

THE EXISTENTIAL NIHILISM SCALE (ENS):
THEORY, DEVELOPMENT, AND PSYCHOMETRIC EVALUATION

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Abstract

Existential nihilism is a meaning-related worldview characterized by a rejection of the existence of meaning in life and a belief in the futility of trying to ameliorate this absence. Despite the rich but often ambiguous philosophical and cultural history of existential nihilism, its impact on mental health and society remains largely unknown due to a gap in the scientific measurement literature. To address this gap, an 8-item scale measuring the proposed construct was rigorously developed and tested in accordance with psychometric theory and scale development guidelines. Two identical studies were conducted within an undergraduate sample ($N = 329$) and a community sample ($N = 307$) to evaluate the scale's item quality, reliability, internal structure, convergent validity, concurrent validity, divergent validity, and incremental validity. Evaluation of the Existential Nihilism Scale (ENS) provided evidence of strong psychometric properties. This new measure promises to contribute to future research examining the impact of existential nihilism on mental health, wellbeing, and social outcomes.

Keywords: existential nihilism, meaning in life, scale development, psychometrics, wellbeing

Word count: 158

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Introduction

Overview

Existential nihilism, the belief that existence is unchangeably meaningless, continues to flourish on popular online platforms such as Reddit, Facebook, Instagram, YouTube, and TikTok. However, despite the precursors of nihilism stretching back to philosophical discussions in ancient Greece (Gertz, 2019), the impact of this worldview on wellbeing, mental health, and society from a scientific perspective remains largely unknown. This scientific gap is additionally puzzling within the context of psychological research on meaning in life, which is robustly associated with wellbeing, implying that adherence to the existential nihilistic worldview may have a profound impact on wellbeing outcomes such as life satisfaction, depression, and affect. Responsible for the current dearth of scientific knowledge regarding this phenomenon is the lack of a sufficient pre-existing tool for the measurement of existential nihilism. To address this gap, a novel questionnaire has been carefully developed, in accordance with psychometric theory, to reliably and validly measure existential nihilism: the Existential Nihilism Scale (ENS; see Appendix A). Two identical studies were conducted to test hypotheses regarding the ENS's item quality, reliability, and internal structure. Furthermore, convergent validity, concurrent validity, divergent validity, and incremental validity were also tested utilizing scales measuring theoretically related constructs (i.e., meaning in life, depression, life satisfaction, and affect). The goal of the present thesis was to create a psychometrically sound measure of existential nihilism to contribute to future research examining its digital, societal, and psychological impact.

Meaning in Life

Across the diverse schools of theological, philosophical, literary, and psychological thought, most theorists agree that discovering, understanding, and ultimately, living by a meaning in life (MiL) is a central human concern. According to the pioneering work of Viktor Frankl (1946), human beings are driven by a primary, deep-seated, and innate motivation to live life meaningfully. Even in our

encounters with suffering and death, Frankl maintains that we seek and rely on meaning to cope. Primarily inspired by the foundational work of Viktor Frankl, the empirical attention devoted to the investigation and understanding of MiL within psychology has seen remarkable growth. Indeed, hundreds of peer-reviewed research papers have been published in recent decades. These publications aim to define MiL, delineate the sources of MiL, and discover the relationships MiL has to mental health, physical health, and wellbeing across cohorts.

Although MiL is widely considered among theorists to be a subjective and personal experience, most definitions that have been proposed for MiL maintain that it is characterized by a sense of purpose, significance, and coherence (Heintzelman & King, 2014; Martela & Steger, 2016). Purpose is the motivational component of MiL (Steger, 2016) and can be defined as the core goals that direct an individual's life (Martela & Steger, 2016). Significance is the evaluative component of MiL (Steger, 2016) and refers to the conviction that life matters, has inherent value, and is worth living (Martela & Steger, 2016). Finally, coherence is the cognitive component of MiL (Steger, 2016) and refers to the degree to which the world, the self, and their interrelationship is understood and comprehended (Martela & Steger, 2016).

The scholarly literature on MiL is vast and robust. The primary focus of such research has been to assess how the presence of MiL relates to indicators of wellbeing and psychopathology. For example, MiL has been linked to positive affect (Hicks et al., 2010; Hicks et al., 2012; Zika & Chamberlain, 1992), life satisfaction (Duffy & Sedlacek, 2010; Zika & Chaimberlain, 1992), happiness (Hicks et al., 2010; Hill et al., 2013; Peterson et al., 2005), positive self-image (Stillman et al., 2009), adaptive coping (Park & Folkman, 1997; Thompson et al., 2003), and overall psychological wellbeing (Ryff, 1989; Steger & Frazier 2005; Steger et al., 2006). MiL has also been researched within the context of social wellbeing, with meaningful living being associated with greater social appeal (Stillman et al., 2011) and a greater sense of social belongingness (Lambert et al., 2013).

Indicators of physical health have also been extensively researched within the context of MiL. Indeed, MiL is not only a robust predictor of health outcomes (Czekierda et al., 2017), but is also positively associated with longevity of life (Alimujiang et al., 2019; Boyle et al., 2009; Krause, 2009). Additionally, Steger and colleagues (2009) demonstrated that higher perceived MiL was associated with superior self-reported health. Research has also shown that greater MiL not only protects individuals from the deleterious effects of stress (Burrow & Hill, 2013; Mascaro & Rosen, 2006; Park & Baumeister, 2017) but is also associated with a greater ability to deal with events in life that are stressful (Sherman & Simonton, 2012).

Conversely, a lack of MiL is, according to empirical consensus, unfavourably associated with poor mental health outcomes, most notably depression and suicidality (Edwards & Holden, 2003; Heisel & Flett, 2004; Kleftaras & Psarra, 2012; Kleiman & Beaver, 2013; Lester & Badro, 1992; Mascaro & Rosen, 2005, 2008; Sorajjakool et al., 2008; Steger & Kashdan, 2009; Steger et al., 2009; Zika & Chamberlain, 1992). Additionally, MiL has more recently been shown to be protective against suicidal ideation in college students (Moscardini et al., 2021). Other research conducted by Zika and Chamberlain (1992) has demonstrated that MiL is inversely related to psychological distress and negative affect.

Existential Nihilism

Despite these important strides in the study of MiL, individual differences in *worldviews* about life's meaning, and their implications for experiencing a meaningful life, have scarcely been studied. One such worldview discussed extensively in philosophy is *existential nihilism*, a facet of the broader nihilism concept. Existential nihilism is defined here as a meaning-related worldview characterized by a rejection of the existence of MiL and its subcomponents (e.g., purpose, significance, mattering) and a belief in the futility of trying to ameliorate this absence (e.g., attempts to search for MiL). Theoretically speaking, existential nihilists perceive the totality of existence, and by extension, their own lives as unchangeably meaningless. They would, therefore, perceive no reason to try to discover

meaning, given their belief that there is no meaning to be found. Consequently, the process of obtaining MiL is eschewed, theoretically contributing to chronic, enduring meaninglessness that is resistant to change. Given the clear connection between existential nihilism and MiL, the measurement of existential nihilism should specifically address the overlap as well as the distinctiveness of this construct in relation to MiL. For example, existential nihilism should similarly be related (albeit inversely) to wellbeing and mental health (e.g., low life satisfaction, poor affect, and depressive symptomatology), while also capturing unique information above and beyond MiL constructs (due to its distinctive features). To map these potential relationships and establish distinctiveness, a working nomological network (Cronbach & Meehl, 1955) has been developed for existential nihilism with neighbouring constructs such as presence of MiL, search for MiL, depression, life satisfaction, positive affect, and negative affect. Given the conceptual overlap between existential nihilism and MiL, the present nomological network was informed by the aforementioned research on the correlates of MiL. Psychometric evaluation of the ENS was then guided by this nomological network. Figure 1 presents the nomological network.

Nihilism

Existential nihilism is a facet of the broader philosophical concept *nihilism*. The *Oxford English Dictionary* (n.d.) defines nihilism as the “total rejection of prevailing religious beliefs, moral principles, laws, etc., often from a sense of despair and the belief that life is devoid of meaning” (para. 2). Whereas *Merriam-Webster* (n.d.) defines nihilism as “a viewpoint that traditional values and beliefs are unfounded, and that existence is senseless and useless” (para. 1a), “a doctrine that denies any objective ground of truth and especially of moral truths” (para. 1b), and “the belief that traditional morals, ideas, beliefs, etc., have no worth or value” (More Definitions for Nihilism section, para. 1). Despite these definitions, any rigorous understanding of nihilism runs into what many scholars have diagnosed as the longstanding problem of nihilism’s conceptual muddiness (Carr, 1992; Crosby, 1988; Tartaglia & Llanera, 2021). Historically, the term ‘nihilism’ has been used in a variety

of philosophical, literary, and political contexts, often relying on definitions that are, as a result, contextual. According to Crosby (1988), the uses of ‘nihilism’ have fallen prey to a number of assumptions that have only served to further obfuscate the meaning of the term. Indeed, ‘nihilism’ is commonly used without providing a clear and concise definition, “assuming that its meaning [is] already apparent or that it would become clear in context” (Crosby, 1988, p. 8). Of the definitions that have been provided for ‘nihilism’, not only is there no particular definition that is unanimously accepted (Carr, 1992), there has also been a lack of consensus about the term’s conceptual parameters, with scholars’ definitions ranging from narrow to broad (Crosby, 1988). This is not surprising. For one, a real tradition of literature dedicated to nihilism does not exist (Carr, 1992). Second, the arena of twentieth-century nihilism-related analysis has suffered from being uncontained, leaving “the diverse efforts to analyze and understand [nihilism] [...] largely isolated from one another” (Carr, 1992, p. 16). The result is a heavily layered (Carr, 1992), vague (Crosby, 1988), and ambiguous (Crosby, 1988; Tartaglia & Llanera, 2021) term, described by Tartaglia and Llanera (2021) as a “true nothing-word” (p. 1). The consequences of nihilism’s conceptual muddiness do not end here. Indeed, nihilism, commonly used as a term of derogation or reproach (Veit, 2018), has been put in danger of becoming an umbrella term to describe everything commonly perceived as bad, perverse, or undesirable (Tartaglia & Llanera, 2021). In light of the aforementioned, the present research has followed the strategies of Carr (1992) and Crosby (1988) in understanding and defining nihilism from a multidisciplinary approach so as to avoid further obfuscation of the term. The present thesis will, therefore, rely on etymological, historical, linguistic, and philosophical analyses to achieve this elucidation, given that the psychological literature on nihilism is relatively non-existent.

Etymology of ‘Nihilism’. Structurally speaking, ‘nihilism’ is composed of two etymons: the classical Latin *nihil* and the English suffix *-ism* (Oxford University Press, n.d.). The Latin word *nihil* serves as the root for ‘nihilism’ and literally translates to “not anything, nothing; that which does not exist” (Oxford Latin Dictionary, 1968, p. 1177). Whereas *-ism* is an English suffix that is added to the

end of a word to form the name of a “system of theory or practice” (Oxford University Press, n.d., para. 2a) or to create “descriptive terms [that signify] doctrines or principles” (Oxford University Press, n.d., para. 2b). Therefore, ‘nihilism’ literally translates to a ‘nothing-doctrine’.

History of Nihilism. Betraying nihilism’s rich philosophical, cultural, and political history is the fact that the term is relatively new. Although Nolen Gertz (2019) traces the precursors of nihilism back to the ancient Greek philosopher, Socrates, the term was not coined until the eighteenth century by a church deacon named Friedrich Lebrecht Götze in a book entitled *De Nonismo et Nihilismo in Theologia* (*The Not-ism and Nothing-ism in Theology*; Tartaglia & Llanera, 2021).

Fifty years later, ‘nihilism’ resurfaced in debates about the metaphysical consequences of Immanuel Kant’s *transcendental idealism* (Carr, 1992; Tartaglia & Llanera, 2021). Kant argued that humans cannot know the external world as it exists independently from human subjectivity but instead can know only a limited appearance of reality wholly constructed by the features of cognition (Gardner, 1999). In response to this, Jacob Hermann Obereit and Daniel Jenische independently accused Kant of creating a philosophy that entailed nihilism (Tartaglia & Llanera, 2021). In this context, ‘nihilism’ meant that transcendental idealism transformed the external world into nothingness. However, it was Friedrich Heinrich Jacobi’s *Letter to Fichte* that popularized the link between nihilism and German idealism (Carr, 1992; Gertz, 2019; Tartaglia & Llanera, 2021). In it, Jacobi levies the same charge of nihilism to the offshoot transcendental philosophy developed by Johann Gottlieb Fichte by similarly criticizing “the implicit tendency of transcendental idealism to dissolve the reality of the external world into the ‘nothingness’ of consciousness” (Carr, 1992, p. 14). For Jacobi, and most of his philosophical contemporaries, the German idealists’ desire for knowledge was disastrously pursued at the expense of an independently existing and knowable reality (Carr, 1992; Tartaglia & Llanera, 2021). In this sense, the first commonly accepted use of ‘nihilism’ was as a “philosophical indictment of the highest order” (Carr, 1992, p. 14) regarded as something to avoid if one were to retain philosophical and intellectual integrity (Carr, 1992).

Then, in 1856, dissatisfaction was ubiquitously felt in Russia following their devastating loss to adversarial forces in the Crimean war (Tartaglia & Llanera, 2021). In the aftermath of the war, a thirst for political and societal reformation was shared among Russia's young intellectuals who called themselves 'nihilists,' largely inspired by the philosophy of Yevgeny Bazarov, the self-proclaimed nihilist in Ivan Turgenev's novel *Fathers and Sons* (Gertz, 2019; Petrov, 2019; Tartaglia & Llanera, 2021). Contrary to the earlier use of the word in Germany, for these young political activists, nihilism did not represent something to avoid; indeed, Carr (1992) notes that they even "used the term with pride" (p. 15). According to Gertz (2019) and Petrov (2019), destruction in the name of upending perceived oppression and tyranny to clear the way for a better (albeit vaguely defined) society was their modus operandi, believing that only what survived destruction was worthy of constituting society. In this sense, 'nihilism' represented a welcomed banner for a particular historically isolated type of sociopolitical activist to march under as a means to revolt against prevailing political structures deemed to be unworthy of existing. With extreme and violent radicalism eventually seeping into Russian nihilism, the movement became linked with terrorism (Petrov, 2019), culminating in the assassination of Tzar Nicholas II in 1881 (Gertz, 2019).

A flurry of anti-nihilistic literature surfaced shortly thereafter, with Fyodor Dostoevsky serving as the most prolific contributor (Petrov, 2019). Works such as *Notes from Underground*, *Crime and Punishment*, *The Devils*, and *The Brothers Karamazov* by Dostoevsky examined Russian nihilism from an existential and moral perspective, arguing that commitment to nihilism represented psychological and spiritual "decline, with diabolical dimensions" (Petrov, 2019, p. 84) arising from the conviction that "everything is permitted" (Woolfolk, 1989, p. 72). Dostoevsky's works assert that the introduction of Western materialism, atheism, science, and politics into Russia led to a "desacralized [worldview]" (Woolfolk, 1989, p. 72) characterized by a dearth of objective, transcendent ideals (Woolfolk, 1989) where all responsibility was deferred to environmental causes (i.e., nature and society; Midgley, 1961). Within such a worldview, the notion that humans were responsible for their actions was unequivocally

rejected, ultimately becoming expressed in the corollary that anything goes, including suicide, murder, and worldly destruction (Midgley, 1961). In this sense, Dostoevsky's 'nihilism', epitomized by "the Underground Man, Raskolnikov, Stavrogin, and Ivan Karamazov," (Woolfolk, 1989, p. 74) represented a total collapse of ethical and moral principles with the potential to culminate in a "blood bath" (Midgley, 1961, p. 70) where "the nihilist will stop at nothing until the world is consumed by fiery destruction" (Midgley, 1961, p. 68). Since their publication, these condemnatory analyses of nihilism found in Dostoevsky's polemical works have significantly influenced the broader twentieth-century cultural understanding and evaluation of the term, contributing to the widespread view that nihilism is intrinsically bad (Petrov, 2019).

However, it was the works of Friedrich Nietzsche that not only solidified nihilism into common twentieth-century parlance (Carr, 1992; Gertz, 2019; Tartaglia & Llanera, 2021), but "has [also] been the decisive influence on [the terms] twentieth-century usage" (Carr, 1992, p. 15). A number of scholars (Carr, 1992; Tartaglia & Llanera, 2021) agree that the ambiguity and inconsistency with which Nietzsche wrote about nihilism was ultimately mirrored by subsequent discussions on nihilism. As Tartaglia and Llanera (2021) illustrate, the conceptual treatment of nihilism in Nietzsche's literary oeuvre goes in many, sometimes opposing directions. Indeed, Nietzsche (as cited in Tartaglia & Llanera, 2021) has described nihilism as both a "divine way of thinking" (p. 22) and as something akin to a malady of the soul resulting from the dissolution of the Judeo-Christian and Platonic tradition grounding European culture (Carr, 1992). This latter interpretation of nihilism is more commonly seen in Nietzsche's works and may be more aptly described as a crisis resulting from a loss of absolute meaning, purpose, truth, and value (Carr, 1992). Here, we can see nihilism further transforming into the existential variant.

