

5-2019

The Relative Value of Pathways Towards A Life Well-Lived

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THE RELATIVE VALUE OF PATHWAYS TOWARDS A LIFE WELL-LIVED

A Thesis
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
Applied Psychology

by
Natalie Vanelli
May 2019

Accepted by:
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ABSTRACT

People frequently encounter situations when they must choose between two pathways. Pathways in this context are a route, or series of decisions, that represent the things individuals' value in pursuit of their happiness. As a result, the trade-off decisions an individual makes and believes to be worthwhile should, therefore, reflect the personal importance of that pathway. Those trade-offs might also be judged worthy by observers depending on the relative importance of the chosen versus unchosen pathway to the observer in question. The studies included in this paper examine the relationship between several distinct pathways to happiness (Security, Outlook, Autonomy, Relationships, Skilled and Meaningful Activity, and Contact with Nature) and their relative value to individuals (Haybron, 2013). I am interested in understanding individual differences in how these pathways are valued relative to one another. The first Study develops the Pathways to Happiness measure, while the second and third studies examine its validity. Results from the first study confirmed 5 out of 6 of Haybron's Pathways to Happiness. These factors were utilized in the subsequent studies outlined in this paper. Results from Studies 2 and 3 confirmed the discriminant validity of the measure developed in Study 1 for all subscales; and the convergent validity for most subscales (the Autonomy subscale did not converge enough with other similar measures). A future study is introduced in the discussion section that proposes an examination of the relative valuation of pathways as measured by this scale and whether those scores predict how an individual perceives choices between two pathways.

DEDICATION

First, I want to dedicate this to Stephen. Thank you for being with me every step of the way on our journey so far, and for giving me the strength to keep going when I wanted to give up. I also wish to thank my family: Sergio, Laura, Mia, and Alicia. My parents for supporting me, believing in me, and trusting my choices even when you didn't understand them completely. My grandmother for instilling a love and appreciation for learning. I am not sure I could have persisted this long without it. I would like to extend a heartfelt thank you to my committee members, Dr. Patrick Rosopa and Dr. Job Chen for helping me with all my statistics-related questions. In addition, a huge thank you to my committee chair and advisor, Dr. Cindy Pury – I sincerely appreciate your guidance throughout the last couple of years. It has been a pleasure to work with you and learn from you. Lastly, there are many other people that come to mind, but in the end all I can say is thank you for everything. There aren't enough words to express my gratitude.

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CHAPTER ONE

PATHWAYS TOWARDS THE LIFE WELL-LIVED

Throughout time, scholars have suggested multiple pathways, or courses of action, towards well-being and the life well-lived. However, not all courses of action towards well-being are the same. Moreover, these actions encompass different domains such as momentary pleasures, security, positive outlook, autonomy, engaging activity, skilled and meaningful work, and relationships and other social interest (Adler, 2012; Haybron, 2013; Seligman, 2011). Haybron (2013) proposes multiple pathways to a good life, with presumed individual differences in which pathways are most personally relevant. Haybron's sources, or pathways towards happiness, sum up pathways that have been suggested previously by scholars, including Security, Outlook, Autonomy, Relationships, Skilled and Meaningful Activity, and Nature.

By and large, people encounter situations when they must decide between pathways every day. For example, individuals at work could be faced with the decision of assisting a co-worker that has asked for help versus focusing on completing their own work. Although people try to have it all, not every pathway can be pursued at once. Ultimately, humans are limited beings and confined or restricted within specific parameters. Therefore, an individual must make choices before continuing one path over another (Haybron, 2013). It is important to realize that affect is a central part of an individual's ability to adapt and is also linked to the gratification of needs. Affect also acts as an internal guide that indicates when things are going well and when things are

going wrong. To this end, it also allows helps indicate when individuals can broaden their attention and build their resources. Moreover, this viewpoint suggests that affect plays a role in decision-making. For example, an individual at an amusement park has two favorite rollercoasters but is limited by the amount of time they have and can only ride one. Due to the restrictions imposed by time, he or she must now decide which pathway will ultimately lead to their happiness and pursue it above all others.

To begin with, I will provide the theoretical foundation for the studies included in this paper. This information includes background on happiness and the distinctions between hedonic and eudaimonic happiness. Then, I will expand upon Haybron's (2013) Pathways to Happiness. Afterward, I will discuss Exemplarist Moral Theory (Zagzebski, 2017) and Conceptual Referent Theory (Rojas, 2005), including their connection to how people judge pathways to be worthwhile. Then I examine Schwartz's Value Theory and value structures. The preceding sections will be followed by a discussion of the studies included in this proposal. Lastly, I will provide a review of implications, limitations, and future research.

Brief Review of Happiness and Well-being

Psychologists typically discuss 'happiness' regarding subjective well-being which contains two parts: life satisfaction and positive emotional cognition (Haybron, 2013). However, past research on the nature and pursuit of happiness and well-being has also resulted in the establishment of two traditions rooted in philosophy: hedonia and eudaimonia (Grinde, 2012; Henderson & Knight, 2012). The hedonic perspective of

happiness suggests that maximizing pleasurable experiences is the main pathway towards happiness. By contrast, the eudaimonic approach argues that a life filled with virtue and achieving one's full potential encompasses the path towards well-being (Delle Fave, Massimini, & Bassi, 2011; Henderson & Knight, 2012). Researchers such as Kahneman (1999) argue that well-being consists of the pleasantness one feels. However, Ryff (1989), Waterman (1993), and others state that well-being also involves applying oneself and developing to the fullest potential (Ryan & Huta, 2009). Despite the debate between these perspectives, psychologists now appear to see benefits in incorporating both conceptualizations of well-being. Although research using a combined approach is still novel, the new academic literature suggests that a life comprised of both hedonic and eudaimonic pursuits is associated with the highest degree of well-being (Huta & Ryan, 2010).

The hedonic tradition of happiness and well-being can be traced back to philosophers including Aristippus, Epicurus, Bentham, Locke, and Hobbes (Henderson & Knight, 2012; Waterman, 2008). Philosophers that adopt the hedonistic perspective believe that well-being is related to the maximization of positive emotional states and conceptualizes well-being as a focus on pleasure and happiness. These positive emotional states are associated with satisfaction of desire. Experiences of pleasure, carefreeness, and enjoyment are considered reflective of well-being (Diener, 2009). With this in mind, pleasure and pain were indicators of good and evil, therefore maximizing pleasure is seen as maximizing the good in one's life (Henderson & Knight, 2012). The most prominent hedonic approach is known as subjective well-being, which is a three-part model that

consists of life satisfaction, the absence of negative affect, and the presence of positive affect (Cooke et al., 2016; Diener, Emmons, Larsen, & Griffin, 1985). The subjective well-being model considers all three constructs, as it includes cognitive judgments of life satisfaction and evaluations of affect (Conceição & Bandura, 2008). It is important to note that happiness and subjective well-being are not the same things. Life satisfaction differs from happiness on the basis that it is a measure of how far an individual is relative to their goals, whereas happiness is the result of a balance between positive and negative affect (Conceição & Bandura, 2008).

On the other hand, the eudaimonic approach suggests that well-being is obtained by achieving fulfillment of one's potential or performing at an optimal level (Lent, 2004). Notably, eudaimonic models are typically considered to be philosophically opposed to the hedonic tradition and focus on how well an individual is thriving within life domains (Deci & Ryan, 2008). Aristotle was one of the first to introduce the concept of eudaimonic happiness. He believed that living a life of virtue, by one's inherent nature was the pathway to well-being (Henderson & Knight, 2012; Norton, 1976). As a result, the eudaimonic approach to well-being can also be defined as acting virtuously and behaving in a way that is worthwhile for its own sake. Often, this emphasizes the virtues of justice, kindness, courage, and honesty. Moreover, eudaimonia also encompasses the development of one's potential in the pursuit of meaningful goals (Henderson & Knight, 2012; Keyes & Annas, 2009). Although Aristotle's conceptualization of eudaimonia did not include positive affect, he did acknowledge that eudaimonic action resulted in hedonic pleasure (Kashdan et al., 2008).

One of the most prominent models of eudaimonia is the psychological well-being model (Ryff, 1989; Ryff & Keyes, 1995). The psychological well-being (PWB) model consists of six elements: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Cooke et al., 2016). Ryan and Deci (2001) have also proposed an alternative model to eudaimonic well-being that focuses on the fulfillment of three basic needs: autonomy, competence, and relatedness. Much like PWB, self-realization is a central aspect of Deci & Ryan's (2000) self-determination theory (SDT). However, there is a notable difference between the two models. The model proposed by Ryff and Keyes's (1995) outlines six distinct domains that promote health and well-being (Ryff & Singer, 1998; Ryan & Deci, 2001). While these domains outline which aspects of life can lead to an increase in well-being, they do not specify how to do so. By contrast, Deci & Ryan's (2000) SDT attempts to specify how self-realization can be accomplished (Ryan & Deci, 2001). The specification of basic needs not only defines the minimum requirements needed to be satisfied but also allows an individual to allocate resources appropriately depending on their contextual environment (Ryan & Deci, 2001).

While this paper will not discuss the following approaches in-depth, two additional categories conceptualize well-being: Quality of Life (QoL) and Wellness. QoL is defined by the World Health Organization as, "a broad range concept affected in a complex way by the persons' physical health, psychological state, level of independence, social relationships and their relationship to salient features of their environment" (Cooke et al., 2016; WHOQOL Group, 1998, p. 1570). The term QoL is often used

interchangeably with terms like well-being. However, QoL conceptualizes well-being broader than both the hedonic or eudaimonic approach by including physical, psychological, and social aspects of functioning (Cooke et al., 2016). This approach is influenced by other disciplines including medicine and sociology and is often utilized in medical contexts (Lent, 2004). Lastly, the wellness approach to well-being is rooted in counseling and is broader and less defined than the previously mentioned categories. Early definitions of wellness were similar to the eudaimonic approach and outlined a focus on optimal functioning and serve as an integrated method of living that's oriented towards maximizing one's potential (Cooke et al., 2016, Dunn, 1961).

The diversity of these conceptualizations is seen in the terms used to identify the individual constructs, and it is important to note that there is still no unified conceptualization of well-being, or how it should be measured (Cooke et al., 2016). However, the two most prominent approaches to well-being in psychology are the hedonic and eudaimonic approaches (Cooke et al., 2016; Lent, 2004; Ryan & Deci, 2001). Although the measures described above capture an individual's amount of well-being, none attempt to capture how an individual makes choices between their values and the actions they take on the path towards happiness and well-being. The purpose of the preliminary Study was to develop a measure that could accurately examine which pathways towards happiness and well-being individuals judge as worthwhile and virtuous via trade-offs made between pathways. One of the objectives of this proposal is to explore if people's pathways towards happiness are organized in a structure that is ranked according to their relative importance. Furthermore, the project will also investigate if the

significance of a pathway is subject to change depending on the situation and which pathways a person must choose between.

The number of scales being developed to measure aspects of well-being has grown over time (Cooke et al., 2016). These instruments are applied in many settings including research, clinical, and organizational. This suggests that conceptualizations of happiness and well-being are useful for various arenas. As mentioned previously, the early body of existing research that looked at the relationship between hedonia, eudaimonia, and well-being was largely unilateral and examined hedonia and eudaimonia separately (Henderson, Knight, & Richardson, 2013). Recent research has begun looking at hedonia and eudaimonia in parallel terms (Henderson, Knight, & Richardson, 2013; Huta & Ryan, 2010; Waterman, Schwartz, & Conti, 2008) and has investigated hedonia and eudaimonia as predictors of life satisfaction and meaning in life respectively (Bujacz, A., Vittersø, J., Huta, V., & Kaczmarek, L. D., 2014; Huta & Ryan, 2010; Peterson, Park, & Seligman, 2005). Past empirical research has been interested in uncovering whether hedonic or eudaimonic pathways will produce higher amounts of well-being and targeting motives for engaging in hedonic and/or eudaimonic activities. With this in mind, this proposal does not seek to explain a new model of well-being.

Rather than focus where an individual lies on the well-being spectrum, or how much well-being a person has, this project is interested in the pathways that influence the choices that people make in the pursuit of happiness and the life well-lived. The measure developed in this project will accomplish this by examining the relative value or

importance of these pathways to an individual's pursuit of happiness. The pathways include security, outlook, autonomy, relationships, and skilled & meaningful activity (Haybron, 2013). In addition to these pathways or sources of happiness, the measure will also examine contact with nature to begin to gather data on the influence of nature on an individual's pursuit of happiness and well-being. Haybron (2013) discussed Contact with Nature in his overall review of the sources or different pathways to happiness. However, it was not 'officially' included due to lack of data showing the relationship between nature and happiness, therefore its inclusion in the Pathways to Happiness measure is an attempt to collect this kind of data. So, as previously stated, rather than look at the level of well-being a person experiences, the Pathways to Happiness measure examines the importance of different domains for happiness, without saying anything about the levels actually experienced.

Haybron's Pathways to Happiness

Listing the sources of happiness is difficult. How do we decide what to focus on? As shown previously, researchers have different approaches, and there is no 'right' set of concepts to use when describing happiness and its components (Haybron, 2013). While there is no 'right' set of concepts that define the sources of happiness, what matters depends on society. Societies can alter the importance of values depending on what society finds useful. For example, previous research has identified that individuals in individualistic cultures, which are driven towards personal achievement, are highly motivated to affirm positive self-attributes and pursue personal happiness. By contrast,

East Asian cultures which are collectivistic and focused on social harmony are not driven to achieve personal happiness out of fear that doing so will hinder social harmony (Uchida & Norasakkunkit, 2004; Diener, Suh, Smith, & Shao, 1995). Societies not only promote the sources of happiness but decide what they are going to make important to obtain it.

