order to make the house more livable and purposeful.	
	Instruct the coachees that they have one more minute and assist if needed.	Coachees work together.	
	Tell coachees to sit back in their seats and show their new house/world.	Coachees listen.	
	Q: How is the house/world better now?	Coachees answer question.	
2	Q: What does this tell us about our own purposes?	Coachees answer question.	

Resource 6: Food and Falvors

This activity is designed to help coachees understand how they will discover the dimensions of the shapes based on their Passion List. They eat a candy they enjoy and think about the flavors, textures and anything else they might like about the food. The idea is that it is not the candy itself that they enjoy but the flavor of it. The food represents their passions while the flavors and textures represent the aspects.

Facilitate the activity by following the instructions below:

1. Pass out an assortment of food (candy bars or healthy food options) ensuring that there are several options available. Together with the food also pass out a scrap of paper.
2. Coachees select one item from the assortment.
3. Give them a minute to savor the food and write, describing the flavors and textures they taste and feel.
4. Discuss how the food represents their passions while the flavors and textures represent the aspects. Connect this activity with stage 2 of this purpose finding process in the following way:
   a. It's not the passion itself they love but aspects of it.
   b. They can discover the aspects by analyzing what they are passionate about in life.

Use the following story to illustrate this idea.

Story: There's a restaurant in Basel, Switzerland that has no menu. This is not that uncommon in high-end restaurants, especially in Europe. But at this restaurant the chef makes a dish especially for you. Here is how it works. You are given a piece of paper to write down three foods you love and two foods you hate. This is then given to the chef, who prepares a dish that he knows you will love.

How does he do it?

It is really rather straightforward. No one really loves food — it is instead the flavor and texture of the food that we love. The intensely pleasurable sensations the flavors visit upon our tastebuds is what we seek. Using the flavors of the foods the patron loves and leaving out those that they hate, the chef is able to concoct a completely new dish he knows the diner will enjoy.

The analogy is clear. After understanding the aspects you enjoy of your passions, you can then create a new thing, a future vocation, that will contain all of those aspects.

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SESSION 3 OVERVIEW

During this session coachees expand their Passion List (use Resource #7 to reintroduce the Passion List), create their Master Passion List and learn how to analyze their passions.

Purpose Navigator Activities Associated With This Session

Exercise 2.0, Exercise 2.1, Exercise 2.2

Concepts With Which You Should Be Familiar For Session 3

Dimensions of Their Shape

In section 2 coachees will be exploring the "dimensions of their shape," after which they will be able to explore in section 3 where they uniquely fit in the the universe. There are five main dimensions:

1. Passions (things they enjoy doing)
2. Aspects (of the things they enjoy)
3. Essences (of their Aspects)
4. Creative/Authentic Scale
5. Charector Strengths (VIA)

Master Passion List:

The Master Passion List is all the items that were placed on the Passion List put in one place. During the next session coachees will analyze the items on the Master Passion List to determine which aspects they enjoy about their passions. To help coachees expand their Passion Lists, facilitate the game Two Passions and a Phony (Resource #8).

Aspects You Enjoy:

The Aspects are the core of this Purpose Finding Coaching process. Your coachees will need to dig deep and investigate their passions to discover the aspects they enjoy about them. Use the Hidden Images activity (Resource #9) to illustrate this point. Finding the aspects coachees enjoy about their passions is the primary dimension of their shape they must understand to find their purpose. It is imperative that they understand the differences between the "actions" they enjoy and the "aspects" they enjoy. The actions they enjoy will not help them during this self-discovery process.

An aspect is something you enjoy about a passion. An action is something you do during the activity you're passionate about. For example, aspects of sports may include competition, strategy, analysis, or connection to others. Actions of sports may include running, throwing, or hitting. Coachees who can only think of actions they enjoy should analyze those actions to find the aspect they enjoy of them. It is important that you visit with each coachee to ensure they are listing aspects correctly.

This can be a challanging process, but have your coachees dig deep to discover the aspects they enjoy. Many of them will list fun and happy as aspects, but there isn't much useful information in those terms. Ask them what is fun or makes them happy about it.

Session: 3	Stage: 2.0-2.2	Aim: For coachees to complete their Passion List in the most thorough manner possible and learn how to analyze their passions.	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Learn about themselves by thinking about the things they enjoy in life.

By the end of the lesson coachees will:

- Have a full appreciation of all the things they love in life.

Know/ Understand:

- That their interests are important.

Have Reflected Upon:

- What captivates them and what they are attracted towards.

Success Criteria:

- Completed exercise 2.0
- Had a good brain storming session with coach
- Participated in sharing with their partner

Assessment opportunities:

- None

Homework:

- None

Time:	Coach Activity:	Coachee Activity:	Resources:
2	Introductory Activity: Show the coachees or pass around pictures of two mystery people.	Coachees hypothesize mystery people's possible passions.	R7 - Mystery People
2	Explain the session's aim.	Coachees listen.	
6	Coachees continue working on Exercise 2.0.	Coachees work on their passions list.	
1	Pair coachees up strategically with a partner that they may not know as well. Tell coachees to have mini brainstorming sessions together with their partner.	Coachees listen then match up with their partners.	
5	Coachees brainstorm with partners.	Coachees share a few answers to brainstorm.	
1	Have the coachees return to their original seats.	Coachees return to their seats.	
5	Instruct them to start at the beginning of the exercise to add items they may have missed the first time.	Coachees write.	
2	Pass out game cards and explain the activity of two passions and a phony.	Coachees listen.	R8 - Two Passions
6	Facilitate the game.	Coachees participate in the game and write down passions they hear from others that they also enjoy but did not yet have on their Passion List.	

Session:	Stage:	Aim:
3	2.0-2.2	For coachees to complete their Passion List in the most thorough manner possible and learn how to analyze their passions.

Time:	Coach Activity:	Coachee Activity:	Resources:
	OPTIONAL - Exercise 2.1. This exercise helps coachees understand aspects. Have coachees do it if they need the aditional help understanding the concept from a different angle.	Coachees read or listen.	
2	CORE - Exercise 2.2: Coachees check their Master Passion List to make sure everything is on it.	Coachees answer questions.	
1	Tell coachees that we are now ready to analyze the "Passions List." But before we do, we need an introduction.	Coachees write.	
7	Introductory Activity: Hidden Images.	Coachees listen.	R9 - Hidden Images
1	Ask coachees to navigate to Exercise 2.2 and explain that it will be done in 2 stages. They must not move ahead unless told to do so.	Coachees listen then read.	
5	The first stage, ask coachees to read the instructions. *Coach uses discretion to have coachees read the instructions or just explain the instructions to them. Remind coachees of the flavor analogy.		
	Wrap up by asking the coachees spot feedback questions to ensure that they understand the difference between actions they enjoy about their passions and aspects.	Coachees answer questions and listen.	
5	Coachees should begin typing aspects they enjoy of their passions. Coach should walk around to ensure it is being done correctly.		
4	Wrap up and discuss the goals for next session.		

SESSION 3 RESOURCES

Resource 7: Mystery People's Passions

This activity is designed to help coachees see that a person's passions and purpose are not always obvious. Each person is different and so are their passions and purposes. It also functions as a refesher activity to prepare them to continue their passion list.

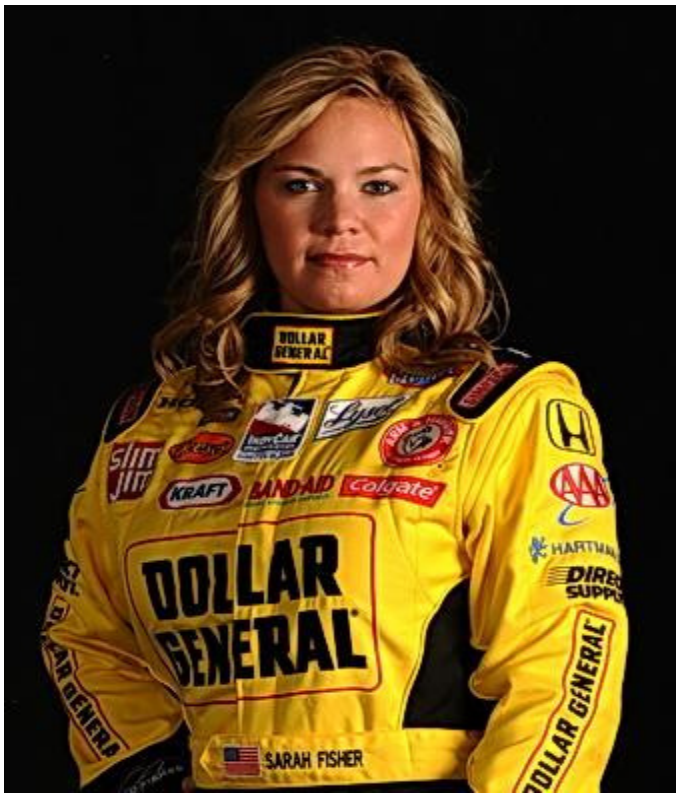
Facilitate the activity by following these steps:

1. Show the coachees pictures of people wearing attire that doesn't reveal their vocations.
2. Have them guess what the people's purposes might be.
3. Show them pictures of the people wearing attire or uniforms for their vocations.
4. Discuss with the coachees the concept that one's purpose is not always obvious, even for themselves, and that they may be surprised by what they learn about themselves during this process.