Driven by Nietzsche's far-reaching and influential analyses and Dostoevsky's literary works, nihilism was further examined by Continental philosophers in the twentieth century. Most notable were the existentialists, Albert Camus (Crosby, 1988; Veit, 2018), Martin Heidegger (Carr, 1992; Tartaglia

& Llanera, 2021), Jean-Paul Sartre (Gertz, 2019), and Simone de Beauvoir (Gertz, 2019). Regarding nihilism, the existentialists were chiefly concerned with not only how to respond to the predicament of universal meaninglessness (Veit, 2019) but also to understand how this loss of meaning could be used to achieve greater personal authenticity and commitment to life (Carr, 1992). Indeed, the goal was to “wrest positive benefit from a condition which seemed paralyzing and inescapable: [...] the loss of all sense of contact with anything that is ultimately [...] meaningful” (Carr, 1992, p. 2). By this time, discussion of nihilism, no longer conceived as a product of the esoteric philosophy of the Enlightenment (i.e., German idealism) or as a culturally bound phenomenon (i.e., Russian nihilism), was widespread (Tartaglia & Llanera, 2021). Indeed, the twentieth-century existentialists, inspired by Nietzsche and Dostoevsky, had transformed their new existential conception of nihilism (i.e., life is meaningless) into a universal human predicament, and due to the popularity of the existential tradition, nihilism (in this new form) gained significant cultural traction.

Karen Carr (1992) argues in *The Banalisation of Nihilism* that nihilism has more recently found its way into the postmodernist tradition. Philosophers such as Jean Baudrillard, Jacques Derrida, Richard Rorty, and Jean-François Lyotard are among the many who discussed nihilism in the context of *postmodernism*, broadly defined by Gertz (2019) as “the view that meanings are not objective but are social constructions” (p. 188). For the postmodernists, the notion of an “eternal, universal, and immutable [meaning is a] stultifying illusion” (Gertz, 2019, p. 92) of traditional Western metaphysics that prevents awareness of what is really true: that what is considered meaningful is utterly groundless. Carr (1992) not only contends that the postmodernist project is an attempt to bring an end to Western metaphysics but also directs attention to the postmodernist attitudes of either complete indifference or “mild revelry” (p. 7) at the resulting nihilism. Indeed, at the end of *Simulacra and Simulation*, Jean Baudrillard (1981) exclaims, “I am a nihilist. [...] There is no more hope for meaning. And without a doubt this is a good thing: meaning is mortal” (pp. 160 - 164).

Today, nihilism (most commonly expressed as the existential variant) can be seen in quite disparate arenas of the world. Most notable is the online presence of nihilism on various social media platforms. The ‘Nihilist Memes’ page on Facebook, which posts nihilism-related digital content, is home to approximately 1.85 million followers.¹ On Instagram, ‘Nihilism’, ‘Nihilist’, and ‘Nihilistmemes’ have been used as hashtags for approximately 350,000 individual posts. Furthermore, the nihilism subreddit on Reddit is currently home to 100,849 subscribers and has seen remarkable growth since its inception. Regarding TikTok, the relatively new video sharing platform, the ‘Nihilism’, ‘Optimistic Nihilism’, and ‘Nihilist’ hashtags already boast of 48.4 million accumulated views. Nihilistic content has also been made available for consumption via uploads to YouTube, television shows, movies, and literature. Indeed, the catalogue of nihilism videos on YouTube is vast, amassing millions of accumulated views. For example, Kurzgesagt’s *Optimistic Nihilism* (2017) YouTube video has acquired 13,168,868 total views, approximately 758,000 likes, and 50,994 comments. Additionally, some of the most popular modern films and television shows, such as *the Dark Knight*, *Rick and Morty*, and *True Detective*, glamorize nihilistic themes and narratives. Such works include detailed depictions of truly nihilistic characters who, Veit (2018) suggests, resemble the absurd nihilistic heroes characteristic of earlier existential works. In light of the aforementioned, there is some evidence to support Veit’s (2018) claim that nihilism is “one of the most popular philosophical views in [contemporary] folk philosophy” (p. 214). The everyday meaning of ‘nihilism’ across these digital platforms and within consumer entertainment is generally conceived through the existential lens, with other conceptualizations of nihilism (e.g., moral nihilism) remaining in the periphery. For example, a viral TikTok video with approximately 1.4 million views, 481,000 likes, and 4,361 comments recounts five reasons to date a nihilist, describing nihilism as the belief that “nothing matters” (@americanbaron, 2021). Another TikTok with approximately 300,000 views, 69,000 likes,

¹ Note that all online statistics presented are from July 2021.

and 2,720 comments describes nihilism as the belief that “my life is meaningless, all life is meaningless” (@january.21.2003, 2020). On the nihilism subreddit, the ‘Introduction’ section that is visible to the entire community more broadly describes nihilism “as a philosophical position, [involving] denying certain existence claims” (r/nihilism, n.d., para. 1), going on to delineate and define two of the most “prominent forms of nihilism” (i.e., existential nihilism and moral nihilism; r/nihilism, n.d., para. 1). Here, existential nihilism is defined as a philosophical position that “rejects claims that human life is meaningful” (r/nihilism, n.d., para. 1), whereas moral nihilism is defined as a philosophical position that “rejects claims that human actions can be right or wrong” (r/nihilism, n.d., para. 1). However, most of the posts and discussions on the nihilism subreddit focus solely on the existential variant, with various community members posting threads with titles such as “Life having a meaning is a horrible lie” (Deleted user, 2021), “Life is a void of meaninglessness” (@cosmickitty666, 2021), and “Life is meaningless, nobody is born with a purpose, and nobody belongs anywhere” (@mistra, 2021). On Instagram, a quick survey of the ‘Nihilism’ hashtag revealed posts claiming that “Everything is meaningless” (@nofunpress, 2021), that “No lives matter [...] because we’re all going to die, eventually” (@nolvsmatter, 2021), and that “Life, in a cosmic sense, is utterly meaningless” (@idontthinkthatsphilosophy, 2021). One Instagram post, with 1,499 likes, even outlines a definition of nihilism as “a philosophical view that life has no intrinsic meaning [suggesting] that the human species is insignificant and without purpose” (@contagious.intellect, 2021). As is apparent in these conceptualizations of nihilism found across different popular social media websites, the common everyday usage of ‘nihilism’ in the twenty-first century has been greatly influenced by existentialism’s treatment of nihilism.

Definition of Nihilism. Conceptually shared among the different historical manifestations of nihilism is a cognitive act of “negation or denial” (Crosby, 1988, p. 35) of some commonly accepted aspect of reality or traditional value of human life. Walter Veit (2018) offers a similar definition, claiming that nihilism is “the negative and eliminativist thesis of denying objective values” (p. 214).

Additionally, nihilism is both a “negative belief” (Tartaglia & Llanera, 2021, p. 8) to the extent that it consists of a *denial* of something generally perceived to exist (Tartaglia & Llanera, 2021) and is a point of view about the general character of the world (i.e., a worldview; Carr, 1992). Michael Gillespie (as cited in Tartaglia & Llanera, 2021), a contemporary scholar of nihilism, adds that nihilism is *experienced* as a void or an absence, suggesting that there is an experiential element involved. Therefore, the present thesis conceptually defines *nihilism* as a worldview characterized by one or more negative beliefs rejecting the existence of commonly accepted aspects of reality or traditional values of human life, which the nihilist can experience as an absence of that which is rejected. Additionally, these aspects of reality or values of human life that the nihilist rejects are often perceived as objective among non-nihilists.

Types of Nihilism. Nihilism has been historically and conceptually divided into several narrower subcategories (e.g., existential nihilism). Having already defined existential nihilism as a belief in the non-existence of MiL and the futility of trying to ameliorate this absence (e.g., ‘Existence is unchangeably meaningless’), the following represents the rest of nihilism’s typology. *Political nihilism* is a worldview that is characterized by both the rejection of all prevailing social and political institutions as well as the belief that the destruction of said institutions is the most viable solution for the establishment of (vaguely defined) reformation (e.g., ‘The current political landscape should be renounced and upended to make room for something better’; Petrov, 2021). *Epistemological nihilism* is a worldview characterized by the rejection of “the possibility of knowledge” (e.g., “Every knowledge claim is equally unjustified”; Carr, 1992, p. 17; Crosby, 1988). *Alethiological nihilism* is a worldview characterized by the rejection of “the reality of truth” (e.g., “There is no truth”; Carr, 1992, p. 17). *Ontological nihilism* is a worldview characterized by the rejection of the reality of the external world (e.g., “Nothing is real”; Carr, 1992, p. 18). And *ethical nihilism* is a worldview characterized by the rejection of all moral, ethical, and evaluative principles (e.g., ‘There is no such thing as good or bad’; Carr, 1992; Crosby, 1988; Kahane, 2017; Veit, 2018).

The Precedence of Existential Nihilism

Although Carr (1992) adamantly opposes the notion that existential nihilism represents the “principal, [...] basic, or fundamental” (p. 19) manifestation of nihilism, she generally agrees, along with many scholars (Crosby, 1988; Tartaglia & Llanera, 2021; Veit, 2018), that existential nihilism is the most dominant and important type regarding its cultural, historical, and philosophical relevance. She correctly notes the comparatively greater prevalence of existential nihilism in literary discussions, news references, and movies (Carr, 1992), which has been mirrored more recently in the nihilism-related content found online. Most contemporary analyses of nihilism (Tartaglia & Llanera, 2021) also tend to give the greatest emphasis to its existential variant, sometimes inaccurately reducing the broader concept of nihilism itself into the belief that life is intrinsically meaningless (Crosby; 1988). To Crosby (1988), the emphasis placed on existential nihilism above the other types is justified by the following three reasons. First, the more broadly defined term ‘nihilism’ is most often linked to beliefs associated with existential nihilism (Crosby, 1988). Second, the other types of nihilism (except the political variant) tend to entail existential nihilism (Crosby, 1988), a claim also posited by Karen Carr (1992). For example, the belief that there is no such thing as truth (i.e., alethiological nihilism) usually leads to the belief that life is meaningless (i.e., existential nihilism). Third, existential nihilism is unique in that it “encompasses the whole of human life” (Crosby, 1988, p. 8) whereas the other types do not. These reasons, for Crosby (1988), point to the precedence of existential nihilism over and above the other types.

In psychology, the decision to focus on existential nihilism is emphasized by the vast literature unequivocally suggesting the importance of MiL on wellbeing and mental health. Surely, the widespread worldview that existence itself is unchangeably meaningless is ripe for psychological investigation, given the empirical attention that MiL has received. Surprisingly, psychology has remained relatively silent on existential nihilism, despite its cultural and potential psychological significance. However, a number of pre-existing constructs and measures have certainly come close to

encompassing the existential nihilism construct, but as will be outlined, they are insufficient for a number of crucial reasons.

Pre-Existing Constructs

Nöogenic Neurosis. According to Victor Frankl (1946), during the meaning-making process, one may experience transitory personal meaninglessness (i.e., the *existential vacuum*). Eventually, the emptiness of meaning produced by this “vacuum” may be filled with something meaningful, provided the existentially frustrated individual effectively employs meaning-seeking strategies. This is the best-case scenario. Alternatively, the ability to successfully overcome the existential vacuum may be continually blocked, resulting in an enduring, pervasive pattern of existential frustration. This pattern may then lead to *Nöogenic neurosis*, defined as a chronic personal meaninglessness coupled with neurotic symptomatology (e.g., chronic apathy, boredom, and aimlessness).

Existential Neurosis. Salvatore Maddi (1967) proposed a similar construct called *existential neurosis*. The development of existential neurosis begins with the *premorbid identity*, defined as an “overly concrete and fragmentary” (Maddi, 1967, p. 315) identity preoccupied with the self as nothing but the “embodiment of biological needs and a player of social roles” (Maddi, 1967, p. 315). Existential neurosis occurs when specific stressors uproot this vision of the self, leaving one without an identity. Maddi specifies three stressors responsible for the onset of existential neurosis: the threat of imminent death, social upheaval, and an acute awareness of one’s own superficiality. Existential neurosis is similarly characterized by a chronic, settled, and personal meaninglessness coupled with apathy and aimlessness.

Some important theoretical differences separate existential nihilism from the above neuroses. First, the neuroses stress a chronic state of *personal* meaninglessness, whereas existential nihilism stresses the meaninglessness of everything, which by extension includes the self. This difference is not negligible. Theoretically speaking, personal meaninglessness may be accompanied by the belief that MiL is still a possibility (e.g., either for other people or for one’s future self), a belief not characteristic

of existential nihilism. Second, the neuroses (i.e., Nöogenic neurosis and existential neurosis) are, by definition, psychopathological (Frankl, 1946; Maddi, 1967), whereas existential nihilism is not. In other words, although existential nihilism can be a key feature of the above neuroses, it is not necessarily entailed. For example, the neuroses could be characterized by the belief that, although other people live meaningfully, MiL is *personally* unavailable. This particular expression of the above neuroses would not be a manifestation of existential nihilism. Furthermore, state-like existential nihilism is another possibility, which would occlude clinical diagnosis of these neuroses, given the transitory expression of nihilism.² As such, the relationship between existential nihilism and the above neuroses is analogous to the relationship between self-criticism and depression. Although self-criticism can be a key feature of depression, it is not, by definition, psychopathological and it is not always accompanied by depression.³

The Need for a Scale

Nevertheless, theorizing about existential nihilism remains speculative as no psychological instrument currently exists to sufficiently measure the construct. There are, however, a number of relevant scales that require some attention.

The Purpose in Life Questionnaire. The Purpose in Life Questionnaire (PIL; Crumbaugh & Maholick, 1964) is a widely used scale that instrumentalizes the cognitive, behavioural, and affective features of Nöogenic neurosis. The scale consists of 20 items, which are rated on a seven-point Likert-type scale with lower scores designed to identify cases of Nöogenic neurosis.

Although the scale may be an adequate measure of Nöogenic neurosis, it is an unsuitable measure of existential nihilism. First, the phraseology of the items is self-referential (e.g., ‘*My life is: (1) empty, filled only with despair to (7) running over with exciting things*’), which does not capture the universal meaninglessness that is crucial to the existential nihilism construct. Furthermore, the

² A key feature of the neuroses is chronicity.

³ Nor is depression always accompanied by self-criticism.

belief in the futility of ameliorating the absence of MiL (another crucial element of existential nihilism) is not reflected in the PIL. However, the lack of existential nihilism's conceptual representation in the PIL is understandable, given that the PIL was designed to measure a different construct. Second, some critics contend that PIL items may be significantly confounded with other constructs, such as depression (Dyck, 1987; Steger, 2006; Yalom, 1980), suicide (Martela & Steger, 2016), despair (Martela & Steger, 2016), and energy (Martela & Steger, 2016). Indeed, a number of items on the PIL have questionable conceptual relevance, especially with existential nihilism (e.g., 'With regard to death I am: (1) *unprepared and frightened* to (7) *prepared and unafraid*'). Third, the psychometric quality of the PIL has been criticized, with researchers suggesting that the scale's factorial structure is inconsistently replicable (Frazier et al., 2003; Steger, 2006). Multiple studies have reported a PIL factorial structure consisting of one factor (Marsh et al., 2003; Steger, 2006), two factors (Dufton & Perlman, 1986; McGregor & Little, 1998; Molcar & Stuempfig, 1988; Morgan & Farsides, 2007; Shek, 1988; Waisberg & Starr, 1999; Walters & Klein, 1980), and three or more factors (Harlow et al., 1987; Reker & Cousins, 1979; Sato & Tanaka, 1974; Zika & Chamberlain, 1988) creating concerns over the scale's dimensionality. Even when the number of factors is replicated, it is important to note that the factors reported are comprised of inconsistent sets of items. In light of these criticisms, Schulenberg and Melton (2010) used confirmatory factor analysis in an attempt to replicate a published model of the PIL. Their analysis demonstrated that the most replicable and psychometrically reliable factor with regard to the purpose in life construct was Morgan and Farsides (2007) "purposeful life" factor, which consisted of items 3, 8, and 20. Schulenberg and Melton (2010) then suggested supplementing the aforementioned 3-item factor with item 4 ('My personal existence is: (1) *utterly meaningless, without purpose* to (7) *purposeful and meaningful*') to create a potential PIL-short form consisting of items 3, 4, 8, and 20 (henceforth, referred to as the PIL-4). Not only does item 4 have content validity but the addition of item 4 to Morgan and Farsides (2007) "purposeful life" factor increases the internal consistency reliability from .75 to .81. Additionally, the PIL-4 was "supported strongly by

confirmatory factor analysis” (Schulenberg & Melton, 2010, p. 107) and is a “clustering of items [that] is consistent with” (p. 107) previous research on the PIL’s internal structure (Dufton & Perlman, 1986; Marsh et al., 2003; Molcar & Stuempfig, 1988; Steger, 2006; Waisberg & Starr, 1999; Walters & Klein, 1980; Yalom, 1980). However, despite this, the PIL and the PIL-4 still do not measure existential nihilism, given the self-referential phraseology and the lack of sufficient representation of the core elements of existential nihilism.

The Nihilism dimension on the Alienation Test. The Alienation Test (AT; Maddi et al., 1979) is a scale that was designed to assess the subjective state of alienation. The scale consists of 60 items, rated on a continuum from 0 to 100. The items belong to four theoretically derived dimensions of alienation (15 items per dimension): powerlessness, vegetativeness, adventurousness, and nihilism. Maddi et al.’s (1979) nihilism is defined as “the insistent attempt to discredit anything that appears to have meaning” (p. 73).⁴ Each dimension is further broken up into 5 different contexts, relating to work, the self, social institutions, interpersonal relations, and family. Importantly, the nihilism and vegetativeness dimensions were derived from Maddi’s theoretical outline of the existential neurosis.