Although different domains have been examined, there is still convergence as to what has the most impact on happiness, even though the relative value of things can depend on the context. Haybron (2013) outlines the following sources of happiness: Security, Outlook, Autonomy, Relationships, and Skilled & Meaningful Activity. These sources are generally agreed upon by researchers and have been established in scientific literature. Haybron (2013) has extended Ryan & Deci's (2001) SDT, which is a list of universal needs, by adding the sources of Outlook and Security. I will now review each of the five sources with an added source, Contact with The Natural World. Although this source is not included as one of Haybron's sources of happiness, research has shown that contact with nature affects happiness.

Security

Feeling secure is one of the basic necessities for happiness; to feel that one is not under threat. However, the role of security as a source of happiness is not simple (Haybron, 2013). There are different kinds of security that play a role in an individual's happiness. The first type of security I will introduce is physical security. This type of security is felt or perceived when one believes their body will not encounter any physical

harm. Although, an individual may encounter risk that doesn't always cause anxiety regardless of our awareness of the physical risk. For example, rock climbers often scale cliff faces and encounter insurmountable physical risk, yet describe it as a *calming* activity (Haybron, 2013).

There are three other particularly important types of security for happiness: material, social, and project. Material security encompasses feeling secure with the possessions and resources one has at their disposal. It is common to think of money when material security comes to mind, and that having wealth breeds material security. However, while some level of affluence can buffer individuals from negative consequences and allow for needs to be satiated, it can increase wants which may feel individuals perceiving less security (Haybron, 2013).

Another form of security is social, which can be described as feeling secure in one's relationships and standing in the community. The third particularly important source of security comes from our projects or the prospect of success in one's major projects. Major projects are defined as commitments or goals that an individual identifies with; a form of identity or sense of self (Haybron, 2013). Lastly, the least obvious form of security is time. This type of security stems from feeling as though one has enough time to complete necessary tasks or having a lack of time. Having a sense of security is good for happiness, however, having more security does not always result in a better outcome. Too much security can lead individuals to be unwilling to persevere through

hard times and leave them unequipped to handle ambiguity and setbacks (Haybron, 2013).

Outlook

A common piece of advice given regarding the pursuit of happiness is that it is all about attitude and that happiness is a choice. While outlook plays a role in determining how happy we are, simply put, happiness is not a choice. Individuals have a great amount of control over their attitudes, which can alter outlooks in ways that leave one happier. Socrates believed that well-being was in control of the individual, arguing that individuals can endure hurt as long as they retain their virtue (Haybron, 2013). Therefore, a core tenant of this point of view is that what matters is how we respond rather than what happens, which highlights an important theme in this research: focusing on actions. Haybron goes on to explain that happiness is not something you simply choose, it is a skill that must be cultivated through effort. Based upon Haybron's (2013) writings, outlook can be broken up into four different types: positivity, acceptance, caring for others, and intrinsic motivation. There is no obvious candidate for the best one as they all have positives and negatives. Furthermore, the term 'outlook' includes how individuals perceive, interpret, respond to things, and lastly, what we value.

Having a positive outlook in this context is defined as focusing on the positives, savoring life's pleasures, and counting one's blessings. By contrast, an outlook that practices acceptance does not get bent out of shape. Individuals who value this source of happiness can easily shrug things off and move on (Haybron, 2013). The third outlook,

caring for others, is defined by the importance placed on doing things for others. Research indicates that people who care more about others tend to be happier. For example, dancing is the only leisure activity that rates higher above volunteering and charity work when looking at 'levels of joy' (Haybron, 2013). Furthermore, an added benefit to this source of happiness is that it promotes concern for others and is an added happiness boost. Studies have shown that spending money on others leave people feeling happier than instances in which they spent money on themselves (Haybron, 2013). Care for others also includes moral concern, like being honest for example. Epicurus claimed that pleasure is our sole end in life but firmly advised that being just and virtuous is essential for peace of mind (Haybron, 2013). Lastly, intrinsic motivation describes sources of happiness that are intrinsically worthwhile. Employees that see their job as a means to an end (money, promotion, etc.) typically have much less satisfying work experience compared to individuals who find intrinsic meaning in their work (Haybron, 2013).

Autonomy

Haybron (2013) includes autonomy, or the sense of control over one's life, as an important source of happiness. People who can make decisions for themselves without being beholden to anyone tend to be happier. Autonomy is also related to self-determination and the extent to which someone oversees their affairs. For example, small business owners report feeling high levels of happiness, and this is because they do not need to answer to anyone else (Haybron, 2013). Autonomy, however, should not be confused with option freedom; the freedom of having a range of options to choose from.

Although option freedom can make it easier for us to obtain things to increase our happiness, this comes with a risk as the odds of making a mistake go up. Critics have said that autonomy is a Western and individualistic ideal and unsuited to many cultures where people may identify themselves more strongly with their families and communities (Haybron, 2013). However, even in areas where one may lack complete control, because their lives may be intertwined with the lives of others due to social roles and expectations, one can be autonomous by acting for reasons you endorse rather than acting in accordance with reasons endorsed by others.

Relationships

Relationships are one of the most important sources of happiness. Humans are social creatures and having relationships allows individuals to reap many benefits. The mere act of enjoying someone's company results in experiencing more positive emotions (Haybron, 2013). As a result, close relationships are important. However, it is important for relationships to have characteristics that allow the individuals involved to reap the most benefits. Relationships that produce the most happiness have the following characteristics: mutual understanding, caring, and validation of people's worth.

Another good sign of a close relationship is trust. Having a close relationship with someone implies trusting someone to a certain degree with private thoughts and concerns. Research has shown that measures of trust correlate well with measures of happiness. Trust also provides one with a sense of security. When we feel there is trust in a relationship, this sense of security allows us to feel accepted, loved, and protected

(Haybron, 2013). However, being around people that can provide us with these important benefits all of the time can be difficult across many societies. Individuals spend most of their time in the workplace, where a person's interest in you may be self-directed (Haybron, 2013).

Skilled & Meaningful Activity

From the perspective of happiness, there are two important facets of human nature: humans are social creatures, and humans are agents, taking an active role to produce the desired effect. I already briefly discussed the sources that impact the social facet in Outlook: Caring for others and Relationships. In this section, we will focus on the second facet of human nature: being an agent. People are happiest living active lives where they are doing rather than existing passively (Haybron, 2013). However, an important component of producing happiness from the things we do is that activity matters. Aristotle stated that the most pleasant life is filled with virtuous or excellent activity. In other words: exercising our fullest capabilities through worthwhile actions or activities will lead to the most pleasant life. Being actively engaged in activity helps develop a feeling of flourishing within individuals that helps bring about the fullest happiness achievable (Haybron, 2013).

To be effective, activities that produce happiness must have two features: they must require skill and be meaningful to one's life. The state of flow is a peak form of happiness that occurs when an individual is doing a challenging task well, where a challenging task is a task that particularly pushes their skills to the limit. An example of such an activity is playing a particular sport. However, apart from providing happiness,

these activities are simply worth doing (Haybron, 2013). When individuals want things, like obtaining achievement, it is because we value that thing. Furthermore, to value something is to see it as mattering. Gaining a sense of meaning from an activity or action is indicative of something an individual ought to want, and primes individuals to behave in certain ways (Haybron, 2013). For example, people do not typically simply prefer to be an expert in their respective field. They value achievement and see it as something that needs to be maintained. When individuals fail and are unable to maintain their values, they feel guilty or ashamed (Haybron, 2013). This perspective can be extended to how we relate and feel about others. We do not value people simply for being good; we also value them for enacting or behaving in ways that endorse virtues like excellence, kindness or resilience (Haybron, 2013). Lastly, individuals can appreciate things. Appreciation is defined as the ability to experience things as valuable, mattering and worthwhile. Feelings of appreciation associated with our actions or other people in turn also enhance the meaning of the values they represent and endorse.

Contact with Nature

Contact with the natural world offers a wide range of benefits. Immersion in nature has been shown to be a calming experience for individuals, and simply a view of trees may help them recover faster if they have been ill. Preliminary results have shown that contact with nature has an array of benefits. However, Haybron (2013) based his decision not to include nature in his sources of happiness due to lack of data, and will not officially include it until more data can confirm that happiness gained from contact with the natural world is distinct and significant enough. Including the construct in this

research is an attempt to test if contact with nature can have a significant effect on happiness.

CHAPTER TWO

MORAL EXEMPLARS AS REFERENTS FOR VALUES

Moral Exemplarist Theory and Conceptual Referent Theory

Various theoretical explanations can account for how both how individuals decide to make choices between valued pathways towards happiness and how individuals grant virtuous accolades to these decisions. The emphasis in this paper will be on moral exemplarist theory and conceptual referent theory which are used to explain how individuals assign virtuous accolades to trade-offs between pathways. Moral exemplarist theory (Zagzebski, 2017) begins with a direct reference to exemplars of moral goodness. The idea behind this is that virtuous attributes are much like natural terms; terms we utilize like *human, water, or gold* (Zagzebski, 2017). When individuals utilize natural terms like the examples above, it is implicitly understood what is being referred to. Utilizing this understanding, one could say that a courageous action can take many forms. However, some elements can be agreed upon collectively to understand that courageous actions are like *that*, much like humans are like *that*. Affixing the understanding of what a natural term is could extend beyond the virtue of courage to others like self-discipline, kindness, and creativity.

Zagzebski continues to explain that we may not always know the nature of a natural term before we define and utilize it collectively as a referent. For example, people

did not know what exactly gold was comprised of for many years. However, this did not impede our ability to construct a definition that attached the referent to a term. The theory of direct reference also helps explain how a term like gold has been utilized before and after the discovery of its anatomical structure (Zagzebski, 2017). This concept may also translate to how an individual's behavior is perceived. It is not necessary to know the nature of a person to find their action virtuous or worthwhile. When an action of courage or kindness is performed, we need not focus on the nature of the individual, but the action or behavior itself.

Furthermore, it is not necessary for individuals to associate descriptions with natural terms to refer to the right kind of thing. The way in which moral exemplarist theory is constructed allows for individuals to succeed in referring to terms like water and gold, even if their descriptions are incorrect. This phenomenon is possible due to an individual's relation to their community, and the community's ability to correctly identify gold, water, or in this case, virtue. The ability to pick out exemplars is also in part due to our communal ties. The practices of picking out exemplars are embedded in our moral practices through narratives of both fictional and non-fictional persons (Zagzebski, 2017). Furthermore, these narratives also show that some people, and more importantly their actions, are admirable and worth emulating. Moral learning is done through emulation, and, exemplars are those persons who are *most imitable*. Moreover, they are considered to be *most imitable* because their actions are admirable and considered worthwhile by observers. As a result, the actions of a moral exemplar also represent values that are worth imitating (Zagzebski, 2017). Therefore, it is through the emotion of admiration that

we can identify persons who are worth emulation. Zagzebski states that this emotion can be educated by observing the reactions of others to the target in question. This relates to my research by explaining how examples of moral exemplars influence our values and how through admiration, moral exemplars influence which pathways towards happiness are worth emulating.

It is important to reiterate that the nature of the person is not the focus when individuals seek moral exemplars to emulate. Instead, it is the nature of their exemplary actions that is the focus, and whether or not those actions symbolize the values, an individual finds important. I hypothesize that when an individual identifies exemplary actions, they undergo a process by which they take the relative importance of their values and compare it to the values that are represented by the actor's options and actions. The nature of the actor is not used as a conceptual referent. However, the relative value of an actor's options is taken into consideration, as their exemplary actions in the face of a trade-off decision represent the value the observer wishes to emulate.

Therefore, moral exemplars, or referents, play a role in how individuals judge their lives and their happiness. Conceptual Referent Theory (CRT) helps explain what a person's notion of a happy life is (Rojas, 2005). In the context of this proposal, it also explains how an individual's value structure is established and appraised. The central component to CRT is that individuals must have a conceptual referent, or moral exemplar, before appraising their lives. This conceptual referent plays a pivotal role in how the individual assesses and judges their life and well-being. Unlike top-down

approaches to happiness, CRT incorporates philosophical perspectives while still maintaining a focus on what an individual believes to be their understanding of happiness. An individual's understanding of happiness is at work when a person assesses their life as a happy or unhappy one. Therefore, two important components in CRT would underlie how an individual chooses to pursue one pathway towards happiness over another: their current level of happiness and the exemplar they use as a guide or method of appraisal. To reiterate, CRT is a mental assessment of an individual's state and can be designated as a cognitive appraisal that relates to the goals for which individuals strive for (Rojas, 2005; Diener, 1999, p.24; Emmons, 1986; Little 1989). Furthermore, it touches upon the cognitive factors that are involved in understanding things that contribute to an individual's happiness by studying what a person thinks, rather than what they feel, at the time of appraisal.

The exemplar acts as a guide that allows individuals to answer questions regarding their subjective well-being (Rojas, 2005). Although moods provide a transient influence on an individual's happiness, a conceptual referent provides a stable, underlying factor that contributes to their happiness. Since happiness is a highly subjective topic that is open to personal interpretation, exemplars can vary from person to person. Heterogeneity between moral exemplars explains how individuals behave differently in their pursuit of happiness. Furthermore, the set of variables that explain a person's happiness and their relationship is also contingent on their exemplar (Rojas, 2004a). As a result, the moral exemplar's actions are a guide that explains how individuals decide which pathways are worth pursuing.