There are sample pictures of accomplished people whose passions are not obvious on the next two pages.







Sarah Fisher – Professional Race Car Driver: At 19, Sarah Fisher became the youngest woman ever to qualify for the Indianapolis 500. In 2008, she formed Sarah Fisher Hartman Racing, and the team scored its first IZOD IndyCar victory in 2011 at Kentucky Speedway. (source: www.SarahFisher.com)



Leland Melvin – Astronaut: Leland Melvin is the Associate Administrator for Education for NASA. He entered NASA's astronaut corps in 1998 and served as a mission specialist operating the robotic arm on two space shuttle missions to the International Space Station. (source: www.nasa.gov/offices/education/leadership/melvin_bio.html)

Resource 8: Two Passions and A Phony

This activity is designed to help coachees think of items for their Passion List. They may be finding it difficult to think about all the things they enjoy. Two Passions and a Phony lets them hear what their peers wrote on their lists so that it may jog their memory too.

Facilitate the activity by following these steps:

1. Print then cut enough cards so each of your coachees receives one
2. Pass out the cards and Instruct them to write two passions from their lists and one phony passion
3. Tell coachees that each will read their two passions and a phony.
4. Instruct coachees to write down items on their Passion Lists that they hear and enjoy but haven't yet listed.
5. Ask for a volunteer to read their two passions and a phony.
6. Anyone who thinks they know the answer raises their hand.
7. The one calling out the passions and a phony picks which coachee will guess the phony. The one that guesses it correctly goes next.

Two Passions and a Phony

1._____(Passion or Phony)

2._____(Passion or Phony)

3._____(Passion or Phony)

Two Passions and a Phony

1._____(Passion or Phony)

2._____(Passion or Phony)

3._____(Passion or Phony)

Two Passions and a Phony

1._____(Passion or Phony)

2._____(Passion or Phony)

3._____(Passion or Phony)

Two Passions and a Phony

1._____(Passion or Phony)

2._____(Passion or Phony)

3._____(Passion or Phony)

Resource 9: Hidden Images

This activity sets up the next step of this purpose finding coaching -- finding the "Aspects You Enjoy." It helps coachees understand that they need to investigate their passions to find what is really there. Make the point that things aren't always what they seem to be on the surface; that sometimes one has to dig deep to find the answers.

Facilitate the activity by following these steps:

1. Find images that contain hidden images/ optical illusions (search for paintings, digital artwork, pictures and logos that contain hidden images or optical illusions).
2. Use a projector or bring in a hardcopy of the images to show your coachees.
3. They investigate the picture for a few moments to find the hidden images.
4. They raise their hands when they think they found the hidden images.
5. Ask for a volunteer to point out the hidden images to the group.
6. Repeat these steps with several hidden images.
7. Discuss how this activity relates to finding the "Aspects You Enjoy" and "Essences" of their passions.

Much like searching for the hidden images, your coachees will analyze their passions to discover the hidden aspects they enjoy of their passions in Exercise 2.2. They will then analyze their aspects to find the essence of what they truly enjoy in life in Exercise 2.2a.

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SESSION 4 OVERVIEW

During this session coachees analyze the items on their Master Passion List to find the aspects they enjoy of their passions.

Purpose Navigator Activities Associated With This Session

Exercise 2.2

Concepts With Which You Should Be Familiar For Session 4

Aspects You Enjoy List:

Based on the responses of past coachees, we have created a list of potential "aspects" the coachees enjoy of their passions (Resource #10). This list may help your coachees identify aspects they enjoy of their passions. Only use this list if the coachees are struggling to identify aspects on their own. We don't want to put words in their mouths, so be careful to ensure that they don't use this list instead of doing real introspection. Thus, the Aspects You Enjoy List, lists various passions and the potential "aspects" of those passions that you may use to help them analyze the items on the coachees' Master Passion List. You can disseminate the list to your coachees, if you choose to do so. The rule however, is that the list should only be passed out after coachees have given considerable thought to analyzing their passions on their own and with the coach.

Session: 4	Stage: 2.2	Aim: Coachees complete the aspects they enjoy about their passions.	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Coachees to learn about themselves by analyzing the things they enjoy in life and finding their aspects.

By the end of the lesson coachees will:

- Have a full appreciation of all the things they love in life. Learn how to peel back the layers and better understand the items on their Master Passion List.

Know/Understand:

- That their passions offer important information that can impact their future.

Have Reflected Upon:

- What captivates them, what they are attracted towards and what they truly enjoy about their passions.

Success Criteria:

- Completed exercise 2.2
- Had a good brainstorming session with the coach
- Participated in sharing
- Participated in activity
- Participated in group discussion

Assessment opportunities:

- None

Homework:

- None

Time:	Coach Activity:	Coachee Activity:	Resources:
4	Review the purpose of Exercise 2.2. Ensure that the coachees understand the differences between the actions and aspects they enjoy about their passions.	Coachees listen and demonstrate comprehension.	
4	As a group, work on one example passion together – ask a coachee for an example passion and discover the different aspects they might enjoy about that passion.	Coachees participate in the example passion.	
36	Coachees begin listing the aspects they enjoy. Make sure coachees use a pencil for this step because they will make mistakes. Coach visits with each coachee to discuss their aspects and ensure the they are doing the exercise correctly.	Coachees write.	
3	Explain "Aspects You Enjoy List" and pass out the sheets (if necessary).	Coachees listen.	R10 - Aspects you enjoy
5	Instruct coachees to begin working on the "Aspects" again. Coach visits with each coachee to discuss their aspects again.	Coachees write.	
3	Wrap up by discussing the session then share the goals for next session.	Coachees participate in the discussion then listen.	

SESSION 4 RESOURCES

Resource 10: Potential "Aspects" of Your Passions

Acting
a. Being a new person
b. Story-telling
c. Music
d. Costumes
e. Creativity
f. Communication

Advocacy
a. Helpfulness
b. Feeling needed
c. Creativity
d. Expression

Animals
a. Companionship
b. Relationship
c. Helpfulness
d. Connection
e. Learning
f. Understanding

Archeology
a. Learning
b. Problem-solving
c. History
d. Teaching

Architect
a. Math
b. Creativity
c. Art
d. Organization

Art (appreciate)
a. Knowledge
b. History
c. Inspiring
d. Beauty

Art (create)
a. Creativity
b. Expression
c. Inspiring
d. Communication
e. Beauty

Being active/fitness
a. Physical activity
b. Self-confidence

Being challenged
a. Adventure
b. Self-affirmation
c. Learning
d. Competition
e. Creativity

Being energetic
a. Unique aspect

Being outside
a. Appreciation
b. Nature
c. Beauty
d. Physical Activity
e. Connection

Being positive
a. Unique skill
b. Relaxing

Biking
a. Physical activity
b. Relaxing
c. Thrill
d. Freedom

Cars
a. Fashion
b. Speed
c. Engineering
d. Beauty
e. Design
f. Control
g. Sense of Sexuality

Coaching
a. Competition
b. Connection
c. Leadership
d. Problem-solving
e. Inspiring

Comedy
a. Expression
b. Connection to others
c. Recognition
d. Entertainment

Community service
a. Selflessness
b. Leadership
c. Quid pro quo
d. Connection
e. Awareness

Concerts/Events
a. Music
(see Music passion)
b. Connection
c. Atmosphere
d. Escaping

Cooking
a. Creativity
b. Eating
c. Feeling useful
d. Freedom
e. Adventure
f. Stimulation
g. Therapeutic

Culture
a. Teaching
b. Learning
c. Connection to others
d. Adventure
e. Understanding the world