Despite Maddi et al.’s (1979) definition, the nihilism dimension on the AT is an unsuitable measure of existential nihilism since many of its items are not conceptually relevant (e.g., ‘The only reason to marry is for convenience and security’ or ‘Why bother to try to love or care for people; they only hurt you in the end’). Furthermore, scholarly suggestions have been made toward the AT, stating that further attention should be paid to the dimensionality of the scale, alluding to the possibility that the dimensions may not be “distinct enough to constitute [unique] sources of information” (Seeman, 1991, p. 363). Additionally, there are a number of presumptive and double-barrelled items, raising

⁴ Within the context of nihilism’s typology previously outlined, this definition appears to be concerned with existential nihilism.

concerns about the quality of the items. All of this suggests that the AT's nihilism dimension may have poor content validity and is not an appropriate measure of existential nihilism.

The Meaning in Life Questionnaire. The Meaning in Life Questionnaire (MLQ; Steger, 2006) is a widely used 10-item scale that assesses the presence of MiL and the search for MiL on a seven-point Likert-type scale ranging from "Absolutely Untrue" to "Absolutely True."

Score profiles showing low presence of MiL *and* low search for MiL are insufficient in measuring *only* existential nihilism, despite the overlap. Theoretically speaking, individual differences in meaning-related worldviews may emerge within this MLQ profile. On the one hand, a low score on both MLQ subfactors could certainly imply a commitment to the existential nihilism worldview (i.e., theoretically speaking, an existential nihilist should not endorse either presence of MiL or search for MiL). However, it could also imply someone with learned helplessness due to repeated failures in seeking a satisfactory personal meaning (i.e., chronic *personal* meaninglessness). Consequently, the MLQ is capable of obtaining only intimations of existential nihilism rather than an unequivocal measurement of the construct. Indeed, when an MLQ score profile shows low presence of MiL and low search for MiL, it remains unclear whether the respondent is an existential nihilist (i.e., 'Existence is unchangeably meaningless') or is someone with chronic *personal* meaninglessness who has given up hope of ever obtaining a personal MiL despite believing the existence of meaning (i.e., 'I do not search for meaning because it has been useless to me. I give up. Only other people can live meaningful lives'). These differences may have important clinical and psychological implications.

The No Meaning Scale. The No Meaning Scale (NoM; Kunzendorf et al., 1995) is an 18-item assessment rated on a 4-point Likert-type scale ranging from "Strongly Disagree" to "Strongly Agree." According to Kunzendorf and colleagues (2016), the scale measures existential authenticity across three (undefined) factors: existential futility, existential insignificance, and existential absurdity. However, which items comprise each factor was not specified.

Approximately four (22.20%) of the eighteen items on the NoM theoretically measure existential nihilism (e.g., ‘Any perceived meaning in life is illusory’). However, as a whole, the NoM is an unsuitable measure of existential nihilism for a number of crucial reasons. First, eight items (44.40%) are phrased self-referentially (e.g., ‘My life has no meaning or purpose’), which confuses the proposed distinction between personal meaninglessness measured by scales such as the MLQ versus the universal meaninglessness characteristic of existential nihilism. Second, the content of five items (27.80%) specifically refer to the relationship between meaninglessness and the inevitability of death (e.g., ‘The fact that I shall die and be forgotten makes my life seem insignificant’), which narrows down the possible sources that are responsible for respondents’ feelings of meaninglessness, something we intended to avoid in the construction of our scale (i.e., we created items that measure the presence of existential nihilism but not the sources that lead to it). Third, a number of items have negative judgements about life and the self written into their structure (e.g., ‘Life is a cruel joke’, ‘Life is filled with one absurd loss after another’, or ‘I just don’t care about myself anymore’). These items appear to be tapping into something like existential despair. Finally, it is unclear which items belong to each factor proposed by Kunzendorf et al. (2016). For example, of the eighteen items on the NoM (Zunzendorf et al., 2016), one item simultaneously loaded onto all three factors ($\geq .35$ factor loading), twelve items simultaneously loaded onto two of the factors ($\geq .35$ factor loading), and only five items cleanly loaded onto only one factor ($\geq .35$ factor loading), raising concerns about the scale’s structure. Although the NoM has some existential nihilism items, it is unclear what the NoM, as a whole, is measuring and is, therefore, an unsuitable measure for existential nihilism.

Further Review of Measurement Literature

The above measurement tools proved to be the most relevant for the present research due to a) existential nihilism’s similarity to the constructs the scales were designed to measure (e.g., PIL’s Nöogenic neurosis, AT’s nihilism, and MLQ’s presence of MiL/search for MiL) or b) the relevance that the scale’s items have with existential nihilism (e.g., some of the items comprising the NoM). In

addition to the above scales, a rigorous literature search was conducted to screen for other measurement tools potentially related to existential nihilism. First, the systematic review of fifty-nine MiL assessment instruments conducted by Brandstätter and colleagues (2012) was utilized to guide the search. Of the fifty-nine MiL assessment instruments identified, only four (including the NoM) contained items that were relevant to existential nihilism. Aside from the NoM, the other three measurement tools contained only one item relevant⁵ to the existential nihilism construct. These scales were the Meaning in Life Scale (MILS; Jim et al., 2006), the Sources of Meaning and Meaningfulness Questionnaire (SoMe; Schnell, 2009), and the Meaning in Life Questionnaire⁶ (MILQ; Kernes & Kinnier, 2008).

Additionally, over fifty potentially relevant pre-existing scales were also reviewed, ranging from a number of meaning-measuring scales (e.g., Reker & Peacock, 1981) to scales measuring narrow existential constructs (e.g., existential concerns, existential uncertainty, and existential quest; van Bruggen et al., 2017; Lewis & Bates, 2013; Van Pachterbeke et al., 2011). Furthermore, scales measuring eudaimonia (e.g., Vowinckel et al., 2017), core beliefs (e.g., Cann et al., 2010), death attitudes (e.g., Wong et al., 1994), wellbeing (e.g., Lui & Fernando, 2018), mattering (e.g., DeForge & Barclay, 1997), and religious quest (e.g., Maltby & Day, 1998) were thoroughly screened for related items. This search resulted in the identification of another six assessment tools that contained items partially relevant to existential nihilism: the Alienation, Despair, and Hope Scales (Cheng et al., 2013), the Existential Anxiety Questionnaire (EAQ; Weems et al., 2004), the Personal Beliefs Scale (PBS; Bergner & Ramon, 2013), the Personal Meaning Profile (PMP; Wong, 1998), the Spiritual Well-Being Scale (SWBS; Ellison, 1983), and the Existential Loneliness Questionnaire (ELQ; Mayers et al., 2002). However, these scales contained only one to two related items, with some of these items being

⁵ Items relevant to MiL that were self-referentially phrased were not considered relevant for the existential nihilism construct.

⁶ Note that this is a different scale than Steger et al.'s (2006) MLQ.

positively keyed (e.g., ‘The universe is full of meaning’; Mayers et al., 2002), and were, therefore, judged to be unsuitable measures of existential nihilism.

This literature search revealed that although some relevant items exist, they are sparse and scattered between different scales designed to measure constructs distinct from existential nihilism. Consequently, there is a gap in the scholarly literature, with no pre-existing scale that sufficiently measures the proposed existential nihilism construct. As a result, theorizing about the impact of existential nihilism remains speculative.

According to Furr (2011), the absence of a sufficiently developed measure within the pre-existing literature can alone be enough to justify the development of a new scale. However, a number of other reasons support the current scale development project. For example, although MiL measures are abundant in the pre-existing literature, they do not capture most of the essential features of existential nihilism (e.g., the universality of meaninglessness, the futility of ameliorating the absence of meaning, and that existential nihilism is a worldview). In other words, a sufficient measure of existential nihilism would not just be an indication of personal meaninglessness. It is hypothesized that a scale tapping into these essential and distinctive features of existential nihilism would, therefore, possess unique explanatory power and, thus, capture information over and above measures of MiL. This provides further justification for the creation of a new scale.

Additionally, existential nihilism has also proven to be, through its historical, cultural, and current digital influence, a phenomenon that is of present concern requiring psychological investigation. Historically, philosophers as early as the eighteenth and nineteenth centuries have been concerned with the societal and psychological ramifications of nihilism, with Nietzsche (as cited in Carr, 1992) famously proclaiming that “[nihilism] is one of the greatest crises, a moment of the deepest self-reflection of humanity” (p. 43). More recently, nihilism has been appraised in a number of diverse ways, demonstrating a current lack of unanimity among the philosophical community regarding how to evaluate the phenomenon. Stanley Rosen (1969) understood nihilism as not only a particularly

dangerous worldview but also one that is unsolvable without “the dissolution of human nature” (p. xx), implying that it is an inextricable possibility characterizing the human condition. Similarly, Gertz (2019) sees nihilism as a potential danger to humans and society, pointing to its “self-destructive” (p. 106) and “contagious” (p. 106) nature. In other words, the arguments of nihilism can be so convincing to others that it holds the potential to become a “contagion” (Gertz, 2019, p. 107) sweeping over society. In stark contrast, Carr (1992) shows that nihilism “evokes, not terror, but a yawn” (p. 7) in the postmodernists. Carr’s (1992) depiction of the nonchalant postmodernist attitude toward nihilism demonstrates that the phenomenon is not always cast in a condemnatory light. This latter appraisal of nihilism is shared by Tartaglia (2016) who sees meaninglessness as a mere fact about reality that we should simply ignore. Accompanying these polarizing examples is a broad array of different theoretical appraisals of nihilism not mentioned here, which are similarly characterized by disagreement. Nevertheless, this dearth of evaluative unanimity provides further reason to spearhead a scientific investigation into existential nihilism in order to shed empirical light on the more theoretical conversations abound.

The presence of existential nihilism within the digital world also calls for an empirical investigation of the phenomenon. This is particularly emphasized by the way Reddit and Instagram have chosen to moderate nihilism-related content. For example, users of Reddit are immediately reminded when they enter the nihilism subreddit (via the only post pinned to the top of the page by the moderators) that “encouraging suicide is against the rules” (@Vivlos, 2019). This appears to be the only visible rule enforced by the moderators, implying that suicidality, and its encouragement, is a recurring problem among self-identified nihilists. On Instagram, a search for the ‘Nihilism’ hashtag prompts a warning message that reads, “Posts with words you’re searching for often encourage behaviour that can cause harm and even lead to death. If you’re going through something difficult, we’d like to help” (Instagram, n.d.) with an accompanying link that leads to recommendations to talk to a friend, call or text a helpline volunteer, and read information about self-support. These examples

point to the fact that existential nihilism has been intuitively appraised among non-philosophers as something that may be deleterious to wellbeing, mental health, and even survival. Such appraisals appear to be corroborated by the MiL literature that reliably shows that the absence of MiL has been associated with a number of indicators of illbeing, such as depression, poor affect, and life dissatisfaction. This is not to mention the presence of existential nihilism in popular shows and movies, such as *Rick and Morty*, that have served to bring this worldview into general public awareness.

Given the current philosophical dispute regarding nihilism's impact, the widespread online and cultural presence of this worldview, its theoretical implications for wellbeing as informed by the MiL literature, and the potential for a scale of existential nihilism to possess unique explanatory power over pre-existing tools, the gap in the measurement literature should be addressed. Therefore, the Existential Nihilism Scale (ENS) was developed and psychometrically evaluated within an undergraduate sample and a community sample.

Development of Initial Item Pool

Articulation of Conceptual Definition

At the behest of recommended scale construction procedures (Clark & Watson, 1995; Furr, 2011), great emphasis was first placed on articulating a refined and theoretically sound conceptual definition of existential nihilism. The initial definition was formed out of a research-intensive and iterative, multifaceted process that relied on philosophical conceptualizations, observations of common linguistic patterns within online nihilism forums, and insights garnered from graduate-level lab meeting discussions. The goal was to develop a definition that not only reflected the core elements of the construct's traditional philosophical conceptualization but also how existential nihilism manifests in practice. The reason for this decision rested on the assumption that philosophical systems are rarely left unmodified by human minds. Existential nihilism in its purest form is that existence has no meaning (Carr, 1992; Tartaglia & Llanera, 2021; Veit, 2018). However, the operationalization of existential nihilism needed to capture how this proposition is typically transformed into other, highly related

beliefs (e.g., “nothing matters”), as observed within online nihilism forums. This decision was further corroborated by philosophical analyses that similarly make such transformations. Indeed, existential nihilism is commonly transformed into beliefs about nothing mattering (Gertz, 2019; Kahane, 2017; Tartaglia & Llanera, 2021), the insignificance of human life (Carr, 1992; Crosby, 1988; Gertz, 2019; Veit, 2018), the pointlessness of human life (Carr, 1992; Crosby, 1988; Tartaglia & Llanera, 2021), the non-existence of purpose (Carr, 1992; Crosby, 1988; Tartaglia & Llanera, 2021; Veit, 2018), and the futility of all attempts to ameliorate meaninglessness (Carr, 1992; Crosby, 1988; Nietzsche as cited in Borg, 1988; Veit, 2018). In addition, two crucial elements of existential nihilism that informed the current understanding of the construct were beliefs in the universality (Carr, 1992; Crosby, 1988; Tartaglia & Llanera, 2021; Veit, 2018) and the atemporality (Crosby, 1988; Nagel as cited in Veit, 2018; Tartaglia & Llanera, 2021) of meaninglessness. In other words, the existential nihilist’s diagnosis of meaninglessness extends to everything and everyone across time. The definition of existential nihilism was then refined in both graduate-level lab meetings and at the author’s discretion with the goal of parsimoniously capturing the core elements of the construct operationally.

Scaling Considerations

A seven-point Likert scale ranging from ‘Strongly Disagree’ to ‘Strongly Agree’ was carefully chosen as the scale’s response format to maximize response variability. Seven response options were deliberately selected to increase the scale’s ability to capture “finer [psychological] gradations” (Furr, 2011, p. 18) of commitment to existential nihilism. Theoretically, we expected there to be subtle individual differences in degrees of commitment to existential nihilism that any scale purporting to measure the construct should be able to measure. For example, a newly minted existential nihilist may only slightly agree to items measuring existential nihilism because not enough time has elapsed for their new belief system to have fully inhibited previous non-nihilistic beliefs. Whereas previously held non-nihilistic beliefs within a long-standing existential nihilist may have been, over time, sufficiently inhibited to evoke strong agreement with such items. To remain consistent with research that

demonstrates the psychometric advantages of labelling all response options (Furr, 2011), the remaining points were also labelled. Namely, 1 = ‘Strongly Disagree’, 2 = ‘Disagree’, 3 = ‘Slightly Disagree’, 4 = ‘Neither Agree nor Disagree’, 5 = ‘Slightly Agree’, 6 = ‘Agree’, 7 = ‘Strongly Agree’. Anchor points were framed in terms of agreement, given that the items were written as statements of fact (Furr, 2011). A midpoint labelled ‘Neither Agree nor Disagree’ was included to detect genuinely neutral sentiments and avoid forced responses, thereby enhancing both the scale’s accuracy (Furr, 2011) and psychometric quality (O’Muircheartaigh et al., 2000).

Item Creation

Several important item-writing recommendations (Clark & Watson, 1995; Furr, 2011) were considered during the iterative process of creating items. First, item-writing was guided by the conceptual definition of existential nihilism with the goal of creating items that sufficiently reflected the core elements of the underlying psychological variable. Therefore, a theoretically supported decision was carefully made to include, in addition to ‘meaning’, words representing subcomponents of meaning (e.g., ‘purpose’, ‘point’, ‘matter’, and ‘significance’). To reiterate, the main reason for including words related to meaning was due in part to the frequent use of those words on nihilism forums and within philosophical analyses to describe existential nihilism. This line of reasoning is not only partially corroborated by the psychological literature, which conceptually divides MiL into various components (i.e., significance, purpose, and comprehension), but also parallels common practice found within the MiL measurement literature to use a variety of interrelated words to point at a latent construct not perfectly expressed with just the word ‘meaning’. Theoretically speaking, deliberate inclusion of meaning-related words beyond ‘meaning’ will serve the intended function of capturing subtle individual differences in the degree of existential nihilistic commitment by casting a wider measurement net. For example, we theorized that an existential nihilist who rejects the existence of meaning, significance, purpose, point, and mattering should be categorized as more nihilistic than an existential nihilist who rejects the existence of *only* meaning. Any scale purporting to measure the

existential nihilism construct should, therefore, be able to quantitatively indicate the degree of these individual differences. A scale excluding those meaning-related words would fail to achieve this theoretically important function. Furthermore, given the nihilistic proclivity for negation, the negated version of these words were also utilized (e.g., ‘meaningless’, ‘insignificant’, and ‘pointless’).

It was important for items to also reflect the subtler elements of existential nihilism (i.e., universality, atemporality, and futility). Use of universal phraseology (e.g., ‘*Our* lives...’), atemporal phraseology (e.g., “Can *never*...”), and qualifiers indicating futility of human intervention (e.g., ‘Despite our best efforts...’) were utilized in structuring items to achieve this end.

Items were structured with the assumption that there are a number of diverse pathways that can lead individuals to endorse existential nihilism (Carr, 1992). For example, the inevitability of death (Crosby, 1988; Veit, 2019), the non-existence of God (Carr, 1992; Crosby, 1988; Veit, 2019), a commitment to scientism (Veit, 2019), and the absence of ethical values (Carr, 1992) are just some of the sources that have been theoretically linked to the onset of this worldview. Given that our goal was to capture only the *presence* of existential nihilism, items were not created to measure its sources.

Finally, to ensure meaningful responses and avoid respondent frustration, a number of item-writing recommendations (Clark & Watson, 1995; Furr, 2011) were followed. Namely, items were written as linguistically, grammatically, and conceptually simple as possible, avoiding philosophical and psychological jargon, without undermining the meaning of each item. Additionally, we avoided the use of double-negative, double-barrelled, and presumptive items. To balance the scale and avoid acquiescence bias, both positively-keyed and negatively-keyed items were written.