Future studies will examine whether or not an individual finds another person's actions admirable or worthwhile based upon on their conceptual referent or moral exemplar. Whether or not an individual finds another person's actions admirable or worthwhile should correspond with their moral exemplars. This is very similar to the concept known as *accolade courage* (Pury & Starkey, 2010). Accolade courage is a process, whereby the third-party observer assesses whether a goal was worthwhile, whether the means to reach the goal were worthwhile, and whether or Inot the significant risk was involved (Pury et al., 2015, Pury & Hensel, 2010). For example, a person saving their child's favorite toy from a burning building may be seen as courageous by some but foolish by others.

Assigning virtuous accolades to actions is an external appraisal made by someone other than the actor. Giving an accolade depends on the subjective judgment of an observer. At times, there are multiple discrepancies between what an observer deems worthwhile and what an actor seems worthwhile. For instance, an individual may find it worthwhile to scale a mountainside to break a record, whereas a third-party observer may find that this choice is not worthwhile depending on their values. These differences can be attributed to the concept that individuals can have different moral exemplars, and moral exemplars behave and act differently. Furthermore, their actions affect how we judge and value behavior. This can extend to a multitude of contexts, including the workplace.

Schwartz's Value Theory

It is important to realize that there has been a lack of consensus in values literature regarding the conceptualization of basic values and their structure. Schwartz's Value Theory, however, outlines ten broad values that are grounded in basic human needs, like control and mastery (e.g., Bandura, 1977; Deci, Cascio, & Krusell 1975). Similarly, Haybron's (2013) pathways to happiness outline broad values that are also likely to be universally important for the pursuit of happiness since they are grounded in self-determination theory, which can also be considered basic human necessities. The ten distinct values recognized in Schwartz's theory include self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism. These basic values are widely recognized across cultures and have dynamic relationships.

Of Schwartz's ten universal values, most closely align with with Haybron's (2013) Pathways to Happiness. Outside of these, while the other remaining values proposed by Schwartz are defined differently than Haybron's (2013) pathways and may represent a combination of pathways, they seem to correspond with one another. I will briefly define Schwartz's ten basic values and compare them to Haybron's (2013) Pathways to Happiness.

Power

This value is defined by social status and prestige, control, dominance, and resources. In other words, this value can be characterized by social power, authority, and wealth (Schwartz, 2012). There are certain aspects of this value that correspond with Haybron's

(2013) Relationship pathway which outlines an individual's desire to retain their social and communal ties. This value may also somewhat correspond with Haybron's (2013)

Security: Material as one is concerned with having enough resources.

Achievement

Schwartz has characterized this value as obtainment of personal success by being capable and displaying ambition (Schwartz, 2012). This type of value corresponds with Haybron's (2013) Skilled & Meaningful Activity pathway which is defined by exercising our fullest capabilities through worthwhile actions or activities.

Stimulation

This value is characterized by feelings of excitement, novelty, and challenge. This can also be seen as having a daring, varied, and exciting life (Schwartz, 2012). Haybron's (2013) Skilled & Meaningful Activity pathway corresponds with this value as it includes the idea that activities must include an element of challenge to be effective at producing happiness within individuals.

Self-Direction

Schwartz has defined self-direction as independent thought and action that is characterized by a person choosing, creating, and exploring. This value can also be seen as a sense of freedom. Haybron's (2013) pathway of Autonomy is the one that most closely resembles this value conceptually. The pathway of autonomy similarly promotes a sense of freedom and independence.

Benevolence

This value is characterized by the enhancement and preservation of well-being in individuals in people's in-groups (Schwartz, 2012). Of all Haybron's (2013) pathways, Benevolence is most closely related to the pathways of Outlook: Caring for Others and Relationships. Both pathways above exemplify values concerned with the welfare of others

Universalism

Universalism encompasses an appreciation, tolerance, and protection of people and nature (Schwartz, 2012). The pathways Outlook: Caring for Others, Relationships and Contact with Nature closely resemble Schwartz's definition. The first two pathways are exemplified by validating people's worth and describe the importance of doing things for others. Also, Haybron (2013) has also touched upon the effect nature has on individuals, as immersion in nature has been shown to have positive effects on people's happiness.

Tradition

This value is defined by the acceptance of customs and ideas, respect, and commitment. Schwartz goes further to explain that groups develop norms that represent their shared experiences and fate; the acceptance of abstract concepts (Schwartz, 2012). Haybron's (2013) Outlook: Acceptance is the pathway that most resembles this value. The pathways' conceptualization of this value states that what matters is how we respond to events, rather than what happens (Haybron, 2013).

Conformity

In the context of Schwartz's values, conformity is described as a restraint of actions and impulses that will likely upset or harm others and violate norms (Schwartz, 2012). The pathway with the closest resemblance is Security: Social (Haybron, 2013). This particular pathway highlights a preoccupation with feeling secure in one's relationships and standing in the community. Ensuring that one complies with a group's norms would indicate that remains in the good graces of others within interpersonal relationships and the larger community.

Security

As described by Schwartz, Security is defined by safety and the stability of society, relationships and the self (Schwartz, 2012). The Security pathway and its variations (physical, material, social, and project) correspond with this value (Haybron, 2013). Although there is variety in the security pathway, the core tenant of all is feeling secure, stable, and not under threat.

Hedonism

Schwartz defines hedonism as sensuous gratification and pleasure. It can also be characterized by enjoying life (Schwartz, 2012). None of the pathways to happiness truly correspond with this value, as the combination of pathways an individual finds important leads to the maximization of their happiness, which is comprised of hedonic components.

The structure of values refers to the relations of conflict and congruence among Schwartz's (2012) ten values. Since values cluster similarly across different cultural groups, this suggests that certain values are considered universally worthwhile. This kind of rationalization can extend to which actions individuals find universally important in the pursuit of happiness as Haybron's (2013) pathways corresponds to values. However, while there is some dimension of universality across groups, there is also some degree of heterogeneity as individuals and groups have different value priorities or structures.

Value Characteristics

Values are representative of the things that matter to us. They are linked to a variety of affective responses due to how they enhance our motivations and affect our judgments because of their significance to us. Since there is variability between individuals, values and how they are prioritized will also differ and range in their relative importance. Schwartz's theory outlined six distinct characteristics that are used to describe a comprehensive set of values which I will now review (Schwartz, 2012). Although all values share the following features, the key factor that distinguishes one value from another is the type of behavior or actions they express.

According to Schwartz, values are beliefs that are connected to an individual's affective responses. Feelings become activated when individuals are placed in situations where they encounter their values. For example, someone that values autonomy will feel happy and enjoy when they can make decisions for themselves. The same individual,

however, may feel a sense of despair and not enjoy situations where they have little control.

Values are also said to represent desirable goals that motivate people to act. For example, individuals who value helpfulness and find it important are motivated to pursue goals that enforce helpfulness. Our values can also transcend situations and specific actions or behaviors. In other words, this means that the value is important and applicable across a variety of contexts. This characteristic helps distinguish values from objects or situations. For example, kindness may be relevant in the workplace, school, and amongst friends or strangers. The values and individual find important to serve as standards or criteria for their lives. Individuals can decide what they consider good or bad, worthwhile or worth avoiding based upon the consequences of their actions based on the values they find most important. We are especially aware of these competing standards when we are trying to decide between different values one cherishes.

Furthermore, and most relevant to this thesis, an individual's values are ordered by importance relative to one another. As a result, values are organized in a system of prioritization. The differing combinations of these values across situations help characterize them as unique individuals. This result stems from the subjective importance attributed to a particular value. However, I propose that the importance we place on our values is derived from exemplary actions and whether or not they are found to be worthwhile. Regarding an action as worthwhile indicates that there is a similar or corresponding value structure between the observer and the actor.

The relative importance of multiple values guides an individual's actions. Actions and behaviors can have consequences on more than one value concurrently. For example, arriving at work early to earn extra money for one's family could express Haybron's pathways of Security: Material or Relationships. However, these pathways could be expressed at the cost of Security: Time values. The trade-off between relevant and prized values guides attitudes and behaviors (Schwartz, 2012). Moreover, Schwartz states they influence action when they are relevant to the context and important to the actor. Although, I posit that in addition to this, these values are also important and expressed in the behavior of the moral exemplars an individual admires.

Value Structures

Schwartz's value theory not only identifies ten basic values, it also explains the structure of the relationships among them. Within Schwartz's conceptualization of value structures, there are certain actions or values that will run counter to some and be congruent with others. For example, achieving power typically opposes acting benevolently as it tends to hinder actions aimed at helping others (Schwartz, 2012). By contrast, security and conformity values are compatible according to this theory and could be pursued concurrently. To further explain the relationship amongst values, Schwartz introduced a circular structure in which all ten basic values are placed along two bipolar dimensions: '*openness to change*' and '*conservation*' contrasted by '*self-enhancement*' and '*self-transcendence*.' These dimensions are meant to help capture the conflict between competing values and represent a motivational continuum. Values that

are located next to each other conceptually share the same broad motivational goal while values that are opposite of each other do not.

Although Haybron's (2013) sources of happiness share the same value characteristics as the values found in Schwartz's Value Theory, the way the pathways are structured may be different. Schwartz's ten basic values lie on the dimensions above, with opposing and congruent values. However, the pathways to happiness that this Study is interested in are not structured by dimensions like the ones found in Schwartz's Value Theory.

As previously mentioned, research on courage has highlighted an important distinction between the process of performing a courageous act and having an action labeled as courageous (Pury & Starkey, 2010; Pury, Starkey, Kulik, Skjerning, & Sullivan, 2015). Accolade courage partially depends upon the observer's assessment. For example, an individual working in their office receives a call from a family member asking for their help. The individual must now decide between leaving work early to help their relative or stay in their office working. Regardless of which pathway is chosen, the type of structure I propose suggests that observers will be more likely to behave in ways that correspond with actions they find exemplary. In other words, I hypothesize that trade-offs between pathways will be perceived worthwhile if the observer also highly values the chosen pathway more than the rejected pathway.

Before such a Study can be conducted, a measure needs to be developed that examines the relative importance of the various pathways to happiness. Study 1 tests an

initial pool of 200 items that cover all Haybron's (2013) sources of happiness including Security, Outlook, Autonomy, Relationships, Skilled & Meaningful Activity, and Contact with Nature. These items were based off a pre-existing and validated measure. After its development, the new Pathways to Happiness measure was validated in a series of studies.

The validation of the measure consisted of several different analyses including exploratory factor analysis, confirmatory factor analysis, and structural equation modeling. Evidence of validity for the Pathways to Happiness measure will be demonstrated if the measure has convergent validity, discriminant validity, and concurrent validity. Convergent validity refers to the degree to which two constructs are related. The measures that were used to demonstrate convergent validity with the individual Pathways to Happiness subscales include the Connectedness to Nature Scale, Positivity Scale, and Work-related Basic Needs Scale that examines Autonomy, Relatedness, and Competence (Broeck, Vansteenkiste, White, & Lens, 2010; Caprara et al., 2012; Mayer, F. S., & Frantz, 2004). For example, the Autonomy subscale of the Pathway to Happiness measure should be related to the Autonomy subscale of the Work-based Related Needs Scale. In addition, the relationship between Diener's (1985) Satisfaction with Life Scale and the Pathways to Happiness subscales was examined to look at the convergence between all of the pathways and a conceptually similar construct.

Conversely, discriminant validity refers to the degree to which two constructs are unrelated. The discriminant validity of the Pathways to Happiness subscales will be

tested by examining their relationship with turnover intentions, which should be unrelated. The convergent and discriminant validity of the measure will be examined by looking at the factor correlations. Correlation coefficients above 0.5 indicate that two factors have adequately converged, whereas correlation coefficients close to 0.0 are desired for discriminant validity. Lastly, concurrent validity refers to the fact that the Pathways to Happiness measure was administered at the same time as the SWL and turnover intentions scale to have its predictive power analyzed.

CHAPTER 3

PATHWAYS TO HAPPINESS SCALE DEVELOPMENT: STUDY 1

Item Development

The purpose of the Pathways to Happiness scale is to measure the differences between the relevance of a variety of pathways to a satisfying life based on Haybron's (2013) sources of happiness. This will be used as a method to examine the relative importance of a construct to someone rather than delve into how much of the construct an individual has. The items included in the measure are based on Joseph and Diduca's (2007) Dimensions of Religiosity Scale, which measures conviction, guidance, preoccupation, and emotional involvement. I chose to model the items on the Dimension of Religiosity scale because conviction, guidance, preoccupation, and emotional involvement should be important constructs to consider when pursuing happiness. Specifically, the conviction with which an individual pursues religion, the guidance it

provides, the preoccupation felt by an individual in relation to their religion, and the emotions associated with it (Joseph & Diduca, 2007). I propose that these constructs are also integral elements a person engages in to continue along a pathway until their goal is obtained.

It is impossible for a person to follow each path because people are limited beings, meaning that an individual cannot pursue every option at one time. As a result, choices must be made in many different situations. Therefore, individuals may possess a ranking of values, with some pathways preferred over others. For example, people pursuing skilled and meaningful work over other pursuits could be seen as those who strive towards to excellence. However, people pursuing security with their relationships, over skilled and meaningful work, could be seen as more caring or less driven depending on the observer. A Pathways to Happiness measure must first be validated before we are able to test out the relative importance of these pathways across different situations.

Participants

The sample consisted of undergraduate students from a Southeastern University (N=347) who completed an online survey for course credit. No additional demographic data was collected for this sample. Items were generated for thirteen different factors using the Dimensions of Religiosity scale as a guide, and an initial pool of 200 items was developed. The group filled out the 200-item Pathways Scale. Using a 7-point scale, the participants rated how important each value or pathway statement was to them (1 = not at

all important, 7 = extremely important). The Pathways constructs are explained further below, along with sample items.