Dancing
a. Expression
b. Physical Activity
c. Freedom
d. Creativity
e. Alternate Reality
f. Recognition
g. Connection
h. Helpfulness

Detective Work
a. Finding the truth
b. Spotting Details
c. Challenge
d. Creativity
e. Connection to others
f. Thrill

Design
a. Creativity
b. Expression
c. Art

Directing
a. Unique Skill
b. Connection
c. Teaching
d. Leadership

DJ
a. Creativity
b. Expression
c. Connection to People
d. Recognition

Drawing
a. Communication
b. Expression
c. Creativity
d. Focus

Editing
a. Understanding the world
b. Comfort
c. Feeling intelligent
d. Expression

Engineering
a. Learning
b. Knowledge
c. Creativity
d. Understanding the world
e. Challenge

Exploring & Travel
a. Adventure
b. Learning about new culture
c. Connection to others
d. Challenge
e. Appreciation
f. Good food

Event Planning
a. Connection
b. Organization
c. Helpfulness
d. Control
e. Creativity

Family
a. Relationships
b. Comfort
c. Acceptance
d. Connection

Fashion (wearing)
a. Status
b. Expression
c. Acceptance
d. Beauty/Art

Friends
a. Companionship
b. Recognition
c. Learning
d. Understanding the world
e. Psychology
f. Comfort
g. Challenge
h. Mystery

Food
a. Adventure
b. Creativity
c. Understanding the world
d. Eating
f. Learning Food Critic

Food Critic
a. Eating
b. Adventure
c. Traveling (see Traveling passion)

Games
a. Strategy
b. Release
c. Recognition

Girls/Boys
a. Mystery
b. Drama-free
c. Competition

Giving advice
a. Unique skill
b. Helpfulness
c. Connection to others
d. Problem-solving
e. Learning

Healthcare
a. Knowledge
b. Awareness
c. Helpfulness
d. Organization

Hiking
a. Physical activity
b. Nature
c. Animals (see Animals passion)
d. Adventure
e. Therapeutic
f. Connection
g. Escaping

History
a. Understanding the world
b. Connection
c. Reading (see Reading passion)

Interacting with People
a. Connection to others
b. Recognition
c. Learning
d. Understanding the world

Interior Design
a. Creativity
b. Organization
c. Fashion
d. Beauty
e. Appreciation
f. Connection
g. Control

Internet
a. Research
b. Communication
c. Current Events
d. Games
e. Entertainment
f. Shopping
g. Money

Journalism
a. Adventure
b. Writing (see Writing passion)
c. Connection to others
d. Communication
e. Story-telling
f. Recognition
g. Knowledge
h. Expression

Law
a. Order
b. Debate
c. Right vs. wrong
d. Psychology
e. Creativity

Leadership
a. Power
b. Control
c. Creativity
d. Problem-solving
e. Helpfulness
f. Knowing the finished product

Librarian
a. Helpfulness
b. Teaching
c. Reading (see Reading passion)
d. Quiet
e. Order
f. Archiving

Listening
a. Share with friends
b. Helpfulness
c. Understanding the word
d. Knowledge
e. Companionship

Love & relationships
a. Romance
b. Companionship
c. Connection to self
d. Comfort
e. Challenge

Making Movies/Videos
a. Creativity
b. See the world
c. Unique skill
d. Technology (see Tech passion)

Matchmaker
a. Love
b. Romance
c. Helpfulness
d. Business
e. Connection

Math
a. Logic
b. Understanding
c. Problem-solving
d. Order

Military
a. Control
b. Strategy
c. Thrill
d. Connection
e. Helpfulness
f. Feeling needed
g. Self-confidence

Money
a. Amount
b. Comfort
e. Freedom
f. Adventure

Movies
a. Story-telling
b. Characters-connection to others
c. Direction
d. Special Effects
e. Knowledge
f. Alternate reality
h. Connection
i. Understanding the world

Multitasking
a. Organization
b. Recognition

Music
a. Soothing/relaxing
b. Escaping
c. Following along
d. Inspiring
e. Appreciation
f. Beauty

My Pet
a. Animals (see Animals passion)
b. Family
c. Loyalty
d. Comfort

Organization
a. Order
b. Easiness
c. Cleanliness
d. Control
e. Therapeutic

Park Ranger
a. Nature
b. Teaching
c. Helpfulness
d. Animals (see Animals passion)

People watching
a. Understanding the world
b. Story-telling
c. Procrastination

Photography
a. New way of looking at the world
b. Communication
c. Expression
d. Composition
e. Creativity
f. Appreciation

Philosophy
a. New way of looking at the world
b. Theory
c. Debate
d. Challenge
e. Knowledge
f. Connection

Playing an Instrument
a. Creativity
b. Relaxing
c. Unique Skill
d. Recognition
e. Problem-solving

Professor
a. Teaching
b. Learning
c. Research
d. Unique skill
e. Connection
f. Problem-solving
g. Understanding the world

Psychology
a. Understanding the world
b. Knowledge
c. Connection
d. Creativity
e. Connection to self

Public relations
a. Connection to others
b. Organization
c. Self-expression

Reading
a. Understanding the world
b. Relaxing
c. Escaping
d. Knowledge
e. Alternate reality
f. Adventure
g. Connection
h. Learning

Restaurant Manager
a. Good food
b. Organization
c. Helpfulness
d. Control
e. Connection

Running
a. Endorphins
b. Physical activity
c. Blank mind
d. Think
e. Self-confidence

Sailing
a. Adventure
b. Thrill
c. Physical Activity
d. Problem-solving

School
a. Connection to others
b. Learning
c. Self-confidence
d. Challenge

Science
a. Knowledge
b. Understanding the world
c. Connection
d. Challenge

Singing
a. Understanding the world
b. Expression
c. Share with friends
d. Communication

Social Media
a. Connection to others
b. Communication
c. Expression
d. Knowledge

Sports
a. Competition
b. Nature
c. Physical activity
d. Eye/hand coordination
e. Strategy
f. Challenge
g. Relaxing
h. Team Work
i. Unique Skill

Spotting details
a. Understanding the world
b. Recognition
c. Order
d. Control

Store Owner
a. Organization
b. Reading (see Reading Passion)
c. Learning
d. Teaching
e. Money
f. Business
g. Order

Teaching & schoolwork
a. Learning
b. Problem-solving
c. Connection to others
d. Challenge
e. Unique skill
f. Creativity
g. Leadership

Technology/Computer
a. Creativity
b. Trendy
c. Efficiency
d. Communication

Therapy
a. Knowledge
b. Helpfulness
c. Connection
d. Psychology
e. Expression
f. Adventure
g. Relationships

Using memory
a. Unique skill
b. Recognition
c. Problem-solving
d. Self-confidence

Video Games
a. Eye/hand coordination
b. Competition
c. Challenge
d. Entertainment

Vintage shopping
a. Reuse the old
b. Money
c. Appreciation
d. Self-confidence
e. Creativity
f. History

Wine maker
a. Creativity
b. Chemistry
c. Agriculture

Working with hands
a. Appreciation
b. Connection to self
c. Knowledge

Writing
a. Expression
b. Communication
c. Teaching
d. Settle Thoughts
e. Understanding the world
f. Creativity

Youth Groups
a. Connection to others
b. Helpfulness

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SESSION 5 OVERVIEW

Coachees will be working at different paces during this session. All of them will need to identify their aspects as Creative or Authentic. Some of them will move on from their "aspects" to finding the "essences." All coachees will need to place themselves on the Creative/Authentic Scale by the end of this session.

Purpose Navigator Activities Associated With This Session

Exercise 2.2, Exercise 2.2a, Exercise 2.3

Concepts With Which You Should Be Familiar For Session 5

Creative and Authentic

Aspects and Essences fall into one of two categories: Creative or Authentic. Although many coachees may feel that their aspects and essences are both creative and authentic, they must identify which is dominant. In this purpose finding coaching we use precise definitions of creative and authentic. While the world may view innovation as a creative process, here we place it somewhere in between Creative and Authentic. Utilize the What's Play-doh? activity (Resource #11) to help your coachees understand the Creative and Authentic.

Creative: The desire to create something new in the world.

Authentic: The desire to understand or experience things that already exist in the world.

