

MY ETERNAL DOUBT:
A STRUCTURAL ANALYSIS OF EXISTENTIAL MEANINGFULNESS

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Abstract
of
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The existential perspective on human existence posits that individuals create meaning for themselves subjectively by becoming authentic. Modern research has defined meaning as well-being, studying objectively constructed sources and goals that provide a universal sense of purpose. The present study created a structural psychological model based on existential theory to represent the process of subjective meaning-making. Results supported the proposed model statistically; interpretations were supported by existential theory. Mediation was achieved in both structures, indicating that having an epistemic interest in self-discovery leads one to self-reflect which through metacognitive self-evaluation creates a curious need to know more and reflect on different perspectives; thus, self-reflection partially mediates epistemic curiosity in developing compassionate perspective-taking. Further, compassionate perspective-taking fully mediated self-reflection's influence on having a sense of existential meaningfulness through self-transcendence and authenticity. Despite limitations to generalizability, the study provides a successful base for future research on existentially based processes of subjective meaning-making.

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Chapter 1

INTRODUCTION

It is this question that makes philosophers of us all, at some time or other. Not everyone wonders late into the night what the stars are made of or how the immune system works. But wondering what it is that makes me me, is never very far from one's elbow.

- Patricia Churchland, *The Brain and Its Self*

Nostalgia for unity, that appetite for the absolute illustrates the essential impulse of the human drama.

- Albert Camus, *An Absurd Reasoning*

Existentialism considers the nature of human existence from the other side of rationalism and empiricism, it takes up the cause for humankind being “the valuing animal” whose responsibility as the agent of consciousness is not only to observe and measure the natural world objectively but also to give it value, or meaning, through our experience of it (Nietzsche, 1964, p. 9). On a large scale we collectively create culture and society, on a more personal scale we create communities and carve out seemingly unique landscapes within which we suss out some purpose for our individual lives; no matter on what scale we are creating, we play a role in making and placing value judgments on everything; essentially to make life meaningful within the framework of our lives. The aim of the existential perspective is to empower people to turn their evaluative ability inward to consider the framework of their individual lives and the source of the values by which they judge themselves and others; to recognize that as

individual conscious beings we each have the potential *to be ourselves* and with that we have the ability to create a more personally valuable existence for ourselves. According to existential theory, as individuals, people may make their lives more personally, *existentially*, meaningful as they learn to differentiate between their learned habits and their potential as free agents; by transcending the habitual practices of objectification they apply to themselves and others based on a system of “universal” truths and by choosing for themselves the values that authentically represent who they are through how they choose to live, they give themselves the opportunity to take ownership of their choices and embrace the unique responsibility their freedom affords (Crowell, 2020; Friedman, 1964).

As the study of meaning has recently garnered interest in various modes of psychological research, existential theory is often mentioned in a historical context but rarely utilized as a basis for modeling the process of experiencing meaning. In lieu of following the existentialist line which views meaningfulness as a result of subjective self-determined self-valuation, researchers instead have logically tended to pursue the eudaimonic model of meaning, which approaches existential themes of meaning from an objective standpoint founded in Aristotelian virtue ethics (Baumeister, 1991; Brandstätter, 2001; Hursthouse & Pettigrove, 2018; Reker & Wong, 1988; Shields, 2016; Steger, 2005; Wong, 2012). The difference between the two approaches may be illustrated through the perspective used to communicate the process; for instance, the eudaimonic model aims to identify what *gives* life purpose or how one *finds* meaning, whereas the existential model aims to understand how the individual *creates* meaning for

their own life. As such, one perspective places meaning in the hands of an outside source while the other places meaning in the hands of the individual as their own source. In contrast to the eudaimonic model of meaning wherein the subject is defined by one's attainment of a greater purpose driven by completion of subordinate goals determined by commonly accepted values of success, happiness, or well-being, the existential perspective approaches meaning as subjectively constructed with no universal externally prescribed goals or greater purpose other than to transcend the boundaries of such previously listed hedonic values in an effort to live authentically. (Baumeister, 1991; Schnell, 2011; Steger, 2005; Wong, 2012).

The work presented herein was inspired by the creative and volitional approach existentialist thinkers utilized to account for life's meaning as experienced from the subjective perspective of the individual. Rather than focusing on objective sources of meaning or goals an individual might pursue in an effort to find meaning, the approach taken here focused on the subjective processes individuals experience as they attempt to self-authenticate. After analyzing the themes of existential theory and conceptualizing them as parts of a process by which existential meaningfulness is created by the individual, the present study sought to explain the subject in a structural model by translating the existential themes into latent composites of psychological constructs and modeling them to represent the process subjective meaning making according to the philosophical conception. Since the focus of this study is existential theory and its perspective on the nature of human existential meaning, the historical review which follows touches on a variety of ontological, epistemological, and ethical themes that

influenced the existentialist movement. The key themes are human consciousness, subjectivity, self-reflection, values of morality, freedom of choice, responsibility, intersubjectivity, transcendence and authenticity.

Existential meaningfulness is herein understood to be experienced concomitantly with an individual's commitment to living authentically; a lifelong effort of transcendence which is developed progressively through processes of self-reflection, perspective-taking, responsibility, and self-determined meaning-making.

Focus of Present Research

The aim of the work presented in this paper was to explicate from existential theory the processes by which existential meaningfulness is created subjectively by and for the individual. Based on this analysis, this study hoped to answer two questions:

1. How might the theoretical processes of existential meaning-making be represented by measurable psychological constructs?
2. How should a structural model of existential meaning-making be configured to faithfully represent existential theory?

Historical Background: Philosophical Precursors to Existentialism

As early as Antiquity, philosophers sought to discern the relation between human existence and the physical world. Those of Ancient Greece were first to postulate that what sets human nature apart from other aspects of nature is our consciousness; our essential function in nature is to be conscious which allows us to observe, consider, choose, and act (Hunt, 2007; Nails, 2020; Palmer, 1988; Thorne & Henley, 1997).

Socrates emphasized the philosophical utility of our rational ability in the form of inquiry. He placed supreme importance on the necessity of questioning everyone and everything in an effort to understand the truth of human existence, and in saying “the unexamined life is a life not worth living,” he implored others to do the same (Nails, 2020; Palmer, 1988, pg. 52). To Socrates, the subjectivity of our consciousness gifts us with the tools for living *the good life* by examining our motives, determining our values, and mastering our passions. Further, his work implies that he held human consciousness to be of the highest value in existence, for as it is our means to understanding ourselves within the natural world, without it he believed life would lack meaning altogether (Nails, 2020; Palmer, 1988).

Akin to Socrates, Plato took a subjective approach to the nature of truth and attempted to explain reality in terms of *ideas* rather than by *appearances*. Plato proposed that the true forms of reality exist in an immaterial state of *Ideals*, and that the objects we interact with in the material world are like shadow images projected on a wall, we perceive only the appearance of the thing, not the thing itself (Hunt, 2007; Kraut, 2017; Palmer, 1988; Thorne & Henley, 1997). Our senses therefore only provide us with representations of reality, which Plato asserted should not be trusted on their own; however, because of our consciousness, humans can access the true forms of reality through a heightened conscious state of reflection. Plato’s idealism represents an extreme position on understanding the nature of reality as being completely subjective, but being as such it was also helpful in conceptualizing the opposite, that taking a completely objective position on understanding the nature of reality may be too limiting a

perspective since how an object appears to one observer may appear differently to another (Hunt, 2007; Kraut, 2017; Palmer, 1988; Thorne & Henley, 1997).

In contrast to Plato's perspective, Aristotle only trusted knowledge preceding from the experience of the senses to be an accurate representation of reality. He took the systematic approach to understanding the objective truths of reality through his method of deductive reasoning. In Aristotle's *Metaphysics*, he describes a teleological theory of change that applies to all of nature where each object contains both its own potentiality and actuality and, dictated by the boundaries of its essential function, naturally strives towards its most perfect state; in other words, its actualized end state determines its purpose for existing (Palmer, 1988; Shields, 2016; Thorne & Henley, 1997). In his *Nicomachean Ethics*, Aristotle uses this theory to argue that the nature of human existence is also teleological; he posits that our consciousness frees us from the passivity observed in other objects and makes us agents of change upon ourselves and other objects within a higher functional caste of nature (Hursthouse & Pettigrove, 2018; Kraut, 2018; Palmer, 1988; Shields, 2016). Given this special agentic function and its accompanying role of power over other things, our consciousness makes us responsible, according to a set of virtues applied from a social context, for living up to our potential to be our best, most virtuous selves (Hursthouse & Pettigrove, 2018; Kraut, 2018). According to this framework, since humankind is defined by how well we live up to our potential, unlike other objects of nature, our value can be variable because our essential function, consciousness, necessarily allows for choice. Aristotle borrowed from Socrates when he supposed that the greatest potential for humankind is to flourish (i.e., eudaimonia), which

is to achieve the *Ultimate Good*. This notion of a prescient kind of ultimate purpose is supposed by Aristotle to guide our lives through our rational mind in accordance with *virtue* (a set of intellectual, temperamental, and hedonic values comprising the ethical standards of the time), so that we may experience well-being (Hursthouse & Pettigrove, 2018; Kraut, 2018; Shields, 2016). Aristotle's approach to understanding human existence then is teleological; our value as individuals depends on our achievements in pursuit of fulfilling our essential purpose, a sense of well-being that is actualized by living a virtuous life according to the ethical standards of society. Additionally, Aristotle addressed the fact that some may exist, according to the *natural* order of society, in a lower caste and therefore would be limited in their abilities to achieve the ultimate eudaimonic good (Hursthouse & Pettigrove, 2018; Kraut, 2018; Shields, 2016).

Though Aristotle recognized that our agentic function in nature gives us a higher-level purpose, he claimed that purpose was essentially preordained by our nature; thus, his view rendered us as slaves to Nature's will. Aristotelian philosophy persisted throughout the ages continuing to inform the status quo; during the Medieval period, Aristotle's works were transmuted by religious scholasticism and Nature's will became God's will, and consequently, the will of the Christian church (Shields, 2016).

Saint Thomas Aquinas was a scholastic priest whose divinely ordained task was to preserve the teachings of Aristotle, by adopting his ideas into the doctrine of the church (Hunt, 2007; McNerny & O'Callaghan, 2018). An example that is important to the theme of *existential freedom* is his interpretation of moral law. Aquinas replaced the Aristotelian *Ultimate Good* with the God of Christianity, who the Church assumed to

represent perfection; therefore, as humans were created by God to be in his image, our essential purpose is to live in accord with the law of God, as presented in biblical morality, to strive for perfection (Hunt, 2007; McInerny & O'Callaghan, 2018). He addressed the agentic function of the human soul and the effect of the context of our life situations by adding that we could pursue a variety of eudaimonic ends to fulfill our purpose, in a hierarchical sense, but our freedom to choose was always being weighed by our responsibility to strive to be perfect like our creator (McInerny & O'Callaghan, 2018). Since according to Aristotelian logic there can be no contradictions in perfection, then the standard to which all of creation is held must then also hold to God the creator, making the law impervious to the will of the deity who proclaimed it. In this sense, even God is a slave to his nature.

Through figures such as St. Thomas Aquinas, the Church made philosophic inquiry accessible, but not without injecting the necessity of *Faith* through the fear of God into the quest for truth; for if one were to question Church doctrine in any form, a trial for heresy would surely ensue. Descartes not only respected this law, but also seemed to truly value its origin and purpose, as we see in his writing (Hatfield, 2015; Hunt, 2007; Thorne & Henley, 1997). In his work, *Discourse on Method for Rightly Conducting One's Reason and Seeking Truth in the Sciences*, Descartes discusses his “excessive desire to learn to distinguish the true from the false” for he felt no harmony or relief in the works of the ancient philosophers, but instead he felt an inspiration to search for truth in the opposite direction (Descartes, 1993, pg. 112). His appreciation and aptitude for mathematics guided him to the conclusion that the rules governing

mathematics should similarly govern a method of reason, which could be applied to both philosophy and the sciences (Hatfield, 2015; Hunt, 2007; Thorne & Henley, 1997; Wilson, 1993).

In *Treatise on Man*, Descartes detailed the development of his method of reason. His method essentially begins with doubt; doubt all propositions that may deceive. For a proposition to be true, it must clearly and distinctly be known through the intuition of a totally focused mind (Wilson, 1993). He proposed that deductive reasoning should be enacted through intuition which relies on an innate inner sense that is the essence of truth, and that the exterior senses are dubious and should not be included in the process. By starting with doubt, denying sensory input, and deducing truth into its simplest form, his assessment naturally led him to begin with his own thoughts. Turned inward upon himself, he deduced that he was undoubtedly thinking and doubting; thus, he uncovered an illuminating truth, "I think, therefore I am" (Descartes, 1993, pg. 127). He further deduced that the purpose of the essence of *l'ame* (meaning soul or mind) is to reason, and that it does not need a body to exist and perform its duty; therefore, the mind must be singular and separate from the body (Hatfield, 2015; Hunt, 2007; Thorne & Henley, 1997; Wilson, 1993). Descartes, after careful application of his method of intuitive reason, considered God perfect and undeceiving, which led him to deduce that it was from God which all innate truth was derived.

