Origins of Purpose in Life: Refining our Understanding of a Life Well Lived

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Abstract

Purpose can be characterized as a central, self-organizing life aim. Central in that when present, purpose is a predominant theme of a person's identity. Self-organizing in that it provides a framework for systematic behavior patterns in everyday life. As a life aim, a purpose generates continual goals and targets for efforts to be devoted. A purpose provides a bedrock foundation that allows a person to be more resilient to obstacles, stress, and strain. In this paper, we outline a theoretical model of purpose development. Besides outlining various essential ingredients to creating a purpose in life, we describe three broad pathways. The first process is proactive involving effort over time and only resulting in a purpose after gradual refinement and clarification. The second process is reactive involving a transformative life event where a purpose arises and adds clarity to the person's life. The third process is social learning - involving the formation of purpose through observation, imitation, and modeling. Our aim is to stimulate more research on this higher-level construct in the architecture of personality.

Keywords: Purpose, meaning in life, well-being; strivings, interests, curiosity.

As researchers make inroads into why certain people are able to create lives that are most worth living, an endless array of variables enter the mix. There are temporary states such as positive emotions, mindfulness, and the act of savoring a meaningful event (Csiksentmihalyi, 1990; Fredrickson, 1998; Lyubomirsky, King, & Diener, 2005). These temporary states come from beliefs where basic psychological needs are satisfied such that a person feels autonomous, competent,

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and a sense of belonging (Deci & Ryan, 2000). There are personal strengths such as gratitude, optimism, and distress tolerance (Peterson & Seligman, 2004). There are social conditions that enable positive states and traits such as supportive relationships and organizations (Reis, Collins, & Berscheid, 2000; Terjesen, Jacofsky, Froh, & DiGiuseppe, 2004). And if we seriously consider the multiple levels that characterize a person, from their personality traits to their goals and life narratives, and the biological and social factors that influence each level (McAdams, 1996; Sheldon, 2004), the list of models to account for happiness, meaning in life, and other elements of well-being is nothing short of paralyzing. In this paper, we suggest that some psychological factors are more important than others for staying on course toward a fulfilling life despite obstacles, failures, and the absence of positive feedback. This point is not controversial. However, far too much work in the field of positive psychology, no different than other areas of psychology, is what we call "variable-centric". Far too much scientific attention and resources is weighted in favor of lower-level constructs to study the antecedents, correlates, and consequences of well-being. By lower-level constructs, we are referring to positive states and personality traits (or strengths). We believe there is value in adding to the smaller body of work focusing on higher-level constructs reflecting enduring strivings and life narratives. We propose that the concept of purpose in life represents a higher-level psychological construct that offers insight into how and why certain people are healthy and successful in the long-term.

Purpose is defined as a central, self-organizing life aim. *Central* in that if present, purpose is a predominant theme of a person's identity. If we envision a person positioning descriptors of their personality on a dartboard, purpose would be near the innermost, concentric circle. Purpose is *self-organizing* in that it provides a framework for systematic behavior patterns in everyday life. Self-organization should be evident in the goals people create, the effort devoted to these goals, and decision-making when confronted with competing options of how to allocate finite resources such as time and energy. A purpose motivates a person to dedicate resources in particular directions and toward particular goals and not others. That is, terminal goals and projects are an outgrowth of a purpose. As a *life aim,* a purpose cannot be achieved. Instead, there are continual targets for efforts to be devoted. A purpose provides a bedrock foundation that allows a person to be more resilient to obstacles, stress, and strain. Persistence is easier with a life aim that resonates across time and context. It is easier to confront long lasting, difficult challenges with the knowledge that there is a larger mission in the background. Moving in the direction of a life aim can facilitate other elements of well-being such as life satisfaction, serenity, and mindfulness (Wilson & Murrell, 2004; Wong & Fry, 1998). Equally interesting is the idea that a behavioral commitment to purpose in life might compensate for reductions in other elements of well-being during periods of difficulty and adversity (for suggestive research, see Alim et al., 2008; Coward, 1994; Creswell, et al., 2005; Hobfoll et al., 2007).