Multiple scale development resources (Clark & Watson, 1995; Furr, 2011) recommend over-inclusivity of items in the initial stages of psychometric assessment. The rationale underlying this recommendation is strong, holding that “subsequent psychometric analyses can identify weak, unrelated items that should be dropped [...] but are powerless to detect content that should have been included but was not” (Clark & Watson, 1995, p. 311). Therefore, a total of 26 items were initially

written. Each item was then subjected to content validity assessment via expert⁷ ratings from one professor, four graduate students, and one lab mate (i.e., a total of six independent ratings for each item). Items were rated on a scale from zero to five, with zero indicating that an item is non-representative of existential nihilism and five indicating that an item is perfectly representative of existential nihilism. After assessment, all six independent ratings for each item were averaged together, and only items averaging a four out of five or higher on interrater agreement were retained, with items under the four out of five cutoff point being eliminated (i.e., six items in total). The resulting item pool contained 20 items, which were then further refined and simplified (see Table 1).

Aims

1. Subject the overinclusive, 20-item existential nihilism pool to item reduction procedures with the goal of obtaining a parsimonious scale for convenient use in research settings.
2. Investigate the factorial structure of the resulting ENS.
3. Investigate the internal consistency reliability of the ENS.
4. Conduct an evaluation of the ENS's validity (i.e., convergent, concurrent, divergent, and incremental) using pre-existing scales that measure theoretically related constructs (see Figure 1 for nomological network), such as nihilism, global presence of MiL, search for MiL, depression, life satisfaction, positive affect, and negative affect.

Methodology

For the present research, two identical studies were conducted. The first study utilized an undergraduate sample, whereas the second study utilized a community sample.

Sample Size Calculations

In anticipation of data exclusions, we aimed to oversample with the goal of obtaining final sample sizes of at least $N = 300$. In doing so, both samples would be adequately sized for exploratory

⁷ *Expert* is defined as a thorough understanding of the conceptual definition of the proposed construct taught through seminar presentations and discussions.

factor analysis based on recommendations of 10 participants per variable (Williams et al., 2010). We determined that a sample size of at least 300 would be sufficient, given that, out of all the EFA's that we expected to conduct, the EFA with the greatest possible number of variables would be comprised of 30 variables. Furthermore, aiming for this sample size satisfied other literature guidelines of 300 participants for EFA (Comrey & Lee, 1992; Tabachnick & Fidell, 2013). Additionally, Schönbrodt and Perugini (2013) recommend sample sizes of $N = 250$ for stable correlation estimates supporting the stated sample size goals. Furthermore, Green (1991) outlines a formula to determine ideal sample sizes for regression analyses. The formula states that N should be greater than $50 + 8m$, where m represents the number of predictor variables comprising the regression model (Green, 1991). The regression model with the greatest number of predictor variables (i.e., 3) that we anticipated to compute suggests that a sample size of at least 74 is required for analyses. Therefore, our goal of obtaining a final sample size of at least 300 participants would also satisfy the output of Green's formula.

Participants

Study 1

In total, 401 York University undergraduate students who were enrolled in an introduction to psychology course were recruited through the undergraduate research participant pool (URPP). To be eligible for Study 1, participants were required to be at least 18 years of age. As incentive for participation, undergraduate students were awarded 0.5 credits toward their final grade in the introduction to psychology course. Exclusion criteria were applied to the total sample. Participants were sequentially omitted who did not complete 100% of the Qualtrics study ($n = 20$), who requested to have their data omitted from the study ($n = 37$), whose total participation time was less than 10 minutes ($n = 3$), who were identified as unconscientious responders according to the Conscientious Responders Scale ($n = 9$; Marjanovic et al., 2012), and who were less than 18 years of age ($n = 3$). Therefore, a total of 72 participants were omitted from the analyses. The final sample ($N = 329$) was predominantly female (69.60%) and single (73.60%), and had an age range from 18 to 43 years old (M

= 19.74, $SD = 2.78$). Regarding ethnic and racial identification, participants reported being South Asian (27.40%), White (16.40%), East Asian (13.40%), Middle Eastern (12.50%), Black (10.60%), Southeast Asian (8.50%), Latin American (2.40%), South American (1.50%), Aboriginal (1.20%), Mixed (4.90%), and other (1.20%). Regarding religious identification, participants reported being Christian (32.50%), Muslim (20.40%), Agnostic (9.40%), Atheistic (7.00%), Hindu (7.00%), Sikh (6.70%), Buddhist (4.00%), Jewish (2.70%), Non-theistic (2.10%), Taoist (0.30%), and other (2.70%), with 16 (4.90%) participants declining to answer. The relationship status among the participants ranged from single (73.60%), in a committed relationship (14.60%), in a casual relationship (7.60%), married (2.70%), in a common-law relationship (0.90%), and other (0.30%).

Study 2

The participants for Study 2 ($N = 352$) were recruited through the UK-based crowdsourcing platform, *Prolific Academic*. The eligibility criteria included residing in North America, speaking English, and being at least 18 years of age. As incentive for participation, individuals were monetarily compensated ($M = \$12.55$ CAD/hour, $M = 29.67$ minutes). Procedures for omitting participants from the final sample were identical to Study 1. Indeed, participants were sequentially omitted who did not complete 100% of the Qualtrics study ($n = 26$), who requested to have their data omitted from the study ($n = 14$), whose total participation time was less than 10 minutes ($n = 2$), who were identified as unconscientious responders according to the Conscientious Responders Scale ($n = 2$; Marjanovic et al., 2012), and who were less than 18 years of age ($n = 1$). Therefore, exclusion criteria identified 45 participants to be omitted from the analyses. The final sample ($N = 307$) had a greater proportion of men (55.40% female) and was older than participants in Study 1 (age range of 18 to 80, $M = 30.39$, $SD = 11.25$). Participants were recruited from the United States (59.90%) and Canada (40.10%). Ethnic and racial identification within the sample varied from White (46.90%), East Asian (15.60%), Southeast Asian (10.10%), Latin American (7.20%), South Asian (6.50%), Black (4.20%), Middle Eastern (1.60%), Aboriginal (0.70%), Mixed (4.60%), and other (0.70%), with 5 (1.60%) participants

declining to answer. Religious identification within the sample varied from Christian (33.60%), Agnostic (20.80%), Atheistic (20.50%), Muslim (5.20%), Non-theistic (3.90%), Buddhist (2.90%), Hindu (2.90%), Jewish (0.30%), Sikh (0.30%), and other (6.20%), with 10 (3.3%) participants declining to answer. Regarding employment among the participants, participants reported being employed full-time (40.10%), students (21.20%), unemployed (12.70%), employed part-time (11.70%), students with a part-time job (8.50%), retired (2.60%), at-home caregivers (1.30%), and students with a full-time job (0.70%), with 4 (1.30%) participants declining to answer. The highest level of education that participants achieved ranged from a bachelor's degree (34.20%), in progress college education (19.50%), high school diploma (16.00%), master's degree (14.70%), college diploma or associate's degree (10.70%), doctoral degree (2.60%), and less than high school education (1.30%), with 2 (0.70%) participants declining to answer. The relationship status among the participants ranged from single (43.30%), married (28.70%), in a committed relationship (18.20%), in a casual relationship (3.60%), in a common-law relationship (3.60%), divorced (1.00%), widowed (1.00%), and separated (0.30%), with 1 (0.30%) participant declining to answer.

Procedure

Study 1

Participants were solicited with an advertisement posted on York University's undergraduate research participant pool directory via Sona System's participant management software. Participants who responded to the advertisement were provided a link. Once accessed, participants were redirected from Sona Systems to take part in a study hosted by Qualtrics, an online research software designed to administer surveys. The first part of the study consisted of obtaining informed consent. Next, participants were asked a series of demographic questions related to age, gender, racial and ethnic identification, education level, country of origin, religious identification, and relationship status. Then,

participants were administered a randomized⁸ battery of psychological questionnaires relevant to the psychometric evaluation of the ENS. Participants were then asked if their data should be used in the study as part of the validity check (i.e., responses should be truthful and accurate). Lastly, participants were debriefed and compensated with 0.5 course credits.

Study 2

A targeted advertisement directed at North Americans was posted on the Prolific participant pool directory to collect participants. After responding to the advertisement and accessing the provided link, participants were redirected from Prolific to take part in a study hosted by Qualtrics. Participants were first provided informed consent and administered demographic questions related to age, gender, racial and ethnic identification, education level, country of residence, religious identification, employment status, and relationship status. Subsequently, a randomized battery of questionnaires identical to the battery given to participants in Study 1 was administered. Participants were then asked to indicate if their data should be included in analyses based on whether responses were truthful and accurate. Finally, participants were debriefed and monetarily compensated ($M = \$12.55$ CAD/hour, $M = 29.67$ minutes).

Materials

Participants in both the undergraduate sample and the community sample were administered an identical battery of measures. Sample-specific descriptive statistics, internal consistency reliabilities (i.e., α), and zero-order correlations for each psychological measure are presented in Table 5. All scales demonstrated coefficient alpha estimates of internal consistency above .70 in both studies.

Demographic Form. Descriptive information about age, gender, racial and ethnic identification, education level, country of residence, religious identification, employment status, and relationship status was gathered using a brief demographic questionnaire.

⁸ Both the order with which questionnaires were presented and the order with which items in each questionnaire were presented was randomized.

20-Item Existential Nihilism Pool. We developed a 20-item pool of existential nihilism items designed to measure existential nihilism as it is conceptually defined in the present paper. These items were administered to participants who were instructed to respond to each item on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with higher scores reflecting greater commitment to the existential nihilistic worldview. Descriptive statistics for each item are presented in Table 1 and Table 2.

Nihilism dimension on the Alienation Test (AT-N; Maddi et al., 1979). The AT-N is a 15-item self-report nihilism subscale on the Alienation Test designed to measure the extent to which individuals insist on discrediting aspects of life that are typically considered meaningful within five contexts: work (e.g., ‘Most of life is wasted in meaningless activity’), the self (e.g., ‘The belief in individuality is only justifiable to impress others’), social institutions (e.g., ‘The only reason to involve yourself in society is to gain power’), interpersonal relations (e.g., ‘Most people are happy not to know that what they call love is really self-interest’), and family (e.g., ‘The idea of a family is a social invention to limit individual freedom of action’). Participants responded to each item on a scale from 0 (*not true at all*) to 100 (*completely true*), with higher scores indicating greater nihilism, as defined by Maddi and colleagues (1979). Coefficient alpha estimates of internal consistency ranging from .79 to .82 have been reported for the AT-N (Seeman, 1991).

The Meaning in Life Questionnaire (MLQ; Steger et al., 2006). The MLQ is a multidimensional self-report scale comprised of two 5-item subscales that were designed to measure the presence of meaning in life (MLQ-P) and the search for meaning in life (MLQ-S). Participants responded to each item on a 7-point Likert-type scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*). Items on the MLQ-P measure the extent to which individuals perceive their lives as meaningful (e.g., ‘I understand my life’s meaning’), with higher scores indicating greater presence of perceived meaning in life. Coefficient alpha estimates of internal consistency ranging from .82 to .86 have been reported for the MLQ-P (Steger et al., 2006). Items on the MLQ-S measure the extent to

which individuals are striving to discover a life meaning (e.g., ‘I am looking for something that makes my life feel meaningful’), with higher total scores indicating a greater perceived attempt to discover what will make life meaningful. Coefficient alpha estimates of internal consistency ranging from .86 to .87 have been reported for the MLQ-S (Steger et al., 2006).

The Purpose in Life Questionnaire (PIL; Crumbaugh & Maholick, 1964). The degree to which participants endorsed purpose in life (commonly seen as synonymous with MiL in the MiL literature; Heintzelman & King, 2014) was measured using the PIL. The PIL is a self-report scale that consists of 20 items designed to instrumentalize the cognitive, behavioural, and affective components of Viktor Frankl’s Nöogenic neurosis (e.g., ‘With regard to death I am: (1) *unprepared and frightened* to (7) *prepared and unafraid*’). Participants responded to each item on a 7-point Likert-type scale, with each item having differently labelled anchors that are relevant to the content of the item. Lower total scores on the PIL reflect lower MiL (and greater Nöogenic neurosis), whereas higher total scores reflect greater MiL (and lower Nöogenic neurosis). The internal consistency of the PIL was reported with a split-half correlation and yielded a coefficient estimate of .85 (Crumbaugh, 1968). Using a Spearman ρ test-retest correlation, Morrison (1977) yielded a coefficient of .88 for the test-retest reliability of the PIL. Some support for the convergent and divergent validity of the PIL has also been found (Seeman, 1991).

Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire (OTHALS-LoM; Peterson et al., 2005). The OTHALS-LoM is a 6-item self-report subscale designed to measure the perceived presence of MiL (e.g., ‘My life has a lasting meaning’) as one of three *orientations* that Peterson, Park, and Seligman (2005) theorized to comprise the broader construct of happiness and life satisfaction. Participants responded to each item on a 5-point Likert-type scale ranging from 1 (*very much unlike me*) to 5 (*very much like me*), with higher total scores indicating greater perceived presence of life meaning. Regarding concurrent validity, the OTHALS-

LoM was shown to be significantly positively correlated with life satisfaction (Peterson et al., 2005). Additionally, a coefficient alpha estimate of .88 has been reported for the internal consistency of the OTHALS-LoM (Peterson et al., 2005).

The Centre for Epidemiological Studies in Depression Scale (CES-D; Radloff, 1977). The CES-D is a 20-item self-report scale designed to assess the prevalence of depressive symptomatology during the week previous to the administration of the items (e.g., ‘I was bothered by things that don’t usually bother me’). Participants responded to items on a 4-point Likert-type scale ranging from 1 (*rarely or none of the time; less than 1 day*) to 4 (*most or all of the time; 5-7 days*), with higher total scores reflecting greater prevalence of depressive symptoms within the appropriate timeframe. Psychometric evaluation of the CES-D provides evidence suggesting that the measure has strong construct validity (Radloff, 1977). Coefficient alpha estimates of internal consistency ranging from .84 to .90 have been reported for the CES-D (Radloff, 1977).

The Satisfaction with Life Scale (SWLS; Diener et al., 1985). The SWLS is a 5-item self-report scale designed to measure global life satisfaction (e.g., ‘The conditions of my life are excellent’), with higher scores reflecting greater satisfaction with life. Participants responded to each item using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Regarding the psychometric properties of the SWLS, Diener et al. (1985) report a strong test-retest reliability of .82 and evidence for concurrent validity to the extent that the SWLS positively correlates with other measures of subjective wellbeing. Pavot and Diener (1993) later report coefficient alpha estimates of internal consistency ranging from .79 to .89, as well as test-retest coefficients ranging from .50 to .84.

The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988). The PANAS is a multidimensional 20-item self-report scale that is comprised of two 10-item subscales designed to measure positive affect (PANAS-PA) and negative affect (PANAS-NA). Participants used a 5-point Likert-type scale ranging from 1 (*very slightly or not at all*) to 5 (*extremely*) to rate the extent to which they *generally* experience each affective state. The instructions used in the current studies referred to

habitual affective experiences rather than immediate affective states. Items on the PANAS-PA reflect positive affective states such as excitement, interest, and enthusiasm. A coefficient alpha estimate of .88 has been reported for the internal consistency of the PANAS-PA (Watson et al., 1988). Items on the PANAS-NA measure negative mood, with each item reflecting some negative affective state such as distress, hostility, and shame. A coefficient alpha estimate of .87 has been reported for the internal consistency of the PANAS-NA (Watson et al., 1988). Regarding divergent validity, correlations between the PANAS-PA and PANAS-NA demonstrate that the subscales are largely unrelated, with r approximately equalling $-.17$ for the ‘general’ time instructions (Watson et al., 1988). Additionally, Watson et al. (1988) report that the PANAS has strong convergent and divergent validity.

Data Analysis and Hypotheses

The IBM Statistical Package for Social Sciences (SPSS) 27 was primarily used to analyse the data. However, parallel analyses were computed using the package ‘nFactors’ (Raiche & Magis, 2020) in the R programming language within RStudio.

The first aim of the studies was to reduce the tested items to obtain a parsimonious measure of existential nihilism. To achieve this, a holistic approach was utilized, relying on both statistical and theoretical considerations. First, item reduction procedures relied on a number of statistical analyses to assess item quality. Mean, skewness, and kurtosis values, along with frequency distributions, were obtained for each item to assess distribution patterns (see Table 1 and Table 2). An interitem correlation matrix was then obtained for the 20-item pool. The goal here was to screen for pairs of items that were too weakly correlated (i.e., $r < .30$), suggesting the items may be too distinct from each other to justify including them in a scale hypothesized to measure a unidimensional construct, or too strongly correlated (i.e., $r > .85$), suggesting that the items may be redundant with one another. Corrected item-total correlations were also obtained for each item to aid in the process of identifying items in the initial pool that were either too distinct (i.e., $r < .30$) or too redundant (i.e., $r > .85$) from the rest of the scale (see Table 1 and Table 2). Theoretically, items were individually assessed and rated by the author for

their content validity with the conceptual definition of existential nihilism, the quality with which they were written, and their conceptual and structural similarity with other items. The goal was to identify well-written and easy-to-understand items that had content validity and were not overly redundant with other items. Statistical and theoretical results from both samples were simultaneously considered in a holistic way to guide the process of item reduction.

The second aim was to examine the factorial structure of the resulting scale within each sample. Exploratory factor analysis (EFA), supplemented by parallel analysis (PA), was computed. An unweighted least squares (ULS) method was utilized to extract the ideal number of factors based on the results of the PA. Oblique rotation was used (i.e., Oblimin) in the possible event that PA extracted more than one factor, given the expectation that factors comprising a possible multiple-factor solution would highly correlate. Within both samples, it was hypothesized that the Existential Nihilism Scale (ENS) would have a unidimensional, one-factor internal structure representing the proposed existential nihilism construct.