Believing that he had proven the existence of the thinker and the source of the thinker (God), he also tackled the existence of the physical world. He argued that since God is not deceitful and he gave us minds, bodies to inhabit, and senses by which to

perceive the material world (also a gift from God), then the material world, our senses, and our bodies must be real because God would not deceive us with false experience (Hatfield, 2015; Hunt, 2007; Thorne & Henley, 1997; Wilson, 1993). In Socratic fashion, Descartes questioned the materialist objectivity of the status quo and discovered with subjective certainty that through rational reflective analysis of our sensuous experiences we may interpret our physical reality and determine the value of things subjectively. Though Descartes looked to his faith in God for divine purpose, by demonstrating our ability for phenomenological examination, he laid the groundwork for understanding existential freedom for thinkers like Kierkegaard and Husserl, and in that way human existence was no longer necessarily bound to Nature or God's will.

By the 18th century, trust in the certainty of Science and Reason had dislodged the dominance of the church, but explanations for the laws of nature and morality offered by the two prominent philosophical perspectives, rationalism and empiricism, continued to rehash the same old epistemological argument, submitting our freedom to either the intellectual will of Reason or the demonstrable will of Nature. In his work, *Critique of Pure Reason*, Immanuel Kant managed to synthesize the two perspectives with his transcendental idealism. While he agreed somewhat with the empiricists that some knowledge begins with experiences, he felt that there must be some other kinds of knowledge existing before experience. While we can experience individual sensations, we cannot experience the laws of nature, or cause and effect. The proposition that every change is enacted by some cause seems acceptable, but it cannot be verified by experience without our being able to experience every change that occurs. Experience,

because it is limited to sensations, is finite; thus, it cannot provide knowledge about the universality of propositions (Rohlf, 2014; Thorne & Henley, 1997). Kant saw the nature of the solution as being in *a priori*, or before the senses, such that the mind is made up of structures that actively turn sensations into perceptions and perceptions into knowledge. Kant argued that *synthetic a priori* claims, claims that say something new about the subject that are true without reference to experience, formed the basis of knowledge. These claims provide information about objects that are independent of experience, but that have a place in the empirical world, such as causation (Rohlf, 2014; Thorne & Henley, 1997).

Kant explained the mind as being an active agent, working through *synthetic a priori* knowledge to process incoming sensations by classifying them (sound, taste, etc.) according to their innate forms of *intuition*, or perception, which are space and time. Sensations become perceptions based on where in space the object is projected and when in time the object is projected. Perceptions are further transformed into knowledge through their innate forms of conception, which Kant called *categories of thought*. The twelve categories of thought, including reality, totality, cause and effect, existence, and nonexistence, allow us to have conceptual knowledge by virtue of being *synthetic a priori* structures of the mind. This explains how the mind can conceive of one event causing another without having directly experienced it; it is an explanation of cognition (Rohlf, 2014; Thorne & Henley, 1997). Kant further explains that our experiences of the *noumenal* world, or the physical world, are being constantly filtered by the innate structures of our minds to form the *phenomenal* world, or our inner world. The noumenal

world is not something we can experience directly, but through our intuitions and conceptions, it is represented in our minds, so that we may interact with it.

Finally, Kant believed that, like the existence of universal principles governing the law of nature, a priori judgments of morality existed as universal principles governing people's actions; He called this this moral law the *Categorical Imperative*. While Kant proposed that the Categorical Imperative was a natural structure built into our consciousness, he also warranted that we are able to act as we please, with respect to the burden of responsibility that comes with choice; thus, Kant claimed for humanity an existential freedom that comes with a set of rules by which everyone should abide (Rohlf, 2014; Thorne & Henley, 1997).

Western society in the 19th century was built upon the ideals of Enlightenment thinkers like Kant; the power of Reason helped people break free from religious dogmatism and gave them a sense of autonomy, agency and equality by making truth objective and accessible through scientific inquiry and analysis. Amongst the progress forged by values of certainty and consensus, writers Soren Kierkegaard and Friedrich Nietzsche, recognized as proto existentialists within the movement, considered the fate of the "existing individual" (Crowell, 2020; Kierkegaard, 1964, pg. 114). Though their influences were divergent, for instance, Kierkegaard was a devout Christian while Nietzsche was a devout atheist, their values were complementary in their presentations of the individual perspective on the existential subject.

Inspired by his personal faith in God and his displeasure with the state of the Christian church, Kierkegaard articulated a philosophy to address the subjective nature of

human experience. He felt that the church no longer represented the transcendent nature of true faith and had become a meaningless tradition, its followers being as religious zealots blindly touting the rules for a virtuous existence without knowing first-hand the passionate nature of divine inspiration. To Kierkegaard, this was a result of a shifting societal paradigm towards over-generalization and deindividualization in an idealized project to unify humanity under universal moral law which is prescriptive of what he called “*the crowd*” (Kierkegaard, 1964, pg. 113). Kierkegaard used his concept of *Faith* to illustrate the difference between living inauthentically among the crowd and living with radical subjective freedom as an individual. The crowd represents a mode of existence that relies on consensus to provide objectively constructed knowledge and values by which society can live life with relative certainty (Crowell, 2020; McDonald, 2017). He argued that the pursuit of certainty is appropriate for understanding knowledge and values that meet the objective criteria for truth, but for understanding knowledge and values that are constrained by their derivation to exist only for the individual subject who experiences them, which do not meet the objective criteria for truth, *doubt* must be embraced. To be certain of something is to have objectively analyzed its possible outcomes and discovered its limitations; whereas to doubt something is to accept that the limits of its possibility are unknown. Kierkegaard felt that God, as the model of infinite and unknown possibility, must be embraced through doubt rather than certainty; thus, the “faith” touted by religious zealots was actually an objective perspective of ethical certainty based on their acceptance of a universal moral law that had been endowed by the church and not, contrary to their claims, based on a true faith in God (Crowell, 2020;

McDonald, 2017). In contrast, Kierkegaard saw true faith as a “teleological suspension of the ethical” through which an individual, in an act of radical subjective freedom, chooses to transcend the lack of objective certainty and embrace the absurdity of doubt (McDonald, 2017, section 4). In this realization of existential freedom, the individual has risen above the objective perspective of ethical certainty, rejecting the limitations placed on them by universal moral law to instead let their value be subjectively determined by according to their own individual, infinite possibility represented in God.

Whereas Kierkegaard’s faith in God led him to view the individual as free according to their subjective determination of truth, it was Nietzsche’s conception of the death of God that led him to view the individual as free in their self-determined creation of values. Like Kierkegaard, Nietzsche viewed the societal move toward science and reason as contributing to an overreliance on the consensus of ‘the crowd’ for moral values, but to Nietzsche the outbreak of conformity was due to the *nihilism*, or lack of belief, that had grown with our realization that there is no higher authority or universal moral law to rely on for revelations of value (Aho, 2016; Crowell, 2020; Lanier, 2017). With the burden of freedom and confused by the leftover conditioning of religious morality, we developed a new universal standard for the autonomous individual embodied by our conscience; but refusing to be free, we used our freedom to create limits for ourselves and each other. This idea of value creation is Nietzsche’s version of realization, as his fictional depiction of the prophet Zarathustra says, “through valuation only is there value; and without valuation the nut of existence would be hollow. Hear it, ye creating ones!” (Nietzsche, 1964, pg. 66). In *Thus Spake Zarathustra*, Nietzsche also

offered a prescription for an ideal version of a self-creating being who grows out of nihilism and embraces their nature in all its absurdity to become the authentic “overman.”

Both Kierkegaard and Nietzsche emphasized the importance of considering human existence from the subjective perspective of the individual; a perspective which finally offered an explanation for our ability to determine our own systems of value by setting us free from the teleological standards of objective truth. Within the individual’s realization of their subjective freedom, they each also recognized a particular tension experienced from the inward reflection on the pull of the crowd, Kierkegaard called it *angst* and Nietzsche likened it to being a sick animal; these foundational insights revealed what would come to be known as the *human condition* (Aho, 2016; Crowell, 2020). Unique for their time, both thinkers were recognized as forefathers to the movement of existentialism and inspired the phenomenological approach to understanding the problem of consciousness.

In the early 20th century Edmund Husserl addressed the problem of trying to explain human consciousness as an object to be referenced within the causal framework of natural science. He proposed that consciousness is itself a self-contained normative categorical framework through which our experience of the natural world is assigned meaning (Beyer, 2018).

With his method of “phenomenological reduction”, Husserl attempted to explain how the *essential structures* (aka experiences) of our consciousness work to turn our perception of objects in the world (real or imagined) into rational structures of thought (Beyer, 2018, section 6; Sawicki, 2020). *Intentionality*, in the phenomenal sense, is the

function of consciousness (also called transcendence). Our consciousness is always engaged in intentionality, which is to say it is always directed at something that is independent of itself, constructing experience (Siewert, 2020). To explain the phenomenal experience of our own experience, or self-awareness, Husserl proposed that there are two states of self-reflective consciousness: pre-reflective consciousness and reflective consciousness (Gallagher & Zahavi, 2019). To be intentional toward the experience of our consciousness is to be in a state of self-reflection. In contrast, pre-reflective consciousness is simply the state of existing which is always intentionally experiencing the contents of its existence within its situation. Reflective consciousness is not an object, a separate entity from our being, as is supposed in Cartesian dualism; rather, it is the subject of its own being (Gallagher & Zahavi, 2019). This method can then also explain the experience of intersubjectivity, or empathy, where one attempts to take on the perspective of another, as consciously attributing the experience of our reflective consciousness' intentionality to "other subjects" (Beyer, 2018).

Chapter 2

EXISTENTIAL MEANINGFULNESS

Existential Theory and the Process of Existential Meaning Making

The aim of the existential perspective on human nature was to shift the focus away from being general and abstract (i.e. “*what gives life purpose?*”) to being particular and concrete (i.e. “*how do I give my life meaning?*”). Rather than defining the whole of human existence solely according to a causal framework that gives humanity a universal, quantifiable system of values from which individuals may choose their life’s purpose, existentialism suggested that it is also important to recognize that each human being is free to define their own individual existence for themselves; by reflecting on their subjective existential freedom and taking responsibility for their choices, individuals may realize how they create the values by which they live thus giving their chosen purpose subjective meaning. Existential theory describes a process by which an individual experiences subjective existential meaningfulness as they commit to living authentically.

Basic Assumptions of Existential Theory

The process of existential meaning-making works under the assumptions that human existence objectively lacks meaning, that the content of subjective experience can be understood as structures of self-identification, that the subjective nature of human existence entails radical freedom of choice, that the individual is responsible for the system of values they create for their existence alone, and that to maintain one’s life as being subjectively meaningful one must continually renew their commitment to being responsible for their existential freedom (Aho, 2016; Crowell, 2020; Friedman, 1964).

The view of human existence as objectively meaningless is assumed not as a nihilistic giving-up-on-meaning altogether, but rather the opposite, as an existential call to action to recognize the subjective opportunity in the objective lack of meaning. Kierkegaard called it the *Absurd*; Heidegger called it the *nothing*; both likened it to death; it represents the arbitrary nature of an individual's existence when one's self-concept is still only understood by its objective truths (Crowell, 2020; Heidegger, 1964; Kierkegaard, 1964; McDonald, 2017). We are born into absurdity with no choice of who we are biologically, culturally, economically, socially, spatially or temporally; all we have to guide us is shared experience, and we are told by society, science, religion and politics who, what, and how we should be on the authority that these constructs have met the objective criteria for being truth. These objective truths of life are not what makes life meaningless, it is the lack of self-authentication of what one values in light of those truths, to echo the words of Socrates "the unexamined life," that makes life devoid of meaning (Crowell, 2020; Kierkegaard, 1964; Heidegger, 1964).

With the realization that life is meaningless, the subjective opportunity for self-determined choice is recognized. The existentialists call our recognition of self-determined choice *Freedom*, and with it comes an understanding that all of the facts of an individual's identity were given to them as structures of objective existential truth, even the parts that felt chosen were actually given in that the individual chose from within a template designed without their initial input; thus, the individual understands that their subjective freedom supersedes the template (Aho, 2016; Crowell, 2020). Existentialism rejects the Aristotelian notion that the essence of human consciousness shackles us to a

predetermined set of universal values through which we find our purpose. Rather, humankind is “an entity whose *what* [essence] is precisely to *be* and nothing but to *be*,” and whose essential features and values are *chosen* rather than given; in other words, the essence of human existence is our freedom (Heidegger, 2020, section 2).