Measures

Autonomy

The Autonomy factor measures the sense of control an individual has over their life. Freedom and having the ability to decide for one's self is a major source of happiness (Haybron, 2013). A sample item is, *It is important to have a strong sense of independence.*

Outlook

The Outlook factors cover how an individual may interpret, explain, evaluate, and respond to the things they value. There are four approaches to consider: positivity, acceptance, caring for others, and intrinsic motivation (Haybron, 2013). A sample item for Outlook: Positivity is: *Having a positive outlook helps me make better decisions.* This particular outlook factor focuses on how much a person endorses the importance of being optimistic, grateful, etc. By contrast, the factor for Outlook: Acceptance focuses on how individuals accept things as they are and contains sample items like *I base my decisions on accepting what is.* Individuals that are oriented towards Outlook: Acceptance are able to shrug things off more easily and move on when things do not fit within one's expectations (Haybron, 2013). The factor for Outlook: Intrinsic Motivation relates to the motives that drive an individual towards performance at work and other activities. A

sample item included for this factor is *I am capable of motivating myself*. Meanwhile, Outlook: Caring for Others differentiates itself by measuring the extent to which an individual is concerned about others. An example sample item is *I will always help others around me*.

Relationships

The Relationships factor is considered to be one of the most important sources of happiness and imperative to “get right” (Haybron, 2013). This subscale is measured using items like *Having a group of people to interact with is important to me*. Trust typically correlates with measures of happiness and is important as it provides a sense of security due to feelings of acceptance and protection. Having strong relationships not only provides a sense of security, but it makes things easier on the community (Haybron, 2013).

Security

The Security factors measure how secure an individual feels in possession of the things that matter most to them. Aside from physical security, there are several other different kinds of security an individual can feel. Each type of security is derived from different sources: material, social, project, and time. An important aspect of security in regards to happiness is that it is perceived or felt (Haybron, 2013). A sample item for Security: Physical is *Physical safety is very important to me*. By contrast, Security: Material uses items such as *I take into account my material possessions when I make*

decisions. Security: Social contains items such as *I am certain that I am important to those I have relationships with* and is meant to capture the feeling of security an individual derives from their relationships and standing in the community. Security: Projects employs the use of items like *I think about my future goals all the time*, and measures how secure an individual feels in the prospect of success in their projects, or goals and commitments. The goals or commitments associated with Security: Projects are goals that an individual identifies with (Haybron, 2013). Security: Time includes items like *It is important to feel like I have enough time to do things*, and measures the feeling of having sufficient time to devote to individual needs.

Skilled and Meaningful Activity

This factor addresses the things individuals do from the perspective of happiness. Aristotle once equated the most pleasant life with a life of virtue or “excellent activity.” This factor considers happiness and well-being as something we do or engage in, rather than an achievable state. Activities that produce the most happiness in individuals have two features: skilled and meaningful. The Skilled and Meaningful Activity subscale includes items like *I often find myself participating in meaningful activity*.

Contact with Nature

There is a growing body of literature that suggests contact with nature has an impact on human health and happiness. An individual that can view natural scenery may experience faster recovery times, feel calm and revitalized, and may have their attention

improve (Haybron, 2013). The Contact with the Natural World subscale is measured using items like *Being outside in nature is important*.

Study 1 Results

A parallel analysis (Schmitt, 2011) was conducted with the original 200 items, and 11 factors were suggested. Then EFAs were conducted from 8 to 12 factors. As a result, 152 items were removed due to unreliability (standardized loadings $<.40$) and cross-loading on multiple factors. The 10-factor solution was fit with the remaining 48 items, and demonstrated good model fit: $\chi^2_{21,035}=1400.14$, CFI = .94, TLI = .93, RMSEA = .032, 90% CI RMSEA = [.028,.036], and SRMR = .05. See table 1 for the 10-factor solution with the remaining 48 items. The factor correlations for this analysis are seen in table 2.

Study 1 Discussion

The results of the CFA confirm 5 out of 6 of Haybron's (2013) pathways to happiness. The items for Skilled and Meaningful Activity were unreliable, and thus will not be included in the next step in scale development. In addition, two factors share items created for Outlook: Intrinsic Motivation and Security: Projects.

The addition of items related to Security: Time created a new factor comprised of Security: Projects, Security: Time, and Outlook: Intrinsic Motivation. The combination of these three factors closely resembles the construct of self-efficacy, which is characterized as judgments regarding an individual's capability to succeed or complete tasks. Example

items from this factor include: *I feel happy when I complete a task* and *I feel happy when I feel as if I have used my time wisely*. The combination of these factors suggests the emergence of a new source or pathway to happiness that is better defined as task-efficacy as items included in this factor reflect an individual's confidence in achieving a pathway. By contrast, the Outlook: Intrinsic Motivation and Security: Project factor includes items like, *I think about ways to motivate myself all the time* and *I feel happy when I have a goal to pursue*. The combination of these two factors suggest another source or pathway to happiness that is best defined as a goal orientation.

To reiterate, the major difference between these factors is the inclusion of time. Although the factors have items from the same pool of preliminary items, the items did not cross-load and helped form distinct factors with unique items. Therefore, future studies will include these two newly formed factors under the names Task-Efficacy and Goal Orientation. Further piloting will be completed in the future with new items for Skilled and Meaningful Activity.

CHAPTER 4

PATHWAYS TO HAPPINESS MEASUREMENT VALIDATION: STUDIES 2 AND 3

Study 2

The purpose of Study 2 was to validate the Pathways to Happiness measure developed in the preliminary Study 1. Additional measures were administered to participants that examine various constructs related to the Pathways to Happiness

measure including Connectedness to Nature, Positivity, and Work-related Basic Needs (Autonomy, Relatedness, & Competence). The measures of interest are described in better detail in the following section. The Pathways to Happiness subscales contained in this Study are Connection with Nature, Outlook: Positivity, Autonomy, Relationships, and Goal Orientation. For these subscales to demonstrate convergent validity, they should conceptually overlap with measures that examine the same construct. Therefore, I hypothesized that the Connection with Nature subscale would correlate with the Connectedness to Nature Scale. Similarly, I hypothesized that the Outlook: Positivity subscale would correlate with the Positivity Scale. Lastly, Autonomy, Relationships, and Goal Orientation should correlate with the three subscales of the Work-related Basic Needs Scale which examines Autonomy, Relatedness, and Competence.

Participants

The sample consisted of online workers using Amazon's Mechanical Turk online platform (N=237) who completed an online survey. A HIT (Human Intelligence Task) was posted online that compensated individuals with USD 4.83 for participation in the Study. These estimates were calculated by using formulas based on paying 150% minimum wage given a certain survey length and the total amount of funding available. To be eligible for the Study, participants were required to be at least 18 years or older and live within the United States. 77% of the sample was 45 years or younger, with the highest percentage of participants (36.5%) falling within the 25-34 age range. Furthermore, 86% of the sample identified as White with only 5.6% identifying as

African-American or Asian (5.1%), and 1.7% as Hispanic. In addition, half of the sample (50%) selected female as their gender. The household income of 50% of the sample was USD 40,000-49,000 or under, with the highest percentage of participants (16.3%) earning USD 30,000-39,000. Lastly, 41% of the sample was married, 33% had never been married, and 12% were co-habiting.

Measures: Convergent Validity for Individual Factors

Pathways to Happiness

The 48-item Pathways to Happiness measure developed in Study 1 was utilized for this Study for validation purposes. Participants rated how important each value or pathway statement is to them using a 7-point scale (1 = not at all important, 7 = extremely important). Items can be found in Table 1.

The Connectedness to Nature Scale

The Connectedness to Nature Scale (CNS) is a multi-item scale that taps into an individual's affective and experiential connection to nature (Mayer, F. S., & Frantz, 2004). It will be utilized to provide construct validity for the Contact with the Natural World subscale. I predicted that the contact with the natural world subscale of the pathways to happiness measure will positively correlate with the CNS. The CNS and the Contact with the Natural World subscale both measure and examine an individual's emotional connection and feelings about the natural world. The CNS is comprised of 17

items (see Appendix) that are rated on a 5-point scale, where 1 = 1 strongly disagree, and 5 = 5 strongly agree ($\alpha = .84$).

The Positivity Scale

The Positivity Scale (P Scale) examines an individual's tendency to view their life and experiences with a positive point of view. Although the definitions of what constitutes positivity can vary slightly, the operationalization of this construct within this Study closely resembles Diener's (2000) definition which states that positivity is the propensity to evaluate aspects of life as good in general (Caprara et al., 2012). This 8-item measure (see Appendix) utilizes a 5-point scale, where 1 = strongly disagree and 5 = 5 strongly agree ($\alpha = .78$).

Work-related Basic Need Satisfaction Scale

The Work-related Basic Need Satisfaction scale (W-BNS) was included to provide convergent validity for the Autonomy, Relationships, and Goal Orientation pathways subscales. The W-BNS is largely based upon Deci & Ryan's (2000) Self-Determination Theory (SDT) which outlines that individuals have three innate, basic needs that must be satisfied to flourish: autonomy, competence, and relatedness. The validity of this measure was provided by Broeck, Vansteenkiste, White, & Lens, (2010). I hypothesized that the Autonomy pathways subscale would be positively related to the *Need for autonomy* W-BNS subscale. Likewise, I also hypothesized that the Relationships subscale would be positively related to the *Need for relatedness* subscale of

the W-BNS. Lastly, I hypothesized the Goal Orientation subscale would be positively related to the *Need for competence* subscale of the W-BNS. Items were formulated as declarative statements to the following stem: *The following statements aim to tap into your personal experiences at work*. Responses to individual items were rated on a 5-point Likert scale (1 = totally disagree, 5 = totally agree).

Method

Data for this Study was collected via an online questionnaire utilizing Qualtrics Software. The questionnaire contained 215 items, including items from the measures described in the measurement validity section, in addition to items from other measures for an additional Study that was conducted concurrently. A power analysis was conducted in EQS to reveal the sample size required to detect an effect. Results showed that a sample size of at least 109 participants would be needed when the effect size is 0.4. The effect size was chosen by examining a meta-analysis conducted by Schneider & Schimmack (2009) that examines self-informant agreement in well-being ratings. The average was taken of all of the effect sizes included in the meta-analysis. Data was analyzed using the lavaan statistical package in R (Rosseel, 2012). Due to the design and measures utilized in this Study; the data was analyzed using confirmatory factor analysis. This method of analysis allowed the relationships between the subscales of the Pathways for Happiness measure to be correlated with validated measures that are associated with similar variables.

Study 2 Results

A CFA was performed based on data from 237 workers from Amazon's Mechanical Turk (MTurk) utilizing the lavaan statistical package in R (Rosseel, 2012). The data was obtained using a survey with 215 questions on Likert-scale surveys measuring the relative value of Pathways to Happiness (Autonomy, Contact with Nature, Positivity, Relationships, and Goal Orientation) Work-related Basic Need Scale (Autonomy, Relatedness, Competence), Connectedness to Nature, and Positivity (Broeck, Vansteenkiste, White, & Lens, 2010; Mayer, F. S., & Frantz, 2004; Caprara et al., 2012). A correlation table with means and standard deviations is shown in Table 3 and standardized loadings for all items can be found in Table 4 (See Appendix). Assumptions of multivariate normality and linearity were examined using SPSS. Using box plots, any observed outliers were removed. Three cases of missing data were also removed. The final sample sized used in the analysis was 175. The comparative fit index (CFI) = .90, the Tucker-Lewis fit index (TLI) = .88, and the RMSEA = .05. Although the chi-square for the model was significant, $\chi^2(1040) = 1629.855, p < .01$, the global fit values indicate a good fit between the model and observed data. Researchers like Kline (2005) and Hooper, Coughlan, & Mullen (2008) have identified the following cutoffs for the fit indices just mentioned: CFI \geq .90, RMSEA $<$ 0.08, TLI \geq .90.

Study 2 Discussion

The hypotheses regarding convergent validity for the Pathways to Happiness measure are mostly supported, except for the Autonomy subscale of the Pathways to Happiness measure. Excluding the Autonomy subscale, the correlations between the

other Pathways to Happiness subscales and their related measures are significant and above +/- 0.5, which indicates some degree of overlap between the tested relationships. Although the correlation between the Autonomy subscales of the Pathways to Happiness measure and Work-related Basic Needs scale was significant, a correlation of 0.24 is not enough to establish convergence between the two subscales. Therefore, further analysis will need to be conducted on the Autonomy subscale of the Pathways to Happiness measure to ensure that it can converge better with similar measures.

It should be noted that the Work-related Basic Need subscale for Relatedness was negatively related to all the subscales included in the analysis. These results could reflect the type of sample utilized in this Study. The questions included in the Work-related Basic Need Relatedness subscale relate to an individuals' relationships at work (e.g., *At work, I can talk with people about things that really matter to me*). Since the sample utilized in this Study is comprised of remote workers using the MTurk platform, they may not have the same opportunities to develop relationships 'at work'. Interactions with other people using the platform are not face to face, and limited to online forums, which may explain why this subscale had strong negative relationships with the other measures included in the model.

Study 3

This Study continued to validate the Pathways to Happiness subscales used in Study 2 which include Goal Orientation, Outlook: Positivity, Autonomy, Relationships, and Connection with Nature. The subscales were tested for additional convergent

validity, plus discriminant and concurrent validity. Secondary measures were administered to participants that examine various constructs including Satisfaction with Life (SWL) and turnover intentions. The measures of interest are described in better detail in the following section. As with Study 2, the purpose of this Study was to continue validating the Pathways to Happiness subscales. Therefore, the correlations between all relevant constructs were examined. In the case of convergent validity, the constructs should correlate which shows that they conceptually overlap. By contrast, the constructs of interest should not correlate at all to demonstrate that they are distinct and do not overlap conceptually to demonstrate discriminant validity.