To achieve the third aim of investigating the internal consistency reliability of the ENS, both Cronbach's alpha and McDonald's omega were obtained. McDonald's omega was manually calculated (Flora, 2020), as there is currently no native method of computing this metric of reliability via SPSS. Within both samples, the ENS was expected to demonstrate satisfactory internal consistency by obtaining both an acceptable Cronbach's alpha estimate (i.e., $\alpha \geq .80$) and an acceptable McDonald's omega estimate (i.e., $\omega \geq .80$).

Additional aspects of the ENS's validity (i.e., aims 4-7) were also analysed. The ENS's convergent and concurrent validity were evaluated by calculating Pearson's correlations between the ENS and theoretically related measures. Within both samples, the ENS was predicted to demonstrate high convergent validity by significantly positively correlating with inventories purporting to measure nihilism. Namely, the ENS was hypothesized to positively correlate with the nihilism subscale on the AT. Within both samples, the ENS was expected to demonstrate high concurrent validity by

significantly correlating with a) inventories purporting to measure theoretically related constructs (e.g., MiL) and b) inventories purporting to measure constructs shown to be reliably associated with MiL. Specifically, the ENS was hypothesized to correlate negatively with measures of MiL, including the MLQ-P, MLQ-S, the PIL, the PIL-4, and the OTHALS-LoM. Additionally, the ENS was expected to correlate positively with measures of depression and negative affect, and negatively with measures of life satisfaction and positive affect.

The divergent validity of the ENS was examined by first combining items from the ENS with items from theoretically-related scales (i.e., the AT-N, MLQ, PIL, PIL-4, and OTHALS-LoM) each in turn. Then the resulting item pools (e.g., ENS and AT-N combined) were subjected to EFA, using a ULS method that was informed by PA to extract the ideal number of factors. The goal was to determine whether ENS items diverged (i.e., formed their own clean existential nihilism factor) from related but distinct constructs measured by pre-existing scales. In other words, existential nihilism consists of appraisals of the *totality* of existence and human life, whereas the MiL construct consists of appraisals of one's *personal* existence. In essence, low life meaning is not equivalent to being existentially nihilistic (e.g., a non-nihilist can appraise their personal existence as meaningless but admit that meaning still exists). Therefore, items measuring existential nihilism should be sufficiently distinct from items measuring personal MiL while remaining correlated; the ENS should thus diverge from scales measuring MiL (i.e., MLQ, PIL, PIL-4, and the OTHALS-LoM). The ENS would also be expected to diverge from the AT-N, given concerns about the AT-N's psychometric quality. Within both samples, we hypothesized that the ENS would demonstrate high divergent validity to the extent that, after pooling items, items on the ENS would form a clean existential nihilism factor distinct from factors comprised of items from theoretically related measures when subjected to exploratory factor analysis (EFA).

The predictions for the EFA comprised of the ENS and the MLQ items were that three factors would be obtained: an existential nihilism factor, a presence of MiL factor, and a search for MiL factor.

In turn, the EFA results from subjecting an item pool comprised of items from the ENS and the PIL was expected to yield *at least* two factors⁹, with the ENS items loading cleanly onto their own existential nihilism factor. Results from the EFA comprised of items from the ENS and the PIL-4 were expected to yield an ideal factorial structure consisting of two factors: the existential nihilism factor and a factor consisting of items from Schulenberg and Melton's (2010) PIL-4. An EFA comprised of items from the ENS and the LoM subscale on the OTHALS was expected to yield a two-factor structure, where items from each scale were predicted to load onto their own factor. Finally, results from subjecting an item pool comprised of items from the ENS and the nihilism subscale on the AT to EFA were expected to yield an ideal factorial structure consisting of *at least* two factors¹⁰, with items from the ENS loading cleanly onto their own existential nihilism factor. We hypothesized that this would be replicated in both studies.

Finally, hierarchical linear regression was used to assess the incremental validity of the ENS in predicting depression and life satisfaction over and above theoretically related measures. To reiterate, the ENS was designed to capture essential and distinctive features of existential nihilism that are not captured by pre-existing scales (e.g., the universality of meaninglessness, the futility of ameliorating the absence of meaning, and that existential nihilism is a worldview). By measuring these essential and distinctive features, the ENS should, therefore, possess unique explanatory power and, thus, capture information over and above pre-existing measures in the outcome of depression and life satisfaction. As such, the first regression models entered the AT-N, the MLQ, the PIL, the PIL-4, or the OTHALS-LoM as a predictor variable for depression or life satisfaction, respectively (i.e., five models per dependent variable per study). Then the ENS was added alongside each theoretically related measure to assess the change in R^2 and the unique predictive contribution of the ENS to outcome.

⁹ It is difficult to predict how PIL items will load, given how tangled the scholarly literature is regarding the factorial structure of this measure.

¹⁰ Similarly, it is difficult to predict how items from the AT-N will load, given the possible poor content validity of the scale.

Within both samples, we hypothesized that the ENS would demonstrate high incremental validity to the extent that the addition of the ENS as a predictor variable would significantly increase the predictive power of each model and significantly contribute to the prediction of depression and life satisfaction.

Results

Item Reduction

Statistical Considerations

Descriptive statistics for the tested items were computed to identify items with either response ranges failing to extend across the entire 7 points on the Likert-type scale or atypical frequency distribution patterns. Across both studies, all of the tested items had responses ranges from 1 to 7 (see Table 1 and Table 2). Therefore, response ranges did not inform our process of item elimination. The frequency distributions of the tested items were positively skewed. In other words, the average score for the items was below the neutral midpoint, with participants generally reporting between disagreement and slight disagreement with nihilistic statements. This was expected, given that we anticipated a higher prevalence of non-nihilistic worldviews within both populations sampled (Heintzelman & King, 2014). Nevertheless, most of the tested items had similar response distributions. However, there were four items (i.e., item 5: ‘Discovering the meaning of life is impossible’; item 17: ‘The world can be a meaningful place’; item 18: ‘To search for a purpose in life can be a worthwhile goal’; and item 19: ‘I am motivated to live a meaningful life’) that produced frequency distributions that stood out across both samples. Compared to the rest of the items, the frequency of respondents choosing the second response option on the Likert-type scale (when reversed) was much higher on item 17, item 18, and item 19 than was typical of the other tested items. It was reasoned that these three items were functioning this way because they were the only reverse-rated items included in the tested pool. The distribution of responses on item 5 was also distinct from the rest of the tested items to the

extent that the item exhibited greater overall respondent agreement within both samples than was typical of the other items.

Interitem correlations and corrected item-total correlations were then obtained to further aid in the process of item deletion. Most of the interitem correlations ranged from moderate to strong (Study 1: $r = .411 - .801$, Study 2: $r = .393 - .772$).¹¹ However, in both samples, the three reverse-rated items had distinctively lower interitem correlations than the rest of the tested items. Item 17 had interitem correlations ranging from $.158 - .380$ in Study 1 and $.280 - .614$ in Study 2. Item 18 had interitem correlations ranging from $.151 - .349$ in Study 1 and $.256 - .467$ in Study 2. Finally, item 19 had interitem correlations ranging from $.240 - .426$ in Study 1 and $.354 - .520$ in Study 2. The corrected item-total correlations showed a similar result. While most of the tested items exhibited corrected item-total correlations ranging from $.645 - .821$ in Study 1 and $.668 - .814$ in Study 2, the three reverse-rated items (items 17, 18, 19) did not. In Study 1, the range of corrected item-total correlations for the reverse-rated items was $.318 - .464$. Similarly, in Study 2, the three reverse-rated items had corrected item-total correlations ranging from $.436 - .584$. These results are a further indication that the reverse-rated items (items 17, 18, and 19) are functioning differently than the negatively keyed items. Corrected item-total correlations are presented in Table 1 and Table 2. Guided by these statistical considerations, items 5, 17, 18, and 19 were eliminated from the final scale.

Theoretical considerations

Theoretically speaking, a number of items were identified as candidates for deletion due to not fully capturing the essence of existential nihilism. Namely, item 4 ('Everything I do will always be fundamentally meaningless') and item 20 ('I see no reason in trying to find a true purpose to live by') were eliminated from the final scale because they were written self-referentially, which does not measure the universality of meaninglessness characteristic of existential nihilism. Furthermore, item

¹¹ These ranges occlude item 17, item 18, and item 19.

15 ('There is no hope for humans to live life meaningfully') was eliminated from the final scale because of its use of the word 'hope'. Ultimately, concerns over whether this item might be confounded with hopelessness guided this decision.

Although the remaining thirteen items were determined to be acceptable for inclusion on the ENS, the scale was further reduced by five items to improve parsimony, linguistic simplicity, and representation of the core elements of existential nihilism. Therefore, a total of 8 items were ultimately retained for the final ENS. Item 2 ('Despite our best efforts, nothing truly matters') was included in the final scale because the item captured not only the futility component of the construct but was the only item to capture global meaninglessness through the conceptual lens of mattering. Item 6 ('All things considered, our lives are insignificant and pointless') was retained over the similarly phrased item 9 ('Regardless of what people think, humans lead pointless lives') for a number of reasons. Item 6 was reasoned to be better than item 9 in capturing nihilistic commitment because meaninglessness is affirmed in light of everything, rather than only human cognition. Additionally, meaninglessness is understood through the lens of both universal pointlessness and insignificance, capturing the multifaceted nature of meaning and its absence. One feature of item 6 that is beneficial is the use of the inclusive 'our'. Indeed, there was a theoretical concern with item 9 that it might also be capturing cynicism, to the extent that one may believe others are leading pointless lives, but oneself is not. We chose to include item 8 ('There is no such thing as a real purpose to life') over the linguistically similar item 3 ('There can never be any real meaning to life') to again capture the multifaceted nature of MiL by having an item refer to meaninglessness through the lens of 'purpose'. Item 10 ('Existence is meaningless') was included in the final scale because of its ability to capture the essence of existential nihilism in a linguistically simple way. It was reasoned that choosing item 10 over item 7 ('The universe is empty of meaning') was optimal because 'existence' is more inclusive than 'universe' (i.e., sometimes 'universe' can be conceived as a separately existing entity from human life whereas 'existence' includes both the universe and human life). To capture the core element of futility in

existential nihilism, both item 11 ('No matter how hard one looks, a real meaning to life can never be found') and item 12 ('Nothing can be done to give life real, lasting significance') were included in the ENS. These were more optimal choices than item 1 ('It is pointless to search for life's meaning or purpose') and item 16 ('Any attempt to find life's meaning is a waste of time and energy') due to concerns about the semantic meaning of the phrase 'life's meaning'. Lastly, item 13 ('All human experience – from suffering to joy – is empty of meaning') and item 14 ('There is no point to life') were retained due to their linguistic simplicity.

Descriptive statistics and corrected item-total correlations for the final 8-item ENS are presented in Table 3 and Table 4. Correlations between the 8 items on the ENS were in the range of acceptable strength in both Study 1 ($r = .481 - .717$) and Study 2 ($r = .504 - .744$), indicating that the items were neither too distinct nor too redundant. Corrected item-total correlations across the items on the ENS were similarly acceptable in Study 1, with correlations ranging from .666 to .803, and in Study 2, with correlations ranging from .713 to .823.

Study 1

Internal Structure of the ENS

The second aim was to examine the factorial structure of the resulting 8-item scale. A parallel analysis revealed that the optimal number of factors to extract was one. The first factor explained 64.14% of the total variance. Factor loadings were high (see Table 3), ranging from .698 to .845. These results are consistent with the hypothesis that the ENS has a one-factor internal structure capturing a unidimensional construct.

Internal Consistency of the ENS

The ENS was then assessed for internal consistency by computing reliability estimates via Cronbach's alpha and McDonald's omega. The 8-item ENS had a high Cronbach's alpha ($\alpha = .92$) and a high McDonald's omega ($\omega = .92$). Consistent with our hypothesis, the present results suggest that the ENS has a high level of internal consistency within a sample of Canadian undergraduates.

Convergent Validity of the ENS

A Pearson's correlation was calculated to assess the relationship between the ENS and the nihilism dimension on the AT in an undergraduate sample. The ENS and the AT-N demonstrated a statistically significant, moderate positive association, $r(327) = .491, p < .001$, which was consistent with our hypothesis that the ENS has adequate convergent validity. Table 6 presents convergent validity results for Study 1.

Concurrent Validity of the ENS

Pearson's correlations were computed between the ENS and a number of theoretically related psychological variables to evaluate the concurrent validity of the ENS.

Global presence of MiL. As predicted, the ENS negatively correlated with a number of measures of global presence of MiL. For example, it was negatively correlated with the MLQ-P, ($r(327) = -.501, p < .001$), the PIL, ($r(327) = -.533, p < .001$), the PIL-4, ($r(327) = -.470, p < .001$) and the OTHALS-LoM, ($r(327) = -.468, p < .001$).

Search for MiL. Consistent with our predictions, the ENS negatively correlated with the search for MiL on the MLQ ($r(327) = -.136, p = .014$).

Depression, Life Satisfaction, and Affect. As predicted, the ENS positively correlated with depression as measured by the CES-D ($r(327) = .369, p < .001$). The ENS also negatively correlated with life satisfaction as measured by the SWLS ($r(327) = -.384, p < .001$), corresponding to predictions. As hypothesized, the ENS negatively correlated with positive affect and positively correlated with negative affect as measured by the PANAS (PANAS-PA, $r(327) = -.364, p < .001$; PANAS-NA, $r(327) = .260, p < .001$).

These correlations indicate that existential nihilism is characterized by lower levels of MiL, search for MiL, life satisfaction, and positive affect within a sample of Canadian undergraduates. Additionally, existential nihilism is associated with higher levels of depression and negative affect

within a sample of Canadian undergraduates. These results provide preliminary support for the concurrent validity of the ENS. Table 6 presents concurrent validity results for Study 1.

Divergent Validity of the ENS

The divergent validity of the 8-item ENS was then examined.

The Nihilism dimension on the Alienation Test. A joint EFA was computed with a pool of 23 items (8 from the ENS and 15 from the AT-N). The suitability of conducting an EFA on the data was assessed prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was five. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented existential nihilism and was exclusively comprised of all 8 items from the ENS. Factor loadings for ENS items within the first factor were high, ranging from .644 to .824. The second, third, fourth, and fifth factors were comprised of items from the AT-N. These results are consistent with the hypothesis that the ENS diverges from the AT-N.

The Meaning in Life Questionnaire. A joint EFA was computed with a pool of 18 items (8 from the ENS, 5 from the MLQ-P, and 5 from the MLQ-S). The suitability of conducting an EFA on the data was assessed prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was three. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented existential nihilism and was exclusively comprised of all 8 items from the ENS. Factor loadings for ENS items within the first factor were high, ranging from .698 - .853. The second factor represented the search for MiL factor and was comprised of items from only the MLQ-S. Factor loadings for MLQ-S items within the second factor were high, ranging from .753 - .869. The third factor represented the presence of MiL factor and was comprised of items from only the MLQ-P. Factor loadings for MLQ-P items within the third factor were high, ranging from .627 - .896. These results are consistent with the hypothesis that the ENS diverges from both subfactors on the MLQ.

The Purpose in Life Questionnaire. A joint EFA was computed with a pool of 28 items (8 from the ENS and 20 from the PIL). The suitability of conducting an EFA on the data was assessed prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was four. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented presence of MiL and was comprised of items from only the PIL. Factor loadings for PIL items within the first factor ranged from .330 - .785. The second factor represented existential nihilism and was exclusively comprised of all 8 items from the ENS. Factor loadings for ENS items within the second factor were high, ranging from .695 - .828. The third and fourth factors were comprised of a number of different PIL items. These results are consistent with the hypothesis that the ENS diverges from the PIL.

The Purpose in Life Questionnaire-4. A joint EFA was computed with a pool of 12 items (8 from the ENS and 4 from the PIL-4). The suitability of conducting an EFA on the data was assessed prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was two. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented existential nihilism and was exclusively comprised of all 8 items from the ENS. Factor loadings for ENS items within the first factor were high, ranging from .713 - .867. The second factor represented Schulenberg and Melton's (2010) proposed PIL-short form and was comprised of items 3, 4, 8, and 20 from the PIL. Factor loadings for PIL-4 items within the second factor were high, ranging from .612 - .777. These results are consistent with the hypothesis that the ENS diverges from the PIL-4.

Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire. A joint EFA was computed with a pool of 14 items (8 from the ENS and 6 from the OTHALS-LoM). The suitability of conducting an EFA on the data was assessed prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was two. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented

existential nihilism and was exclusively comprised of all 8 items from the ENS. Factor loadings for ENS items within the first factor were high, ranging from .672 - .845. The second factor represented the OTHALS-LoM factor and was comprised of only items from the OTHALS-LoM. Factor loadings for OTHALS-LoM items within the second factor ranged from .454 - .669. These results are consistent with the hypothesis that the ENS diverges from the OTHALS-LoM.

Results from the above EFAs indicate that the ENS diverges from pre-existing tools that measure related but distinct constructs within a Canadian undergraduate sample. These results provide preliminary support for the divergent validity of the ENS.

Incremental Validity of the ENS

Hierarchical linear regression was used to assess the incremental validity of the 8-item ENS in predicting depression and life satisfaction over and above related measures in Study 1.

Depression.

The Nihilism dimension on the Alienation Test. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the AT-N alone (see Table 7 for details). The model consisting of the ENS and AT-N to predict depression had an R^2 that was statistically significant, $R^2 = .178$, $F(2, 326) = 35.264$, $p < .001$; adjusted $R^2 = .173$. The addition of the ENS to the prediction of depression led to a small ($sr = .220$, $sr^2 = .049$) and statistically significant increase in R^2 of .049, $F(1, 326) = 19.278$, $p < .001$.