From the existentialist perspective, *the human condition*, which seeds in us all an eternal doubt, is that we are, as Sartre famously said, “condemned to be free” (Sartre, 2020, pg. 5). Consider that for an individual to be free implies that they were freed *from* something; so in contrast to being not-free, where the conditions of one’s life are predetermined and thus given by some objectifying source of power (i.e. *Nature, God, Reason*), to be free is to see one’s future as an expanse of endless possibility where the conditions of one’s life are yet undetermined and may be chosen by the individual (Heidegger, 1946). The burden then that we are “condemned” to carry is felt in the weightiness of our responsibility; with each self-determined choice an individual bears more responsibility for maintaining the value of their freedom. In other words, once you realize that you are free to choose what you will, and are no longer beholden to the conditions of your former inauthentic mode of existing, you must create the standards by which your freedom is deemed worthy through your decisions, but you must also *choose to commit* to upholding those standards to continue living authentically and with a unstinted sense of existential meaningfulness. Existential freedom is exciting and inspiring in its possibility for continued self-propelled growth, but it is also accompanied by a sense of anxiety from one’s awareness of the weight each decision carries for their life’s existential value. Existential anxiety, or *Angst*, is an integral part of the experience

of freedom as well as an important theme in existential theory. As it represents the duality of conflict an individual experiences upon realizing their subjective freedom. Anxiety is conceptualized as the source of motivation for an individual to reflect on what they value, and is indicative of a need for inward change (Aho, 2016; Crowell, 2020).

Existentialist writer Albert Camus depicted the process of existential meaning-making through the *Myth of Sisyphus*, of which the title character is set to the meaningless task of pushing a boulder up a hill over and over again for all of eternity. In a state of resignation to this miserable existence, Sisyphus one day recognized the tragedy of his life only when he asked himself “*why?*” As he became consciously aware of his existential suffering, in subjectivity he recognized his agentic possibility to take ownership of his existence and claim his eternal task which freed him from his agony. His decision to live authentically gave him pleasure in the face of pain, and from within the bounds of his existence he created meaning for himself (Aho, 2016; Crowell, 2020).

Themes of Existential Meaningfulness

The rhetoric of existential philosophy is characterized by its use of *mood* to represent its essential themes, which is appropriate as it embodies the subjective dialect used by individuals when describing their experiences (Crowell, 2020). To understand the individual as the existential subject is the goal of existentialism; likewise, for the individual, it is the goal of their process of creating meaning (Friedman, 1964). From this perspective, meaning as a *concept* is not the goal nor the motivating factor that directly influences the process of its creation, rather existential meaningfulness as a subjective *experience* is representative of the thematic moods that inspire the process from which it

emerges. The process is the practical embodiment of Sartre's definitive existential creed, "existence precedes essence" for, as my existence substantiates my subjective existential freedom, my sense of meaningfulness substantiates my commitment to living authentically (Sartre, 2020, pg. 1). Thus, to answer the existential question "*how do I give my life meaning?*" is to simultaneously define existential meaningfulness; as such, the individual must realize their existential freedom to become their most authentic self through transcendence of their objectively constructed identity and commitment to being responsible for their choices (Baumeister, 1991; Crowell, 2020).

To create a life of meaning, an individual must strive to become authentic (Aho, 2016; Baumeister, 1991; Crowell, 2020; Friedman, 1964). Etymologically, the word "authentic" from the Greek *authentēs* means "he who acts out himself" (Harrison, 2017). Heidegger, who introduced the term to existentialism, used the German *Eigenlichkeit* which "names that attitude in which I engage in my projects *as my own (eigen)*" (Crowell, 2020, section 2.3). Accordingly, being authentic may be understood as owning one's actions as definitive of one's self; or taking responsibility for one's choices (Varga & Guigon, 2020). In *Being and Nothingness*, Sartre says that authenticity is the "self-recovery of being which was previously corrupted." From this perspective, being authentic is relative to a former state of *inauthenticity*, referring to a time before one had engaged in their existential freedom that was defined by their objectively constructed identity (Sartre, 1964, p. 70). In that same passage Sartre also suggests that our self-deceit is inescapable as we are constantly faced with reflections of our externally facing identities in the interactions we have with other people, and even a firm commitment to

one's freedom is not likely to be perfectly upheld (Harrison, 2017). In relation to the process of existential meaning-making, the concept of authenticity is akin to the experience of existential meaningfulness; to experience existential meaningfulness an individual must strive to become authentic. The process of becoming authentic is the process of making meaning. To become authentic an individual must recognize their self-deceit, perpetuated by their inauthentic mode of existence, and take ownership of their objectively constructed identities.

The self-deceit which Sartre said was inescapable refers to what existentialists termed our *Facticity* (Aho, 2016; Crowell, 2020). Being that most of us are born, or *thrown* into pre-existing systems of culture, society, and ethics, we are immediately assigned identities and roles based on the objectively construed, contextual facts of our lives (Heidegger, 1964). Facticity is representative of these *natural properties* of existence, the exteriors of the individual perceived from a third-person perspective (Crowell, 2020). Developing in these systems, it is easy and natural to assume these factitious identities for ourselves; this is the inauthentic mode of existence. However, in the vein of Husserl's phenomenology, the subjective nature of our consciousness is structured to assess the experience of our facticity by taking on multiple perspectives; this allows us to interpret the dichotomous incongruity we experience as we begin to realize our existential freedom; this is what existentialists call our *transcendence* (Aho, 2016; Crowell, 2020).

Transcendence here may be understood in two ways: as an existential concept and as a self-regulatory process. As an existential concept transcendence is one's engaged

agency in assimilating their practical, factitious existence with their possible existence (Crowell, 2020). It is through self-focused acts of transcendence that existential freedom is realized in that transcendence functions to consider the value of our choices in decision-making. Through transcendence, a world of possibility is revealed and takes on meaning. As the concept of authenticity is to the experience of existential meaningfulness, so is the concept of transcendence to the self-regulatory process of *self-reflection*. Self-reflection then is like the processing power that sustains an individual's work to transcend (Gallagher & Zahavi, 2019). From the existentialist's phenomenological view, transcendence and self-reflection are structures of subjective existential experience which allow an individual to take on multiple perspectives and evaluate the intersubjectivity of self and other within the *situation* of their life (Crowell, 2020; Friedman, 1964).

To live authentically and experience existential meaningfulness an individual must strive to transcend their facticity and engage in the possibilities that their freedom reveals. For an individual to reflect on and transcend their own facticity, they must also transcend their existential *situation*, which represents the spatial and temporal contexts of their lives (Crowell, 2020). By recognizing and taking responsibility for one's life as being in a particular time and place, they must consider this part of their existence as shared; this takes a kind of extension of perspective from which they view themselves with a third-person stance (Crowell, 2020). Likewise, because as individuals our lives are integrated with the lives of others, as Sartre said, "the other is indispensable to my existence, as well as to the knowledge I have of myself," our transcendence must also

take the individual freedom of others into account by extending our subjective perspective outwardly (Sartre, 1964, pg. 186). Nietzsche placed great importance on perspective-taking and its implications on the altruistic good of morality. That we should use our cognitive ability as a “perspectival knowing,” which is to “deploy and be responsive to” a variety of perspectives on a matter, and knowing the differences between them, will give us a more complete picture of the situation, filling out our “objectivity” (Nietzsche, 2017, section 6.2). In this sense, perspective-taking is important for motivating one’s personal value creation to consider the welfare of other people for their own sake, in relation to their freedom (Anderson, 2017). Simone De Beauvoir captured the essence of this when she said, “to will oneself moral and to will oneself free are one and the same decision” (De Beauvoir, 2016, pg. 2).

Psychological Conceptualization of Existential Themes

The psychology of meaning is becoming defined as a distinct discipline in modern psychological research, one that is truly integrative in the sense that many different fields of psychology are looking to answer essentially the same question using different methodologies. They are all working for a comprehensive understanding of how people come to understand themselves, their environment, and their distinct, personal relationship to their environment (Markman et al., 2013). Though the broadening scope of methodology for studying meaning in life is a relatively recent occurrence, within the schools of existential and humanistic psychology, meaning has been studied as a construct of human motivation for the last five decades (Wong, 2014). Those who may be claimed as early adopters of blending existentialism with psychological practice were

drawn to the philosophical perspective for its bold (of the time) insistence that the subjective experience of human existence should be understood systematically according to methods that would allow explorations of the self without the prejudice of social objectification. Influenced by existential themes like freedom, anxiety, transcendence, reflection and authenticity, psychological theories on personal meaning and identity construction flourished.

Over time, as psychology researchers have sought to quantify aspects of human meaningfulness, the focus has naturally moved away from the highly individualistic, staunchly subjective and rhetoric driven themes of the existential model of meaning in favor of the more objective, teleological eudaimonic model of meaning where meaning is once again conflated with purpose and a sense of happiness ala Aristotle. However, things have changed somewhat and though different methods are used to pursue to truth, as it ever was, both perspectives seem to agree on the basics; which are that human meaningfulness is ultimately a subjective experience that is informed by knowledge, experience, reflection, and social influences (Schnell, 2014). Although the number of components related to meaning in life vary by discipline and terminology, the focus of the present study is to attempt a respectful representation of the themes of existential theory as they portray a subjective process of existential meaning-making; in which the three primary components are *authenticity*, *self-transcendence*, and *sense of meaning*.

Existential Meaningfulness: Authenticity, Self-Transcendence and Sense of Meaning

Authenticity as a psychological construct reflects being “true to oneself” or acting in ways that are congruent with one’s self-conceptualization and ascribed values (Power,

2011; Smallenbroek et al., 2015; Wood et al., 2008). Also known as “self-actualization,” this interpretation of authenticity is influenced by existential theory as it proposes reaching one’s highest potential of integration of self-concept and wholeness by first being able to differentiate one’s own subjective reality from others’ subjective realities (Crowell, 2020; Gawel, 1996; Robinson et al., 2017; Wong, 2014). To achieve this level of subjectively construed personal freedom requires an active process of recognizing one’s own internal thoughts, feelings, and actions, evaluating them from within one’s own social context, and determining how they represent one’s self-determined values (Sollod et al., 2009; Wood et al., 2008). As individuals learn to self-reflect, they learn how to view themselves from a perspective that is not beholden to their pasts, acknowledging both positive and negative aspects of themselves as they are able to disclose their true selves to others in close relationships; to attend to one’s self-proclaimed needs for self-knowledge and engage in the process of reflection is an integral part of reaching authenticity (Mengers, 2014). As individuals recognize the aspects of their present self-concepts that they have not consciously chosen for themselves, they identify what makes their lives inauthentic, which may result in experiences of self-alienation, anxiety, meaninglessness or guilt at not fulfilling one’s full human potential (Sollod et al., 2009; Wood et al., 2008; Wong, 2014). Through these experiences of mental anguish, we become motivated to reconsider the values by which we live by taking ownership of them and choosing to assimilate the parts of our identities that redeem our potential and leave the parts that do not represent our self-concept in our pasts. However, life is not a static experience and requires continuous commitment to

choosing to live according to our own values for the benefit of ourselves; in doing this we engage in transcendence and strive to live authentically.

Psychologists do not agree on the order of events surrounding authenticity and self-transcendence, but they do recognize that the two are intimately linked. While Maslow believed that one needed to be authentic in order to self-actualize, Frankl and May argued that authenticity came primarily through the act of self-transcendence (Osin et al., 2016; Wong, 2014). One reason for this disagreement may be based on how different disciplines in psychology view individual differences (Osin et al., 2016). In either case, self-transcendence represents a willingness and ability to think beyond one's immediate concerns with a sense of global responsibility, to recognize that experiences of self-alienation, anxiety, and guilt arise due to discrepancies in internally and externally imposed truths, and to move beyond the immediate moment to enact change (Osin et al., 2016; Schnell, 2014; Wong, 2014). Self-transcendence also represents the development of one's clarity regarding the separateness of *self* versus *other*; through understanding where definitions of self originate and in turn the choices made to create boundaries between the internal, the external, and the transpersonal experiences in life (Levenson et al., 2005). By considering the perspectives of other people, an individual begins to think about issues from outside of their self-centered lens, developing greater freedom of choice (Le & Levenson, 2005; Sollod et al., 2009). By developing greater freedom, an individual may choose how they react to events, ask questions, and pursue a calling or noble mission in life (Sollod et al., 2009; Wong, 2014).

By engaging in a continual process of reflecting on one's existential concerns and engaging in one's transcendence of mismatched identity to strive to be more authentic, an individual enacts the process of subjective existential meaning-making. Existential meaningfulness is constructed through every situation in life from the individual level to the global level (Wong, 2014). In realizing the opportunity for personal valuation in every moment, an individual becomes open to constant avenues of self-transcendence due to increased awareness of oneself within the situation. Creating meaning at a more global level increases awareness of choices regarding societal values and contributions and, according to Frankl, can lead to pursuing a higher calling in life (Wong, 2014). Part of the global experience is the recognition that, just as the individual is searching for authenticity and self-transcendence, so are others around them. By contributing to a greater good beyond ourselves, humankind enables both individual and collective growth (Wong, 2014). Given authenticity is a unique experience for each individual, the sense of meaning one experiences as a result of pursuing authenticity and transcendence is a highly subjective and personal experience (Allan & Shearer, 2012; Schnell, 2014). While discovering a sense of meaning in life may be a very individual experience, it is not related to the more individualistic ideas such as achieving goals or accumulating wealth (Le & Levenson, 2005). Instead, the act itself of striving for authenticity, transcendence, and subsequent meaning are the embodiment of existential meaning-making.