Most of the existing work on purpose in life has relied on global self-report questionnaires. This line of work asks respondents to endorse the degree to which their life has a purpose or mission (Crumbaugh & Maholick, 1964; Ryff, 1989; Steger & Frazier, 2005). Related work assesses goals that are pursued because they are intrinsically enjoyable or important as opposed to extrinsic reasons (Sheldon & Elliot, 1999). These processes are necessary but not sufficient for an assessment of purpose. If a purpose is present, people should be equipped to clarify and elaborate their goals and how these goals are woven into larger value systems. Goals pursued for intrinsic or self-determined reasons may be connected to core value and meaning systems. A person with a purpose in life should have overarching values that consistently manifest at the behavioral and cognitive level on a day-to-day basis.

The relative absence of measurement models and assessment devices to study purpose only allow us to rely on indirect research to speculate on the causes, correlates, and consequences of purpose. Our definition of purpose provides an entry point to begin creating assessment devices to study purpose in life more directly. Additional details of our conceptual model of purpose are outlined elsewhere (McKnight & Kashdan, 2009). This includes a merger of existing, diverse literatures to provide preliminary support that the benefits of purpose cannot be accounted for by lower-level constructs. The main purpose of this paper is to outline the various reasons why some people develop a purpose in life (and others live a happy, healthy, long lasting life without this particular mechanism).

The Development of Purpose

An intriguing question arises when we consider where purpose may come from and how it might be fostered. Our model is based upon an interpretation of the relevant research literature concerning related constructs of approach motivation, self-determination, interests, and meaning in life. The model identifies the roles played by biological vulnerabilities, psychological processes, and social environments which can lead in combination with equifinality to the development of purpose in life. Equifinality refers to the fact that a given outcome can be attained by various means and processes, and there is no single route (Cicchetti & Rogosch, 1996). The final outcome of purpose can result from various initial ingredients that operate together in various configurations.

Those initial ingredients may come at many levels. At a biological level of analysis, approach and avoidance temperament might be the most fundamental. Across various literatures, there is robust evidence for two independent biologically based motivational systems often referred to as the Behavioral Approach System (BAS) and Behavioral Inhibition System (BIS) (Carver, Sutton, & Scheier, 2000; Depue, 1996; Gray, 1981; Watson, Wiese, & Vaidya, 1999). The BAS is responsible for sensitivity to potential reward cues and initiates motivation to seek

them out. The BIS is responsible for sensitivity to potential threat and punishment cues and initiates the avoidance of these sources of danger. Each of these systems serves as the guiding influence for particular types of affect, motivation, and personality traits (Carver, Sutton, & Scheier, 2000). People with a stronger BAS are more likely to be extraverted, experience a high frequency of positive affect, react strongly to rewarding events in the laboratory and everyday life, and create and pursue approach-related goals; people with a stronger BIS are more likely to be introverted, experience a high frequency of negative affect, react strongly to physical, psychological, and social threats, and create and pursue avoidance goals. Based on our definition of the constituent elements of purpose, people with a stronger BAS and weaker BIS possess a pattern of thoughts, feelings, behaviors, and motivational tendencies that provide an advantage to finding and living in a way that is consistent with a purpose. This level of analysis provides an entry point into the development of purpose, however, greater explanatory power is likely to reside from an understanding of how the outputs of these systems lead to particular influential life events - a point we shall return to shortly.

Another ingredient to the development of purpose is the pursuit of self-concordant goals. The degree to which a person's strivings reflect their innermost values and interests are the defining feature of self-concordant goals (cf. Sheldon & Kasser, 1998; Sheldon & Elliot, 1999). Self-concordant goals are the epitome of self-determination and are associated with greater effort and attainment over time (being much more important than goal content). Factors that increase the likelihood of self-concordant goals and their successful pursuit are relevant to purpose development. An antecedent to self-concordant goals is available opportunities to better understand and strengthen one's innermost values and interests. Whether it is introspection, recognition and capitalization on potential reward cues in the environment, internalization of these experiences, or some combination, people with a stronger BAS can be expected to be at a greater advantage. In particular, being curious and exploratory is expected to be integral to the process of developing a purpose. Curiosity attracts people to new experiences. Self-expansion is inevitable, no matter how slight, when a person is exploring the unknown or challenging the limits of their knowledge and skills. When people feel curious, there is an intense desire to explore or take advantage of opportunities to expand the self (Izard, 1977; Kashdan, 2009). This expansion process can include clarifying and strengthening pre-existing interests and values (depth), or the construction and broadening of interest and value categories (breadth) (Fredrickson, 1998; Renninger, Hidi, & Krapp, 1992; Tomkins, 1962). This expansion process can lead to interests or passions, defined as reliable intentionally sought after sources of joy and meaning (Silvia, 2001; Vallerand et al., 2003). These sources of enjoyment and meaning are important, however, interests and passions vary in the degree to which they are connected to other elements in a person's life narrative, personality, or identity. Some interests and passions are at the core of a person's identity and others are relatively tangential, lingering on the periphery. While the

presence of purpose can be defined as a passionate interest, not all interests or passions can be construed as a purpose.