Creative/Authentic Scale

After coachees identify their aspects and essences as Creative or Authentic, they place themselves on the Creative/Authentic Scale. Have them review their aspects and essences and contemplate where they feel they are on the scale. The scale is important when they explore vocations. The fields in the Vocations List are separated into Creative and Authentic categories. When the coacheee decides where to put themselves on the Creative/Authentic Scale it should not be done based on the arithmatic, how many Creative aspects and essences they have versus have many authentic they have. Rather is must be done based on the coachees overall judgement after they have stood back, and have taken in all that they have learned about themselves. Rememeber it is their journey and therefore their decision. It could well be that they have more authentic aspects and essences than creative but the few creative aspects and essences they have represent their overwhelming passions. In such a case they would place themselves to the left-hand side of the scale.

Essences

Coachees dig another layer deeper by analyzing their aspects. They are peeling back a second layer of their passions to figure out the core of the aspects they enjoy. For example, many people list sports as a passion. Aspects they enjoy about sports may include analysis and strategy. After investigating their analysis and strategy aspects, they may find that the essence they enjoy about sports is problem-solving. You may refer to the Essences List (Resource #12) to help your coachees determine potential essences. The essences are important to completely understand the dimensions of their shape, but they are not a CORE element in this process. While we recommend that coachees complete the essences, they may skip them if you, the coach, think that the level of abstract thinking needed for it is beyond your coachees ability.

Session: 5	Stage: 2.2-2.3	Aim: For coachees to find the "aspects they enjoy" and the "essences" of their passions, to identify if they are more creative or authentic.	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Learn how to analyze and find the "essences" of their passions. Learn how to differentiate between aspects or essences that are creative or authentic.

By the end of the lesson coachees will:

- Understand that they feel passionate about things because of different aspects and essences they enjoy, and know where they stand on the Creative/Authentic Scale.

Know/Understand:

- How to better understand themselves based on the "aspects" and "essences" of their passions, and if they are more Creative or Authentic.

Have Reflected Upon:

- A pattern that emerges from the aspects and essences of their passions.

Success Criteria:

- Participated in activities
- Completed Exercise 2.2a and 2.3
- Identified self on Creative/Authentic Scale

Assessment opportunities:

- None

Homework:

- None

Time:	Coach Activity:	Coachee Activity:	Resources:
2	Review last session and remind coachees about aspects.	Coachees answer questions showing knowledge about aspects.	
1	Instruct coachees that we are moving on to the last stage of exercise 2.2. It is OK if they have not finished filling in all of the Aspects, they will go back at a later time and complete it.	Coachees listen.	
2	Ask coachees to read the instructions for Creative/Authentic. *Coach uses discretion to have coachees read the instructions or explain the instructions to them.	Coachees read.	
7	Facilitate the Play-Doh activity.	Coachees participate.	R11 - Play-doh
3	Ask coachees spot feedback questions to ensure understanding of "Creative" and "Authentic." Now take time to discuss the underlying concepts.	Coachees answer questions and participate in discussion.	
10	Instruct students to begin identifying their aspects as creative or authentic. Tell students to raise their hands and ask questions if they are unsure about whether an item is C/A. Visit with each coachee to ensure they are doing the activity correctly.	Coachees identify their aspects as Creative or Authentic	

Session:	Stage:	Aim:
5	2.2-2.3	For coachees to find the "aspects they enjoy" and the "essences" of their passions, to identify if they are more creative or authentic.

Time:	Coach Activity:	Coachee Activity:	Resources:
	The coach now has two options: Option 1: If you feel coachees have not completed 2.0 and 2.2 properly, do the following: • Instruct them to go back to the second stage and finish their Aspects, then identify them as C/A • Then instruct them to go back to their original Passion List, review the questions and add new items to their Master Passion List and repeat all 3 stages with those items. Option 2: If coachees have completed 2.0 and 2.2, they now move on to 2.2a the "essences."		
1	Instruct coachees to move on to exercise 2.2a and read the instructions. *Coach uses discretion to have coachees read the instructions or explain the instructions to them.	Coachees read the instructions.	
5	Explain the concept of essences to all coachees. Then instruct the coachees who are ready for option 2 to do the essences and the C/A concurrently. Coachees in option 1 complete Exercises 2.0 and 2.2.	Coachees listen then answer feedback questions demonstrating comprehension of "essences."	
17	Coachees work on completing Exercise 2.2 or 2.2a. Coach visits with each coachee to ensure they are doing the exercises correctly.	Coachees write.	R12 - Essences List
1	CORE - Exercise 2.3: Explain the concept of the Creative/Authentic Scale.	Coachees listen.	
2	Have coachees read the instructions. *Coach uses discretion to have coachees read the instructions or explain the instructions to them.	Coachees read.	
2	Explain that this is not based on numbers, rather it's based on how they feel about it.	Coachees listen.	
1	Coachees place themselves on the scale.	Coachees write.	
1	Wrap up by discussing the goals of the next session.	Coachees listen.	

SESSION 5 RESOURCES

Resource 11: What Is Play-Doh?

Play-Doh Activity Instructions:

This activity is designed to help coachees understand the concept of Creative and Authentic.

1. Give out Play-Doh to each coachee.
2. Divide your group of coachees into two.
3. One group of coachees should spend two minutes analyzing the Play-Doh and using their ingenuity to try and figue out what it is made of.
4. The other group of coachees should be tasked with creating or sculpting anything they want out of the Play-Doh.
5. After two minutes ask coachees to put the Play-Doh down.
6. Tell the group who was creating to try and figure out what the Play-Doh is made out of and vice versa. This should be done for another two minutes.
7. Get feedback from coachees about what they created and found out.
8. Use these two experiences, the creating and the analyzing, to explain the ideas of Creative and Authentic.

Play-Doh's basic ingredients:

- Water
- Flour
- Salt
- Oil
- Fragrance
- Coloring

Resource 12: Potential "Essences" of the "Aspects You Enjoy"

Acceptance
a. Not alone

Adventure
a. Challenge
b. Surprises
c. Newness
d. Escape

Agriculture
a. Understanding
b. Connection to earth

Alternate reality
a. Freedom
b. Escape

Appreciation
a. Knowledge
b. Relating

Archiving
a. Organization
b. Understanding

Art
a. Creativity
b. Understanding

Atmosphere
a. Unity
b. Awareness
c. Understanding your world

Beauty
a. Appreciation
b. Nature

Being a new person
a. Escape

Blank Mind
a. De-stress
b. Focus

Business
a. Organization
b. Understanding

Challenge
a. Problem-Solving
b. Analyzing

Chemistry
a. Analyzing
b. Organization
c. Precision

Cleanliness
a. De-stress
b. Focus
c. Order

Comfort
a. Security
b. Peace
c. Escape stress

Communication
a. Connecting with others
b. Recognition
c. Superiority

Companionship
a. Security
b. Interaction with others

Competition
a. Drive
b. Vision
c. Glory

Composition
a. Creativity
b. Connection to others
c. Unity

Connection to self
a. Understanding

Control
a. Power
b. Order
c. Stability
d. Security

Costumes
a. Appreciation
b. Creativity
c. Escape

Creativity
a. Creativity
b. Discovery
c. Inspire

Current Events
a. Recognition
b. Analyzing
c. Understanding

Debate
a. Interaction with others
b. Spontaneity
c. Organization

Design
a. Creativity
b. Being Inspired
c. Beauty

Drama-free
a. Peace

Diversity
a. Understanding
b. Appreciation

Easiness
a. De-stress
b. Speed

Eating
a. Adventure
b. Analyzing
c. Understanding

Efficiency
a. Easiness
b. Recognition

Endorphins
a. Physical reaction
b. Feeling unstoppable

Engineering
a. Appreciation
b. Understanding
c. Excellence

Entertainment
a. Alternate reality
b. Creativity

Escaping
a. Alternate reality
b. De-stress

Expression
a. Emotional release
b. Mental release

Eye/hand coordination
a. Unique skill
b. Recognition

Fashion
a. Vanity
b. Beauty
c. Confidence

Feeling intelligent
a. Recognition
b. Feeling useful
c. Self-confidence
d. Recognition
e. Capability