Epistemic Curiosity

Epistemic Curiosity has been defined as “the desire for knowledge that motivates individuals to learn new ideas, eliminate information-gaps, and solve intellectual

problems” Litman, 2008, p.1586). Berlyne posited that curiosity acts as a motivational force and catalyst for exploratory behavior. Additionally, Berlyne (1967) proposed that curiosity enacted two different types of exploratory behavior; *diversive* behavior, which was supposed to be motivated to resolve boredom, and *specific* behavior, which was supposed to be motivated by a need to fill a gap in information. While Berlyne’s theory provided a framework for how this phenomenon presents itself, further work was necessary to reliably measure epistemic curiosity. Experts have since concluded that rather than seeing curiosity as the motivating force driving two types of exploratory behavior, there are actually two types of epistemic curiosity that are both activated by a common stimulus, *discovery*. Researchers across multiple disciplines have measured epistemic curiosity and found that *diversive* curiosity involves seeking breadth of knowledge while *specific* curiosity involves seeking depth of knowledge (e.g. Ainley, 1987; Langevin, 1971; Litman & Spielberger, 2003). While *diversive* curiosity is a manifestation of *needing* new information, *specific* curiosity is a manifestation of *liking* new information (Litman, 2005).

This theoretical iteration of *specific/diversive* type curiosity is grounded in drive-reduction theory which states that curiosity incites an undesirable emotional experience, namely anxiety, which may only be resolved through learning new concepts. The drive-reduction framework is often associated with Lowenstein (1994) who proposed the need to relieve uncertainty results from gaps in stores of existing information. As such, individuals who recognize their own uncertainty about a subject will feel ignorance, self-alienation, anxiety, and discomfort until their curiosity enables them to find the

information needed to fill gaps in their knowledge (Litman & Jimerson, 2004). However, the size of the information gap is important to the amount of uncertainty and curiosity associated with it (e.g. Crandall, 1971). If an information gap is either too large or too small, it will not evoke the amount of uncertainty necessary to elicit a curious search for information (Kang et al., 2009). This framework is particularly compatible with specific-type epistemic curiosity in that it concentrates on a specific topic where a gap in knowledge is identified and discomfort can be reduced by filling that gap or gathering enough information to complete a task. However, drive-reduction theory does not exclude diversive curiosity because this type of exploratory knowledge acquisition may also occur through volitional acts of self-discovery (Litman, 2005; Litman & Jimerson, 2004).

While drive theory helps explain the ways that individuals access information in the face of anxiety, it does not explain how curiosity is experienced. As a result of this informational gap, an optimal arousal theory for curiosity was created by Spielberger and Starr in 1994 as the next iteration to build on the drive-reduction approach to curiosity. The optimal arousal framework centers on the idea that individuals desire a balanced amount of arousal in their lives and curiosity helps fulfill this equilibrium. Within this framework, curiosity drives filling of gaps in knowledge when levels of anxiety become too high and allows a return to normal baselines of arousal. Similarly, curiosity can act as a stimulus for excitement and seeking out new information when arousal becomes too low (Eren, 2009). With the most recent iteration, Litman and Jimerson (2004) presented a theory of curiosity that integrated the drive and optimal arousal frameworks to address

individual differences in how epistemic curiosity is experienced situationally. They introduced two different, but not mutually exclusive types of epistemic curiosity: *interest-type* and *deprivation-type*. Interest-type curiosity is aroused in situations where acquiring new information creates a sensation of intellectual pleasure; it motivates learning for the sake of learning. Deprivation-type curiosity is aroused when awareness of a gap in knowledge in a specific domain creates a need to reduce uncertainty; it motivates learning for the sake of problem-solving. (e.g. Litman, 2005; 2008; 2010; Litman, Crowson, et al., 2010; Litman, Hutchins, et al., 2005; Litman & Jimerson, 2004; Litman & Silvia, 2006; Litman & Spielberger, 2003).

Taken together, interest and deprivation curiosity have been the subject of much research; for example, within the realm of education and learning, both interest and deprivation curiosity have been found to predict mastery goals and performance-approach goals in college students (e.g. Eren, 2009; Litman, 2008). Within this context, increasing feelings of competence and pleasure from obtaining information for task-specific coursework acted together to produce learning and personal growth. Cross-cultural studies have shown that even though cognitive resources are applied differently across interest and deprivation types, both types of epistemic curiosity are consistently related to information-seeking behaviors (Brennen et al., 2007; Lauriola et al., 2015). Further, recent research has revealed that when individuals are presented with information that is incongruent with their existing beliefs, individuals are more likely to experience both positive and negative emotions such as anxiety, a loss of control, confusion, and curiosity which lead to enhanced critical thinking (Muis et al., 2015; Muis et al., 2018). While

interest type is related to the experience of pleasure one receives upon engaging with a novel subject and its subsequent motivation for exploratory knowledge acquisition, deprivation curiosity is related to a more visceral experience of anxiety associated with a recognized lack of desired knowledge and its subsequent need-like drive for focused and intentional knowledge acquisition; further, deprivation-type tends to elicit a more deliberate and cautious approach (Litman, 2018). Previous research has also shown a relationship between epistemic curiosity and existential thinking with both types of epistemic curiosity being positively associated to thinking critically about existential issues and searching for meaning in life; furthermore, the searching for and engagement with novel information and meaning that results from curiosity has been demonstrated to predict life direction and purpose (Allan & Shearer, 2012; Kashdan et al., 2004).

The relationship between epistemic curiosity and certain emotional responses appears to be impacted by the perceived time one takes to find a resolution in gaps of knowledge. Experimental studies have shown that after individuals discover a gap in their knowledge, the intensity of their curiosity does not change with their anticipation of time to resolve the lack of knowledge, but their levels of anxiety and anticipation do (Inagaki & Hatano, 1977; Noordeqier & van Dijk, 2017). Specifically, as the time increased for an individual to resolve gaps in knowledge, so also did their anxiety over the knowledge gap; furthermore, the amount of anticipation regarding resolving long-term problems appears to increase as time passes. This provides a salient example of how the differences between interest type and deprivation type curiosity work together to create, possibly, a cyclical, continuous renewal of commitment to resolving gaps in knowledge in the face

of repeated bouts of increasing anxiety and anticipation. As Litman (2018) reported, a state of interest type curiosity inspires an openness to experience that involves conscious engagement with previously unknown sources of knowledge that may not necessarily lead to a specific goal, but may provide a sense of personal value in the present moment (i.e. self-knowledge); compared to deprivation type, interest type tends to expend less energy toward information-seeking and excites motivation in smaller temporal bursts. As such, the recognition of one's existential possibility via their subjective freedom may inspire excitement to explore novel self-knowledge driven by a state of interest type curiosity. However, once the pursuit of self-knowledge is no longer novel but instead reveals a larger previously unrecognized gap in self-knowledge, the excitement wears off and interest type curiosity gives way to the more angsty, determined deprivation type which the research literature describes as representing a state of curiosity that is restrained, focused and sensible in its self-regulatory practices. Further, for a state of deprivation type curiosity to persist, an individual must feel that the knowledge of their pursuit will be worth the effort, such that it "does not orient individuals to learn new things just for the fun of it, but rather underlies wanting to develop a deeper, more meaningful understanding of the subject" (Lauriola et al., 2015; Litman, 2010; Richards et al., 2013).

As a motivational state, epistemic curiosity may be representative of the existential theme of anxiety in the way that being in a state of interest type curiosity excites an individual to explore the pleasure of possibility opened up by the recognition of their existential freedom which is followed by a state of deprivation type curiosity to

develop a deeply felt need to know more at any cost; however, it cannot explain the entire process by which it aids in the creation of existential meaningfulness. In light of the research literature showing empirically how epistemic curiosity predicts successful self-determined achievement of intellectual goals and how each type has demonstrated “unique associations with metacognitive judgements” it is not surprising that it has been linked to processes of metacognition and self-regulation (Carruthers, 2017; Casey, 2014; Lauriola et al., 2015).

The proposed relationship between epistemic curiosity and existential meaning-making is complex in that it requires consideration of additional factors to identify psychological constructs that may faithfully represent the self-regulatory aspect of transcendence and considerations of intersubjectivity. Research has shown that the exploration of *possibility* and existential meaning requires additional intra- and interpersonal forces such as a need for cognition and engagement with the interpersonal situations of our existence (Allan & Shearer, 2012; Collins et al., 2004; Constant et al., 2019). There is evidence suggesting that additional intermediate processes inform how searching for knowledge about existential issues leads to existential meaning-making, such that in the face of incongruent information, some people tend to reduce associated negative emotions by combining curiosity with the use of reflection and social interaction (e.g. Birenbaum et al., 2019; Muis et al., 2015). The two constructs that are described herein are proposed to explain the self-regulatory and interpersonal processes of becoming authentic; they are self-reflection and compassionate perspective-taking.

Self-Reflection

Self-reflection is a key component for existential meaning-making. Previous research has demonstrated that individuals see self-reflection as their most important source of self-knowledge (Sedikides & Skowronski, 1995). Self-reflection, the self-monitoring aspect of self-regulation, is the process by which an individual inspects and evaluates their own thoughts, feelings, and behaviors; by recognizing a need for reflection and engaging in it, individuals consciously direct their awareness inward to make purposeful change within themselves (Grant et al., 2002). The self-reflective process allows individuals to ascribe personal meaning to their experience of events and interactions rather than simply collecting facts indiscriminately (Hixon & Swann, 1993; Kashdan et al., 2004). In an experiment testing the effect of self-reflection on social identity formation in a decision-making scenario, self-reflection demonstrated significantly higher salience in identity formation when choices were deemed personally meaningful (Dishon et al., 2017). Similarly, Loevinger (1983) has noted that self-reflection is a mechanism that helps individuals progress to more advanced stages of ego development. One reason that self-reflection plays such a critical role in identity formation, personal growth, and existential meaningfulness is due to the iterative process of self-monitoring and self-evaluating by which an individual gains more self-knowledge and insight (Grant, 2001; Hixon & Swann, 1993; Roberts & Stark, 2008). However, research has shown that self-reflection does not always result in gained insight due to restrictive emotional experiences (e.g. Grant et al., 2002; Hixon & Swann, 1993).

One consequence of self-reflection is awareness of both personal strengths and flaws which can lead to a variety of distressing emotional experiences, including anxiety (Silvia, 2004; Trapnell & Campbell, 1999). However, by becoming aware of their shortcomings, an individual is also able to evaluate standards, determine values, and make desired changes for oneself to create a sense of self-control over life trajectories (Silvia, 2004). For example, students whose self-reflection on study habits influenced their choices to modify their existing thought and behavioral patterns tended to experience increased motivation and commitment to continue making meaningful changes in their academic identities (Travers et al., 2015). Similarly, research examining the use of self-reflection during meditation demonstrated increased ability to identify and cope with negative emotional states, motivation to change, and sense of existential meaningfulness (Dorjee, 2016). The changes an individual is able to make due to self-reflection exemplify an ability to differentiate between one's actual and possible selves and make new valuations guided by self-awareness; in this way self-reflection embodies the existential concept of transcendence and may lead to living more authentically (Kernis & Goldman, 2006). Possible Selves Theory presents the self-concept as motivational strategy for identity development; the concept of an *actual self* represents who a person is in the present, while the concept of *possible selves* represents who a person may be in the near or distant future (Dittman & Stephens, 2017; Oyserman & James, 2009; Markus & Nurius, 1986). As opposed to focusing on the past to learn about oneself, the focus of possible selves is future oriented which allows for consideration of both negative and positive outcomes from the possibilities an individual faces in the

present. Reflecting on one's potential future with the ability to differentiate between possible positive and negative outcomes motivates the individual to consider how they may live in the present to lessen the gap between their present self and the possible positive outcome and widen the gap between their present self and the possible negative outcome (Oyserman & James, 2009). Research has shown that an individual's self-regulatory orientation toward the discrepancy between present and possible selves, being either to reduce potential losses or to increase potential gains, affects the individual's sense of subjective meaningfulness; in existential terms this suggests that one's motivation to become more authentic may be enhanced or hindered depending on their ability to commit to their existential freedom to choose, a distinction that is exemplified by self-reflection and its maladaptive twin, self-rumination (Luyckx, 2009; Oyserman & James, 2009).