Each of the ingredients outlined above can lead to the development of purpose which when present, offers insight into the totality of a person across time and context. These ingredients are not sufficient for understanding the genesis of purpose, however, as they also lead to interests, passions, and other highly circumscribed positive experiences. We discuss how under the right conditions, these interests sometimes serve as intermediate points in the development of purpose.

Given our definition, conceptual model (see McKnight & Kashdan, 2009), along with a few necessary ingredients, we now speculate on the broader development process of purpose. It is important to note that these ideas merely form a set of testable hypotheses and in no way do we consider there to be a single way of developing purpose. In fact, we hold that there are probably three broad processes for the development of purpose. The first process is proactive involving effort over time and only resulting in a purpose after gradual refinement and clarification. The second process is reactive - involving a transformative life event where a purpose arises and adds clarity to the person's life. The third process is social learning - involving the formation of purpose through observation, imitation, and modeling. We provide greater detail for these processes below.

Proactive Development

A purpose may be difficult to form and may only come from an effortful and gradual development process. Thus, purpose may come from a deliberate searching and refining process that we term proactive. For this process to unfold, we expect that a person must possess a curious nature for the intentional pursuit of meaningful and rewarding behaviors. The proactive development process is characterized by the formation of interests (Silvia, 2001) through curious exploration. As an entry point, people need to be aware, open, and receptive to new experiences and alternative ways to examine themselves and the outside world (Bishop et al., 2004; McCrae, 1993). The more a person seeks out novel and potentially rewarding behaviors, the greater the likelihood that the person will form a coherent understanding of her environment and the associated contingencies (cf. detecting and creating meaning; Kashdan & Steger, 2007). Learning and growing are inevitable by-products of being curious and exploratory (for a review, see Kashdan, 2009; Silvia, 2006). However, many instances of curiosity are transitory experiences that might capture attention and be satisfying but fail to hold attention and transfer into a stable, lasting structural element of the self (Krapp, 2002; Loewenstein, 1994). Other ingredients are needed to explain how momentary curiosity can transform into long-lasting interests and in some cases, the formation of a purpose.

We expect that to fully develop a purpose from pursuing and engaging new and challenging events, a person must be able to recognize and capitalize on situations that allow for the synthesis of potentially illuminating experiences. This includes intentionally embarking on restorative periods to reflect on and integrate material into associative networks that comprise the self (this can take the form of assimilation, accommodation, or some combination). Restorative periods also allow for a revitalization of a person's finite supply of stamina, attentional resources, and self-control capacity to effectively adapt to the demands of everyday life. Effort and ability, however, are not the only requirements for proactive purpose development. A third and final requirement is a degree of chance or

serendipity. As a person curiously seeks out environmental data, they will encounter random stimuli that may provoke a response. If those random stimuli provide the opportunity for a strong positive response then the direction of curiosity may now be dictated for the foreseeable future.

Similar theories exists for the development of creativity (Campbell, 1960) (blind-variation-and-selective-retention model of creative thought) and scientific genius (Simonton, 1988) (chance-configuration theory of scientific genius). What these models hold is the dictum that trial and error along with chance provide the grounds by which creativity and genius might form. We posit that the same process likely holds for the development of purpose. If a person studies a field carefully, observes events that can be synthesized into the core body of knowledge gained to date, and then extrapolate to form new insights after a novel observation then that person is likely to be deemed a creative or scientific genius. A person exhibiting the same focus but directed toward the environment and evaluated by the response to those environmental contingencies may develop a purpose.