As a result, I hypothesized that the SWL measure would be related to the Pathways to Happiness subscales since they are both measuring conceptually similar constructs. In addition, the Pathways to Happiness subscales were expected to be unrelated to turnover intentions as they are an indicator of dissatisfaction, which should be unrelated to happiness. Lastly, the SWL and turnover intentions measures were also used to demonstrate the concurrent validity of the Pathways to Happiness subscales. To do this, the Pathways to Happiness subscales will be used to predict SWL and turnover intentions. It was hypothesized that the Pathways to Happiness subscales will be able to predict both constructs.

Participants

The sample consisted of undergraduate students from a Southeastern University (N=383) who completed an online survey for course credit. 52.2% of the sample was 18

years old, while 23% of the sample was 21 years or older. Meanwhile, 85% of the students that participated identified as White, 7.5% as African-American, 1.9% as Asian, and 1.5% as Hispanic. Lastly, 65.6% of the sample stated they were female.

Measures for Overall Construct Validity: Convergent and Discriminant

Satisfaction with Life

Diener et al's (1985) Satisfaction with Life Scale (SWL) examines the cognitive judgmental process that individuals engage in when assessing their quality of life. An individual's assessment is done according to their own criteria and depends on comparisons. In other words, one must judge their life and compare it to some kind of referent or standard that is set by the individual rather than externally imposed. Furthermore, these life satisfaction judgments are centered around one's personal values and not based upon criterion that is judged to be important by others (Diener, 1985; Diener, 1984). Rather than focus on specific life domains, the SWLS focuses on an overall judgment of life quality. Prior to the creation of this measure, satisfaction with life scales commonly utilized only one item which introduced a number of problems including not strictly measuring life satisfaction and being ungeneralizable. The SWLS has correlated with other measures of SWB.

Turnover Intentions

Kelloway, Gottlieb, and Barham's (1999) four-item turnover intentions scale will be utilized to examine the discriminant validity of the Pathways to Happiness subscales

included in the analysis. Over time, researchers (Bannister & Griffeth, 1986; Bretz et al., 1994; Mobley, Horner, & Hollingsworth, 1978) have been able to come to agreement that dissatisfaction with organizational aspects including, compensation, satisfaction, and policies, are related to searching for another job. Moreover, these findings are consistent with turnover models that outline dissatisfaction as a primary cause of turnover intentions, which leads to turnover. Due to this characterization, I hypothesized that the turnover intentions measure and the Pathways to Happiness subscales would be largely unrelated since the turnover intentions measure can be considered an indicator of dissatisfaction, which should not overlap greatly with happiness. The items of this measure were adapted since a student sample was used for this Study. As a result, items reflect a student's intentions to leave their current major of Study instead of leaving a position at an organization. For example, *I am planning to look for a new job* changed to *I am planning to look for a new major*, and *I am thinking about leaving this organization* changed to *I am thinking about leaving my major*. Each item was rated on a 1-5 Likert-scale where 1 = strongly disagree and 5 = strongly agree.

Concurrent Validity.

Diener et al's (1985) Satisfaction with Life Scale (SWL) and Kelloway, Gottlieb, and Barham's (1999) adapted four-item turnover intentions scale was used to demonstrate concurrent validity for the Pathways to Happiness subscales included in Study 3. The Pathways to Happiness subscales were also used to predict participant's

SWL and turnover intentions. I hypothesized that the Pathways to Happiness subscales would be able to significantly predict both turnover intentions and SWL.

Method

The survey administered to the student sample contained 119 items, including items from the measures described in the measurement validity section. A power analysis was conducted in EQS to reveal the sample size required to detect an effect. Results showed that a sample size of at least 90 participants would be needed when the effect size is 0.4. The effect size was chosen by examining a meta-analysis conducted by Schneider & Schimmack (2009) that examines self-informant agreement in well-being ratings. The average was taken of all of the effect sizes included in the meta-analysis.

Once data was collected it was analyzed in R using the lavaan statistical package (Rosseel, 2012). Due to the design and measures utilized in this Study, the data was analyzed using structural equation modeling. This method of analysis allowed the relationships between the subscales of the Pathways for Happiness measure to be correlated with validated measures that are associated with similar variables. Furthermore, it allowed for simultaneous testing of all convergent and discriminate constructs.

Study 3 Results

A CFA was initially performed on the data from 383 undergraduates at a large southeastern university before conducting a subsequent SEM analysis on the same set of data. Both analyses were conducted using the lavaan statistical R package for Structural

Equation Modeling (Rosseel, 2012). Using Qualtrics Software, a survey was administered with 119 Likert-scale questions using the Pathways to Happiness measure introduced in this paper and other measures associated with satisfaction with life (SWL) and turnover intentions (Diener, Emmons, Larsen, & Griffin, 1985; Kelloway et al., 1999). Using a combination of box plots and Mahalanobis distance, all observed outliers were removed. One case of missing data was also removed. The final sample sized used in the analysis amounted to 267 cases.

The hypothesized and final SEM are shown in Figures 1 and 2. Standardized loadings for items are provided in Table 5 (See Appendix). In addition, a correlation table with means and standard deviations for the CFA and SEM are provided in Tables 6 and 7 respectively (See Appendix). The hypothesized model was tested to investigate the hypotheses that the Pathways to Happiness subscales are related to SWL and unrelated to turnover intentions. All the Pathways to Happiness subscales, in addition to SWL and turnover intentions, were treated as latent variables. The hypothesized model also specified direct paths from the Pathways to Happiness subscales to SWL and turnover intentions. Although the chi-square for the model was significant, $\chi^2(441) = 589.358, p < .01$, alternative fit indices indicated a good fit to the data, CFI = 0.966, SRMR = 0.048, RMSEA = 0.037. As mentioned in the Study 2 results, researchers like Kline (2005) and Hooper, Coughlan, & Mullen (2008) have identified the following cutoffs for the fit indices just mentioned: CFI \geq .90, RMSEA $<$ 0.08, TLI \geq .90.

Study 3 Discussion

Convergent and Discriminant Validity

The hypotheses regarding discriminant validity between the Pathways to Happiness measure and the adapted turnover intentions scale were all supported (Kelloway et al., 1999). The correlations between the latent variable constructs are shown in Table 5. All the hypotheses are supported, and correlations are at or below 0.10, which indicates that the constructs do not conceptually overlap.

The hypotheses regarding convergent validity between the Pathways to Happiness measure outline that the subscales will be positively related to the Satisfaction with Life (SWL) Scale (Diener, Emmons, Larsen, & Griffin, 1985). The correlations between the latent variable constructs are shown in Table 5. The hypotheses were mostly supported and SWL was positively related to each of the Pathways to Happiness subscales except for the Autonomy and Contact with Nature subscales. Although the correlations between these subscales and the SWL scale were significant, coefficients of 0.20 are not enough to establish strong convergent validity. Overall, results suggest that the Pathways to Happiness subscales included in the analyses demonstrate discriminant validity. However, more research and analysis will need to be conducted on the Autonomy and Contact with Nature subscales to ensure that they are able to demonstrate convergent validity better.

Criterion Validity: Concurrent Validity

The Pathways to Happiness subscales were used to predict SWL and turnover intentions to demonstrate the concurrent validity of the measure. Results of the SEM analysis indicated that only the Outlook: Positivity subscale of the Pathways to Happiness measure significantly predicted turnover, $\beta = 0.419$, $SE = 0.159$, $\beta^* = 0.230$, $p < .05$. These results could indicate that those individuals who have a positive outlook and are preoccupied with their happiness are more willing to take control over their happiness and experience turnover intentions in the case they are dissatisfied. Meanwhile, only the Outlook: Positivity and Relationship subscales significantly predicted SWL, $\beta = 0.377$, $SE = 0.101$, $\beta^* = 0.312$, $p < .001$ and $\beta = 0.740$, $SE = 0.207$, $\beta^* = 0.315$, $p < .001$ respectively. These results indicate that a portion of the subscales included in the SEM can demonstrate concurrent validity when measured at the same time as other constructs.

CHAPTER FIVE

DISCUSSION, LIMITATIONS, & FUTURE STUDIES

Discussion

This paper seeks to further the research on well-being and happiness by developing and validating a measure that investigates the relative value of various pathways towards happiness. This is of interest because, as previously discussed, it is impossible for people to pursue all pathways at once. Therefore, individuals must go through a series of actions, across different contexts, with different affordances (Schwartz, 2012). As previously stated, the hedonic and eudaimonic traditions of

happiness are philosophically different, one focusing on maximizing the good in one's life and the other on whether or not we are thriving within certain domains or fulfilling our fullest potentials. Despite these differences, measures that follow the hedonic or the eudaimonic tradition still seek to measure how much someone has of their domains of interest. The most prominent model of eudaimonic happiness, psychological well-being (PWB), examines six domains that promote well-being: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. These domains outline which aspects of life can lead to an increase in well-being. Likewise, the model of the most prominent hedonic approach, subjective well-being (SWB), consists of three-parts: life satisfaction, absence of negative affect, and presence of positive affect. Ultimately, much like the eudaimonic model, it is interested in how much an individual has of those components.

By contrast, the Pathways to Happiness measure uncovers how vital a specific pathway is in the pursuit of happiness for an individual. This is the biggest contrast between the measure introduced and validated in this paper and other existing measures of happiness and well-being; it measures the relative importance of pathways rather than measure how much of a domain someone has or doesn't have. Although this measure is not described prior in detail, the Meaning in Life Questionnaire (MLQ) also provides insights into how the Pathways to Happiness measure is distinct and novel (Steger, Oishi, & Kaler, 2006). The MLQ is designed to look at two dimensions that help comprise meaning in life: the presence of meaning and search for meaning. The presence of meaning subscale measures the amount of meaning an individual feels they have in their

life, while the search for meaning subscale measures how motivated individuals are in finding meaning in their lives (Steger, Oishi, & Kaler, 2006).

On its surface, it would seem the search for meaning subscale of the MLQ would be like that of the Pathways to Happiness measure; seeking a pathway in pursuit of happiness v. seeking the meaning in life. However, upon further inspection of the search for meaning items, it is easy to see that they are, in fact, different. A few sample items include: *I am looking for something that makes my life feel meaningful*, *I am always looking to find my life's purpose*, and *I am searching for meaning in my life*. It is apparent from reading the items and examining their structure, that the individual rating the item is *lacking* that construct in their life; they are not evaluating how *important* meaning in their life is. Since the Pathways to Happiness measure examines the relative importance of a collection of constructs rather than report how much or how little of a construct someone has, it will allow future research to focus on the choices people make in situations where they must decide between pathways. Furthermore, it may allow us to determine which means people find most important toward their optimal view of happiness and if those choices are worthwhile.

Limitations

The initial aim of this proposal was to validate the entire Pathways to Happiness measure developed in Study 1 which includes the following factors: Security, Outlook, Autonomy, Relationships and Contact with Nature. As previously mentioned in the review portion of this paper, there are certain pathways (e.g., Security and Outlook) that

include distinct subsets that encompass different domains related to the overall factor. For example, the Security factor includes physical, material, social, and time subsets which are distinct from one another. Including all the Pathways to Happiness and their individual subsets would have resulted in a structural equation model that would have been incredibly complex and would require an enormous sample size to validate.

As a result, Studies 2 and 3 focused on the following pathways: Autonomy, Relationships & Security: Social (Relationships), Outlook: Positivity, Goal Orientation and Contact with Nature. These specific pathways were chosen because of their potential relevance to the workplace. While pathways like Security: Physical are important in the overall pursuit of happiness, individuals may not regularly encounter situations in which they must decide between the pathway of physical safety and other pathways. Therefore, future studies should attempt to validate the other Pathways to Happiness subscales that were not included in Studies 2 and 3 to ensure that the entire measure is valid and reliable.

Based on the results from Studies 2 and 3, the Pathways to Happiness subscales included in this paper demonstrate some convergent and discriminant validity. However, although factor analytic results from the studies included in this paper indicate that the Pathways to Happiness factors are adequate, their relationship with similar constructs could be stronger to demonstrate better convergent validity. For example, the results in Study 2 indicate that the Autonomy subscale has a weak correlation (0.2) with the corresponding Work-related Basic Need Autonomy subscale, despite their significant

relationship. All other subscales and corresponding measures have moderate to strong correlations. A similar pattern emerges in Study 3. Here, the Pathways to Happiness subscales are tested against SWL to see how these measures converge. All Pathways to Happiness subscales included in this analysis indicate good convergence except for the Autonomy and Contact with Nature subscales which both weakly correlated with SWL (0.2). These results indicate that attention should be given to the items included in these subscales to ensure that they are measuring their intended constructs; the pathway in question and the happiness that it brings. Focus should be given to the Autonomy subscale in particular since it did not perform well in Study 2 and Study 3. The item *I often think about being independent.* was removed due to unreliability (loading below 0.4) and was removed from the analysis for Study 2 and as a result, was not included in Study 3.

Future Studies

Subsequent studies should also ensure they use multiple types of methods to avoid issues such as common method bias and participant fatigue. The participants outlined in this paper received a large questionnaire with multiple instruments. The variations in responses could be caused by the instruments themselves rather than the predispositions of the participants. Furthermore, the results could be contaminated by the noise coming from the biased instruments. In addition, employing the use of long survey instruments increases the probability that participants will encounter participant fatigue which could lead to increased inattention while they participate in the study. This increase in

inattention could lead to instances of careless responding which could cause a mismatch between the respondent's answer and their true level of measurement on a particular construct.