Although self-reflection is a positive source of personal growth and valuable change, it can also be a contributing factor in experiences of self-rumination. Self-rumination is "passively focusing one's attention on a negative emotional state, intrusive thinking about a distressing event, and distress associated with thoughts about recent negative events" (Samaie & Farahani, 2011). The distinction between self-reflection and self-rumination may be dependent on whether epistemic curiosity is activated while in a state of self-attentiveness. Specifically, self-reflection is a form of inwardly oriented self-attention driven by an individual's active and intentional curiosity about the nature of their subjective experiences; whereas self-rumination is externally oriented, motivated by fear and is a more passive engagement in self-attention due to the individuals perceived

lack of personal agency (Luyckx et al., 2009; Samaie & Farahani, 2011). The perspective one takes toward their freedom, or their perceived agency, then not only determines their epistemic curiosity but also the focus and motivation of their self-attention. Specifically, if individuals have a greater sense of personal agency and engage in an open and deliberate curiosity about themselves then their motivation to self-reflect is more likely to be oriented toward self-empowerment; in contrast, those who feel less in control of their outcomes and engage in rumination are more likely to be oriented toward denial of personal responsibility for their negative outcomes (Luyckx et al., 2007; Luyckx et al., 2009; Kaur & Tung, 2019). Another reason that individuals may experience rumination during their course of self-reflection is due to an inability to disengage from reflective self-thought when faced with negative circumstances (Elliott & Coker, 2008). Similar to the theoretical framework of epistemic curiosity, previous research has shown that individuals who engage in more self-reflection also tend to experience increased psychological distress, but if self-reflection is followed by increased insight about one's experience then there is an overall decrease in psychological distress (Trapnell & Campbell, 1999). This suggests that continued engagement in self-reflection may resolve an individual's epistemic need for self-understanding and diminish their experience of existential anxiety. The distinction shown between self-reflection and rumination illustrates the key factors that distinguish living authentically and inauthentically; an individual's ability to take ownership of their thoughts allows them to be intentional about their existential questioning, reflecting on their past, present, and possible future selves with an inward orientation to understand what it means to be their own person and

take responsibility for every outcome- past, present and future; and by committing to the continued engagement of their transcendence, an individual may experience less existential tension and more meaningfulness as they strive toward authenticity.

Compassionate Perspective Taking

Epistemic curiosity and self-reflection may be two components contributing to the individual's ability to create subjective existential meaning for themselves, but this process does not occur in isolation from other people. Several psychological theories have been proposed to explain how *intersubjectivity*, the presence of others, acts as a mechanism for personal growth, identity formation, and existential meaning making; Dialogical Self Theory specifically links intersubjectivity to self-reflection and existential meaning. Stemming from philosophical theories on internal dialogue dating back to Antiquity, Dialogical Self Theory submits that self-reflection acts as an internal dialogue occurring within an individual (Gillespie, 2011; Oles & Puchalska-Wasyl, 2010). Based in part on William James' conception of the "extended self," (1890) Dialogical Self Theory suggests that while an individual's authentic self is singular and subjective, through one's objective extension to its environment, it also constitutes a collective of perspectives such that all of the objects of one's subjective experience form a part of the individual's identity (Hermans, 2001, p. 244). According to this theory, as an individual self-reflects, they relate to their subjective experience not just from a singular point of view, but as if in a dialogue with the collective of perspectives one has access to through their experience; by imagining oneself through a multitude of interacting perspectives, one is able to understand oneself more fully and create meaning. The number of internal

dialogues an individual engages in at a given time is indicative of their level of self-uncertainty; this is experienced as recognizing gaps in one's self-knowledge through self-reflection and epistemic curiosity (Oles & Puchalska-Wasył, 2010).

Previous research has demonstrated that an individual's ability to self-reflect is closely related to their ability to reflect about the experiences of others (DiMaggio et al., 2008). Building on the idea that epistemic curiosity acts as the distinctive factor between self-reflection and self-rumination, research suggests that epistemic curiosity and self-reflection are integral to an individual's ability to take on the perspective of others. Specifically, previous research has shown that individuals who experience self-rumination rather than self-reflection tend to have greater difficulty with perspective-taking and empathy; this is partially due to lack of engagement with epistemic concerns (Joireman et al., 2002). One reason that self-reflection plays such an integral role in the ability to take on the perspective of others is because it enables learning what it means to be a *self* and an *other*. By reflecting on internal dialogues between self and other perspectives, the contrast of who the self is and who the other is becomes salient (Starovoytenko & Derbeneva, 2017). As individuals become aware that other perspectives provide valuable context to their subjective internal dialogues about existential questions of selfhood, they also become aware that each individual goes through this process of perspective-taking; as such, we each provide to those around us a new perspective through which they may learn more about themselves through their own subjective process of perspective-taking. By realizing that our individual identities require a merging of perspectives of oneself as both a subjective individual and an

objective other, we may extend our self-understanding to the rest of humanity as both similar and distinct from ourselves. Previous research has demonstrated this as recognizing the potential overlap in how different people have similar attributes as self and other through role-taking, which allowed for imagining perspectives experienced by others (Davis et al., 1996; Farmer & Maister, 2017).

The ability to imagine the perspectives of others is often referred to as Theory of Mind (also called cognitive empathy) and is directly related to prosocial behaviors such as empathy and compassion (Preckel et al., 2018). Not to be conflated, empathy and compassion are considered distinct from one another. While empathy is the ability to take on another person's perspective and express concern for their distress, compassion is the extension of empathy with a further desire to alleviate distress (Fulton, 2018; Oveis et al., 2010). One reason the relationship between perspective-taking and prosocial behavior is important to the process of existential meaning-making is that it demonstrates how individuals consider the lives of other people when making value judgements to create their personal code of ethics. For example, experiments that have induced individuals to consider the perspectives of others with regard to resource allocation have found that people will take a less self-centered approach to what they believe is fair although this did not consistently extend to matching behavior (Epley et al., 2006; Kramer & Brewer, 1984). One potential explanation for inconsistent thought and action after perspective-taking may be the amount of adversity a person has faced in their past. Research examining the relationship between compassion and adversity has shown that individuals

who have experienced greater adversity tend to also exhibit greater perspective-taking and compassion than those who have experienced less adversity (Lim & DeSteno, 2016).

Regardless of past personal experiences, the act of compassion instinctually compels individuals to consider both the experiences and circumstances in which someone suffering is situated. If one's compassion motivates a desire to relieve the suffering of others, then in light of that motivation, it is unlikely that they would simultaneously make choices that would lead to creation of suffering because to do so would be inauthentic (Ozawa-de Silva et al., 2012). Previous research has shown that there is a positive relationship between concern for others, prosocial behavior, and self-transcendence (Caprara et al., 2012). This may be because in striving for self-transcendence, it is necessary to create conditions that allow for growth of both oneself and others which assumes that one will consider ethical dilemmas and consequences that enable these conditions (Williams, 2008). To act with compassion is to take responsibility for one's actions and the suffering seen in the world; further, making choices that avoid creating suffering in others is directly related to both curiosity and self-reflection (Ruiz & Vallejos, 1999). Often, when an individual encounters situations of suffering, they are left feeling anxious and uncertain of how to respond, this leads to questions concerning their sense of personal agency and self-reflection on what choices they can make as a means of reducing their anxiety (Schwartz, 2010). An individual who has done the work to become more authentic will have a greater ability to take on the perspective of others motivated by compassion, and through this transcendent state may be more capable in situations

where the suffering of others raises the dilemma of uncertainty over decisions to act from a sense of self-determined ethical good toward others.

Chapter 3

PRESENT RESEARCH

Existential Meaning Making:

Connecting Psychological Constructs to Themes of Existential Theory

A person's existential meaning emerges out of its transitive relationship with transcendence and authenticity in an ever-expanding project of self-determined identity construction. That which is crucial to understanding the process of existential meaning-making then seems to be the previsionary working parts that constitutively act out an individual's subjectively understood transcendence and authentic commitment.

Theoretically, the process truly begins with one's experience of existential anxiety; also known as the human condition, it is characterized by a dichotomous interaction of motivating emotional experiences felt as an excitement for understanding one's possible future selves which carries with it the burden of continual uncertainty and a need to evaluate the truth of one's subjective existence in order to maintain a sense of equilibrium. The present study suggests that the motivational attributes of epistemic curiosity act out the thematic drives represented in the dichotomous nature of existential anxiety. An individual experiencing interest-type epistemic curiosity would feel excitement at the prospect of acquiring novel self-knowledge which would in turn motivate the renewal of similar self-questioning in order to continually seek out more novel aspects of one's own possibility in the form of self-knowledge. As the awareness of a gap in self-knowledge is elucidated by their curious state of interest, an individual may then be motivated by an experience of deprivation-type curiosity to pursue a deeper

understanding of self-knowledge; by producing a need to know more about one's self, one's curious state of deprivation would motivate a commitment to decreasing one's self-uncertainty by engaging in self-reflection.

Theoretically, as an individual is motivated by their existential anxiety, they undertake the tasks of transcendence; which is the process of recognizing and assimilating the external factors and situations of their objective identity according to a new set of values they create through subjective self-construction and perspective-taking. The present study suggests that the self-regulatory metacognitive tasks of transcendence are carried out through the process of self-reflection. Incited by a state of deprivation epistemic curiosity, an individual senses a need to self-reflect upon some heretofore novel piece of self-knowledge as they realize it holds great personal value for their possible, future self. As the individual engages in self-reflection, the process of transcendence proceeds. Their commitment to self-authenticate via self-reflection is continually renewed by the interaction of interest and deprivation-type epistemic curiosity; this may also be conceptualized as a self-regulatory response to repair the sense of duality inherent to existential anxiety.

An integral part of transcendence is the extension of self-understanding and subjective valuation to others according to their intersubjectivity. It is supposed in the present work that the process of self-reflection advances not only to understand one's own perspective, but also to use the information gained about one's self to understand and evaluate their existential situation from the perspective of others who share it; through an imaginative reflection on one's self as another, an individual is able to process

the subjective truths of their own existence with an ever-expanding perspective which further cultivates their curiosity, awareness, empathy and compassion for others as well as for themselves.

In sum, one's creation of personal value depends upon their commitment to living authentically through a process of continued engagement in self-reflection. Motivated by their eternal doubt, an individual strives toward authenticity through transcendence by assimilating the given aspects of their inauthentic past selves with the set of values they have determined to be meaningful with respect to their possible, future selves. By living out this process practically in their life, an individual's self-knowledge expands with perspective, and with that authentic growth and sense of existential meaningfulness comes a larger capacity for understanding and concern for others.

Purpose

The purpose of the present study was to recreate the subjective perspective of human existential meaningfulness as a process of meaning-making in a structural model composed of psychological constructs. An analysis of existential philosophical theory and its themes of subjective existential meaning-making provided the hypothetical bases from which the representative psychological constructs were chosen.

Outline of Model

The model shown in Figure 1 depicts the proposed structure of paths representing the subjective process of creating existential meaningfulness. This model suggests that individuals who are motivated by high levels of epistemic curiosity will engage in more self-reflection, and will demonstrate more compassionate perspective-taking;

furthermore, individuals who engage in more self-reflection and demonstrate high levels of compassionate perspective-taking will report having a greater sense of existential meaningfulness through increases in authentic living and self-transcendence.

Figure 1

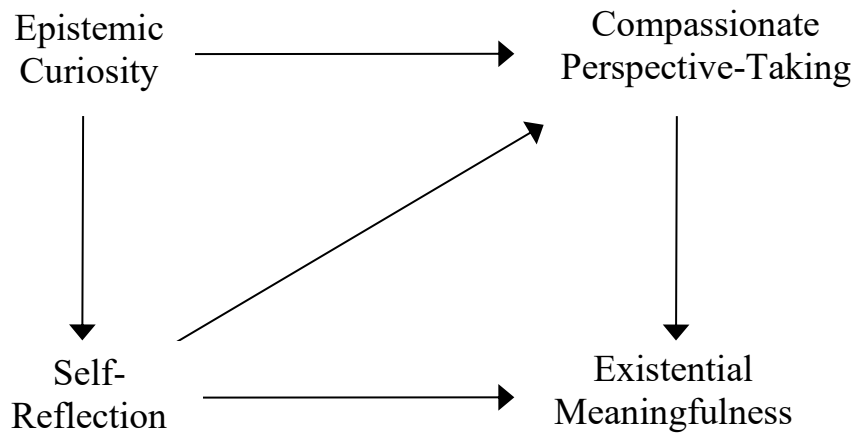


Figure 1. Proposed Structure of Predictive Paths to Creating Existential Meaningfulness by Three Predictor Variables. All relationships are theorized to occur in a positive direction.

Chapter 4

METHOD

Participants

Three hundred and fifty-nine psychology students attending a public university in Northern California participated in this study. Participants were recruited from the human subjects pool of the psychology department's research program. Primarily undergraduates in their second (26.5%) or third year (33.5%) of study, the majority of the sample identified as female (68.5%), were between the ages of 18 and 24 (87.4%) and were primarily part of Latino/a (35.1%) or Caucasian (25.6%) ethnic groups. Further detailed demographic information is presented in Table 1. Students who participated in the hour and fifteen-minute long study received 1.25 research participation credits which could be used to satisfy the psychology department's research participation requirement. There were not any prerequisite conditions restricting participant acquisition, and participation was limited to one session per student.

Materials

At the outset of this study many constructs theoretically related to meaningfulness and meaning-making were explored. Participants responded to items on nineteen separate questionnaires measuring nearly 100 different variables. The following sections provide detailed information on the nine variables that were chosen for final analyses; they are organized according to their proposed (latent) or intended (measured) roles in the analysis.