The Meaning in Life Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the MLQ-P and the MLQ-S alone (see Table 7 for details). The model consisting of the ENS, MLQ-P, and MLQ-S to predict depression had an R^2 that was statistically significant, $R^2 = .262$, $F(3, 325) = 38.369$, $p < .001$; adjusted $R^2 = .255$. The addition of the ENS to the prediction of depression led to a small ($sr = .175$, $sr^2 = .031$) and statistically significant increase in R^2 of .031, $F(1, 325) = 13.431$, $p < .001$.

The Purpose in Life Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the PIL alone (see Table 7 for details). The model consisting of the ENS and PIL to predict depression had an R^2 that was statistically significant, $R^2 = .399$, $F(2, 326) = 108.181$, $p < .001$; adjusted $R^2 = .395$. The addition of the ENS to the prediction of depression led to a statistically non-significant increase in R^2 of .002, $F(1, 326) = .800$, $p = .372$.

The Purpose in Life Questionnaire-4. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the PIL-4 alone (see Table 7 for details). The model consisting of the ENS and PIL-4 to predict depression had an R^2 that was statistically significant, $R^2 = .279$, $F(2, 326) = 63.184$, $p < .001$; adjusted $R^2 = .275$. The addition of the ENS to the prediction of depression led to a small ($sr = .147$, $sr^2 = .021$) and statistically significant increase in R^2 of .021, $F(1, 326) = 9.825$, $p = .002$.

Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the OTHALS-LoM alone (see Table 7 for details). The model consisting of the ENS and OTHALS-LoM to predict depression had an R^2 that was statistically significant, $R^2 = .136$, $F(2, 326) = 25.736$, $p < .001$; adjusted $R^2 = .131$. The addition of the ENS to the prediction of depression led to a medium ($sr = .316$, $sr^2 = .100$) and statistically significant increase in R^2 of .100, $F(1, 326) = 37.785$, $p < .001$.

The ENS accounted for unique variance in depressive symptoms over and above measures of MiL in a sample of Canadian undergraduates with effect sizes ranging from small to medium. The only exception was for the PIL, where existential nihilism failed to contribute to outcome prediction over and above this measure. This suggests that the ENS extends beyond most related measures in explaining levels of depression, providing some preliminary support for incremental validity.

Life Satisfaction.

The Nihilism dimension on the Alienation Test. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the AT-N alone (see Table 8 for details). The model consisting of the ENS and AT-N to predict life satisfaction had an R^2 that was statistically significant, $R^2 = .178$, $F(2, 326) = 35.222$, $p < .001$; adjusted $R^2 = .173$. The addition of the ENS to the prediction of life satisfaction led to a small ($sr = -.249$, $sr^2 = .062$) and statistically significant increase in R^2 of .062, $F(1, 326) = 24.539$, $p < .001$.

The Meaning of Life Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the MLQ-P and the MLQ-S alone (see Table 8 for details). The model consisting of the ENS, MLQ-P, and MLQ-S to predict life satisfaction had an R^2 that was statistically significant, $R^2 = .306$, $F(3, 325) = 47.855$, $p < .001$; adjusted $R^2 = .300$. The addition of the ENS to the prediction of life satisfaction led to a small ($sr = -.150$, $sr^2 = .022$) and statistically significant increase in R^2 of .022, $F(1, 325) = 10.491$, $p = .001$.

The Purpose in Life Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the PIL alone (see Table 8 for details). The model consisting of the ENS and PIL to predict life satisfaction had an R^2 that was statistically significant, $R^2 = .425$, $F(2, 326) = 120.530$, $p < .001$; adjusted $R^2 = .422$. The addition of the ENS to the prediction of life satisfaction led to a statistically non-significant increase in R^2 of .002, $F(1, 326) = 1.083$, $p = .299$.

The Purpose in Life Questionnaire-4. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the PIL-4 alone (see Table 8 for details). The model consisting of the ENS and PIL-4 to predict life satisfaction had an R^2 that was statistically significant, $R^2 = .342$, $F(2, 326) = 84.890$, $p < .001$; adjusted $R^2 = .338$. The addition of the ENS to the prediction of life satisfaction led to a small ($sr = -.131$, $sr^2 = .017$) and statistically significant increase in R^2 of .017, $F(1, 326) = 8.530$, $p = .004$.

Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the OTHALS-LoM alone (see Table 8 for details). The model consisting of the ENS and OTHALS-LoM to predict life satisfaction had an R^2 that was statistically significant, $R^2 = .176$, $F(2, 326) = 34.770$, $p < .001$; adjusted $R^2 = .171$. The addition of the ENS to the prediction of life satisfaction led to a small ($sr = -.260$, $sr^2 = .068$) and statistically significant increase in R^2 of .068, $F(1, 326) = 26.789$, $p < .001$.

The ENS accounted for unique variance in life satisfaction over and above measures of MiL in a sample of Canadian undergraduates with small effect sizes. The only exception was for the PIL, where existential nihilism failed to contribute to outcome prediction over and above this measure. This suggests that the ENS extends beyond most related measures in explaining satisfaction with life, providing some preliminary support for incremental validity.

Study 2

Internal Structure of the ENS

We then examined the factorial structure of the resulting 8-item ENS within the North American community sample using EFA. A parallel analysis revealed that the optimal number of factors to extract was one. The first factor explained 69.64% of the total variance. Factor loadings were high (see Table 4), ranging from .735 to .856. These results are consistent with the hypothesis that the 8-item ENS has a one-factor internal structure capturing a unidimensional construct.

Internal Consistency of the ENS

Within the community sample, the 8-item ENS had a high Cronbach's alpha ($\alpha = .936$) and a high McDonald's omega ($\omega = .937$). Consistent with our hypothesis, the present results suggest that the ENS has a high level of internal consistency within a sample of North American adults.

Convergent Validity of the ENS

A Pearson's correlation was calculated to assess the relationship between the 8-item ENS and the nihilism dimension on the AT in a North American community sample. The ENS and the AT-N demonstrated a statistically significant, large positive association, $r(305) = .549, p < .001$, which was consistent with our hypothesis that the ENS has adequate convergent validity. Table 6 presents convergent validity results for Study 2.

Concurrent Validity of the ENS

Global presence of MiL. As predicted, the ENS negatively correlated with a number of measures of global presence of MiL. For example, it was negatively correlated with the MLQ-P, $(r(305) = -.495, p < .001)$, the PIL, $(r(305) = -.461, p < .001)$, the PIL-4, $(r(305) = -.509, p < .001)$ and the OTHALS-LoM, $(r(305) = -.414, p < .001)$.

Search for MiL. Consistent with our predictions, the ENS negatively correlated with search for MiL on the MLQ $(r(305) = -.205, p < .001)$

Depression, Life Satisfaction, and Affect. As predicted, the ENS positively correlated with depression as measured by the CES-D $(r(305) = .386, p < .001)$. The ENS also negatively correlated with life satisfaction as measured by the SWLS $(r(305) = -.261, p < .001)$, corresponding to predictions. As hypothesized, the ENS negatively correlated with positive affect and positively correlated with negative affect as measured by the PANAS (PANAS-PA, $r(305) = -.268, p < .001$; PANAS-NA, $r(305) = .340, p < .001$).

These correlations indicate that existential nihilism is characterized by lower levels of MiL, search for MiL, life satisfaction, and positive affect within a sample of North American adults. Additionally, existential nihilism is associated with higher levels of depression and negative affect within a sample of North American adults. These results provide preliminary support for the concurrent validity of the ENS. Table 6 presents concurrent validity results for Study 2.

Divergent Validity of the ENS

The Nihilism dimension on the Alienation Test. A joint EFA was computed with a pool of 23 items (8 from the ENS and 15 from the AT-N). The suitability of conducting an EFA on the data was assessed prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was five. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented existential nihilism and was exclusively comprised of all 8 items from the ENS. Factor loadings for ENS items within the first factor were high, ranging from .714 - .882. The second, third, fourth, and fifth factors were comprised of various items from the AT-N. These results are consistent with the hypothesis that the ENS diverges from the AT-N.

The Meaning in Life Questionnaire. A joint EFA was computed with a pool of 18 items (8 from the ENS, 5 from the MLQ-P, and 5 from the MLQ-S). The suitability of conducting an EFA on the data was assessed prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was three. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented existential nihilism and was comprised of all 8 items from the ENS. However, item 9 on the MLQ also loaded onto this factor with a factor loading of -.320. Factor loadings for ENS items within the first factor were high, ranging from .708 - .862. The second factor represented the search for MiL factor, comprised of items from only the MLQ-S. Factor loadings for MLQ-S items within the second factor were high, ranging from .835 - .873. The third factor represented the presence of MiL factor, comprised of items from only the MLQ-P. Factor loadings for MLQ-P items within the third factor were high, ranging from .595 - .943. These results are consistent with the hypothesis that the ENS diverges from both subfactors on the MLQ, except for item 9 on the MLQ, which appears to have a small to modest loading on the existential nihilism factor in the current sample.

The Purpose in Life Questionnaire. A joint EFA was computed with a pool of 28 items (8 from the ENS and 20 from the PIL). The suitability of conducting an EFA on the data was assessed

prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was five. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented presence of MiL and was comprised of items from only the PIL. Factor loadings for PIL items within the first factor ranged from .384 - .648. The second factor represented existential nihilism and was exclusively comprised of all 8 items from the ENS. Factor loadings for ENS items within the second factor were high, ranging from .730 - .857. The third, fourth, and fifth factors were comprised of a number of different PIL items. These results are consistent with the hypothesis that the ENS diverges from the PIL.

The Purpose in Life Questionnaire-4. A joint EFA was computed with a pool of 12 items (8 from the ENS and 4 from the PIL-4). The suitability of conducting an EFA on the data was assessed prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was two. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented existential nihilism and was exclusively comprised of all 8 items from the ENS. Factor loadings for ENS items within the first factor were high, ranging from .715 - .852. The second factor represented Schulenberg and Melton's (2010) proposed PIL-short form and was comprised of items 3, 4, 8, and 20 from the PIL. Factor loadings for PIL-4 items within the second factor were high, ranging from .583 - .852. These results are consistent with the hypothesis that the ENS diverges from the PIL-4.

Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire. A joint EFA was computed with a pool of 14 items (8 from the ENS and 6 from the OTHALS-LoM). The suitability of conducting an EFA on the data was assessed prior to analysis. A parallel analysis revealed that the optimal number of factors to extract was three. Oblique rotation (i.e., Oblimin) was used, given the expectation that these factors would correlate. The first factor represented existential nihilism and was exclusively comprised of all 8 items from the ENS. Factor loadings for ENS items within the first factor were high, ranging from .694 - .838. The second factor was comprised

of items 2, 3, and 6 on the OTHALS-LoM. Factor loadings for these items within the second factor ranged from .415 - .782. The third factor was comprised of items 1, 4, and 5 on the OTHALS-LoM. Factor loadings for these items within the third factor ranged from .549 - .844. These results are consistent with the hypothesis that the ENS diverges from the OTHALS-LoM.

Results from the above EFAs indicate that the 8-item ENS diverges from pre-existing tools that measure related but distinct constructs in a North American community sample. These results provide preliminary support for the divergent validity of the ENS.

Incremental Validity of the ENS

Depression.

The Nihilism dimension on the Alienation Test. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the AT-N alone (see Table 9 for details). The model consisting of the ENS and AT-N to predict depression had an R^2 that was statistically significant, $R^2 = .177$, $F(2, 304) = 32.646$, $p < .001$; adjusted $R^2 = .171$. The addition of the ENS to the prediction of depression led to a small ($sr = .232$, $sr^2 = .054$) and statistically significant increase in R^2 of .054, $F(1, 304) = 19.859$, $p < .001$.

The Meaning in Life Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the MLQ-P and the MLQ-S alone (see Table 9 for details). The model consisting of the ENS, MLQ-P, and MLQ-S to predict depression had an R^2 that was statistically significant, $R^2 = .359$, $F(3, 303) = 56.575$, $p < .001$; adjusted $R^2 = .353$. The addition of the ENS to the prediction of depression led to a small ($sr = .162$, $sr^2 = .026$) and statistically significant increase in R^2 of .026, $F(1, 303) = 12.349$, $p = .001$.

The Purpose in Life Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the PIL alone (see Table 9 for details). The model consisting of the ENS and PIL to predict depression had an R^2 that was

statistically significant, $R^2 = .469$, $F(2, 304) = 134.200$, $p < .001$; adjusted $R^2 = .465$. The addition of the ENS to the prediction of depression led to a statistically non-significant increase in R^2 of .007, $F(1, 304) = 3.887$, $p = .05$.

The Purpose in Life Questionnaire-4. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the PIL-4 alone (see Table 9 for details). The model consisting of the ENS and PIL-4 to predict depression had an R^2 that was statistically significant, $R^2 = .344$, $F(2, 304) = 79.624$, $p < .001$; adjusted $R^2 = .339$. The addition of the ENS to the prediction of depression led to a small ($sr = .108$, $sr^2 = .012$) and statistically significant increase in R^2 of .012, $F(1, 304) = 5.388$, $p = .021$.

Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of depression over and above the OTHALS-LoM alone (see Table 9 for details). The model consisting of the ENS and OTHALS-LoM to predict depression had an R^2 that was statistically significant, $R^2 = .173$, $F(2, 304) = 31.615$, $p < .001$; adjusted $R^2 = .167$. The addition of the ENS to the prediction of depression led to a small ($sr = .285$, $sr^2 = .082$) and statistically significant increase in R^2 of .082, $F(1, 304) = 29.800$, $p < .001$.

The ENS accounted for unique variance in depressive symptoms over and above most measures of MiL in a sample of North American adults with small effect sizes. The only exception was for the PIL, where existential nihilism failed to contribute to outcome prediction over and above this measure. This suggests that the ENS extends beyond most related measures in explaining levels of depression, providing some preliminary support for incremental validity.

Life Satisfaction.

The Nihilism dimension on the Alienation Test. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the AT-N alone (see Table 10 for details). The model consisting of the ENS and AT-N to predict life

satisfaction had an R^2 that was statistically significant, $R^2 = .095$, $F(2, 304) = 15.961$, $p < .001$; adjusted $R^2 = .089$. The addition of the ENS to the prediction of life satisfaction led to a small ($sr = -.128$, $sr^2 = .016$) and statistically significant increase in R^2 of .016, $F(1, 304) = 5.472$, $p = .02$.

The Meaning of Life Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the MLQ-P and the MLQ-S alone (see Table 10 for details). The model consisting of the ENS, MLQ-P, and MLQ-S to predict life satisfaction had an R^2 that was statistically significant, $R^2 = .407$, $F(3, 303) = 69.460$, $p < .001$; adjusted $R^2 = .402$. The addition of the ENS to the prediction of life satisfaction led to a statistically non-significant change in R^2 of .000, $F(1, 303) = .214$, $p = .644$.

The Purpose in Life Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the PIL alone (see Table 10 for details). The model consisting of the ENS and PIL to predict life satisfaction had an R^2 that was statistically significant, $R^2 = .558$, $F(2, 304) = 191.784$, $p < .001$; adjusted $R^2 = .555$. The addition of the ENS to the prediction of life satisfaction led to a small ($sr = .091$, $sr^2 = .008$) and statistically significant increase in R^2 of .008, $F(1, 304) = 5.708$, $p = .018$.

The Purpose in Life Questionnaire-4. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the PIL-4 alone (see Table 10 for details). The model consisting of the ENS and PIL-4 to predict life satisfaction had an R^2 that was statistically significant, $R^2 = .422$, $F(2, 304) = 110.892$, $p < .001$; adjusted $R^2 = .418$. The addition of the ENS to the prediction of life satisfaction led to a statistically non-significant increase in R^2 of .006, $F(1, 304) = 3.251$, $p = .072$.

Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire. A hierarchical multiple regression was run to determine if the addition of the ENS improved the prediction of life satisfaction over and above the OTHALS-LoM alone (see Table 10 for details). The model consisting of the ENS and OTHALS-LoM to predict life satisfaction had an R^2 that

was statistically significant, $R^2 = .142$, $F(2, 304) = 25.125$, $p < .001$; adjusted $R^2 = .137$. The addition of the ENS to the prediction of life satisfaction led to a small ($sr = -.121$, $sr^2 = .014$) and statistically significant increase in R^2 of .014, $F(1, 304) = 5.195$, $p = .023$.

The ENS accounted for unique variance in life satisfaction over and above some related measures in a sample of North American adults with small effect sizes. The exception was for the MLQ and the PIL-4, where existential nihilism failed to contribute to outcome prediction over and above these measures. This suggests that the ENS extends beyond some related measures in explaining satisfaction with life, providing some preliminary support for incremental validity.

Discussion

The aim of this thesis was to construct a brief, psychometrically sound assessment tool for the measurement of existential nihilism within research settings. The result was the development of the Existential Nihilism Scale (ENS; see Appendix A). The ENS is a unidimensional, 8-item measure that was designed to conveniently and meaningfully capture individual differences in commitment to the worldview that existence is unchangeably meaningless (e.g., ‘Despite our best efforts, nothing truly matters’). Preliminary psychometric evaluation of the ENS was assessed in two independent samples. This was achieved through an examination of the scale’s internal structure, the scale’s internal consistency, and different facets of the scale’s validity within a Canadian undergraduate sample and a North American community sample. The results from the two studies provide preliminary evidence for the ENS as a reliable and valid measure of existential nihilism.