Future studies should also aim to increase the understanding of how individuals structure their values regarding the pursuit of happiness, including how often people choose to endorse them through their behaviors. The term value structure here refers to the various pathways individuals favor towards their pursuit of happiness. Individuals that share similar value structures should be able to understand the value of a trade-off being made more so than individuals with dissimilar value structures. Moreover, agreeing upon which trade-offs are worthwhile also indicate that there is some covariance between which actions are considered exemplary and the idea that actions worth admiring are like *that*. A behavioral representation of values could influence participants to identify with trade-offs that are congruent with their values. People that score highly on Outlook: Caring for Others would likely believe that giving up social relationships for anything else wouldn't be worthwhile. Conversely, individuals giving up alternate pathways for pathways related to social relationships would be seen as admirable.

This line of research could expand upon current research investigating the relationship between happiness and work outcomes. Furthermore, although virtues were not measured in the studies featured in this paper, future studies should investigate whether or not people believe certain virtues correspond with specific pathways to happiness. Specifically, in situations where they're giving up one pathway for another.

For example, participants will be presented with sample scenarios that correspond with the subscales derived from the Pathways to Happiness. Furthermore, subjects will be asked to answer questions such as, “Was the choice worthwhile?” “Do you think this was a clear-cut choice?” and “Would choices like this lead to further happiness?” The purpose of including the scenarios is to see which pathways participants find more worthwhile in behavioral situations. In addition, the questions associated with the scenarios can also be utilized to see whether or not participants engage in accolade virtue, which like accolade courage, should be dependent on the perspective of the observer. An example scenario is included below:

Ciera is an associate partner at a law firm for the past several years. She enjoys the job but at times does not feel like her voice is being heard. A new job offer has recently come open where Ciera would be the main lawyer at the firm versus just being a partner. However, this law firm is not as prestigious as the one she is currently at. Ciera decides that she wants to have more say in how things go and takes the new job at the less prestigious law firm.

Ciera is an associate partner at a law firm for the past several years. She enjoys the job but at times doesn't feel like her voice is being heard. A new job offer has recently come open where Ciera would be the main lawyer at the firm versus just being a partner. However, this law firm isn't as prestigious as the one she is currently at. Ciera decides that she is pretty grateful about the opportunities she has where she is and will stay at the current firm to learn more about practicing law.

Once the entire Pathways to Happiness measure is validated, it should be reviewed alongside other relevant workplace constructs, like performance. Previous research has shown that the link between job satisfaction and job performance has been inconsistent (Iaffaldano & Muchinsky, 1985). However, it appears that positive affect is a good predictor of job performance (Wright & Cropanzano, 2000). The Pathways to Happiness measure could help demystify the relationship between happiness, performance, and success in the workplace.

For example, when organizations formally recognize an employee, it is implied that the actions they engaged in to receive said praise are worthwhile and valuable. Furthermore, the employee is recognized as a moral exemplar within their organization. Moral exemplars (Zagzebski, 2017) are individuals who are imitable because their actions are admirable and considered worthwhile by observers.

When leaders engage in positive actions, such as giving praise, they can increase employee efficiency, motivation, creativity, and productivity (Achor, 2011; Allen & McCarthy, 2016). Also, leaders can alter the importance of organizational values by giving praise for certain behaviors. Praise also generates a fulfillment of basic psychological needs (Deci & Flaste, 1996; Maslow, 1943). If done publicly, praise can have a positive effect on the subsequent performance of other workers (Bradler, Dur, Neckermann, & Non, 2016).

Happiness is associated with a wide array of positive relationships for individuals and organizations including greater career success, earning, job performance, and helping

others at work (Boehm & Lyubomirsky, 2008; Singh & Aggarwal, 2017). Previous research has shown that happy individuals tend to earn more money, have higher performance, and engage in more prosocial behaviors. Findings from such projects could help organizations ensure that their workers are happier at work by aligning their values, which could help reduce negative consequences including, poor work-life balance, turnover intentions, and CWBs (Sousa & Porto, 2015; Winslow et al., 2017)

APPENDICES

Appendix A

Pathways to Happiness EFA

<i>Items</i>	<i>Autonomy</i>	<i>Contact w/ Natural World</i>	<i>Outlook: Positivity</i>	<i>Security: Physical</i>	<i>Relationships and Security: Social</i>	<i>Goal Orientation</i>	<i>Outlook: Caring for others</i>	<i>Security: Materials</i>	<i>Task- efficacy</i>	<i>Outlook: Acceptance</i>
It is important to have a strong sense of independence.	0.69									
I will always be independent .	0.726									
I feel happy when I am independent .	0.748									
I often think about being independent .	0.689									
Going outside in		0.747								

nature is better than staying indoors.										
Being outside in nature is important.		0.897								
People need to spend more time outdoors.		0.827								
Nature calms me down.		0.746								
It's important to have a positive outlook every day.			0.746							
Having a positive outlook on life makes me feel calm.			0.771							
Having a positive outlook helps me make better decisions.			0.775							
I feel that I am going in the right direction			0.74							

when I think positively.										
I like to think positively.			0.742							
Physical safety is very important to me.				0.787						
Being physically safe is important for being happy in life.				0.75						
I feel happiest when I'm physically safe from harm.				0.756						
I try to pick physically safe activities.				0.742						
My physical safety is one of my top priorities.				0.781						
I know I can trust the people I am					0.692					

in close relationships with.										
I feel happy with my relationships.					0.674					
Socializing with my close friends immediately brings me joy.					0.626					
I am certain that I am important to those I have relationships with.					0.68					
I know that my friends and family will always be there.					0.666					
The people in my social circles make me happy.					0.738					
I am capable of motivating myself.						0.601				
I am motivated						0.688				

by the possibility of what I can achieve.										
I think about ways to motivate myself all the time.						0.626				
I feel happy when I have a goal to pursue.						0.659				
My future goals determine my present actions and current life.						0.675				
I think about my future goals all the time.						0.647				
I make my decisions based on how I can help other people.							0.700			
I like to devote big chunks of my time to helping other people.							0.793			

I am constantly looking for opportunities throughout the day to help others.							0.781			
I like to spend most of my time helping others.							0.852			
I constantly think of ways to help others.							0.745			
I believe money will solve my problems.								0.713		
I am happy when I have money.								0.668		
I take into account my material possessions when I make decisions.								0.68		
I constantly think about acquiring material possessions.								0.708		

I feel proud when I can motivate myself to complete a task.									0.649	
I feel happy when I complete a task.									0.596	
I feel happy when I feel as if I have used my time wisely.									0.722	
I feel happy when I have enough time to do things.									0.599	
Accepting what happens is an important skill in life.										0.692
I feel happy when I accept things as they are.										0.678
When things are going badly, I work on accepting										0.629

my situation to make myself feel better.										
I base my decisions on accepting what is.										0.667
I think about ways to be at peace with the way things are.										0.688

Table A-1: EFA Results for Pathways to Happiness Measure.

Table 2. Factor Correlations and Average Variance Extracted (AVE) for Pathways to Happiness EFA

Factor	1	2	3	4	5	6	7	8	9	10	AVE
F1	.81										.51
F2	.25	.88									.65
F3	.27	.33	.87								.57
F4	.18	-.02	.34	.88							.58
F5	.20	.32	.62	.29	.84						.46
F6	.44	.26	.56	.37	.48	.88					.42
F7	.21	.35	.36	.40	.35	.45	.88				.60
F8	.22	-.03	.03	.28	.12	.24	.10	.79			.48
F9	.38	.33	.60	.37	.50	.67	.32	.08	.74		.41
F10	.31	.31	.57	.32	.31	.33	.35	.18	.43	.80	.45

Note: Composite reliability (ρ) on diagonal. AVE: Average variance extracted.

1 = Autonomy, 2 = Contact w/ Natural World, 3 = Outlook: Positivity, 4 = Security: Physical, 5 = Relationships and Security: Social, 6 = Outlook: Intrinsic Motivation and Security: Projects, 7 = Outlook: Caring for Others, 8 = Security: Materials, 9 = Outlook: Intrinsic Motivation, Security: Projects, and Security: Time, and 10 = Outlook: Acceptance.

Table A-2: Factor Correlations and Average Variance Extracted (AVE) for Pathways to Happiness EFA

Appendix B

Study 2 Correlations and Factor Loadings

Table 3. Correlations for CFA – Study 2

Observed Variable	1	2	3	4	5	6	7	8	9	10
1. Autonomy	0.77									
2. Contact w/ Nature	0.32*	0.88								
3. Positivity	0.47*	0.56*	0.89							
4. Relationships	0.28	0.25	0.40*	0.88						
5. Project Motivation	0.35*	0.21*	0.50*	0.40*	0.84					
6. WBNS Autonomy	0.24*	0.10	0.23	0.40*	0.34*	0.80				
7. WBNS Competence	0.24	0.21*	0.40*	0.54*	0.60*	0.33*	0.82			
8. WBNS Relatedness	-0.16	-0.20*	-0.40*	-0.60*	-0.30	-0.50*	-0.60*	0.90		
9. Connectedness to Nature	0.20*	0.73*	0.40*	0.24	0.22	0.11	0.30	-0.20	0.93	
10. Positivity Scale	0.12	0.30	0.50*	0.45*	0.42*	0.40*	0.50*	-0.50*	0.30	0.93

Note. Factor alpha reliabilities are found on the diagonal. Significant correlations are denoted as follows: $p < .001$ are in bold and include an asterisk (*), $p < .005$ are in bold, $p < .05$ have an asterisk (*).
N = 175; M = 0; SD = 1.

Table B-1: Correlations for CFA – Study 2

Table 4. Factor Loadings for Confirmatory Factor Analysis – Study 2

lhs	rhs	est.	std	Se
Autonomy	Q9: It is important to have a strong sense of independence	.751		.045
Autonomy	Q10: I will always be independent	.602		.055
Autonomy	Q11: I feel happy when I am independent	.869		.039
Nature	Q13: Going outside in nature is better than staying indoors.	.741		.038
Nature	Q14: Being outside in nature is important.	.883		.023
Nature	Q15: People need to spend more time outdoors.	.778		.034
Nature	Q16: Nature calms me down.	.797		.031
Positivity	Q17: It's important to have a positive outlook every day.	.791		.032
Positivity	Q18: Having a positive outlook on life makes me feel calm.	.839		.027
Positivity	Q19: Having a positive outlook helps me make better decisions.	.778		.033
Positivity	Q20: I feel that I am going in the right direction when I think positively.	.784		.033
Positivity	Q21: I like to think positively.	.704		.041
Relationships	Q22: I know I can trust the people I am in close relationships with.	.727		.038
Relationships	Q23: I feel happy with my relationships.	.689		.042
Relationships	Q24: Socializing with my close friends immediately brings me joy.	.738		.040
Relationships	Q25: I am certain that I am important to those I have relationships with.	.798		.031
Relationships	Q26: I know that my friends and family will always be there.	.785		.034
Relationships	Q27: The people in my social circles make me happy.	.821		.029
Goal Orientation	Q28: I am capable of motivating myself.	.816		.032
Goal Orientation	Q29: I am motivated by the possibility of what I can achieve.	.908		.024

Goal Orientation	Q30: I think about ways to motivate myself all the time.	.539	.058
Goal Orientation	Q31: I feel happy when I have a goal to pursue.	.591	.051
Goal Orientation	Q32: My future goals determine my present actions and current life.	.579	.054
Goal Orientation	Q33: I think about my future goals all the time.	.458	.064
WBNS Autonomy	Q153: I feel like I can be myself at my job.	.722	.046
WBNS Autonomy	Q154: At work, I often feel like I have to follow other people's commands.	.584	.056
WBNS Autonomy	Q157: I feel free to do my job the way I think it could best be done.	.783	.041
WBNS Autonomy	Q158: In my job, I feel forced to do things I do not want to do.	.724	.046
Connectedness to Nature	Q59: I often feel a sense of oneness with the natural world around me.	.836	.025
Connectedness to Nature	Q60: I think of the natural world as a community to which I belong.	.841	.023
Connectedness to Nature	Q63: When I think of my life, I imagine myself to be part of a larger cyclical process of living.	.802	.029
Connectedness to Nature	Q64: I often feel a kinship with animals and plants	.767	.034
Connectedness to Nature	Q65: I feel as though I belong to the Earth as equally as it belongs to me.	.738	.037
Connectedness to Nature	Q68: I often feel part of the web of life.	.866	.022
Connectedness to Nature	Q69: I feel that all inhabitants of Earth, human, and nonhuman, share a common 'life force'.	.738	.030
Connectedness to Nature	Q70: Like a tree can be part of a forest, I feel embedded within the broader natural world.	.797	.030
Positivity Scale	Q77: I am satisfied with my life	.824	.029
Positivity Scale	Q79: Others are generally here for me when I need them.	.730	.039
Positivity Scale	Q80: I look forward to the future with hope and enthusiasm.	.862	.024
Positivity Scale	Q82: I feel I have many things to be proud of.	.776	.034
Positivity Scale	Q83: I generally feel confident in myself.	.844	.027

WBNS Competence	Q159: I really master my tasks at my job.	.667	.047
WBNS Competence	Q160: I feel competent at my job.	.839	.032
WBNS Competence	Q161: I am good at the things I do in my job.	.856	.031
WBNS Relatedness	Q164: I don't really feel connected with other people at my job.	.632	.048
WBNS Relatedness	Q165: At work, I feel part of a group.	.812	.030
WBNS Relatedness	Q166: I don't really mix well with other people at my job.	.748	.037
WBNS Relatedness	Q167: At work, I can talk with people about things that really matter to me.	.833	.028
WBNS Relatedness	Q168: I often feel alone when I am with my colleagues.	.867	.024
WBNS Relatedness	Q169: Some people I work with are close friends of mine.	.729	.040