Existential Meaningfulness

It was proposed that the outcome variable for this study, Existential Meaningfulness, would be constructed from three measured variables chosen for their theoretical and practical significance as presented in the literature; they were Authentic Living, Self-Transcendence, and Meaningfulness.

The Authentic Living subscale of the Authenticity Scale (AS) was used to measure dispositional authenticity (Baliouisis et al., 2008). Authentic Living consists of four items that assess an ability to not only consciously discern one's own values and beliefs but also to act in accordance with them. Items are measured using a 7-point response scale ranging from *1=does not describe me at all* to *7=describes me very well* and are not reverse-scored. Sample items include "I think it is better to be yourself, than to be popular" and "I am true to myself in most situations." Higher scores reflect a greater ability to live authentically. Wood et al. (2008) reported stable test-retest reliability coefficients for *authentic living* across studies ranging from .78 to .79.

The Adult Self-Transcendence Scale (ASTI) was used to measure self-transcendence (Levenson et al., 2005). The ASTI consists of ten items that measure how well one is able to interact with the world from a less self-centered point of view, with open-minded consideration of human nature and a sense of freedom from social conditioning. It uses a 4-point response scale ranging from *1=disagree strongly* to *4=agree strongly* to represent the extent to which the participant agrees with an item compared to five years earlier. There are no reverse-scored items, and the scale is scored by computing a mean of all items. Sample items include "I feel that my individual life is

part of a greater whole,” “Material things mean less to me,” and “I am more likely to engage in quiet contemplation.” Higher scores on the ASTI indicate a greater level of self-transcendence. Levenson et al. (2005) reported acceptable reliability coefficients across samples (Cronbach’s $\alpha = .75$).

The Meaningfulness scale, extracted from the Schnell’s Sources of Meaning and Meaning in Life Questionnaire (Schnell, 2009), was used to measure experienced meaningfulness. The Meaningfulness scale uses a 6-point response scale ranging from *0=strongly disagree* to *5=strongly agree* and consists of five items that assess the degree to which people feel their lives are coherent, significant, directed, and belonging. Sample items include “I feel I belong to something bigger than myself,” “I lead a fulfilled life,” and “I think my life has a deeper meaning.” The scale is scored by computing a mean of all items, none of which are reverse-scored. Higher scores indicate a greater sense of subjectively experienced meaningfulness. Schnell (2009) reported an acceptable Cronbach’s α of .74.

Epistemic Curiosity

Litman and Spielberger’s Epistemic Curiosity Scale (Litman & Spielberger, 2003) was used to measure two types of dispositional epistemic curiosity. The EC scale utilizes a 4-point response scale ranging from *1=almost never* to *4=almost always* and is comprised of two five item subscales, Interest-Type (I-EC) and Deprivation-Type (D-EC). I-EC assesses a disposition to indulge in the learning of new ideas and skills to experience the pleasure received from acts of exploration, abstraction and mastery; a sample item is “I enjoy learning about subjects that are unfamiliar to me.” D-EC assesses

a disposition driven by an anxious need to find pertinent solutions to specific issues and to improve performance; “I work like a fiend at problems that I feel must be solved.” Each subscale is created by computing a sum of each set of items. High scores on I-EC reflect a greater disposition toward Interest-Type EC. High scores on D-EC reflect a greater disposition toward Deprivation-Type Litman and Spielberger reported acceptable internal consistency coefficients for I-EC (Cronbach’s $\alpha = .82$) and D-EC (Cronbach’s $\alpha = .76$).

Compassionate Perspective-Taking

Two measured variables, Compassion and Perspective-Taking empathy, were chosen to construct and evaluate the proposed predictor variable, Compassionate Perspective-Taking.

The Perspective-Taking subscale of the Interpersonal Reactivity Index (Davis, 1980) was used to measure a cognitive component of empathy where one can relate to the perspectives of others. This subscale is comprised of seven items (items 3 and 15 are reverse-scored) and utilizes a 5-point response scale ranging from *1=does not describe me very well* to *5=describes me very well*; it assesses the tendency to adopt others’ points of view across various contexts and situations. Sample items include “I sometimes try to understand my friends better by imagining how things look from their perspective” and “Before criticizing somebody, I try to imagine how I would feel if I were in their place.” Higher scores on the Perspective-Taking subscale reflect a greater tendency to take on the perspectives of others. Davis (1990) reported adequate internal consistency for females (Cronbach’s $\alpha = .78$) and males (Cronbach’s $\alpha = .75$).

The Compassion scale was extracted from the Big Five Aspects Scales (BFAS; DeYoung et al., 2007) to measure compassion as an aspect of agreeableness. The scale is comprised of ten items, five of which are reverse-scored, and uses a 5-point response scale ranging from *1=disagree strongly* to *5=agree strongly* to assess the tendency to be aware of and show concern for the emotions of others. Items on the Compassion scale include “I feel others’ emotions”, “I take an interest in other people’s lives”, and “I sympathize with others’ feelings.” Higher scores indicate a greater tendency to act on feelings of compassion. DeYoung et al. (2007) reported a range of good Cronbach’s α of .84 to .91 across samples.

Self- Reflection

The Need for Self-Reflection (N-SR) and Engaging in Self-Reflection (E-SR) subscales of the Self-Reflection and Insight Scale (SRIS; Roberts & Stark, 2008) were used to measure the two processes that lead to the use of self-reflection as metacognitive tool for self-regulation. Each subscale is comprised of six items (items 1, 2, 8, and 13 are reverse-scored) and uses a 5-point response scale ranging from *1=strongly disagree* to *5=strongly agree*. N-SR assesses the motive for self-reflection which comes from a curiosity about one’s own psychological processes; sample items include “I have a definite need to understand the way my mind works” and “It is important to me to try to understand what my feelings mean.” E-SR assesses the process of self-reflection which involves spending time giving attention to and indulging in that curiosity about oneself; sample items include “I frequently take time to reflect on my thoughts” and “I often think about the way I feel about thing.” Higher scores on the N-SR subscale reflect having a

stronger drive to be self-reflective, and higher scores on the E-SR subscale reflect having a greater ability to self-reflect. Roberts and Stark (2008) reported acceptable reliability coefficients for overall self-reflection (Cronbach's $\alpha = .88$), N-SR (Cronbach's $\alpha = .87$) and E-SR (Cronbach's $\alpha = .83$).

Demographics

A demographics survey was used by participants to report their age, gender, ethnicity, class rank, and belief system.

Procedure

Data collection took place over two semesters within the psychology department at a public university in Northern California. During the first semester, each research session took approximately 1 hour; however, due to the lengthiness of the packet of questionnaires, students participating during the second semester were given 1 hour and 15 minutes to complete packets. The maximum number of participants allowed to partake in the study for a given session was eight. When participants arrived at the research room for their allotted time, the researcher distributed the sign-in sheet and the consent form. Participants were given instructions regarding the sign-in sheet, consent form, how to fill out the packets, how long they should expect to be in the session, and when they should expect to see their participation credits online; they were also encouraged to seek the researcher's attention for clarification on survey questions or to be excused as needed. Participants were thanked for their time in advance and informed that they would receive their debriefing forms with the researchers' names and contact information via email immediately after the session. After the participants filled out the sign-in sheet and signed

the consent forms, the researcher collected the documents and placed them in an envelope separate from packets containing the inventories so as to protect the privacy of participants. The researcher then distributed the survey packets, each containing a set of the inventories in a different randomized order, with the demographics questionnaire placed in the back. Participants were instructed to give their completed packets to the researcher before leaving the room quietly when they were finished. This study along with these detailed procedures was approved by the university's psychology department human subjects committee.

Design

Data analysis began with data screening and descriptive statistical procedures to ensure the highest quality of the final set of data. Correlation analyses were conducted to evaluate the relationships between variables, which were followed by exploratory factor analyses to aid in the selection of variables from which the hypothesized latent constructs would be composed. Once the latent constructs, Compassionate Perspective-Taking, Epistemic Curiosity, Self-Reflection, and Existential Meaningfulness were finalized, they were evaluated as a measurement model by confirmatory factor analysis for convergent and discriminant validity, and for overall goodness-of-fit of the model. The proposed structural model was then evaluated using structural equation modeling (SEM) procedures. Finally, tests of significance for two mediation structures were conducted. The statistical software used for the data analyses is IBM SPSS, Version 25.0 (IBM SPSS; SPSS Inc., 1989/ 2017) and Amos, Version 4.0 (IBM SPSS; SPSS Inc., 1983/ 2017).

Table 1
Participant Demographic Characteristics

Participant characteristic	<i>n</i>	%
Gender		
Female	244	68.0
Male	110	30.6
Non-Binary	2	.6
Missing	3	.8
Ethnicity		
Latino/a	126	35.1
Caucasian	92	25.6
East Asian	44	12.3
Multi-Ethnic	40	11.1
African American	20	5.6
West Asian	15	4.2
Pacific Islander	10	2.8
Arab American	4	1.1
Native American	2	.6
Missing	6	1.7
Class Rank		
Freshman	112	31.2
Sophomore	94	26.2
Junior	119	33.1
Senior	29	8.1
Graduate Student	1	.3
Missing	4	1.1
Age		
Less than 18	11	3.1
18-24	312	86.9
25-34	28	7.8
35 and above	6	1.7
Missing	2	.6
Belief System		
Member of Organized Religion	190	52.9
Belief in Spiritual Realm/ Non-Religious	63	17.5
Don't Know/ Don't Care/ Agnostic	71	19.8
Atheist	31	8.6
Missing	4	1.1

Note. *N* = 359.

Chapter 5

RESULTS

Data Screening

All variables were screened prior to data analyses to identify and correct any abnormalities in data entry and/or coding, violations of statistical assumptions, outliers, and missing values; this process employed IBM SPSS Frequencies, Explore, Plot, Missing Value Analysis, and Regression procedures. Participants' responses for each continuous variable under study were screened for missing values. A missing value analysis revealed that less than .05 percent of the values were missing, and recognized those values as being missing completely at random (MCAR), suggesting that the data sample was still representative of the population and that the missingness was not due to underlying, systematic problems within the dataset. Taking into account the results of the missing value analysis and how few values were missing, a mean substitution procedure was chosen as the simplest option to replace the one to eight missing values per variable that were discovered. No univariate outliers were detected. Mahalanobis distance was computed for each case across all variables to detect multivariate outliers; a total of twenty-seven cases were recognized as potential outliers and were removed, resulting in a final sample of 332 cases.

Descriptive Statistics

Descriptive statistics and internal consistency coefficients are presented in Table 2. Following reliability analyses for each measured variable, it was determined that an item should be removed from each of the variables authentic living and perspective

taking to improve reliability coefficients. Comparison of Cronbach's alphas in the current study to those reported in past literature revealed a few inconsistencies. Several variables obtained lower alpha coefficients: authentic living (current $\alpha = .74$, previous $\alpha = .78$), compassion (current $\alpha = .80$, previous $\alpha = .84$), interest-type EC (current $\alpha = .76$, previous $\alpha = .82$), need for self-reflection (current $\alpha = .76$, previous $\alpha = .87$), engaging in self-reflection (current $\alpha = .75$, previous $\alpha = .83$), and meaningfulness (current $\alpha = .73$, previous $\alpha = .74$). Additionally, there were two variables whose alpha coefficients were slightly higher than those previously reported: deprivation-type EC (current $\alpha = .80$, previous $\alpha = .76$) and self-transcendence (current $\alpha = .74$, previous $\alpha = .73$).

Table 2
Reliability Coefficients and Descriptive Statistics for Observed Variables

Measure	α	Mean	SD	SEM	95% Confidence Interval	
					Lower Limit	Upper Limit
Compassion	.80	3.99	.56	.03	3.93	4.05
Perspective-Taking	.73	3.75	.69	.04	3.68	3.83
Interest-Type EC	.76	3.14	.56	.03	3.08	3.20
Deprivation-Type EC	.80	2.59	.67	.04	2.52	2.66
Need for S-R	.76	3.85	.64	.04	3.78	3.92
Engaging in S-R	.75	3.76	.68	.04	3.69	3.84
Authentic Living	.79	5.60	1.15	.06	5.47	5.72
Self-Transcendence	.74	3.11	.45	.02	3.06	3.15
Meaningfulness	.73	3.88	.73	.04	3.80	3.96

Note. $N = 332$.

Participants demonstrated average scores close to or below the midpoint for the following measures: perspective taking, compassion, engaging in self-reflection, need for

self-reflection, and authentic living. Average scores were higher than the midpoint for the following measures: meaningfulness, interest-type epistemic curiosity, and deprivation-type epistemic curiosity.

Correlations between the observed variables are displayed in Table 3. A wide range of values were observed (range: $r = .08$ to $r = .74$); most were moderate, and none were large enough to indicate multicollinearity. The highest intercorrelations were between subscales of the same measures. The only relationship that did not achieve statistical significance was between compassion and deprivation-type epistemic curiosity. Generally, individuals who found their lives to be more meaningful and coherent tended to live more authentically and with a greater sense of self-transcendence; they were more compassionate and had a greater ability to empathize with the perspectives of others; they were more motivated to acquire knowledge, driven almost equally by the pleasure that learning new, novel information affords and also by the nagging need to fill an internal gap of information; and they had a greater ability not only to engage in self-reflection for the purpose of self-improvement, but also to recognize when a need for self-reflection had arisen.