Finding the truth
a. Analyzing

Finished Product
a. Stress relief

Focus
a. Achieving
b. Productivity

Following along
a. Analyzing
b. Desire for order
c. Uniting with music/art

Freedom
a. Escape stress
b. Body awareness

Games
a. Problem-Solving
b. Competition
c. Challenge

Good food
a. Adventure
b. Plants
c. Animals
d. Preparation
e. Eating

Helpfulness
a. Recognition
b. Empathy
c. Selflessness

History
a. Understanding
b. Relating
c. Analyzing
d. Connection

Inspiring
a. Creativity
b. Feel happy
c. Teach
d. Recognition
e. Connection

Knowledge
a. Recognition
b. Stress relief
c. Understanding
d. Analyzing

Leadership
a. Superiority
b. Organization of people
c. Recognition
d. Power

Learning
a. Analyzing
b. Desire

Learning about cultures
a. Understanding
b. Connection
c. Unity

Logic
a. Analyzing
b. Structure

Loyalty
a. Recognition
b. Connection

Love
a. Not alone
b. Connection

Masculinity/Femininity
a. Appearance
b. Status

Math
a. Understanding
b. Recognition
c. Analyzing
d. Control
f. Security

Money
a. Security
b. Recognition
c. Expression

Mystery
a. Analyzing
b. Understanding

Nature
a. Beauty
b. Spiritual

New way of looking at world
a. Escape

Order
a. Analyzing
b. Easiness
c. Stability

Organization
a. Easiness
b. Structure
c. Control
d. Stability

Perfectionism
a. Control
b. Stability

Physical Activity
a. Health
b. Endorphins
c. Escape
d. Release

Power
a. Feel seen
b. Superiority

Problem-solving
a. Analyzing
b. Understanding
c. Recognition
d. Critical Thinking
e. Creativity

Procrastination
a. Re-focus

Psychology
a. Analyzing
b. Understanding

Quid pro quo
a. Something in return

Quiet
a. Focus
b. De-stress

Relationship
a. Not alone
b. Interaction with others

Research
a. Analyzing
b. Understanding

Reuse
a. Creativity
b. Appreciation

Right vs. Wrong
a. Interaction with others
b. Analyzing

Romance
a. Connection

Science
a. Analyzing
b. Understanding

Self-affirmation
a. Confidence
b. Recognition

Self-confidence
a. Recognition
b. Feeling strong

Selflessness
a. Spiritual
b. Moral/ethical
c. Recognition

Settle thoughts
a. Focus

Share with friends
a. Connection
b. Appreciation

Shopping
a. Recognition
b. Status

Soothing/Relaxing
a. Feeling complete
b. Escape stress
c. Calm
d. Therapeutic
e. Self Discovery
f. Security

Special Effects
a. Alternate reality
b. Creativity

Speed
a. Adrenaline
b. Control

Spotting details
a. Recognition

Status
a. Recognition
b. Power

Stimulation
a. Movement
b. Sense

Story-telling
a. Analyzing
b. Connection
c. Creativity

Strategy
a. Analyzing
b. Challenge
c. Creativity
d. Problem-Solving

Taking care of people
a. Respect
b. Recognition

Teaching
a. Learning
b. Analyzing
c. Status
d. Power
e. Understanding

Team Work
a. Unity
b. Problem-solving
c. Connection

Theory
a. Analyzing
b. Understanding

Therapeutic
a. Helpfulness
b. Teach
c. Connection
d. Breaking boundaries

Think
a. Organize
b. Focus
c. Understanding
d. Analyzing

Thrill
a. Endorphins

Tradition
a. Connection
b. Security
c. Stability

Traveling
a. Adventure
b. Understanding
c. Fulfillment
d. Thrill

Trendy
a. Fit-in

Understanding the world
a. Analyzing
b. Empathy
c. Security
d. Appreciation

Unique skill/aspect
a. Recognition
b. Practice

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SESSION 6 OVERVIEW

This session is the last step for coachees to identify the dimensions of their shape. They complete the Values in Action Character Strength Assessment and review their results. They also complete Purpose Self-Assessment 2.

Purpose Navigator Activities Associated With This Session

Exercise 2.4, Purpose Self-Assessment 2

Concepts With Which You Should Be Familiar For Session 6

Values in Action (VIA)

The VIA character strength assessment helps students identify and focus on their strengths rather than their deficits or what they perceive to be wrong with themselves. The assessment takes between 20-40 minutes depending on the coachees reading speed and comprehension. Ensure that they take the survey for youth, which has far fewer questions than the adult survey. Their top ten character strengths are the final dimension of their shape they will need to discover before exploring where they fit in the universe and vocations. There is a link to the VIA assessment in the Purpose Navigator.

Congratulations are in Order

Congratulate your coachees after they complete the VIA survey. By taking the time and effort to explore themselves and discover the dimensions of their shapes, they finished an extremely important, difficult, often tedious task that most people, especially youth, don't take the time to do.

Session: 6	Stage: 2.4	Aim: For coachees to assess their VIA top ten character strengths.	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Coachees complete the Values in Action character strengths assessment and understand their top ten character strengths.

By the end of the lesson coachees will:

- Discover and reflect on their top ten character strengths and complete Self-Assessment 2

Know/Understand:

- How their character strengths are an important dimensions of their shape.

Have Reflected Upon:

- Their unique place in the universe.

Success Criteria:

- Complete the VIA assessment
- Complete Self-Assessment 2

Assessment opportunities:

- VIA
- Self-Assessment 2

Homework:

- None

Time:	Coach Activity:	Coachee Activity:	Resources:
4	Explain the VIA Character Assessment. Ensure coachees understand that they need to take the assessment for youth then list their top ten character strengths. Explain that this is the last "dimension of their shape" that they will need before moving on to figure out where their "shape" fits in the universe. Ask coachees questions to ensure comprehension.	Coachees listen. Answer questions.	
40	Coachees complete their VIA profile and assessment at www.VIAME.org. They review then list their top ten character strengths.	Coachees complete the VIA assessment then review and list their top ten character strengths.	VIA Website (vieme.org)
9	CORE - Self-Assessment 2	Coachees complete Self-Assessment 2	
2	Wrap up by congratulating the coachees for finding the dimensions of their shapes. Then discuss the next step of this purpose finding process and goals for next session.	Coachees listen.	

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SESSION 7 OVERVIEW

During this session coachees identify and then explore vocations that they feel might fit the dimensions of their shape.

Purpose Navigator Activities Associated With This Session

Exercise 3.0, Exercise 3.1

Concepts With Which You Should Be Familiar For Session 7

Vocation Exploration

This is the phase of their journey during which coachees discover where the "dimensions of their shape" fits in the universe. Emphasize that they are searching for a vocation or calling rather than a job or a career. To help them realize that there are options for vocations beyond which they have been exposed, facilitate the Top Ten Least Common Vocations activity (Resource #13).

Vocations They Have Always Thought They'll Love

It is often the case that the vocations or careers that a coachee has always thought they would enjoy doing are the ones that fit their shape best. This is why the coachess should start examining those items first to see if they truly fit what they now know are the dimensions of their shape.

Youth Directions Vocations List

The Purpose Navigator links to several vocation research websites. We recommend that your coachees begin with our proprietary Vocations List found within the Purpose Navigator. Our Vocations List will show up in the Purpose Navigator based on where the coachee placed themselves on the Creative Authentic Scale.

Where They Fit In

In this step coachees take everything they have learned about themselves and use it to explore where they fit in the universe. They do this by matching the dimensions of their shape (Aspects, Essences, Creative/Authentic and Character Strengths) with vocations and careers that call for those dimensions. This way the coachee knows that they will truly love the vocation they choose and that it will be in sync with and use the strengths that they innately have already.

Session: 7	Stage: 3.0-3.1	Aim: For coachees to learn about and research vocations they might be interested in	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Coachees research to figure out what the items they have chosen are actually like and how they incorporate the dimensions of their shapes

By the end of the lesson coachees will:

- Understand how their aspects, essences and character strengths will help them identify a calling that fits them.

Know/ Understand:

- How their purpose fits them uniquely.

Have Reflected Upon:

- Their unique place in the universe.