While the models may appear similar because they are developmental and evolutionary models at their core, they differ on the outcomes. Campbell and Simonton's models tend to focus on externally evaluated outcomes whereas our model of purpose focuses on an internal resolution or "satisficing" solution. At some point in the trial, error, and chance process, a person may come to the realization that a satisfactory purpose has been reached or at least a purpose that can be further refined (Simon, 1956). The same could be said about both the creative and scientific discovery processes but with those ends, the results often depend upon others or nature to dictate what is "right." In the process of developing a purpose, the "satisficing" solution is less about pursuing happiness (Schwartz et al., 2002) and more about discovering the architectural framework that allows for an authentic expression of those elusive innermost values and interests originally discussed by Aristotle (350 BC/1962 CE; 1986) and applied by contemporary psychologists (e.g., Seligman, 2002; Sheldon & Elliot, 1999).

The core of this proactive model is a strong tendency toward curiosity and sustained attention regardless of the demand. Furthermore, throughout the process, the person needs to have a stable self-concept connected to an enduring memory of

an event. Given these requirements, there must also be some level of serendipity whereby the person comes to the point of realization that the search has borne fruit and that fruit provides a compass for her life. When and how that serendipitous or chance event occurs and how it may manifest can vary. In some cases, a person may recognize this compass through social interactions or introspection that a new motive stimulates decisions and helps prioritize options. Chance, therefore, may play a role in the recognition of purpose. More importantly, however, chance likely dictates the direction of the compass by providing stimuli that steer a person toward one purpose and away from another. That is to say that there exists some random element that dictates which purpose a person may choose after an effortful advancement from curiosity through self and environmental exploration eventually to some level of synthesis. We propose that acts of exploration, intentional reflection and synthesis are key elements leading to strong and broad structural additions to the self (e.g., purpose). The process contrasts sharply with the more superficial process of fleeting positive experiences and circumscribed interests that may develop (for related work on internalization, see Deci & Ryan, 2000; Silvia, 2001).

Reactive Development

Another role of chance in the formation of purpose may come well before any effort was expended to explore the environment. We hypothesize that a chance event transforms a person's focus and sense of personal meaning and therefore provides an alternative pathway for purpose development. Transformative life events such as direct (e.g., near death experiences) or indirect (e.g., death of a loved one) traumatic exposure may play the role of chance that forms or at least initiates the formation of a purpose (Tedeschi & Calhoun, 2004). Events such as heart attacks (Affleck, Tennen, Croog, & Levine, 1987), illness and death of children (Affleck & Tennen, 1991; Polatinsky & Esprey, 2000), and severe (Affleck et al., 2001; Bower et al., 2005; Coward, 1990) and terminal illness diagnosis (Coward, 1994) are just some of the events that are routinely studied in the stress response and coping literature. Stressful events may trigger a person to quickly re-evaluate priorities, become more introspective, seek out more rewarding behaviors, and create meaning via synthesis (Bonanno, 2004). In short, the event triggers a sudden transition through the proactive development process but without the lengthy and effortful trial-and-error process.

It is not imperative that the transformative life event take place prior to any effort to develop a purpose. Reactive purpose development may happen at any time. A person may already be laying the foundation of a purpose by the proactive development process and experience a transformative life event. The important aspect of the reactive process is that the event triggers the person to accelerate through the process of seeking out rewarding behaviors through a trial and error

process and then synthesizing the results to form a more coherent sense of purpose. The end result of both developmental processes is purpose.

Social Learning Development

The third and final process of developing a purpose follows along the social learning theory framework of Bandura (1977). Developing a purpose begins through a vicarious process of observing others, noting how the behaviors result in certain outcomes, and associating those behaviors with the recognized outcomes. As the outcomes become more pleasing, the observer aims to mimic them to reach the same ends. We recognize that people of all ages watch others behave and take note of the social ramifications of those behaviors. For example, children observe their parents and mimic many of their parents' behavior. Children go on to practice the same religion as their parents, eat many of the same foods, and often capture the demeanor and practice similar habits and preferences as their parents. Why? Perhaps some of these common outcomes are genetic (Bouchard Jr., 2004) but we would argue that modeling plays a non-trivial role in the development process. The same can be said in general about the development of purpose. People are likely to observe others behaving in ways that elicit positive emotions. A person may help another person in a time of crisis and if others see that kind act, it likely affects future behavior. The more an observer sees similar acts and also recognizes the positive associated outcomes, the more likely a person will assign a positive valence to the causal behaviors. Purpose for some may originate from others. That is to say that the purpose did not come from a laborious act of self-discovery or the chance occurrence of a transformative life event but rather from the mere observation of another's behaviors and the associated emotional reaction that was paired with those behaviors.