Table 3

Correlations between Observed Variables

Variables	1	2	3	4	5	6	7	8	9
1. Authentic Living	--								
2. Compassion	.26**	--							
3. Perspective Taking	.41**	.40**	--						
4. Interest-Type EC	.22**	.21**	.34**	--					
5. Deprivation-Type EC	.12*	.08	.28**	.53**	--				
6. Need for S-R	.31**	.31**	.42**	.39**	.24**	--			
7. Engaging in S-R	.34**	.34**	.39**	.29**	.16**	.74**	--		
8. Self-Transcendence	.41**	.33**	.39**	.29**	.11*	.22**	.22**	--	
9. Meaningfulness	.52**	.31**	.34**	.26**	.21**	.24**	.20**	.51**	--

Note. * $p < .05$; ** $p < .01$.

Specifying the Model

The final structural model, shown in Figure 3, assessed the direct and indirect effects of three latent predictors on the latent outcome variable, Existential Meaningfulness. Construction of the latent factors was based upon theoretical relationships between measured variables using exploratory factor analysis. A four-component solution extracted with principal axis factoring with promax rotation was selected. The solution accounted for 56.93% of the variance common to the set of variables. All variables exhibited factor loadings of greater than .500, and thus were included in the model. The latent factor representing Existential Meaningfulness was comprised of the measured variables meaningfulness, self-transcendence, and authenticity. The latent factor of Compassionate Perspective-Taking consisted of the measured variables perspective taking empathy and compassion. The latent factor of Self-Reflection was comprised of its measured subscales need for self-reflection and engaging

in self-reflection. The latent trait of Epistemic Curiosity consisted of interest-type epistemic curiosity and deprivation-type epistemic curiosity.

A two-step structural equation modeling strategy using IBM SPSS Amos (25) was employed with a full-information maximum likelihood procedure to estimate the parameters. The first step of this strategy employed a confirmatory factor analysis (CFA) to assess the quality of the four latent factors comprising the measurement model. The second step placed the four latent factors into a structural model wherein the path coefficients were evaluated for statistical and practical significance. In each step, five criteria were used to assess the fit of the data to the measurement model: the chi-square statistic, of which a nonsignificant value is desired; the normed fit index (NFI), goodness of fit index (GFI), and comparative fit index (CFI), all of which should produce a value of .95 or higher to be deemed to represent acceptable model fit; and the root mean square error of approximation (RMSEA), which should produce a value of .05 or less for good fit, with values between .06 and .08 being acceptable (MacCallum et al., 1996; Meyers et al., 2013).

The results of the CFA were satisfactory. The chi-square statistic for the measurement model was statistically significant, $\chi^2(21) = 37.166, p < .05$, suggesting that the model failed to fit the data; however, a significant chi-square is likely due to the large sample size of this study and may be overlooked if other fit indices reveal acceptable fit (Meyers et al., 2013). The values for NFI, GFI, and the CFI were .96, .98, and .98, respectively, suggesting good to excellent model fit to the data. The RMSEA produced a value of .048 with a 90 percent confidence interval of .021 to .073, reflecting good model

fit. All coefficients were greater than .50 and achieved statistical significance ($p < .05$); thus, the measured variables were sufficiently related to their respective latent factors. Finally, the correlations between latent factors ranged from .37 to .75, suggesting adequate discriminant validity between them for building the structural model.

The second step evaluated the path coefficients of the proposed structural model, shown in Figure 3, and further assessed model fit. The chi-square statistic demonstrated essentially the same result as in the measurement model, $\chi^2(22) = 38.470, p < .05$. Overall, the results suggest excellent model fit with the data, GFI = .98, NFI = .96, CFI = .98, RMSEA = .048, with a 90 percent confidence interval of .020 and .072. The model explained 66 percent of the variance of Existential Meaningfulness. Existential Meaningfulness was driven almost entirely by the direct effect of Compassionate Perspective-Taking. The model also accounted for 19 percent of the variance of Self-Reflection and 51 percent of the variance of Compassionate Perspective-Taking; Self-Reflection was predicted by Epistemic Curiosity, and Compassionate Perspective-Taking was primarily predicted by Self-Reflection with some aid from Epistemic Curiosity.

With the results of the structural model being satisfactory, further analyses were performed to evaluate the two potential mediation structures, Self-Reflection potentially mediating the relationship between Epistemic Curiosity and Compassionate Perspective-Taking potentially mediating the relationship between Self-Reflection and Existential Meaningfulness.

Mediation Analyses

Tests of mediation are dependent on each structure meeting the following necessary conditions: a) the predictor must significantly predict the outcome variable in the unmediated model; b) the predictor must significantly predict the mediating variable; and c) the mediator must significantly predict the outcome variable (Meyers et al., 2013). Both potential mediation structures within the final model satisfied these conditions; detailed results of the analyses for each are reported below.

Mediation Through Self-Reflection

The prerequisite conditions for the first potential mediation structure were satisfied as follows: a) Epistemic Curiosity acted as a significant predictor of Compassionate Perspective-Taking in the unmediated model (see Figure 2; $\beta = .483, p < .001$); b) Epistemic Curiosity significantly predicted Self-Reflection (the mediator) in the mediated model ($\beta = .441, p < .001$); and c) Self-Reflection significantly predicted Compassionate Perspective-Taking in the mediated model ($\beta = .543, p < .001$).

Figure 2

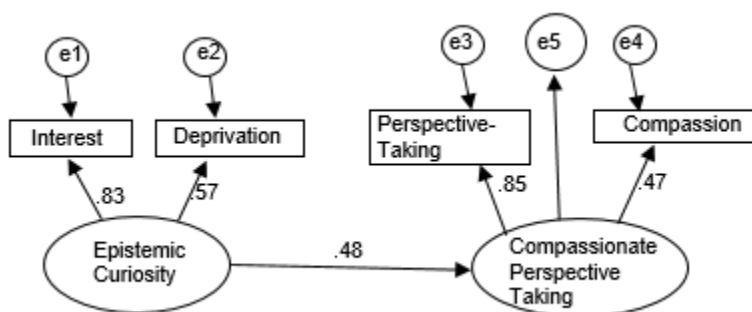


Figure 2. The Unmediated Model of Epistemic Curiosity Predicting Compassionate Perspective-Taking. The direct path was statistically significant, $p < .001$.

An Aroian test (Aroian, 1944/1947) was used to determine the significance of the indirect path from Epistemic Curiosity through Self-Reflection. The results showed that the indirect effect of Epistemic Curiosity through Self-Reflection on Compassionate Perspective-Taking was statistically significant, $z = 3.927, p < .001$. By comparing the direct paths from Epistemic Curiosity to Compassionate Perspective-Taking in the mediated (see Figure 2; $\beta = .287, p < .001$) and unmediated (see Figure 3; $\beta = .483, p < .001$) models, the results of a Freedman-Schatzkin test (Freedman & Schatzkin, 1992) revealed that the presence of Self-Reflection in the mediated model significantly reduced the direct effect of Epistemic Curiosity on Compassionate Perspective-Taking, $t(330) = 5.663, p < .001$. Thus, it was determined that partial mediation through Self-Reflection had been observed in which approximately 50% of the effect of Epistemic Curiosity on Compassionate Perspective-Taking was mediated through Self-Reflection.

Figure 3

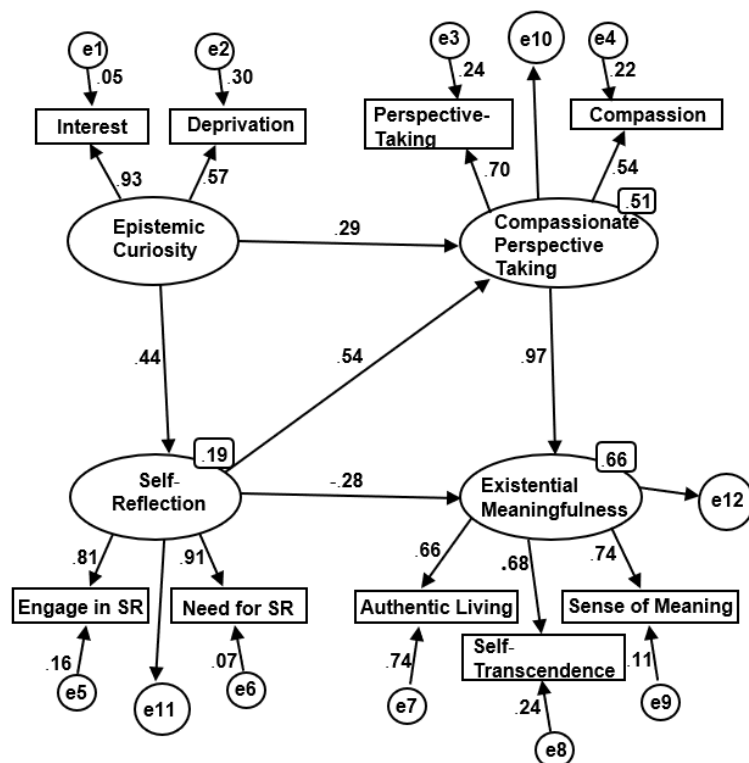


Figure 3. Proposed Structural Model. All path coefficients significant at $p < .001$, except for path from Self-Reflection to Existential Meaningfulness ($p = .048$).

Mediation Through Compassionate Perspective-Taking

Finally, the prerequisite conditions for the second potential mediation structure were satisfied as follows: a) Self-Reflection acted as a significant predictor of Existential Meaningfulness in the unmediated model (see Figure 4; $\beta = .361, p < .001$); b) Self-Reflection significantly predicted Compassionate Perspective-Taking (the mediator) in the mediated model ($\beta = .543, p < .001$); and c) Compassionate Perspective-Taking significantly predicted Existential Meaningfulness in the mediated model ($\beta = .972, p < .001$).

Figure 4

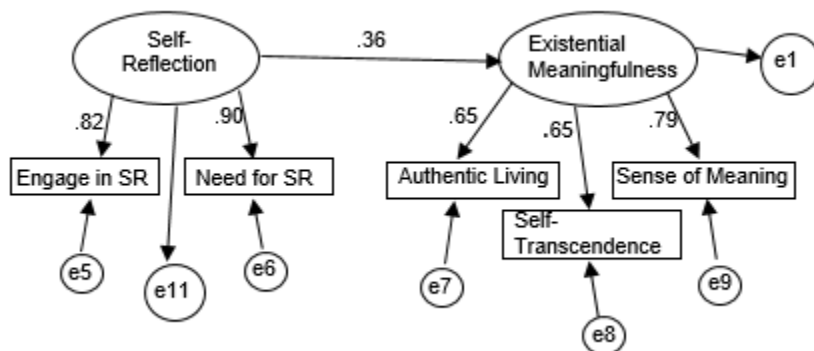


Figure 4. The Unmediated Model of Self-Reflection Predicting Existential Meaningfulness. The direct path was statistically significant, $p < .001$.

An Aroian test (Aroian, 1944/1947) was used to determine the significance of the indirect path from Self-Reflection through Compassionate Perspective-Taking. The results of the test revealed that the indirect effect of Self-Reflection through Compassionate Perspective-Taking on Existential Meaningfulness was statistically significant, $z = 4.0106$, $p < .001$. The direct path from Self-Reflection to Existential Meaningfulness in the mediated model (see Figure 4; $\beta = -.282$, $p = .05$) was not statistically significant which presented the possibility of the structure achieving complete mediation since the direct path in the unmediated model (see Figure 4; $\beta = .361$, $p < .001$) was significant. By comparing the direct path of the mediated model to that of the unmediated model, a Freedman-Schatzkin test (Freedman & Schatzkin, 1992) revealed that the presence of Compassionate Perspective-Taking in the mediated model significantly reduced the direct effect of Self-Reflection on Existential Meaningfulness,

$t(330) = 6.594, p < .001$. Thus, it was determined that complete mediation of Self-Reflection through Compassionate Perspective-Taking had been observed.

Chapter 6

DISCUSSION

The purpose of the present study was to determine a structural model that could faithfully represent existential philosophical theory as a psychological process of subjective meaning-making. The first step was to explicate from existential theory the primary facets of meaning-making and their practical functions to ascertain how they might be represented by measurable psychological processes. Once the representative constructs were chosen, the next step was to fashion a structural model that would potentially mimic the theoretical processes by which an individual creates existential meaning for oneself and test it.