Table B-2: Factor Loadings for Confirmatory Factor Analysis – Study 2

Appendix C

Study 3 Structural Equation Models, Correlations, and Factor Loadings

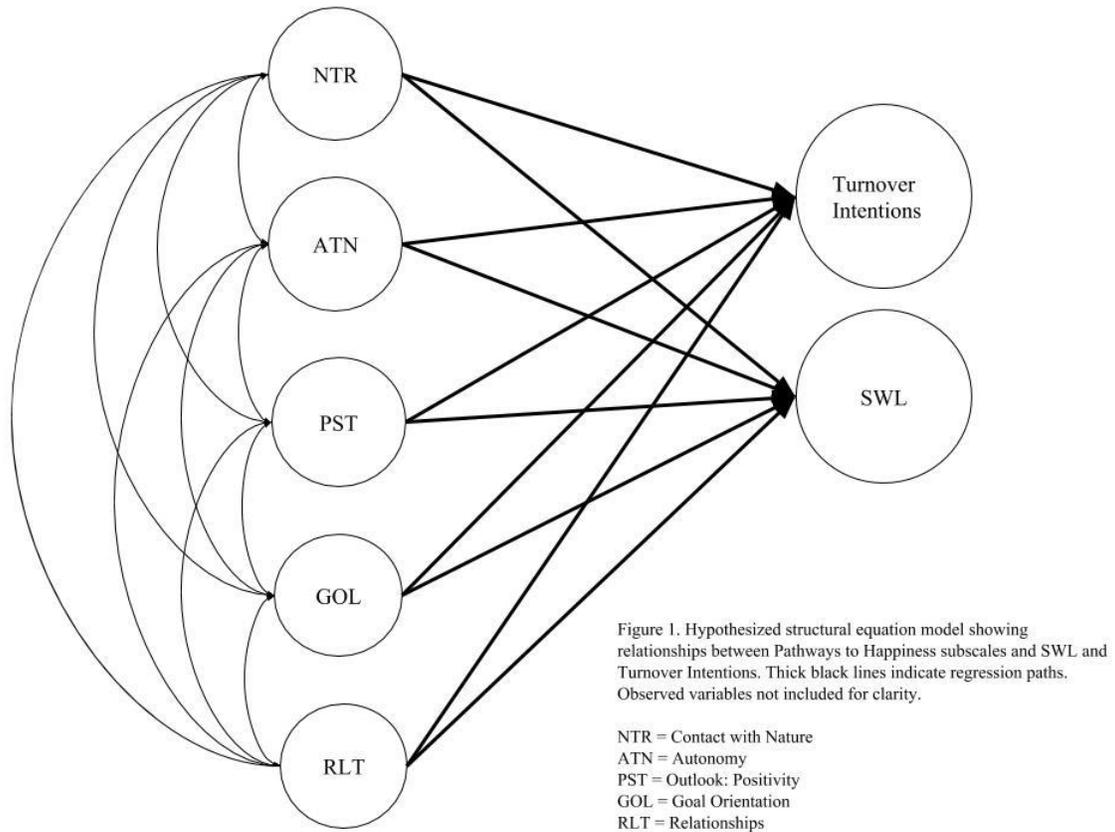


Figure C-1: Hypothesized structural equation model for Study 3

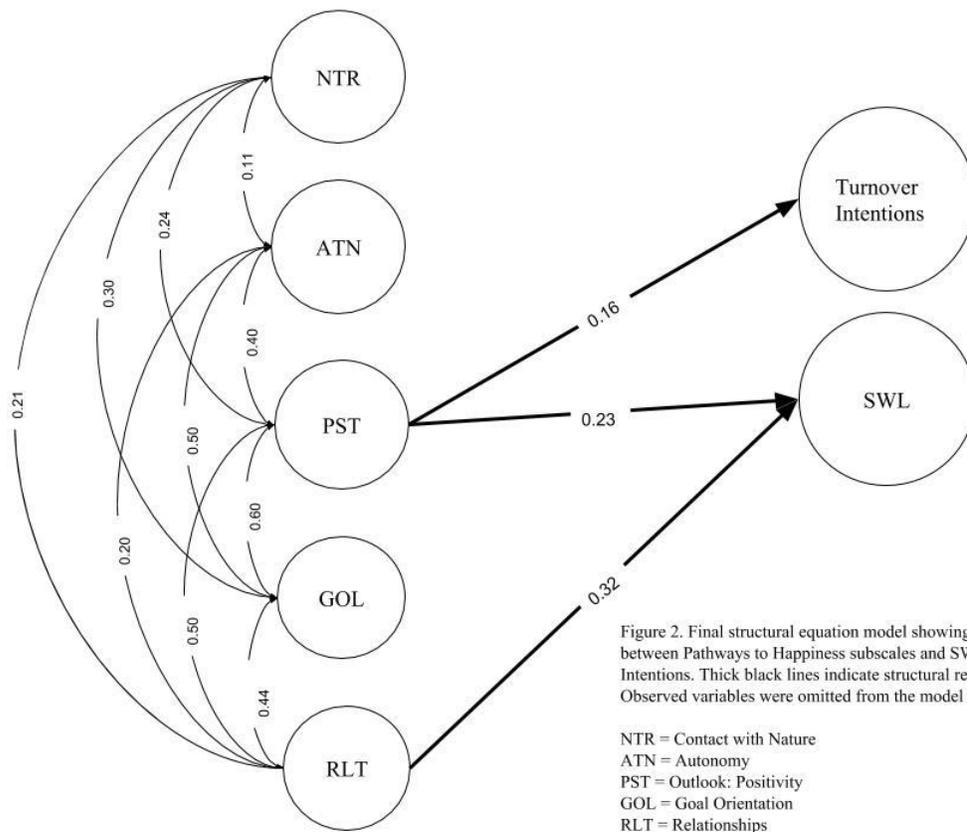


Figure C-2: Final structural equation model for Study 3

Table 6. Correlations for CFA – Study 3

Observed Variable	1	2	3	4	5	6	7
1. Autonomy	0.70						
2. Contact w/ Nature	0.13	0.86					
3. Positivity	0.40*	0.30*	0.87				
4. Relationships	0.20*	0.22	0.60	0.82			
			*				
5. Goal Orientation	0.44*	0.32*	0.63	0.50*	0.80		
			*				
6. SWL	0.20*	0.20*	0.53	0.53*	0.40*	0.83	
			*				
7. Turnover Intentions	0.02	0.08	0.10	-0.05	-0.04	0.00	0.95

Note. Factor alpha reliabilities are located on the diagonal. Significant correlations are denoted as follows: $p < .001$ are in bold and include an asterisk (*), $p < .005$ are in bold, $p < .05$ have an asterisk (*).
N = 267; M = 0; SD = 1.

Table C-1: Factor correlations for CFA conducted in Study 3

Table 7. Correlations for SEM – Study 3

Observed Variable	1	2	3	4	5	6	7
1. Autonomy	0.70						
2. Contact w/ Nature	0.11	0.86					
3. Positivity	0.40*	0.24*	0.87				
4. Relationships	0.20	0.21	0.50	0.82			
			*				
5. Goal Orientation	0.50*	0.30	0.60	0.44*	0.80		
			*				
6. SWL	0.20*	0.20*	0.51	0.52*	0.40*	0.84	
			*				
7. Turnover Intentions	0.03	0.07	0.10	-0.05	-0.02	0.01	0.95

Note. Factor alpha reliabilities are located on the diagonal. Significant correlations are denoted as follows: $p < .001$ are in bold and include an asterisk (*), $p < .005$ are in bold, $p < .05$ have an asterisk (*).
N = 267; M = 0; SD = 1.

Table C-2: Factor correlations for SEM conducted in Study 3

Table 5. Factor Loadings for Structural Equation Model – Study 3

lhs	rhs	est. std	se
Autonomy	Q9: It is important to have a strong sense of independence	.640	.052
Autonomy	Q10: I will always be independent	.781	.050
Autonomy	Q11: I feel happy when I am independent	.564	.054
Nature	Q12: Going outside in nature is better than staying indoors.	.743	.032
Nature	Q13: Being outside in nature is important.	.886	.022
Nature	Q14: People need to spend more time outdoors.	.810	.027
Nature	Q15: Nature calms me down.	.696	.036
Positivity	Q16: It's important to have a positive outlook every day.	.592	.045
Positivity	Q17: Having a positive outlook on life makes me feel calm.	.767	.030
Positivity	Q18: Having a positive outlook helps me make better decisions.	.810	.027
Positivity	Q19: I feel that I am going in the right direction when I think positively.	.826	.026
Positivity	Q20: I like to think positively.	.765	.030
Relationships	Q21: I know I can trust the people I am in close relationships with.	.591	.049
Relationships	Q22: I feel happy with my relationships.	.685	.042
Relationships	Q23: Socializing with my close friends immediately brings me joy.	.596	.050
Relationships	Q24: I am certain that I am important to those I have relationships with.	.700	.043
Relationships	Q25: I know that my friends and family will always be there.	.619	.048
Relationships	Q26: The people in my social circles make me happy.	.692	.042
Goal Orientation	Q27: I am capable of motivating myself.	.594	.046
Goal Orientation	Q28: I am motivated by the possibility of what I can achieve.	.756	.035
Goal Orientation	Q29: I think about ways to motivate myself all the time.	.595	.047
Goal Orientation	Q30: I feel happy when I have a goal to pursue.	.617	.045

Goal Orientation	Q31: My future goals determine my present actions and current life.	.617	.045
Goal Orientation	Q32: I think about my future goals all the time.	.587	.048
SWL	Q34: In most ways my life is close to ideal.	.808	.027
SWL	Q35: The conditions of my life are excellent.	.812	.026
SWL	Q36: I am satisfied with my life.	.793	.028
SWL	Q37: So far, I have gotten the important things I want in life.	.594	.044
SWL	Q38: If I could live my life over, I would change almost nothing.	.622	.042
Turnover Intentions	Q62: I am thinking about dropping my major.	.913	.011
Turnover Intentions	Q63: I am planning to look for a new major.	.989	.005
Turnover Intentions	Q64: I intend to ask people about new majors.	.882	.014
Turnover Intentions	Q65: I don't plan to be in this major much longer.	.922	.010

Table C-3: Factor loadings for structural equation model in Study 3

Appendix D

Measures Used Across All Studies

Turnover Intentions

I am thinking about leaving this organization
I am planning to look for a new job
I intend to ask people about new job opportunities
I don't plan to be in this organization much longer

(Each item is rated on a 1 – 5 Likert scale, 1 = strongly disagree, 5 = strongly agree. The items would be adapted to reflect the students major, e.g., “I am planning to look for a new major”, “I intend to ask people about new academic opportunities or I intend to ask people about other majors” etc.)

(Kelloway et al., 1999)

Connectedness to Nature Scale

Please answer each of these questions in terms of the way you generally feel. There are no right or wrong answers.

1. I often feel a sense of oneness with the natural world around me.
2. I think of the natural world as a community to which I belong.
3. I recognize and appreciate the intelligence of other living organisms.
4. I often feel disconnected from nature.
5. When I think of my life, I imagine myself to be part of a larger cyclical process of living.
6. I often feel a kinship with animals and plants.
7. I feel as though I belong to the Earth as equally as it belongs to me.
8. I have a deep understanding of how my actions affect the natural world.
9. I often feel part of the web of life.
10. I feel that all inhabitants of Earth, human, and nonhuman, share a common ‘life force’.
11. Like a tree can be part of a forest, I feel embedded within the broader natural world.
12. When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature.
13. I often feel like I am only a small part of the natural world around me, and that I am no more important than the grass on the ground or the birds in the trees.
14. My personal welfare is independent of the welfare of the natural world

5-point scale where 1 = 1 strongly disagree and 5 = 5 strongly agree
(Mayer, F. S., & Frantz, 2004)

The Positivity Scale

1. I have great faith in the future.
2. I am satisfied with my life.
3. Others are generally here for me when I need them.
4. I look forward to the future with hope and enthusiasm.
5. On the whole, I am satisfied with myself.
6. At times, the future seems unclear to me (R)
7. I feel I have many things to be proud of.
8. I generally feel confident in myself.

Note: (R) Reversed Item.

5-point scale where 1 = strongly disagree and 5 = 5 strongly agree
(Caprara et al., 2012)

Work-related Basic Need Satisfaction Scale

Need for autonomy

1. I feel like I can be myself at my job
2. At work, I often feel like I have to follow other people's commands (R)
3. If I could choose, I would do things at work differently (R)
4. The tasks I have to do at work are in line with what I really want to do
5. I feel free to do my job the way I think it could best be done
6. In my job, I feel forced to do things I do not want to do (R)

Need for competence

1. I really master my tasks at my job
2. I feel competent at my job
3. I am good at the things I do in my job
4. I have the feeling that I can even accomplish the most difficult tasks at work

Need for Relatedness

1. I don't really feel connected with other people at my job. (R)
2. At work, I feel part of a group.
3. I don't really mix well with other people at my job. (R)
4. At work, I can talk with people about things that really matter to me.
5. I often feel alone when I am with my colleagues. (R)
6. Some people I work with are close friends of mine.

Note. (R) Reversed Item.

5-point scale where 1 = totally disagree and 5 = totally agree
(Broeck, Vansteenkiste, White, & Lens, 2010)

Satisfaction with Life Scale

Instructions for administering the scale are: Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding. The 7-point scale is: 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 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.