Success Criteria:

- Students are efficiently working on Exercise 3.0 and 3.1

Assessment opportunities:

- None

Homework:

- None

Time:	Coach Activity:	Coachee Activity:	Resources:
2	Introduction - Explain to the coachees the aim of today's session and the importance of the vocations exploration: • For them to realize what the vocation is like everyday. • So they can determine if the dimensions of their shapes fit the vocations they are researching. Also explain to coachees that everyone will be working at different paces and not to worry about where other coachees are in the process.	Coachees listen.	
3	Introductory Activity: Facilitate top ten least common careers game.	Coachees participate in the game.	R13 - Top 10 Least
3	CORE - Exercise 3.0: Ask coachees to navigate to Exercise 3.0 and spend a few minutes thinking of and listing vocations in which they are interested.	Coachees list vocations.	
22	Explain how to use the Vocations List. Coachees review vocations in the list and select those that they think will fit their shape.	Coachees review the options in the YD vocations list and select those that they think may fit their shape.	Vocations List
2	CORE - Exercise 3.1: Explain how to		

Session:	Stage:	Aim:
7	3.0-3.1	For coachees to learn about and research vocations they might be interested in

Time:	Coach Activity:	Coachee Activity:	Resources:
	complete Exercise 3.1. Ensure that coachees understand to use their own aspects, essences and character strengths. At this stage coachees should also have the opportunity to research beyond our Vocations List and look for other careers that may fit them and add those to 3.1. They should also add to 3.1 careers or vocations that they always thought they would enjoy.	Coachees listen. Coachees work on the exercise.	
21	Coachees work on Exercise 3.0 at different paces. Coach visits with each coachee and reviews which exercise they are working on to ensure they understand the process and are working at a normal pace.		
	For coachees on 3.1: Ensure coachees understand how to use the YD vocations list to research their potential vocations. Remind coachees that if they did not complete Exercise 2.2a, they skip the 'three essences' questions.	Coachees listen and answer questions.	
2	Wrap-up: • Ask coachees to share something they learned about a vocation. • Ask coachees to share a vocation they learned about that they think would be really "cool" to do. • Discuss the goals for next session		

SESSION 7 RESOURCES

Resource 13: Top Ten Least Common Vocations in America

This activity is designed to help coachees realize that there are vocations they've never heard of. It broadens their horizons and encourages them to investigate vocations that are outside of their own experience.

Instructions

1. Copy the vocation list found on the next page. Cut each vocation into its own card
2. Tape or pin each vocation card to a whiteboard or corkboard
3. Describe what each vocation is
4. As a group, coachees approach the board and arrange the vocations in order of what they guess to be the least common to the most common
5. Coachees return to their seats
6. Put the vocations in their correct order
7. Discuss that there are endless possibilities of unique vocations

Top Ten Rarest Jobs in America*

10. Model (Employees 1,510): Models pose for artists, photographers, or customers to help advertise a variety of products, including clothing, cosmetics, food, and appliances.
9. Astronomers (Employees 1,240): Observe, research, and interpret celestial and astronomical phenomena to increase basic knowledge and apply such information to practical problems.
8. Geographers (Employees 1,170): Study nature and use of areas of earth's surface, relating and interpreting interactions of physical and cultural phenomena. Conduct research on physical aspects of a region, including land forms, climates, soils, plants and animals, and conduct research on the spatial implications of human activities within a given area, including social characteristics, economic activities, and political organization, as well as researching interdependence between regions at scales ranging from local to global.
7. Math Technicians (Employees 1,090): Apply standardized mathematical formulas, principles, and methodology to technological problems in engineering and physical sciences in relation to specific industrial and research objectives, processes, equipment, and products.
6. Segmental Pavers (Employees 1,040): Lay out, cut, and place segmental paving units. Includes installers of bedding and restraining materials for the paving units.
5. Farm Labor Contractors (Employees 1,000): Recruit and hire seasonal or

temporary agricultural laborers. May transport, house, and provide meals for workers.

4. Locomotive Firers (Employees 960): Monitor locomotive instruments and watch for dragging equipment, obstacles on rights-of-way, and train signals during run. Watch for and relay traffic signals from yard workers to yard engineer in railroad yard.
3. Radio Operators (Employees 870): Receive and transmit communications using radiotelephone equipment in accordance with government regulations. May repair equipment. Excludes "Radio, Cellular, and Tower Equipment Installers and Repairs".
2. Fabric Menders (Employees 840): Repair tears, holes, and other defects in fabrics, such as draperies, linens, parachutes, and tents.
1. Prosthodontists (Employees 660): Construct oral prostheses to replace missing teeth and other oral structures to correct natural and acquired deformation of mouth and jaws, to restore and maintain oral function, such as chewing and speaking, and to improve appearance.

*Descriptions courtesy of the US Department of Labor Statistics.

Geographers
Models
Farm Labor Contractors
Fabric Menders (Except Garments)
Astronomers
Prosthodontists
Radio Operators
Mathematical Technicians
Segmental Pavers
Locomotive Firers

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OVERVIEW OF SESSION 8

This session completes the vocation exploration process. Coachees explore vocations, spend time visualizing themselves doing the vocations, then rate their level of excitement for each vocation on a scale of 1-10.

Purpose Navigator Activities Associated With This Session

Exercise 3.0, Exercise 3.1, Exercise 3.3, Purpose Self-Assessment 3

Concepts With Which You Should Be Familiar For Session 8

Vocation Visualizations

Coachees spend a few minutes visualizing themselves working in the vocation. You can help facilitate this process by suggesting that they visualize themselves doing activities throughout a day. They can visualize themselves waking up, preparing for the day then driving to the office.

Encourage them to visualize the things they may do to start their work day, what the may do during the middle of the day, and what they would do at the end of the day. If someone is visualizing being a veterinarian, have them visualize calculations they must make for pharmaceuticals, performing surgery, meeting with clients, etc.

Teenagers are especially good at fantasy. They should use this talent to fantasize about what the specific vocation will be like in reality.

This step is important because it is impossible for them to actually experience every vocation on their list in reality, but doing so isn't necessary. The brain is a powerful tool and the visualization process allows the coachees to use what they have now learned about the vocation and see if they will enjoy it in actuality. If it is something that they are truly attracted to, they will get a feeling of excitement when they visualize doing that particular item.

After they visualize themselves doing each vocation, they rate their level of excitement on a scale of 1-10. They will get to shadow and conduct informational interviews in the field of the three vocations which they score highest on their visualization. The top three will appear on Exercise 3.3 of the Pupose Navigator.

Session: 8	Stage: 3.1-SA 3	Aim: For coachees to finish researching their potential direction and narrow their focus based on passion.	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- How to think about their future direction based on research.

By the end of the lesson coachees will:

- Select their top three potential vocations that will lead them to where they fit in the world.

Know/ Understand:

- Understand that they should base their future on their own personal passion and drive.

Have Reflected Upon:

- What they can do in the future that will utilize their passions most.

Success Criteria:

- Students are efficiently working on exercise 3.1
- Students complete Self-Assessment 3

Assessment opportunities:

- Self-Assessment 3

Homework:

- N/A

Time:	Coach Activity:	Coachee Activity:	Resources:
2	Introduction – Explain to the coachees today's session aim: If they realize the items that they are very passionate about, they can pursue them will full effort, and they will be successful. Remind them that everyone is working at different paces and not to worry about where others are in the process. They should only concentrate on doing their best and staying on task.	Coachees listen.	
	Ask coachees to return to the exercise they were working on last class.	Coachees return to the exercise they were working on last class.	YD Vocations ListResources:
41	Coach visits with each coachee and reviews the exercise they are working on to ensure they are on pace to complete Exercises 3.0, 3.1, 3.2, 3.3 and Self-Assessment 3 by the end of the session. • For coachees on Exercise 3.0 and 3.1: remind them of the instructions which indicate if they did not complete Exercise 2.2a, they skip the "three essences" questions.	Coachees work quietly and independently.	

Session:	Stage:	Aim:
8	3.1-SA 3	For coachees to finish researching their potential direction and narrow their focus based on interest and passion.

Time:	Coach Activity:	Coachee Activity:	Resources:
	• Help coachees eliminate unnecessary questions if they are behind the pace to complete the required exercises by the end of the session. CORE - Exercise 3.2: Have coachees list the items that they researched and spend a minute or two really visualizing (using what they have learned from their research) what it would be like to actually do that type of work. Then they can rate the item on a scale of 1-10, 1 meaning that they dont feel passion and excitement at all, and 10 meaning that they get very passionate just thinking about it. CORE - Exercise 3.3: The top 3 items appear automatically.		
9	CORE - Self-Assessment 3.	Coachees complete Self-Assessment 3.	
3	Wrap-up: • Ask coachees to share a cool job that they imagined doing in the future. • Ask coachees to share their highest rated item.	Coachees listen and answer questions.	

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SESSION 9 OVERVIEW

During this session coachees prepare twenty questions to ask professionals in those fields during their informational interviews. They must prepare twenty questions for each interview.

Purpose Navigator Activities Associated With This Session

Exercise 4.0, Exercise 4.1

Concepts With Which You Should Be Familiar For Session 9

Top Three Vocations

Coachees review the vocations and then list the top three in which they are interested. They will conduct informational interviews with professionals in these three fields.

Purpose Interview Activity

The Purpose Interview activity (Resource #14) is designed to help your coachees know how well they understand the dimensions of their shapes and how their dimensions fit their top three vocational interests. It will also expose gaps in their knowledge of vocations that they think may represent their purpose. It will therefore awaken questions that need to be asked during their informational interviews with professionals.