The internal structure of the ENS was replicated in two independent samples using exploratory factor analysis (EFA). The number of factors extracted was informed by parallel analysis (PA), a hypothesis testing statistical procedure that more reliably determines the number of factors to retain in a given EFA over other more conventional methods (e.g., Scree test evaluation; Horn, 1965). Results from these analyses strongly suggested a one-factor solution for the 8 items, which was consistent with the hypothesis that the ENS would be unidimensionally structured. It is important to note the reason

that EFA was used in favour of confirmatory factor analysis (CFA) in Study 2. The assumption that the factor structure obtained from a sample of undergraduates was enough to support confirmatory analyses within a sample from a different population (i.e., North American adults) is unjustified within the context of proper psychometric evaluation practices. Indeed, psychometric theory (Furr, 2011) dictates that it is inappropriate to assume that the psychometric properties of a scale within one sample will generalize to another (perhaps psychologically differing) sample. Therefore, the internal structure of the ENS had to be assessed for Study 2 independent of the results of Study 1, given the differences in the samples assessed. Now that EFA has been conducted for both samples, utilizing CFA to confirm more confident hypotheses about the unidimensional factor structure of the ENS within either an undergraduate sample or a North American community sample is warranted within future studies evaluating the scale's psychometric properties. See Figure 2 for a potential CFA model for the ENS.

In both of the samples, the ENS was assessed for reliability using two different internal consistency estimates. High reliability was demonstrated in both studies. Indeed, the ENS obtained high Cronbach's alpha estimates in both samples (Study 1, $\alpha = .92$; Study 2, $\alpha = .936$). Similarly, McDonald's omega estimates for the ENS were also high across samples (Study 1, $\omega = .92$; Study 2, $\omega = .937$). The next step for reliability evaluation will be to evaluate the scale's test-retest reliability. Commitment to existential nihilism should be relatively stable across time. However, this does not bar the possibility of a nihilist becoming a non-nihilist. It is possible that an existential nihilist may come into contact with new information about the character of existence that can neither be reconciled with the existential nihilism worldview nor can the information be denied. In this case, the existential nihilist's worldview may be modified. For example, the use of psychoactive compounds (e.g., psilocybin or 5-methoxy-*N,N*-dimethyltryptamine) could upend the temporally stable belief that existence is meaningless. It is also proposed that, in some cases, existential nihilism may manifest as a psychological *state*. An individual with state-like existential nihilism might, for example, fleetingly subscribe to the belief that existence is meaningless during an intense experience (e.g., the unexpected

death of a spouse or a child) where the world briefly becomes, for this individual, devoid of reason, purpose, and significance. In the case of state-like existential nihilism, an evaluation of test-retest reliability may not be appropriate. Nevertheless, we propose that in most cases, existential nihilism is a stable worldview. The existential nihilist believes not only that existence is meaningless but that nothing can be done to change this quality of existence. As such, existential nihilists give up on the project of searching for meaning, cutting off potentially meaningful aspects of the world that might change their worldview. Less exposure to potentially meaningful experiences may, therefore, perpetuate the belief that existence is meaningless. This suggests that an evaluation of the ENS's test-retest reliability is the next logical step in the scale's psychometric assessment.

The convergent validity of the ENS was also evaluated by examining its correlations with a pre-existing measure of nihilism, the AT-N. Although the ENS and the AT-N purport to measure similar constructs, we did not expect very strong correlations (i.e., $r > .70$) but rather a moderate relationship between the two. First, the conceptual definitions for the constructs that each scale measures differ in subtle but important ways. Second, the AT-N purports to measure meaninglessness within five narrower domains (e.g., social institutions), whereas the ENS measures broad meaninglessness (e.g., the totality of existence and human life). Finally, many items on the AT-N do not have content validity with either Maddi et al.'s (1979) definition of nihilism or the definition proposed in the present paper. Nevertheless, the ENS was moderately to largely correlated with the nihilism dimension on the AT (Study 1, $r = .491$; Study 2, $r = .549$). Consistent with the hypotheses, these results provide evidence to suggest that the scale is convergently valid. Given that there is, at present, no other pre-existing measure of existential nihilism in the psychological measurement literature, convergent validity testing will have to continue to rely on evaluating zero-order correlations between the ENS and the AT-N in future research on the scale's psychometric properties.

We also evaluated the ENS's concurrent validity by examining its associations with both theoretically related variables and their reliable correlates. In both studies, the ENS demonstrated

correlations with variables that were consistent with concurrent validity hypotheses, showing the strongest associations with measures of meaning in life (MiL). This finding was expected, given that the ENS measures beliefs in the nonexistence of MiL. Indeed, individuals who are existentially nihilistic are expected to have very low levels of MiL. However, this does not mean that the *lack* of a commitment to existential nihilism entails high levels of MiL. Instead, we expect that many people who do not subscribe to existential nihilism may still experience low levels of MiL. This may explain why the strength of the associations between the ENS and measures of MiL are not stronger than they are (Study 1, $r = -.468$ to $-.533$; Study 2, $r = -.414$ to $-.495$). Further investigation into the ENS's association with other measures of MiL is warranted. In the present study, only the MLQ-P, PIL, PIL-4, and the OTHALS-LoM were used for the ENS's concurrent validity analyses with measures of MiL. The psychological measurement of MiL is vast, and future studies investigating the psychometric properties of the ENS should assess its associations with other popular MiL measures such as the Life Regard Index (Battista & Almond, 1973), the Life Attitude Profile (Reker & Peacock, 1981), or the Personal Meaning Profile (Wong, 1998).

In both the undergraduate and community sample, the ENS demonstrated a small negative association with the search for MiL (Study 1, $r = -.136$; Study 2, $r = -.205$). Although the direction and significance of the association between the ENS and the search for MiL are consistent with the hypotheses (i.e., higher nihilism would be associated with lower search for meaning), the strength of this relationship (r values) was lower than expected. These results do indicate that nihilists do not search for meaning in life. However, the magnitude of these correlations also indicates that it is not a perfect relationship and that there may be room for some search in even those who endorse nihilistic beliefs.

Presence of MiL has been shown to have a robust relationship with various measures of subjective wellbeing, including lower levels of depression (Steger et al., 2009) and negative affect (Zika & Chamberlain, 1992), and higher levels of life satisfaction (Duffy & Sedlacek, 2010) and

positive affect (Zika & Chamberlain, 1992). Given the absence of meaning associated with existential nihilism, relationships between the ENS and measures of subjective wellbeing were expected. Consistent with our concurrent validity hypotheses, existential nihilism was significantly associated with depression (Study 1, $r = .369$; Study 2, $r = .386$), life satisfaction (Study 1, $r = -.384$; Study 2, $r = -.261$), positive affect (Study 1, $r = -.364$; Study 2, $r = -.268$), and negative affect (Study 1, $r = .260$; Study 2, $r = .340$) in both studies. It appears that the stronger one's commitment to existential nihilism, the greater their level of depression and negative affect, and the lower their level of life satisfaction and positive affect. It is important to note that the direction of causation between these variables is not currently known, and future studies are required to determine whether a commitment to existential nihilism leads to depression, poor affect, and an unsatisfied life, or vice versa.

Further psychometric evaluation of the ENS's concurrent validity is warranted. The present study proposed an initial outline of existential nihilism's nomological network, including a limited number of variables reliably associated with MiL. Informed by the MiL literature, future research should aim to expand the boundaries of existential nihilism's nomological network with the inclusion of other psychological, social, and health-related variables. Refinement of the nomological network may then inform additional concurrent validity analyses.

It will also be important to map the variables that should be theoretically unrelated to existential nihilism. This will allow for further evaluation of the ENS's divergent validity. Indeed, theoretical research that extends the nomological network of existential nihilism will be necessary to articulate hypotheses about variables that should be unrelated to the ENS. As the theoretical foundation of existential nihilism develops, correlational analyses may then be conducted to evaluate the ENS's divergent validity. One hypothesis is that existential nihilism will be unrelated to socially desirable responding (Crowne & Marlowe, 1960), given that responses on the ENS are instead expected to be honest expressions of an individual's commitment to existential nihilism. Showing that scores on the ENS are not attenuated by the need to appear socially desirable will, therefore, be one way to

demonstrate the validity of the ENS. This can be achieved by evaluating the relationship between the ENS and the 33-item Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). The ENS will show good divergent validity to the extent that correlational analyses between the ENS and the aforementioned scale of social desirability show a weak, near-zero association.

The hypotheses within the present research pertaining to the divergent validity of the ENS were tested using exploratory factor analyses on combined items with theoretically related but distinct scales (i.e., AT-N, MLQ, PIL, PIL-4, and OTHALS-LoM). The ENS showed strong evidence of divergent validity in both studies. Indeed, in Study 1, the ENS formed its own clean factor apart from items comprising the AT-N, MLQ, PIL, PIL-4, and the OTHALS-LoM, in five separate EFAs, respectively. This pattern was mostly¹² replicated in Study 2. This suggests that, although the scales are correlated, the ENS measures something distinct from both pre-existing scales of MiL and pre-existing scales that spuriously measure existential nihilism (i.e., AT-N).

The ENS was expected to predict depression over and above related measures (i.e., AT-N, MLQ, PIL, PIL-4, and OTHALS-LoM) as a test of incremental validity. Hierarchical regression models were tested to predict depression with the ENS entered as a second predictor variable following a competing related measure. In Study 1 and Study 2, findings demonstrated that existential nihilism significantly predicted depression over and above the AT-N, MLQ, PIL-4, and OTHALS-LoM. Existential nihilism did not significantly predict depression over and above the PIL in either study. This was an unexpected finding, but one that can be understood within the context of the psychometric literature that claims that many items on the PIL (e.g., ‘With regard to suicide, I have: (1) *thought of it seriously as a way out* to (7) *never given it a second thought*’) are confounded with depression (Dyck, 1987; Steger, 2006; Yalom, 1980). Consequently, it is difficult to know whether the PIL is better at predicting depression because it is, in some ways, a measure of depression. With this in mind, we were

¹² Item 9 on the MLQ loaded onto the existential nihilism factor with a relatively low factor loading of -.320.

more interested in seeing whether existential nihilism predicted outcomes in depression over and above the more theoretically relevant PIL-4 (i.e., Schulenberg and Melton's (2010) psychometrically promising short form measure for the PIL). As such, the present research provides support, within two studies, for the incremental validity of the ENS. In other words, the ENS obtains unique information in the relationship between the absence of meaning and depression.

The ENS was also expected to predict life satisfaction over and above related measures (i.e., AT-N, MLQ, PIL, PIL-4, and OTHALS-LoM). Hierarchical regression models obtained for Study 1 and Study 2 largely supported this hypothesis. There were a few exceptions. For example, in Study 1, the ENS failed to make unique contributions to the prediction of life satisfaction over and above the PIL. Again, this can be understood within the context of the PIL's psychometric literature, with many research articles independently extracting life satisfaction-related factors from the PIL that may include a dominant life satisfaction factor (Dufton & Perlman, 1986), a life excitement factor (Walters & Klein, 1980), a quality-of-life factor (Shek, 1988), an interesting daily life factor (Waisberg & Starr, 1999), or an exciting life factor (Morgan & Farsides, 2007). It is likely that the ENS failed to make predictions over and above the PIL in Study 1 due to the possibility that the PIL is in many ways a measure of life satisfaction. However, in Study 2, existential nihilism *did* contribute unique predictive power over and above the PIL. Instead, in Study 2, the ENS failed to make unique contributions to life satisfaction in models including the MLQ and the PIL-4. Therefore, within the context of predicting life satisfaction, the ENS shows only some support for incremental validity. Given the overlap between existential nihilism and MiL, and given their more modest relationship to life satisfaction, it is not surprising that the ENS failed to show incremental validity in some of the regression models.

Given the number of regression models that were computed, it is possible that a type I error was committed. Despite this, opting for statistical significance at $p = .05$ was preferred over statistical significance at $p = .01$ for two reasons. First, adopting a more conservative p-value (i.e., .01) would conversely increase the likelihood of committing a type II error, potentially leading to statistically

significant results being overlooked. Second, setting the p-value to .05 allowed for potentially coherent patterns of significance to emerge across multiple tests of incremental validity, which may have been limited with a more conservative approach. Looking at the results between both studies, the consistency across the significant effects discovered increases our confidence that the incremental validity tests that were conducted obtained robust findings and are likely not a reflection of a possible type I error.

Limitations and Future Directions

Several limitations to this research are worth noting. First, the prevalence of existential nihilism within the samples was low. It remains to be determined whether a ceiling effect may or may not be obtained within a population of existential nihilists. A major step in the psychometric evaluation of the ENS requires a methodological replication of the present studies within a sample of self-identified existential nihilists to ensure that items behave properly at the upper end of the distribution.

Second, the present research did not assess a number of psychometric properties that are important for scale validation. Indeed, neither predictive validity nor test-retest reliability were demonstrated for the ENS. Rather than the cross-sectional design used for the present studies, future examination of the ENS's psychometric properties should make use of a longitudinal design in order to assess if the ENS is predictively valid. For example, the ENS at Time 1 could be used to predict depression and other theoretically meaningful developmental outcomes in both the achievement and relationship domains. Additionally, once the theoretical foundation for existential nihilism is further refined to include theory regarding the expected temporal stability of the worldview, the ENS can be evaluated for its ability to reliably capture this expected stability of existential nihilism across time.

Third, the convergent validity of the ENS is greatly limited. As far as we know, the nihilism dimension on Maddi et al.'s (1979) Alienation Test is the only comprehensive measurement tool for existential nihilism within the extant literature. Therefore, there are no other pre-existing, well-established measures of existential nihilism for comparison with the ENS. This reduces the certainty with which we can claim that the ENS measures the existential nihilism construct. Additionally, the

AT-N is characterized by a number of psychometric concerns that raise serious questions about whether this scale truly measures existential nihilism. As such, it may be a poor benchmark for comparison, and consequently, a poor standard to evaluate convergent validity.

These limitations demonstrate that the psychometric evaluation of the ENS has only just begun. Although the present research has demonstrated preliminary evidence for a reliable, valid, and structurally sound scale, as with any scale development project, demonstration of the psychometric soundness of a novel scale is an ongoing process, with continued evaluation being necessary.

Despite the limitations of this research, the present thesis addresses a gap in the current MiL measurement literature by constructing a brief 8-item instrument designed to measure existential nihilism, the widespread MiL-related worldview that existence is unchangeably meaningless. The development and psychometric evaluation of the ENS may produce worthwhile directions for future research. For example, is existential nihilism on the rise, as its growing popularity on various social media platforms would suggest? Are there developmental antecedents or a specific socio-cultural context that contribute to the manifestation of existential nihilism? Does this worldview account for the documented rise in mood disorders and suicidality in young people (Twenge et al., 2019)? Finally, does optimism and pessimism moderate the relationship between nihilism and wellbeing as the notion of *optimistic nihilism* (Kurzgesagt, 2017) implies? This new measure marks only the beginning in providing an empirically supported way to investigate the psychological impact of existential nihilism, which is a worldview that may be, in the words of Stanley Rosen (1969), a “perennial human possibility” (p. xiv).

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Table 1

Means, Standard Deviations, Skewness, Kurtosis, and Corrected Item-Total Correlations for Items Tested in Study 1

| Tested Items | <i>M</i> | <i>SD</i> | <i>S</i> | <i>K</i> | <i>Min</i> | <i>Max</i> | <i>CI-TC</i> |
|--|----------|-----------|----------|----------|------------|------------|--------------|
| 1. It is pointless to search for life's meaning or purpose. | 2.19 | 1.327 | 1.371 | 1.785 | 1 | 7 | .742 |
| 2. Despite our best efforts, nothing truly matters. | 2.46 | 1.558 | 1.077 | .357 | 1 | 7 | .742 |
| 3. There can never be any real meaning to life. | 2.33 | 1.467 | 1.216 | .995 | 1 | 7 | .746 |
| 4. Everything I do will always be fundamentally meaningless. | 2.41 | 1.526 | 1.068 | .355 | 1 | 7 | .756 |
| 5. Discovering the meaning of life is impossible. | 2.80 | 1.683 | .818 | -.143 | 1 | 7 | .652 |
| 6. All things considered, our lives are insignificant and pointless. | 2.31 | 1.495 | 1.156 | .550 | 1 | 7 | .821 |
| 7. The universe is empty of meaning. | 2.21 | 1.375 | 1.238 | 1.095 | 1 | 7 | .736 |
| 8. There is no such thing as a real purpose to life. | 2.34 | 1.490 | 1.210 | .836 | 1 | 7 | .743 |
| 9. Regardless of what people think, humans lead pointless lives. | 2.38 | 1.396 | .989 | .298 | 1 | 7 | .750 |
| 10. Existence is meaningless. | 2.20 | 1.466 | 1.302 | 1.001 | 1 | 7 | .762 |
| 11. No matter how hard one looks, a real meaning to life can never be found. | 2.49 | 1.465 | 1.045 | .502 | 1 | 7 | .722 |
| 12. Nothing can be done to give life real, lasting significance. | 2.33 | 1.347 | .962 | .215 | 1 | 7 | .719 |
| 13. All human experience - from suffering to joy - is empty of meaning. | 2.13 | 1.273 | 1.226 | .966 | 1 | 7 | .691 |
| 14. There is no point to life. | 2.03 | 1.324 | 1.473 | 1.748 | 1 | 7 | .768 |
| 15. There is no hope for humans to live life meaningfully. | 2.09 | 1.244 | 1.291 | 1.448 | 1 | 7 | .727 |
| 16. Any attempt to find life's meaning is a waste of time and energy. | 2.26 | 1.383 | 1.213 | .947 | 1 | 7 | .738 |
| 17. The world can be a meaningful place. (RR) | 2.45 | 1.439 | 1.487 | 2.127 | 1 | 7 | .348 |
| 18. To search for a purpose in life can be a worthwhile goal. (RR) | 2.82 | 1.587 | 1.066 | .561 | 1 | 7 | .318 |
| 19. I am motivated to live a meaningful life. (RR) | 2.39 | 1.286 | 1.020 | 1.069 | 1 | 7 | .464 |
| 20. I see no reason in trying to find a true purpose to live by. | 2.32 | 1.408 | 1.169 | .758 | 1 | 7 | .645 |

Note. RR = Reverse Rated.