The social learning model follows along the logical path as Bandura had originally postulated (Bandura, 1977). It begins with people observing others. Through observation people are able to mimic the observed behaviors. As those observers mimic the behaviors, they often end up modeling the behaviors for others to see. Where the theory aids in our description of purpose and its development is the concept of viral transmission purpose may spread through others. Religion serves as an excellent example of the viral effects of social learning. It is important to stress that we use the term "viral" in a non-judgmental way that connotes transmission. With respect to religion, children grow up in religious households. Those children observe their parents, siblings, friends, and neighbors behaving in accord with a religious faith. Those behaviors become "normalized" and soon are acted out by the children. The more a community fosters these behaviors, the stronger the religious following becomes. In a sense, religion spreads through others. Purposes may spread through others in the same way. In fact, purpose may be more virulent than religion in that people may observe behaviors in ways that

are even more removed than simply being vicarious. People could vicariously observe behaviors or hear of purposes through communication (e.g., message exchange), entertainment (e.g., movies), or imaginal exposure. Since purpose has no restrictions, people are free to follow what provides them with the greatest reward.

Hybrid Development

There is no reason to suspect that people develop purposes through only one process. In fact, it is far more reasonable to expect that people develop a purpose through all or a combination of the three developmental pathways. For example, a person may be actively seeking and developing a purpose that was once learned from another person's behaviors. The purpose would initially begin with the social learning process but then move toward the proactive process. Similarly, a person may experience a transformative life event while engaged in the proactive development process. A transformative life event that triggers the reactive purpose may require that a person have a modicum of direction before the event and that direction most likely comes from some level of social learning or self-discovery. Purpose, therefore, likely comes from a combination of three developmental processes.

Non-conscious priming might play a strong role in the hybrid development of purpose and, more importantly, in the incentive to develop a purpose. In fact, we hypothesize that priming is particularly important in group processes. Consider an example that clarifies this point - home field advantage in sports. It is a commonly held and empirically substantiated belief that home teams tend to win more often than when they are visiting an opponent (Courneya & Carron, 1992; Carron, Loughhead, & Bray, 2005). The home field advantage may be a product of additional crowd support or reduced hassles attributable to travel. The same advantage afforded by the home crowd may turn into a disadvantage for reasons directly related to purpose. Self-reflection or self-presentation (Baumeister & Steinhilber, 1984) may adversely affect home performance. Home teams with great pressure to win tend to lose more often compared to the visiting teams with the same outcome pressure. The lower the expectations, the lower the pressure and the more likely the home team will be favored. It was hypothesized by Baumeister and Steinhilber (1984) that the social climate of support and expectation directs an individual's attention inward and thus interfere with performance. The players are not conscious of this force because, if they were aware, presumably they might seek a neutral site to decrease the effect. Non-conscious priming in this context focuses the players on themselves and provides stimuli that may be more powerful than well-learned behaviors. The hybrid development process likely mimics this general process in that the unconscious priming effects of either social learning or transformative life events may cause people to re-evaluate even the most ingrained behaviors that were developed systematically through a more proactive process.

Conclusion

Studying philosophical issues such as purpose in life is no small feat. Our goal with this paper is to provide a clear definition of purpose in life and outline a theoretical model of the various processes that might contribute to purpose development. Concrete answers are not provided instead, we hope to stimulate researchers to move beyond variable-centric approaches to address the multiple levels of personality (i.e., a person-centric approach). Far too much of the literature consists of atheoretical attempts to measure a researcher's favorite variable and examine relations with health and well-being outcomes. No single agent is likely to be sufficient to understanding health and well-being.The combination of higher and lower level constructs and the dynamic relations among them offer the promise of comprehensive models. For some people, purpose in life will be irrelevant. For others, purpose in life exists and an omission of this construct will render it impossible to understand the origin of their thoughts, behaviors, and strivings. We look forward to the empirical studies that will validate, refute, refine, and extend these ideas about the nature and origin of purpose.

REFERENCES

Affleck, G., & Tennen, H. (1991). The effect of newborn intensive care on parents' psychological well-being. *Children's Health Care, 20,* 6-14.

Affleck, G., Tennen, H., Croog, S., & Levine, S. (1987). Causal attribution, perceived benefits, and morbidity after a heart attack: An 8-year study. *Journal of Consulting and Clinical Psychology, 55,* 29-35.