Informational Interviews

The informational interviews are integral in this coaching process. Coachees ask professionals twenty questions to learn what it takes to be successful in their vocations, what kind of education or certifications they will need, and what it's like on a daily basis. It is from these interviews that they determine which vocation to pursue as their purpose. You can disseminate the Informational Interview Guidelines (Resource #15) to help your coachees navigate each step of the informational interview process.

Twenty Questions

Coachees prepare twenty questions to learn pertinent information about a vocation during their informational interviews. The Informational Interview Guidelines (Resource #15) has several sample questions to help them think of questions to ask. These questions and interviews provide the chance for your coachees to explore and understand their potential purpose. The idea of these questions is for the coachee to ask the things they will need to know in order to decide if this vocation or career truly represents their purpose. The coachee should be encouraged to think about the things they need to know before making this momentous decision, and then ask the questions accordingly.

Session: 9	Stage: 4.0-4.1	Aim: For coachees to understand how well their top three vocations fit them and write questions for informational interviews.	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Understand how well the dimensions of their shapes fit their potential purpose and prepare questions for informational interviews.

By the end of the lesson coachees will:

- Have written questions for their informational interviews.

Know/Understand:

- Understand how well their top vocational interests fit them and what questions to ask during informational interviews for each vocation.

Have Reflected Upon:

- Their top three vocational interests and informational interview questions.

Success Criteria:

- Students participate in Purpose Interviews
- Students begin Exercise 4.1

Assessment opportunities:

- None

Homework:

- None

Time:	Coach Activity:	Coachee Activity:	Resources:
2	Introduction – Explain today's session aim and the purpose of the informational interviews.	Coachees listen.	
2	CORE - Exercise 4.0: Coachees review their top three vocations.	Coachees think about vocations they've researched and write their top three.	
24	Purpose Interview activity.	Coachees participate in the activity.	R14 - Purpose Interviews
25	CORE - Exercise 4.1: Explain the purpose of the questions and the types of questions coachees should write. Coachees review sample questions in the Informational Interview Guidelines. Visit with each coachee to ensure they are doing the exercise correctly.	Coachees listen then prepare questions.	R15 - Info Interview Guidelines
2	Wrap up by explaining the goals of next session.	Coachees listen.	

SESSION 9 RESOURCES

Resource 14: Purpose Interviews

In this activity coachees interview each other as if they are interviewing for one of their top three vocations.

The activity is designed to help coachees consider how the dimensions of their shapes fit into their potential purpose. For many coachees this activity is their first exposure to a professional style of interview. Emphasize that they should maintain proper posture and eye contact as well as speak clearly.

These interviews can be challenging for coachees as they are the first time they will articulate how the dimensions of their shape and potential vocation compliment each other. Encourage them to review their aspects, essences, creative/authentic rating and character strengths prior to the interviews.

Follow the steps below to facilitate this activity:

1. Review the instructions on the coachees' score cards
2. Partner them into interviewing teams of two
3. Coachee A asks coachee B five questions for each vocation
4. Coachee B asks coachee A five questions for each vocation
5. Observe each group to ensure they are doing the interview correctly
6. Briefly review what they learned during the activity

Instructions for Coachees

Coachees should prepare for interview in the following ways:

1. Make sure you fully understand the vocation for which you are interviewing.
2. Make sure you have clarity on how the dimensions of your shape fits this vocation: consider your aspects, essences, character strengths and creative authentic scale, as well as what about it awakens passion within you.
3. Think about position, posture, eye contact and diction during the interview.

Questions coachees should ask their interviewee:

1. What are your long term goals?
2. How does this calling fit into your passions?
3. What aspects of this calling do love most?
4. Can you give examples of things you have done in the past that are similar to aspects in this calling?
5. What are you willing to sacrifice in order to fulfill this calling?

Interviewer rates each answer on a scale of 1-10.

Rating should be based on the following criteria:

- Clarity of response (2).
- How well the interviewee demonstrated that they fit this calling (6).
- Posture, diction and eye contact, etc (2).

Score card

Name:

Interview 1: Q1 __ Q2 __ Q3 __ Q4 __ Q5 __
Interview 2: Q1 __ Q2 __ Q3 __ Q4 __ Q5 __
Interview 3: Q1 __ Q2 __ Q3 __ Q4 __ Q5 __

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SESSION 10 - 11 OVERVIEW

During these sessions coachees research professionals in their top three vocational interests to find three reputable professionals to interview. During these sessions they may call or email professionals to set up their informational interviews.

Purpose Navigator Activities Associated With This Session

Exercise 4.1

Concepts With Which You Should Be Familiar For Session 10-11

Informational Interview Research and Requests

Coachees refer to the Informational Interview Guidelines (Resource #15) to learn how to thoroughly research professionals to ensure they are reputable prior to contacting them. These interviews introduce many coachees to the concept of professionalism. For many coachees the interview is the first time they will speak with people in a professional manner and setting. The Informational Interview Guidelines has tips on how they should conduct themselves in a professional manner.

Informational Interview Format

Explain the informational interview format during this session. The informational interviews may take the entire session. It is best if they can conduct their interviews at the professional's place of business. This helps the them see the vocation in action, which gives them better insight into it. Coachees may also interview professionals via the phone, an internet meeting platform or in person at the facility coaching sessions have been held.

Interview Options

Coachees may find it difficult to schedule interviews during session times. Should this occur they may conduct the interviews on their own time. In the rare cases that coachees cannot establish an interview time during a session or on their own time, they may research the vocation to answer the questions they prepared for the interview. This should be a last resort.

You may find that several of your coachees have the same vocation in their top three. Although it is best for coachees to interview professionals one-on-one, there is the option of a group interview. Thus, if, for example, three of the coachees in your group want to interview a computer programer, all three of them could interview one computer programming professional at the same time.

Session: 10-11	Stage: 4.1	Aim: For coachees to conduct research on professionals in their top three vocational fields of interest and set up informational interviews	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Coachees learn how to research professionals to interview and request an interview.

By the end of the lesson coachees will:

- Have found three professionals to interview and set up interview times.

Know/Understand:

- Understand how to conduct research to find reputable professionals for their informational interviews and set up their interviews.

Have Reflected Upon:

- Professionals to interview.

Success Criteria:

- Coachees find three professionals to interview
- Coachees set up informational interviews

Assessment opportunities:

- None

Homework:

- None

Time:	Coach Activity:	Coachee Activity:	Resources:
4	Introduction: Refer to the Informational Interview Guidelines for the interview request script. Explain the goals of the session. Review the interview request script and research guidelines. Inform coachees that they can interview the professionals on their own time or during the next three sessions.	Coachees listen.	
48	Coachees research professionals in their top three vocational fields to set up informational interviews. Coach visits with each coachee to ensure they are conducting the research correctly and understand the interview request script. Coachees may call professionals to set up interviews at this time.	Coachees conduct research and call professionals.	Phones R15 - Informational Interview Guidelines
2	Wrap up by explaining the goals of next session.	Coachees listen.	
1	Homework: Coachees continue their research and set up informational interviews on their own time.	Coachees write down homework assignment.	

SESSION 10 - 11 RESOURCES

Resource 15: Informational Interviews

Interview Questions:

Exercise 4.1: The informational interviews are a crucial part of this purpose finding coaching. Coachees will have the opportunity to speak with a professional in each of their top three vocations to find out what the fields are really like. They will need to bring 20 questions to the interview. The questions below are just a guide to help coachees think of questions. Be sure to tell them to ask about things related to the dimensions of their shape. If they find, for example, that they really like interacting with people, they need to ask the professional if they get the chance to do that every day. Remember, they want to find out everything they can about the vocation. Help your coachee to come up with questions.

Here are Sample Questions and Instructions you can share with your coachees:

1. What is a typical day like?
2. What are the core activities, and services of this department?
3. What are typical career paths in this field?
4. What are typical job roles available in this profession? Entry? Mid-level? Upper-level?
5. What kind of jobs/experience did you need to get your current position?
6. What kind of education is required to enter this field?
7. Are there continuing education requirements or certifications to advance in this field?
8. What experiences, paid or unpaid, would you encourage for anybody pursuing a career in this field?
9. What personal characteristics do you feel contribute most to success in this field?
10. How do you fit your passion(s) into your everyday profession?
11. What do you find is the most rewarding/satisfying about your profession?
12. What are some recent challenges you faced in your field?
13. What skills and knowledge are most critical in this organization?
14. What personal qualities do you believe are necessary to be very successful in this field?
15. What are employers usually looking for when they hire someone for this profession?
16. What did you do to make yourself marketable?
17. How would you describe the pace and cycle of work in this area?