Selecting Theoretically Representative Psychological Constructs

Based on existential philosophical literature, the primary themes of the process of meaning-making were identified as existential anxiety, self-reflection, intersubjectivity, transcendence, authenticity and existential meaningfulness. With consideration of the complexity of content contained in each existential theme, an exhaustive review of research literature pertaining to existential psychology and the psychological study of meaning provided the bases for choosing the psychological constructs that might represent the primary themes of existential meaning-making; as such, both interest- and deprivation-type epistemic curiosity were supposed to represent the motivating aspects of existential anxiety, self-reflection was supposed to represent the self-regulatory metacognitive aspect of transcendence, perspective-taking empathy was selected to represent the aspect of transcendence that extends one's perspective in intersubjectivity,

compassion was selected to represent one's subjective ethical responsibility to intersubjectivity, self-transcendence was selected to represent the subjective experience of transcendence, authentic living was selected to represent authenticity, and meaningfulness was selected to represent one's sense of meaning in life. Results of a principal axis factor analysis confirmed the proposed theoretical composition of two latent variables representing intersubjectivity and existential meaningfulness. The latent variable representing intersubjectivity was labeled Compassionate Perspective-Taking and was comprised of compassion and perspective-taking, and Existential Meaningfulness was comprised of self-transcendence, authenticity, and meaningfulness.

Full Structural Model

Generally, the results supported the proposed structural model; all paths were statistically significant and displayed fairly moderate to strong positive relationships, with the exception of the direct path from Self-Reflection to Existential Meaningfulness which was not significant and resulted as such due to the mediating influence of Compassionate Perspective-Taking. These results indicate that individuals who are driven by a heightened state of Epistemic Curiosity to seek out and acquire new forms of knowledge tend to be more attentive in evaluating their internal states through Self-Reflection and also exhibit a more developed ability for Compassionate Perspective-Taking; further, individuals who spend more time engaged in Self-Reflection to evaluate their internal states tend to exhibit more Compassionate Perspective-Taking as they consider states and situations of other people; finally, those with more developed Compassionate Perspective-Taking tend to experience a greater sense of Existential

Meaningfulness through increased Self-Transcendence and by living with more Authenticity.

Mediation Structures

The two mediation structures in the proposed model were intended to allow more finesse in the interpretation of the subjective meaning-making process and both were supported by the model to different degrees.

The first mediation structure implied that Self-Reflection would mediate the relationship between Epistemic Curiosity and Compassionate Perspective-Taking. The results revealed a partial mediation through Self-Reflection which significantly reduced the influence of Epistemic Curiosity on Compassionate Perspective-Taking. This observation indicates that when an individual experiences an interest and/or need to understand the perspective of another's state of being they will be more effective in learning compassionate perspective-taking if they first evaluate their own internal states with self-reflection which may be used to relate to another perspective or else identify a gap in relative self-knowledge and may lead to a more coherent compassion for others. Muis et al. (2018) developed a model to explain *self-regulated learning*, a process where an individual's learning strategy incorporates the epistemic evaluation of new knowledge with metacognitive and emotional regulation. Their model proposes that highly self-regulated learners will be more adept at considering multiple perspectives without experiencing cognitive avoidance due to the emotions that arise from their learned awareness of conflicting information. The process demonstrated by this mediation structure appears to support the self-regulated learning model as it shows how the more

desirable outcome of having a well-developed, emotionally open ability to take on and handle multiple perspectives may result from a kind of self-regulatory metacognitive balancing act in which the duality of the emotional epistemic interest/need to know renews the cycle of learning in its interplay with self-reflection's self-evaluative response to need with metacognitive engagement; in sum, it reflects a strategy for consciously attending to subjectively experienced thoughts which evaluates both a personal need to know with a recognition of the benefits available to extending that knowledge to outside perspectives with potential for repeated processing.

The second mediation structure implied that Compassionate Perspective-Taking would have a mediating effect on the relationship between Self-Reflection and Existential Meaningfulness. The results revealed that, having achieved full mediation, the effect of Self-Reflection on Existential Meaningfulness was completely encompassed by Compassionate Perspective-Taking within the full model. This observation indicates that while engaging in self-reflection on its own may bring some increases in one's self-transcendence, authenticity, and sense of meaning, if an individual has developed a greater ability to consider, imagine, and care for the perspectives of others, then their sense of existential meaningfulness appears to take on more meaning; conversely, if the individual has worked toward a degree of self-transcendence through self-reflection, but has not yet extended their transcendence through self-reflection to develop compassionate perspective-taking, then the existential meaning they have acquired may lose its potency. Thus, to have a purely self-centered perspective on one's life ultimately limits one's potential scope for creating personal meaning.

This observation could be explained by two different approaches to the psychological understanding of existential meaningfulness. Recent research on the different sources and values of meaning all report that having a sense of *belonging* is among the most salient components of finding life to be meaningful (Baumeister, 2005; Heine et al., 2006; Moynihan et al., 2017; Stillman et al., 2009; Van Tilburg and Igou, 2013, Williams, 2002). Further, research has shown that people engage in self-regulating behaviors to increase their sense of belonging by gaining acceptance and avoiding rejection of others (Baumeister, 2008a, Baumeister et al., 2005, Baumeister et al., 2011; Malone, et al., 2012). Additionally, in their comprehensive review of process models from development and consciousness stage theories, Prinsloo (2012) presented a comparison of the different models, including those proposed by Maslow, Loevinger, Kohlberg, Kegan and Wilber, in which the last two stages consistently involved an other-oriented extension of transcendence following a more ego-centered phase of self-realization at an earlier stage.

Did the Model Fit the Theory?

These results suggests that the theoretical process of subjective meaning-making may be understood through representative psychological constructs; further, the theoretical concept of Existential Meaningfulness may be measured in relation to the process of meaning-making, as represented by the psychological constructs in the model. The basic structures of the psychological model supported the theoretical conceptualization of the meaning-making process as follows.

First, Epistemic Curiosity embodied the dichotomous mood of existential anxiety through its curious states of Interest, motivating learning by placing epistemic value on self-knowledge, and Deprivation, motivating learning by identifying a need to learn more about one's self through gaps in existing self-knowledge, the evidence of which was seen through its functionality in the model. Further, the types of Epistemic Curiosity captured the function that existential anxiety provides to the process of meaning-making by directly motivating an individual's self-reflection processes in activating its need to reflect through awareness of a knowledge gap and its engaging in reflection with new information brought to light through epistemic interest. Similar to its effect on Self-Reflection, Epistemic Curiosity also motivated both directly and indirectly, through Self-Reflection, an individual's Compassionate Perspective-Taking; directly, through Interest one engages with the idea of knowing another's perspective from a compassionate standpoint and indirectly by activating Self-Reflection to process one's stored information on the topic through awareness of a need to know more about that other perspective.

Second, Self-Reflection appeared to perform the self-regulatory metacognitive tasks of the theoretical concept of transcendence through its activation and interplay with Epistemic Curiosity and through its relationship with Compassionate Perspective-Taking. In the theoretical conceptualization of subjective meaning-making, the interplay between transcendence and anxiety is the process by which an individual takes responsibility for their freedom (motivated by epistemic curiosity) by choosing to engage in self-discovery (self-reflection) and commit to a continuous act of transcendence of one's self and

situation through intersubjectivity to become their most authentic self. The first mediation structure may hint at how the ongoing process of transcendence works through continuous metacognitive acts of engaging with a new perspective on an idea, reflecting on it, and returning to it from multiple perspectives, one being from a source of reflection (mediated/ deprivation-type) and the other being from a fresh idea inspired by reflection (direct/ interest-type). Finally, the second mediation structure may demonstrate the theoretical concept of commitment to self-authentication through transcendence since, according to existential theory, to truly become authentic an individual must transcend the situations of their life in addition to their internal states, which entails other people; to maintain one's sense of existential meaning, an individual must stay authentically current, continuing to transcend the moments of their life as possibility turns into the past, so to stop the progress of understanding one's life as their own is to place limits on one's subjective truth, rendering it objective and meaningless.

Limitations

However, some limitations should be noted. First, the participants in this study were selected through convenience sampling from a university psychology department's human subjects pool. Generally, with an undergraduate sample that was primarily female, between the ages of 18-24 and limited to Northern California, the results are not likely representative of the general population. Also, additional bias may be found in the sample being primarily psychology students for they likely had more familiarity with the themes presented in the survey packet from coursework than would the general public. Further

study on this topic would benefit immensely from random sampling within a larger, more diverse population.

Second, there were inconsistencies within the data collection phase that caused a large amount of missing data which may have affected the overall data quality. Data were collected over the course of two semesters, during the first of which participants were allotted one hour to complete the packet of surveys that typically took participants over an hour to complete; the research sessions were extended by 15 minutes during the second semester of data collection. Also, because of the lengthiness of the survey packets (21 pages), surveys were printed as double-sided pages and due to improper direction from researchers, many participants failed to complete the packet of surveys. Further study on this topic should be conducted with improved data collection setting and protocol; also, having smaller survey packets would have yielded more consistent data collection.

Finally, though interest in meaning-in-life research has grown substantially in the last few years, when this study was being designed and the data collected, there was relatively little existing modern research to draw from concerning meaningfulness generally and even less from the strictly subjective existential point of view. Though this posed a challenge during the design phase, the reliance on pure philosophical theory as a basis for the proposed structural model proved to be an interesting exercise in creative research design; and as it turns out very in line philosophically with the topic. In comparing the results of the present study with other research findings on existential themes released in the last few years, taking this creative approach to studying subjective

processes of existential meaning-making seems to have identified some opportunities for future research in line with conceptual gaps articulated in other related works.

Future Research

Self-reflection has been positively associated with cognitive flexibility which demonstrates an ability to recognize different possibilities for a given situation and to adapt to changes with confidence and ease (Martin & Rubin, 1995). It would be interesting to include cognitive flexibility in future research to better understand the influence cognitive flexibility may have on the process of meaning-making in terms of its known correlates and their potential relation to self-reflection, as well as psychological aspects of the existential theme of commitment.

Future studies could test the direct influence of each type of epistemic curiosity on the specific aspects of self-regulatory learning they each motivate separately according to their theoretical conceptualization. By testing their interactions separately and together, researchers may capture a new perspective on how this construct works.

Future research may benefit from testing this mediated relationship between the two types of epistemic curiosity and the two aspects of self-reflection, need to reflect and engage in reflection; exploring this relationship with different existential concepts may yield more insight into the process of subjective categories of thought.

Multiple studies looking at epistemic and self-regulatory variables in relation to learning have referenced the “self-absorption paradox” as a topic for future research, which appears when an individual engages in deliberate self-discovery from which the increase in self-knowledge also comes with an increase in psychological distress and

anxiety (Litman et al., 2005; Lowenstein, 1994; Sutton, 2016; Trapnell & Campbell, 1999). The current study poses an interesting explanation for this problem; using existential theory, the negative feeling of existential anxiety is associated with responsibility and commitment, meaning that when an individual increases their self-understanding they recognize that to develop a more complete self-understanding they must continue to learn about themselves, a lifelong process of following uncertain truths, which explains the dichotomy of experiencing motivation for self-knowledge search and anxiety over self-knowledge search simultaneously. Borrowing from Kierkegaard's notion that the categorical difference between understanding objective and subjective truth hinges on the inherent limitations of certainty; since the source of self-knowledge is a human being whose subjective existential experience will continually be in flux throughout the extent of their lifespan, then an individual can never be absolutely certain of their self-knowledge, thus posed with the task of self-discovery with indefinite limits they experience the anxiety of commitment to their own self-authentication as well as the motivation to continue the act of self-authentication as a sense of responsibility to their existential freedom. The proposed interplay between epistemic curiosity as representing existential anxiety and self-reflection as the mechanism of self-authentication through transcendence may be useful to consider for future research to understand this paradox.

Conclusion

The findings of the present study highlight the value in taking a creative approach to psychological research. The focus of the study was to see how the themes of existentialism, each one expressed as a rhetorical *mood* densely packed with meaning,

may be matched with representative psychological constructs and how they might be conceptualized as a systematic subjective process creating existential meaningfulness for placement in a structural model. The proposed structural model confirmed the theoretical conceptualization of the subjective meaning-making process as each latent psychological variable performed according to the mood and function of its existential ideal. Both mediation structures demonstrated the complexities of the subjective meaning-making process; as Interest and Deprivation types of Epistemic Curiosity interacted with the self-evaluative metacognitive tasks performed by Self-Reflection to produce increased ability and expression of Compassionate Perspective-Taking, a metacognitive and altruistic form of empathy. Further, the mediating effect of Compassionate Perspective-Taking for Self-Reflection facilitated the emergence of Existential Meaningfulness, which may show that as an individual renews their commitment to self-authenticate by regular engagement with their epistemic need for self-knowledge they may not only experience transcendence over their former limits of self-concept, but also may experience transcendence in how they relate to others by extending their perspective of freedom outwardly in an act of mutually benefitting care. These are the acts of value creation that Nietzsche (1964, pg. 66) implored us all to find for ourselves, as his Zarathustra said, “Love ever your neighbour as yourselves- but first be such as *love themselves*.”

These findings provide insight on how the existential perspective may prove a valuable tool for future meaning-in-life research; additionally, they elucidate how the interaction between Epistemic Curiosity and Self-Reflection is worthy of further study

for its potential explanation of an individual's drive to continue self-discovery while in a state of existential anxiety.

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