Affleck, G., Tennen, H., Zautra, A., Urrows, S., Abeles, M., & Karoly, P. (2001). Women's pursuit of personal goals in daily life with fibromyalgia: A value-expectancy analysis. *Journal of Consulting and Clinical Psychology, 69,* 587-596.

Alim, T.N., Feder, A., Graves, R.E., Wang, Y., Weaver, J., Westphal, M., et al. (2008). Trauma, resilience, and recovery in a high-risk African-american population. *American Journal of Psychiatry, 165,* 1566-1575.

Aristotle (1986). *Nicomachean ethics*. New York: Macmillan, (Original published 4th Century BCE).

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Baumeister, R., & Steinhilber, A. (1984). Paradoxical effects of supportive audiences on performance under pressure: The home field disadvantage in sports championships. *Journal of Personality and Social Psychology, 47*, 85-93.

Bishop, S.R., Lau, M., Shapiro, S., Anderson, N., Carlson, L., Segal, Z.V., et al. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, *11*, 230–241.

Bonanno, G.A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist, 59,* 20-28.

Bouchard Jr., T. (2004). Genetic influence on human psychological traits: A survey. *Current Directions in Psychological Science, 13,* 148-151.

Bower, J.E., Meyerowitz, B.E., Desmond, K.A., Bernaards, C.A., Rowland, J.H., & Ganz, P.A. (2005). Perceptions of positive meaning and vulnerability following breast cancer: Predictors and outcomes among long-term breast cancer survivors. *Annals of Behavioral Medicine, 29,* 236-245.

Campbell, D. (1960). Blind variation and selective retention in creative though as in other knowledge processes. *Psychological Review, 67,* 380-400.

Carron, A., Loughhead, T., & Bray, S. (2005). The home advantage in sport competitions: Courneya and Carron's (1992) conceptual framework a decade later. *Journal of Sports Sciences, 23,* 395-407.

Carver, C.S., Sutton, S.K., & Scheier, M.F. (2000). Action, emotion, and personality: Emerging conceptual integration. *Personality and Social Psychology Bulletin, 26,* 741-751.

Cicchetti, D., & Rogosch, F.A. (1996). Equifinality and multifinality in developmental psychopathology. *Development and Psychopathology*, *8,* 597–600.

Courneya, K., & Carron, A. (1992). The home advantage in sport competitions: A literature review. *Journal of Sport and Exercise Psychology, 14,* 13-27.

Coward, D.D. (1990). The lived experience of self-transcendence in women with advanced breast cancer. *Nursing Science Quarterly, 3,* 162-169.

Coward, D.D. (1994). Meaning and purpose in the lives of persons with aids. *Public Health Nursing, 11,* 331-336.

Creswell, J.D., Welch, W.T., Taylor, S.E., Sherman, D.K., Gruenewald, T.L., & Mann, T. (2005). Affirmation of personal values buffers neuroendocrine and psychological stress responses. *Psychological Science*, *16*, 846-851.

Crumbaugh, J.C., & Maholick, L.T. (1964). An experimental study in existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology, 20,* 200–207.

Csikszentmihalyi, M. (1990). *Flow*. New York: Harper & Row

Deci, E., & Ryan, R. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11,* 227-268.

Depue, R.A. (1996). A neurobiological framework for the structure of personality and emotion: Implications for personality disorders. In J.F. Clarkin & M.F. Lenzenweger (Eds.), *Major theories of personality disorder* (pp. 347-391). New York: Guilford.

Fredrickson, B. (1998). What good are positive emotions? *Review of General Psychology, 2,* 300-319.

Gray, J.A. (1981). A critique of Eysenck's theory of personality. In H.J. Eysenck (Ed.), *A model for personality* (pp. 246-277). Berlin: Springer.

Hobfoll, S.E., Hall, B.J., Canetti-Nisim, D., Galea, S., Johnson, R.J., & Palmieri, P. (2007). Refining our understanding of traumatic growth in the face of terrorism: Moving from meaning cognitions to doing what is meaningful. *Applied Psychology: An International Review, 56*, 345–366.

Izard, C.E. (1977). *Human emotions.* New York: Plenum.

Kashdan, T.B. (2009). *Curious? Discover the missing ingredient to a fulfilling life*. New York, NY: HarperCollins.