Now that you have come up with twenty questions to ask during your informational interviews, it's time to find professionals to interview. The tips below are divided into three categories: Finding Professionals to Interview, Setting Up the Interviews, and Conducting the Interviews.

Finding Professionals to Interview:

1 Review your ideal top three vocations.

- What are your three interviews going to be (Nurse, Lawyer, Singer, etc.)?

2. Decide how far you are willing to travel.

- How far could you travel for the interview? Remember you can schedule a phone or Internet interview if they professional is in another city or state.

3. Use the internet/phone books.

- Look up local listings for these professionals.
- Check out their websites.
- Look up and read reviews on them.

- Move on if they don't seem interesting or qualified.

Setting Up the Interview:

4. Call them before sending an email.
- Refer to the Sample Phone and Email Script at the end of this guide for assistance.
- Speak to the person with respect.
- Use please and thank you.
- Avoid using slang terms.
- Speak clearly, be articulate.

5. Set up a meeting time, date and place.
- Make sure to give yourself plenty of time to get there.
- Get the exact address and a phone number to call if you get lost.
- Make sure they have your phone number, too.

6. Call your coach.
- Once you have a set the meeting time, date, and place, tell your coach when and where it is.

Conducting the Interview:

7. Get prepared BEFORE the meeting.
- Write the 20 questions in a notebook and leave space to write the professional's responses. Or you can take a laptop, tablet or phone with you to use the Purpose Navigator to record the answers during your interview. Just make sure you will have an internet connection.
- Otherwise, make sure you bring your notebook and a pen or pencil.

8. Dress professionally.
- Look up the typical attire professionals wear daily and dress accordingly to that attire.
- You don't have to be in a suit or fancy dress, but be sure to avoid clothes that are too casual if you are going to an office in which professionals dress in business attire.

9. Be early.
- Don't aim to be on time to the meeting, aim to be early.

10. Introduce yourself and ask the questions you prepared beforehand.
11. Maintain a professional demeanor during the interview.
- Use proper posture.
- Maintain eye contact.
- Treat the professional with respect.
- Avoid using slang terms.
- Speak clearly, articulate.

12. Listen to and write down answers.
- Control the interview by not allowing the professional to go off on tangents.
- Have a conversation but remember, you only have an hour to ask your 20 questions and follow-up questions. As soon as you have the information you need feel free to gently interupt your interviewee and ask your next question. Remember, you are doing the interview, they are supposed to be the ones answering YOUR questions.

13. Ask follow up questions about things for which you are curious.
- Write down follow-up questions when you think of them so you won't forget them.
- Be bold.
- This is the time to get information.

14. Thank the professional at the end of the meeting. Remember to shake their hand.
- If you connect, ask for a business card at the end of your session to keep in touch.

15. Send a thank you card.
- Send the person you interviewed a personalized thank you card thanking them for making the time.

Sample Phone and Email Script

Hello, my name is _____. I'm a participant in the Youth Directions Purpose Finding Coaching program that helps youth find their direction, purpose and calling in life.

I have selected vocations which I feel could be my calling and about which I would like to learn more. I am calling today to see if you (or someone in your office) would be willing to speak with me about what it takes to be successful in this field.

Would you or someone at your company be willing to conduct an hour-long informational interview with me? The idea is that I would be able to ask questions to learn about your profession and what it takes to become successful.

It would really mean a lot to me.

Thank you for your time and consideration.

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SESSION 12 - 14 OVERVIEW

These sessions are devoted to informational interviews. Coachees should have set up interviews for each of these sessions. After each interview, they must complete their informational interview reports. If, for some reason, they have not conducted all three of their informational interviews by the end of session fourteen, they must complete them on their own time or research them to answer their twenty questions prior to session 15.

Purpose Navigator Activities Associated With This Session

Exercise 4.1

Concepts With Which You Should Be Familiar For Session 12-14

Purpose Decision:

Coachees must review their informational interview reports and decide which vocation they will pursue as their purpose by the end of session 14. They must inform the coach of their purpose decision in time for the coach to create their Purpose Certificates for the presentation during session fifteen.

Session: 12, 13 & 14	Stage: 4.1	Aim: For coachees to conduct their informational interviews	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:

- Coachees conduct informational interviews

By the end of the lesson coachees will:

- Have interviewed one professional

Know/Understand:

- Understand the vocation for which they interviewed

Have Reflected Upon:

- How well the vocation fits them and how excited they are about it

Success Criteria:

- Coachees conduct an informational interview each session

Assessment opportunities:

- None

Homework:

- Research professionals in vocational fields
- Set up informational interviews
- Interview professionals
- Write interview reports

Time:	Coach Activity:	Coachee Activity:	Resources:
55	Coachees may use the entire session to conduct an informational interview. If time permits, coachees may interview professionals at their places of business. If time does not permit them to conduct the interview at the person's place of business, coachees may interview via phone or the Internet. Or, the professional may come to coaching facility.	Coachees interview.	
	If a student hasn't found a professional to interview during a session, they may use this time to research professionals and set up interviews.	Coachees conduct research and call professionals.	Phones R15 - Informational Interview Guidelines
	Homework: CORE - Exercise 4.2 : Students write their reports after each informational interview		
	Coachees must find and interview professionals on their own time or research the profession to answer their interview questions, if they cannot complete it in time alloted.	Coachees write down homework assignment.	

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OVERVIEW OF SESSION 15

This session is the culmination and celebration of your coachees having found their purpose. During the session the coachees and the coach develop a purpose roadmap, the coach recognizes the coachees for finding their purposes, and encourages the coachees to speak with their peers about purpose.

Purpose Navigator Activities Associated With This Session

Purpose Self-Assessment 4, Exercise 5.0, Exercise 6.0

Concepts With Which You Should Be Familiar For Session 15

Deciding on a Purpose

By now, the coachees have had a chance to get to know themselves on a deeper level and have discovered the dimensions of their shape. After completing the vocational exploration, including informational interviews, the coachees are now ready to decide on a purposeful long-term goal that they will be passionate about acheiving. They will do this in exercise 4.2.

The Roadmap

Coachees are much more likely to pursue their purpose if they develop a plan. We suggest that coachees create a ten-year plan. However, they and their coach may develop a plan of shorter duration so long as it culminates in the coachees reaching their purpose. They are encouraged to share this plan with family, friends, educators, mentors and others, to create a cheer team that can offer support along the way.

Purpose Certificates

At this point in the coaching process, coachees have spent considerable time and effort to discover themselves and their purposes. Coaches recognize them for completing the difficult task of finding their purpose.

Spread the Message About Purpose

To reverse the trend that only twenty percent of youth feel like they have purpose in their lives, coachees identify ten people with whom they will speak about purpose. They are encouraged to talk with family, friends and other peers to spread the message about finding purpose.

Session: 15	Stage: 4.2-6.0	Aim: For coachees to develop a plan to reach their purposeful calling in life	
Date:	**Location:**	**Coach:**	**Coachee:**

Coaching Objectives:
- Coachees develop a plan to reach their purpose

By the end of the lesson **coachees** will:
- Have completed Self-Assessment 4 and developed a plan to reach their ourpose

Know/Understand:
- Understand how they can reach their purpose

Have Reflected Upon:
- Each step they need to take to reach their purpose

Success Criteria:
- Coachees develop a long-term plan to reach their vocational goal
- Coachees complete Self-Assessment 4

Assessment opportunities:
- None

Homework:
- Complete Exercise 6.0 and speak with peers about finding their purpose

Time:	Coach Activity:	Coachee Activity:	Resources:
1	Introduction - Explain the goals of the session.	Coachees listen.	
4	Coachees complete Self-Assesment 4.	Coachees complete Self-Assessment 4	
39	CORE - Exercise 5.0: Coachees develop a long-term plan to reach their vocational goal. Coach visits with each coachee to help them with their plans.	Coachees work on their long-term roadmaps.	
5	CORE - Exercise 6.0: Explain this exercise to the coachess telling them that now that they have found their purpose they should help others find their purpose as well.	Coachees complete Exercise 6.0 where they decide which of their friends they are going to speak to about purpose.	
6	Presentation of YD Purpose Certificates	Coachees are congratulated and receive Ceritifcates of Passion & Purpose.	Purpose Certificates

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