(Diener, Emmons, Larsen, & Griffin 1985)

REFERENCES

- Achor, S. (2011). *The happiness advantage: The seven principles of positive psychology that fuel success and performance at work*. Random House.
- Adler, A. (2012). *Social Interest: A Challenge to Mankind* (J. Linton & R. Vaughn, Trans. H. Stein Ed. Kindle Edition ed.). Bellingham, WA, USA: Alfred Adler Institute of Northwestern Washington.
- Allen, M. S., & McCarthy, P. J. (2016). Be happy in your work: The role of positive psychology in working with change and performance. *Journal of Change Management*, 16(1), 55-74.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13(1), 27-45.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.
- Bannister, B. D., & Griffeth, R. W. (1986). Applying a causal analytic framework to the Mobley, Horner, and Hollingsworth (1978) turnover model: A useful reexamination. *Journal of Management*, 12(3), 433-443.
- Barnard, C.I. (1938), *The Functions of the Executive*, Harvard University Press, Cambridge, MA.
- Blais, A.-R., & Weber, E. U. (2006) A Domain-Specific Risk-Taking (DOSPERT) scale for adult populations. *Judgment and Decision Making*, 1, 33-47.
- Boehm, JK, & of career assessment, L.-S. (2008). Does happiness promote career success? *Journal of career assessment*. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/1069072707308140>
- Bohlmeijer, E., ten Klooster, P. M., Fledderus, M., Veehof, M., & Baer, R. (2011). Psychometric properties of the five facet mindfulness questionnaire in depressed adults and development of a short form. *Assessment*, 18(3), 308-320.

- Bradler, C., Dur, R., Neckermann, S., & Non, A. (2016). Employee recognition and performance: A field experiment. *Management Science*, *62*(11), 3085-3099.
- Bretz Jr, R. D., Boudreau, J. W., & Judge, T. A. (1994). Job search behavior of employed managers. *Personnel Psychology*, *47*(2), 275-301.
- Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). CONSEQUENCES OF INDIVIDUALS' FIT AT WORK: A META ANALYSIS OF PERSON-JOB, PERSON-ORGANIZATION, PERSON-GROUP, AND PERSON-SUPERVISOR FIT. *Personnel psychology*, *58*(2), 281-342. doi:10.1111/j.1744-6570.2005.00672.x
- Broeck, A., Vansteenkiste, M., Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. *Journal of Occupational and Organizational Psychology*, *83*(4), 981-1002.
- Bujacz, A., Vittersø, J., Huta, V., & Kaczmarek, L. D. (2014). Measuring hedonia and eudaimonia as motives for activities: cross-national investigation through traditional and Bayesian structural equation modeling. *Frontiers in psychology*, *5*, 984.
- Caprara, G. V., Alessandri, G., Eisenberg, N., Kupfer, A., Steca, P., Caprara, M. G., ... & Abela, J. (2012). The positivity scale. *Psychological Assessment*, *24*(3), 701.
- Chahal, H., & Mehta, S. (2010). Antecedents and consequences of organisational citizenship behaviour (OCB): A conceptual framework in reference to health care sector. *Journal of Services Research*, *10*(2), 25.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational research methods*, *4*(1), 62-83.
- Conceição, P., & Bandura, R. (2008). Measuring subjective wellbeing: A summary review of the literature. *United nations development programme (UNDP) development studies, working paper*.
- Cooke, & Counseling ..., M. (2016). Measuring well-being: A review of instruments. doi:10.1177/0011000016633507
- Crandall, J. E. (1975). A scale for social interest. *Journal of individual psychology*, *31*(2), 187.
- Dawis, R. V. (1992). The individual differences tradition in counseling psychology. *Journal of Counseling Psychology*, *39*(1), 7.
- Deci, E. L., & Flaste, R. (1996). *Why we do what we do: Understanding self-motivation*. London: Penguin books.

- Deci, E. L., Cascio, W. F., & Krusell, J. (1975). Cognitive evaluation theory and some comments on the Calder and Staw critique. *Journal of personality and social psychology*, 31(1), 81-85.
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian psychology/Psychologie canadienne*, 49(3), 182.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, 11(4), 227-268.
- Delle Fave, A., Massimini, F., & Bassi, M. (2011). Hedonism and eudaimonism in positive psychology. In *Psychological selection and optimal experience across cultures* (pp. 3-18). Springer Netherlands.
- Diener, E. (1984). Subjective well-being. *Psychological bulletin*, 95(3), 542.
- Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social indicators research*, 31(2), 103-157.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American psychologist*, 55(1), 34.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, 49(1), 71-75.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological bulletin*, 125(2), 276.
- Dunn, H. L. (1961). High level wellness.
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social psychology*, 51(5), 1058.
- Fredrickson, B. L. (2004). The Broaden-and-Build Theory of Positive Emotions. *Philosophical Transactions*,
- Grinde, B. (2012). *The Biology of Happiness*. New York: Springer.
<http://dx.doi.org/10.1007/978-94-007-4393-9>
- Harrison, D. A., Price, K. H., Gavin, J. H., & Florey, A. T. (2002). Time, teams, and task performance: Changing effects of surface-and deep-level diversity on group functioning. *Academy of management journal*, 45(5), 1029-1045.

- Haybron, D. M. (2013). *Happiness: A Very Short Introduction*. Oxford, UK: Oxford University Press.
- Henderson, L. W., & Knight, T. (2012). Integrating the hedonic and eudaimonic perspectives to more comprehensively understand wellbeing and pathways to wellbeing. *International Journal of Wellbeing*, 2(3).
- Henderson, L. W., Knight, T., & Richardson, B. (2013). An exploration of the well-being benefits of hedonic and eudaimonic behaviour. *The Journal of Positive Psychology*, 8(4), 322-336.
- Henderson, & International, K. (2012). Integrating the hedonic and eudaimonic perspectives to more comprehensively understand wellbeing and pathways to wellbeing.
- Hollenbeck, J. R., Klein, H. J., O'leary, A. M., & Wright, P. M. (1989). Investigation of the construct validity of a self-report measure of goal commitment. *Journal of Applied Psychology*, 74(6), 951.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Articles*, 2.
- Huta, & of Studies, R. (2010). Pursuing pleasure or virtue: The differential and overlapping well-being benefits of hedonic and eudaimonic motives.
- Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological bulletin*, 97(2), 251.
- Joseph, S., & DiDuca, D. (2007). The Dimensions of Religiosity Scale: 20-item self-report measure of religious preoccupation, guidance, conviction, and emotional involvement. *Mental Health, Religion and Culture*, 10(6), 603-608.
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness*. New York, NY: Hyperion.
- Kashdan, TB, & of Positive ..., B.-D.-R. (2008). Reconsidering happiness: The costs of distinguishing between hedonics and eudaimonia. *The Journal of Positive ...*
doi:10.1080/17439760802303044
- Kelloway, E. K., Gottlieb, B. H., & Barham, L. (1999). The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of occupational health psychology*, 4(4), 337.
- Keyes, C., & of Psychology, A.-J. (2009). Feeling good and functioning well: Distinctive concepts in ancient philosophy and contemporary science. *The Journal of Positive Psychology*. doi:10.1080/17439760902844228

- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford publications.
- Klein, H. J., & Wright, P. M. (1994). Antecedents of goal commitment: An empirical examination of personal and situational factors. *Journal of Applied Social Psychology, 24*(2), 95-114.
- Langfred, C. W., & Moye, N. A. (2004). Effects of task autonomy on performance: an extended model considering motivational, informational, and structural mechanisms. *Journal of applied psychology, 89*(6), 934.
- Lent, R. W. (2004). Toward a unifying theoretical and practical perspective on well-being and psychosocial adjustment. *Journal of Counseling Psychology, 51*(4), 482.
- Little, B.: 1989, 'Personal projects analysis: Trividal pursuits, magnificent obsessions, and the search for coherence', in D. Buss and N. Cantor (eds.), *Personality Psychology: Recent Trends and Emerging Directions* (Springer-Verlag), pp. 15-31
- Lord, H. G. (1918). *The Psychology of Courage*. Boston, MA: John W. Luce.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour research and therapy, 33*(3), 335-343.
- Lucas, R. E., Diener, E., & Suh, E. (1996). Discriminant validity of well-being measures. *Journal of personality and social psychology, 71*(3), 616.
- Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of environmental psychology, 24*(4), 503-515.
- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied psychology, 63*(4), 408.
- Muchinsky, P. M., & Monahan, C. J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of vocational behavior, 31*(3), 268-277.
- Norton, D. L. (1976). *Personal Destinies*. Princeton: Princeton University Press
- Peterson, C., Park, N., & Seligman, M. E. (2005). Orientations to happiness and life satisfaction: The full life versus the empty life. *Journal of happiness studies, 6*(1), 25-41.
- Pury, C. L. S., & Hensel, A. D. (2010). Are courageous actions successful actions? *The Journal of Positive Psychology, 5*(1), 62-72. doi:10.1080/17439760903435224

- Pury, C. L. S., & Starkey, C. B. (2010). Is courage an accolade or a process? *The psychology of courage: Modern research on an ancient virtue*. Washington, DC: American Psychological Association.
- Pury, C. L., Starkey, C. B., Kulik, R. E., Skjerning, K. L., & Sullivan, E. A. (2015). Is courage always a virtue? Suicide, killing, and bad courage. *The Journal of Positive Psychology, 10*(5), 383-388.
- Ravlin, E. C., & Meglino, B. M. (1987). Effect of values on perception and decision making: A Study of alternative work values measures. *Journal of Applied psychology, 72*(4), 666.
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling and more. Version 0.5–12 (BETA). *Journal of statistical software, 48*(2), 1-36.
- Rojas, M. (2004). *Well-being and the complexity of poverty: A subjective well-being approach* (No. 2004/29). Research Paper, UNU-WIDER, United Nations University (UNU).
- Rojas, M. (2005). A conceptual-referent theory of happiness: Heterogeneity and its consequences. *Social Indicators Research, 74*(2), 261-294.
- Rokeach, M. (1973). *The nature of human values*. Free press.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology, 52*(1), 141-166.
- Ryan, R. M., & Huta, V. (2009). Wellness as healthy functioning or wellness as happiness: The importance of eudaimonic thinking (response to the Kashdan et al. and Waterman discussion). *The Journal of Positive Psychology, 4*(3), 202-204.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology, 57*(6), 1069.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology, 69*(4), 719.
- Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological inquiry, 9*(1), 1-28.
- Sagiv, L., & Schwartz, S. H. (2000). Value priorities and subjective well-being: Direct relations and congruity effects. *European journal of social psychology, 30*(2), 177-198.
- Schmitt, T. A. (2011). Current methodological considerations in exploratory and confirmatory factor analysis. *Journal of Psychoeducational Assessment, 29*(4), 304-321.

- Schneider, L., & Schimmack, U. (2009). Self-informant agreement in well-being ratings: A meta-analysis. *Social Indicators Research*, 94(3), 363.
- Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online readings in Psychology and Culture*, 2(1), 11.
- Schwarz, N., & Strack, F. (1991). Context effects in attitude surveys: Applying cognitive theory to social research. *European review of social psychology*, 2(1), 31-50.
- Seligman, M. E. (2011). Flourish: a visionary new understanding of happiness and well-being. *Policy*, 27(3), 60-1.
- Sinclair, S. J., Siefert, C. J., Slavin-Mulford, J. M., Stein, M. B., Renna, M., & Blais, M. A. (2012). Psychometric evaluation and normative data for the depression, anxiety, and stress scales-21 (DASS-21) in a nonclinical sample of US adults. *Evaluation & the Health Professions*, 35(3), 259-279.
- Singh, S., & Aggarwal, Y. (2017). Happiness at Work Scale: Construction and Psychometric Validation of a Measure Using Mixed Method Approach. *Journal of Happiness Studies*. doi:10.1007/s10902-017-9882-x
- Sousa, J. M. D., & Porto, J. B. (2015). Happiness at work: Organizational values and person-organization fit impact. *Paidéia (Ribeirão Preto)*, 25(61), 211-220.
- Starkey, CB, Kulik, RE, & of ... S.-K. (2015). Is courage always a virtue? Suicide, killing, and bad courage. *The Journal of ...* doi:10.1080/17439760.2015.1004552
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of counseling psychology*, 53(1), 80.
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of personality and social psychology*, 64(4), 678.
- Waterman, A. S. (2008). Reconsidering happiness: a eudaimonist's perspective. *The Journal of Positive Psychology*, 3(4), 234-252. <http://dx.doi.org/10.1080/17439760802303002>
- Waterman, A. S., Schwartz, S. J., & Conti, R. (2008). The implications of two conceptions of happiness (hedonic enjoyment and eudaimonia) for the understanding of intrinsic motivation. *Journal of Happiness Studies*, 9(1), 41-79.

- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, 54(6), 1063.
- Winslow, C. J., Hu, X., Kaplan, S. A., & Li, Y. (2017). Accentuate the positive: Which discrete positive emotions predict which work outcomes? *The Psychologist-Manager Journal*, 20(2), 74.
- Weber, E. U., Blais, A.-R., & Betz, N. (2002). A domain-specific risk-attitude scale: Measuring risk perceptions and risk behaviors. *Journal of Behavioral Decision Making*, 15, 263-290.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of management Review*, 14(3), 361-384.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of occupational health psychology*, 5(1), 84.
- Yang, LQ, Che, H, & of and Spector - PE. (2008). Job stress and well-being: An examination from the view of person-environment fit. *Journal of Occupational and ...*
doi:10.1348/096317907X243324
- Zagzebski, L. (2017). *Exemplarist moral theory*. Oxford University Press.