Kashdan, T.B. & Steger, M.F. (2007). Curiosity and pathways to well-being and meaning in life: Traits, states, and everyday behaviors. *Motivation and Emotion, 31,* 159-173.

Krapp, A. (2002). Structural and dynamic aspects of interest development: Theoretical considerations from an ontogenetic perspective. *Learning and Instruction, 12,* 383-409.

Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin, 116,* 75–98.

Lyubomirsky, S., King, L.A., & Diener, E. (2005). The benefits of frequent positive affect. *Psychological Bulletin, 131,* 803-855.

McAdams, D.P. (1996). Personality, modernity, and the storied self: A contemporary framework for studying persons. *Psychological Inquiry, 7,* 295–321.

McCrae, R. (1993). Openness to experience as a basic dimension of personality. *Imagination, Cognition, and Personality, 13,* 39-55.

McKnight, P.E., & Kashdan, T.B. (2009). Purpose in life as a system that creates and sustains health and well-being: An integrative, testable theory. *Manuscript under review.*

Peterson, C. & Seligman, M.E.P. (2004). *Character strengths and virtues: A Handbook and classification*. New York: Oxford University Press.

Polatinsky, S., & Esprey, Y. (2000). An assessment of gender differences in the perception of benefit resulting from the loss of a child. *Journal of Traumatic Stress, 13,* 709-718.

Reis, H.T., Collins, W.A., & Berscheid, E. (2000). The relationship context of human behavior and development. *Psychological Bulletin, 126,* 844-872.

Renninger, K., Hidi, S., & Krapp, A. (1992). *The role of interest in learning and development*. Hillsdale, NJ: Erlbaum.

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,* 1069–1081.

Schwartz, B., Ward, A., Monterosso, J., Lyubomirsky, S., White, K., & Lehman, D.R. (2002). Maximizing versus satisficing: Happiness is a matter of choice. *Journal of Personality and Social Psychology, 83,* 1178-1197.

Seligman, M. (2002). *Authentic happiness*. New York: Free Press.

Sheldon, K.M. (2004). *Optimal human being: An integrated multi-level perspective*. New Jersey: Erlbaum.

Sheldon, K., & Elliot, A. (1999). Goal striving, need-satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology, 76,* 482-497.

Sheldon, K., & Kasser, T. (1998). Pursuing personal goals: Skills enable progress but not all progress is beneficial. *Personality and Social Psychology Bulletin, 24,* 1319-1331.

Silvia, P. (2001). Interest and interests: The psychology of constructive capriciousness. *Review of General Psychology, 5,* 270-290.

Silvia, P. (2006). *Exploring the psychology of interest*. New York: Oxford University Press.

Simon, H.A. (1956). Rational choice and the structure of the environment. *Psychological Review, 63,* 129-138.

Simonton, D. (1988). *Scientific genius: A psychology of science*. Cambridge: Cambridge University Press.

Steger, M.F., & Frazier, P. (2005). Meaning in life: One link in the chain from religion to well-being. *Journal of Counseling Psychology, 52,* 574-582.

Tedeschi, R., & Calhoun, L. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15,* 1-18.

Terjesen, M.D., Jacofsky, M.D., Froh, J.J., & DiGiuseppe, R.A. (2004). Integrating positive psychology into schools: Implications for practice. *Psychology in the Schools, 41,* 163-172.

Tomkins, S.S. (1962). *Affect, imagery, consciousness: Vol. 1, The positive affects.* New York: Springer.

Vallerand, R.J., Blanchard, C., Mageau, G.A., Koestner, R., Ratelle, C., Leonard, M., et al. (2003). Les passions de l'ame: on obsessive and harmonious passion. *Journal of Personality and Social Psychology, 85,* 756-767.

Watson, D., Wiese, D., & Vaidya, J. (1999). The two general activation systems of affect: Structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology, 76,* 820-838.

Wilson, K.G. & Murrell, A.R. (2004). Values work in Acceptance and Commitment Therapy: Setting a course for behavioral treatment. In S.C. Hayes, V.M. Follette, & M. Linehan, (Eds.), *The new behavior therapies: Expanding the cognitive behavioral tradition* (pp. 120-151). New York: Guilford Press.

Wong, P.T.P., & Fry, P.S. (1998). *The human quest for meaning: A handbook of psychological research and clinical application.* Mahwah, NJ: Lawrence Erlbaum.