Table 2

Means, Standard Deviations, Skewness, Kurtosis, and Corrected Item-Total Correlations for Items Tested in Study 2

| Tested Items | <i>M</i> | <i>SD</i> | <i>S</i> | <i>K</i> | <i>Min</i> | <i>Max</i> | <i>CI-TC</i> |
|--|----------|-----------|----------|----------|------------|------------|--------------|
| 1. It is pointless to search for life's meaning or purpose. | 2.51 | 1.518 | 1.034 | .395 | 1 | 7 | .742 |
| 2. Despite our best efforts, nothing truly matters. | 2.87 | 1.796 | .739 | -.573 | 1 | 7 | .770 |
| 3. There can never be any real meaning to life. | 2.60 | 1.631 | 1.086 | .470 | 1 | 7 | .794 |
| 4. Everything I do will always be fundamentally meaningless. | 2.84 | 1.716 | .703 | -.596 | 1 | 7 | .769 |
| 5. Discovering the meaning of life is impossible. | 3.27 | 1.874 | .526 | -.838 | 1 | 7 | .668 |
| 6. All things considered, our lives are insignificant and pointless. | 3.01 | 1.859 | .571 | -.839 | 1 | 7 | .803 |
| 7. The universe is empty of meaning. | 2.63 | 1.750 | 1.002 | -.004 | 1 | 7 | .744 |
| 8. There is no such thing as a real purpose to life. | 2.75 | 1.712 | .913 | -.077 | 1 | 7 | .807 |
| 9. Regardless of what people think, humans lead pointless lives. | 2.81 | 1.736 | .805 | -.364 | 1 | 7 | .793 |
| 10. Existence is meaningless. | 2.58 | 1.723 | 1.001 | -.007 | 1 | 7 | .811 |
| 11. No matter how hard one looks, a real meaning to life can never be found. | 2.96 | 1.832 | .705 | -.644 | 1 | 7 | .781 |
| 12. Nothing can be done to give life real, lasting significance. | 2.52 | 1.558 | 1.088 | .431 | 1 | 7 | .777 |
| 13. All human experience - from suffering to joy - is empty of meaning. | 2.36 | 1.522 | 1.180 | .681 | 1 | 7 | .758 |
| 14. There is no point to life. | 2.42 | 1.610 | 1.155 | .555 | 1 | 7 | .814 |
| 15. There is no hope for humans to live life meaningfully. | 2.33 | 1.510 | 1.312 | 1.226 | 1 | 7 | .802 |
| 16. Any attempt to find life's meaning is a waste of time and energy. | 2.41 | 1.562 | 1.250 | .896 | 1 | 7 | .743 |
| 17. The world can be a meaningful place. (RR) | 2.31 | 1.290 | 1.445 | 2.371 | 1 | 7 | .584 |
| 18. To search for a purpose in life can be a worthwhile goal. (RR) | 2.74 | 1.525 | 1.065 | .661 | 1 | 7 | .436 |
| 19. I am motivated to live a meaningful life. (RR) | 2.64 | 1.368 | 1.109 | 1.138 | 1 | 7 | .560 |
| 20. I see no reason in trying to find a true purpose to live by. | 2.48 | 1.526 | 1.061 | .442 | 1 | 7 | .668 |

Note. RR = Reverse Rated.

Table 3

Means, Standard Deviations, Corrected Item-Total Correlations, and Factor Loadings for ENS Items in Study 1

| The Existential Nihilism Scale (ENS) | <i>M</i> | <i>SD</i> | <i>CI-TC</i> | Factor 1 |
|---|----------|-----------|--------------|----------|
| 1. Despite our best efforts, nothing truly matters. | 2.46 | 1.558 | .748 | .785 |
| 2. All things considered, our lives are insignificant and pointless. | 2.31 | 1.495 | .803 | .845 |
| 3. There is no such thing as a real purpose to life. | 2.34 | 1.490 | .715 | .747 |
| 4. Existence is meaningless. | 2.20 | 1.466 | .771 | .813 |
| 5. No matter how hard one looks, a real meaning to life can never be found. | 2.49 | 1.465 | .711 | .742 |
| 6. Nothing can be done to give life real, lasting significance. | 2.33 | 1.347 | .694 | .723 |
| 7. All human experience - from suffering to joy - is empty of meaning. | 2.13 | 1.273 | .666 | .698 |
| 8. There is no point to life. | 2.03 | 1.324 | .752 | .789 |

Table 4

Means, Standard Deviations, Corrected Item-Total Correlations, and Factor Loadings for ENS Items in Study 2

| The Existential Nihilism Scale (ENS) | <i>M</i> | <i>SD</i> | <i>CI-TC</i> | Factor 1 |
|---|----------|-----------|--------------|----------|
| 1. Despite our best efforts, nothing truly matters. | 2.87 | 1.796 | .784 | .813 |
| 2. All things considered, our lives are insignificant and pointless. | 3.01 | 1.859 | .796 | .825 |
| 3. There is no such thing as a real purpose to life. | 2.75 | 1.712 | .777 | .804 |
| 4. Existence is meaningless. | 2.58 | 1.723 | .823 | .856 |
| 5. No matter how hard one looks, a real meaning to life can never be found. | 2.96 | 1.832 | .713 | .735 |
| 6. Nothing can be done to give life real, lasting significance. | 2.52 | 1.558 | .750 | .779 |
| 7. All human experience - from suffering to joy - is empty of meaning. | 2.36 | 1.522 | .769 | .802 |
| 8. There is no point to life. | 2.42 | 1.610 | .816 | .849 |

Table 5

Means, Standard Deviations, Cronbach's Alphas, and Zero-Order Correlations for Variables in Study 1 and Study 2

| Study 1 | <i>M</i> | <i>SD</i> | α | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------|----------|-----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|---------|----|
| 1. AT-N | 28.11 | 15.73 | .848 | - | | | | | | | | | |
| 2. MLQ-P | 4.55 | 1.313 | .900 | -.333*** | - | | | | | | | | |
| 3. MLQ-S | 5.05 | 1.28 | .906 | -.071 | .181** | - | | | | | | | |
| 4. OTHALS-LoM | 3.53 | .71 | .791 | -.273*** | .598*** | .427*** | - | | | | | | |
| 5. PIL | 4.62 | .92 | .906 | -.440*** | .735*** | .167** | .534*** | - | | | | | |
| 6. PIL-4 | 4.99 | 1.07 | .798 | -.363*** | .776*** | .207*** | .603*** | .870*** | - | | | | |
| 7. CES-D | 2.13 | .59 | .914 | .360*** | -.450*** | .084 | -.190** | -.630*** | -.508*** | - | | | |
| 8. SWLS | 4.13 | 1.32 | .866 | -.340*** | .519*** | -.024 | .329*** | .651*** | .570*** | -.525*** | - | | |
| 9. PANAS-PA | 3.29 | .72 | .876 | -.250*** | .540*** | .108 | .428*** | .686*** | .635*** | -.419*** | .479*** | - | |
| 10. PANAS-NA | 2.53 | .79 | .869 | .290*** | -.262*** | .043 | -.072 | -.404*** | -.295*** | .628*** | -.394*** | -.161** | - |
| Study 2 | <i>M</i> | <i>SD</i> | α | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1. AT-N | 29.40 | 16.42 | .856 | - | | | | | | | | | |
| 2. MLQ-P | 4.17 | 1.43 | .910 | -.347*** | - | | | | | | | | |
| 3. MLQ-S | 4.79 | 1.42 | .930 | -.043 | .082 | - | | | | | | | |
| 4. OTHALS-LoM | 3.31 | .76 | .776 | -.335*** | .579*** | .360*** | - | | | | | | |
| 5. PIL | 4.36 | 1.03 | .922 | -.367*** | .782*** | .039 | .589*** | - | | | | | |
| 6. PIL-4 | 4.55 | 1.28 | .851 | -.374*** | .811*** | .107 | .624*** | .893*** | - | | | | |
| 7. CES-D | 2.07 | .63 | .925 | .351*** | -.555*** | .113* | -.302*** | -.680*** | -.576*** | - | | | |
| 8. SWLS | 3.89 | 1.45 | .901 | -.281*** | .617*** | -.113* | .357*** | .741*** | .645*** | -.592*** | - | | |
| 9. PANAS-PA | 2.96 | .82 | .902 | -.160** | .597*** | .132* | .565*** | .689*** | .650*** | -.444*** | .538*** | - | |
| 10. PANAS-NA | 2.21 | .83 | .901 | .265*** | -.327*** | .128* | -.134* | -.469*** | -.375*** | .671*** | -.361*** | -.197** | - |

Note. AT-N = Nihilism subscale on the Alienation Test, MLQ-P = Presence of Meaning subscale on the Meaning in Life Questionnaire, MLQ-S = Search for Meaning subscale on the Meaning in Life Questionnaire, OTHALS-LoM = Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire, PIL = Purpose in Life Questionnaire, PIL-4 = Schulenberg and Melton's (2010) proposed short form measure for the Purpose in Life Questionnaire, CES-D = Centre for Epidemiological Studies in Depression Scale, SWLS = Satisfaction with Life Scale, PANAS-PA = Positive Affect subscale on the Positive and Negative Affect Schedule, PANAS-NA = Negative Affect subscale on the Positive and Negative Affect Schedule, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 6*Zero-Order Correlations between the ENS and Related Variables in Study 1 and Study 2*

| Variables | Study 1 | Study 2 |
|---------------|----------|----------|
| 1. ENS | - | - |
| 2. AT-N | .491*** | .549*** |
| 3. MLQ-P | -.501*** | -.495*** |
| 4. MLQ-S | -.136* | -.205*** |
| 5. OTHALS-LoM | -.468*** | -.414*** |
| 6. PIL | -.533*** | -.461*** |
| 7. PIL-4 | -.470*** | -.509*** |
| 8. CES-D | .369*** | .386*** |
| 9. SWLS | -.384*** | -.261*** |
| 10. PANAS-PA | -.364*** | -.268*** |
| 11. PANAS-NA | .260*** | .340*** |

Note. ENS = The Existential Nihilism Scale, AT-N = Nihilism subscale on the Alienation Test, MLQ-P = Presence of Meaning subscale on the Meaning in Life Questionnaire, MLQ-S = Search for Meaning subscale on the Meaning in Life Questionnaire, OTHALS-LoM = Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire, PIL = Purpose in Life Questionnaire, PIL-4 = Schulenberg and Melton's (2010) proposed short form measure for the Purpose in Life Questionnaire, CES-D = Centre for Epidemiological Studies in Depression Scale, SWLS = Satisfaction with Life Scale, PANAS-PA = Positive Affect subscale on the Positive and Negative Affect Schedule, PANAS-NA = Negative Affect subscale on the Positive and Negative Affect Schedule, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 7*Hierarchical Regression Analysis with ENS and Related Variables Predicting Depression in Study 1*

| | β | p | R^2 | ΔR^2 | df | ΔF |
|---------------------|---------|------|-------|--------------|----------|------------|
| Depression | | | | | | |
| Model 1: AT-N | .013 | .000 | .129 | - | (1, 327) | - |
| Model 2: AT-N | .009 | .000 | .178 | .049 | (1, 326) | 19.278*** |
| Model 2: ENS | .129 | .000 | - | - | - | - |
| Depression | | | | | | |
| Model 1: MLQ-P | -.214 | .000 | .231 | - | (2, 326) | - |
| Model 1: MLQ-S | .079 | .001 | - | - | - | - |
| Model 2: MLQ-P | -.170 | .000 | .262 | .031 | (1, 325) | 13.431*** |
| Model 2: MLQ-S | .083 | .000 | - | - | - | - |
| Model 2: ENS | .103 | .000 | - | - | - | - |
| Depression | | | | | | |
| Model 1: PIL | -.402 | .000 | .397 | - | (1, 327) | - |
| Model 2: PIL | -.386 | .000 | .399 | .002 | (1, 326) | .800 |
| Model 2: ENS | .023 | .372 | - | - | - | - |
| Depression | | | | | | |
| Model 1: PIL-4 | -.278 | .000 | .258 | - | (1, 327) | - |
| Model 2: PIL-4 | -.235 | .000 | .279 | .021 | (1, 326) | 9.825** |
| Model 2: ENS | .085 | .002 | - | - | - | - |
| Depression | | | | | | |
| Model 1: OTHALS-LoM | -.158 | .001 | .036 | - | (1, 327) | - |
| Model 2: OTHALS-LoM | -.019 | .697 | .136 | .100 | (1, 326) | 37.785*** |
| Model 2: ENS | .183 | .000 | - | - | - | - |

Note. ENS = The Existential Nihilism Scale, AT-N = Nihilism subscale on the Alienation Test, MLQ-P = Presence of Meaning subscale on the Meaning in Life Questionnaire, MLQ-S = Search for Meaning subscale on the Meaning in Life Questionnaire, PIL = Purpose in Life Questionnaire, PIL-4 = Schulenberg and Melton's (2010) proposed short form measure for the Purpose in Life Questionnaire, OTHALS-LoM = Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 8

Hierarchical Regression Analysis with ENS and Related Variables Predicting Life Satisfaction in Study 1

| | β | p | R^2 | ΔR^2 | df | ΔF |
|---------------------|---------|------|-------|--------------|----------|------------|
| Life Satisfaction | | | | | | |
| Model 1: AT-N | -.029 | .000 | .116 | - | (1, 327) | - |
| Model 2: AT-N | -.017 | .005 | .178 | .062 | (1, 326) | 24.539*** |
| Model 2: ENS | -.329 | .000 | - | - | - | - |
| Life Satisfaction | | | | | | |
| Model 1: MLQ-P | .544 | .000 | .284 | - | (2, 326) | - |
| Model 1: MLQ-S | -.126 | .011 | - | - | - | - |
| Model 2: MLQ-P | .458 | .000 | .306 | .022 | (1, 325) | 10.491** |
| Model 2: MLQ-S | -.135 | .006 | - | - | - | - |
| Model 2: ENS | -.200 | .001 | - | - | - | - |
| Life Satisfaction | | | | | | |
| Model 1: PIL | .935 | .000 | .423 | - | (1, 327) | - |
| Model 2: PIL | .895 | .000 | .425 | .002 | (1, 326) | 1.083 |
| Model 2: ENS | -.060 | .299 | - | - | - | - |
| Life Satisfaction | | | | | | |
| Model 1: PIL-4 | .703 | .000 | .325 | - | (1, 327) | - |
| Model 2: PIL-4 | .617 | .000 | .342 | .017 | (1, 326) | 8.530** |
| Model 2: ENS | -.171 | .004 | - | - | - | - |
| Life Satisfaction | | | | | | |
| Model 1: OTHALS-LoM | .614 | .000 | .108 | - | (1, 327) | - |
| Model 2: OTHALS-LoM | .357 | .001 | .176 | .068 | (1, 326) | 26.789*** |
| Model 2: ENS | -.340 | .000 | - | - | - | - |

Note. ENS = The Existential Nihilism Scale, AT-N = Nihilism subscale on the Alienation Test, MLQ-P = Presence of Meaning subscale on the Meaning in Life Questionnaire, MLQ-S = Search for Meaning subscale on the Meaning in Life Questionnaire, PIL = Purpose in Life Questionnaire, PIL-4 = Schulenberg and Melton's (2010) proposed short form measure for the Purpose in Life Questionnaire, OTHALS-LoM = Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 9*Hierarchical Regression Analysis with ENS and Related Variables Predicting Depression in Study 2*

| | β | p | R^2 | ΔR^2 | df | ΔF |
|---------------------|---------|------|-------|--------------|----------|------------|
| Depression | | | | | | |
| Model 1: AT-N | .013 | .000 | .123 | - | (1, 305) | - |
| Model 2: AT-N | .008 | .002 | .177 | .054 | (1, 304) | 19.859*** |
| Model 2: ENS | .123 | .000 | - | - | - | - |
| Depression | | | | | | |
| Model 1: MLQ-P | -.249 | .000 | .333 | - | (2, 304) | - |
| Model 1: MLQ-S | .070 | .001 | - | - | - | - |
| Model 2: MLQ-P | -.209 | .000 | .359 | .026 | (1, 303) | 12.349** |
| Model 2: MLQ-S | .084 | .000 | - | - | - | - |
| Model 2: ENS | .084 | .001 | - | - | - | - |
| Depression | | | | | | |
| Model 1: PIL | -.413 | .000 | .462 | - | (1, 305) | - |
| Model 2: PIL | -.387 | .000 | .469 | .007 | (1, 304) | 3.887 |
| Model 2: ENS | .041 | .050 | - | - | - | - |
| Depression | | | | | | |
| Model 1: PIL-4 | -.283 | .000 | .332 | - | (1, 305) | - |
| Model 2: PIL-4 | -.252 | .000 | .344 | .012 | (1, 304) | 5.388* |
| Model 2: ENS | .055 | .021 | - | - | - | - |
| Depression | | | | | | |
| Model 1: OTHALS-LoM | -.250 | .000 | .091 | - | (1, 305) | - |
| Model 2: OTHALS-LoM | -.143 | .003 | .173 | .082 | (1, 304) | 29.800*** |
| Model 2: ENS | .139 | .000 | - | - | - | - |

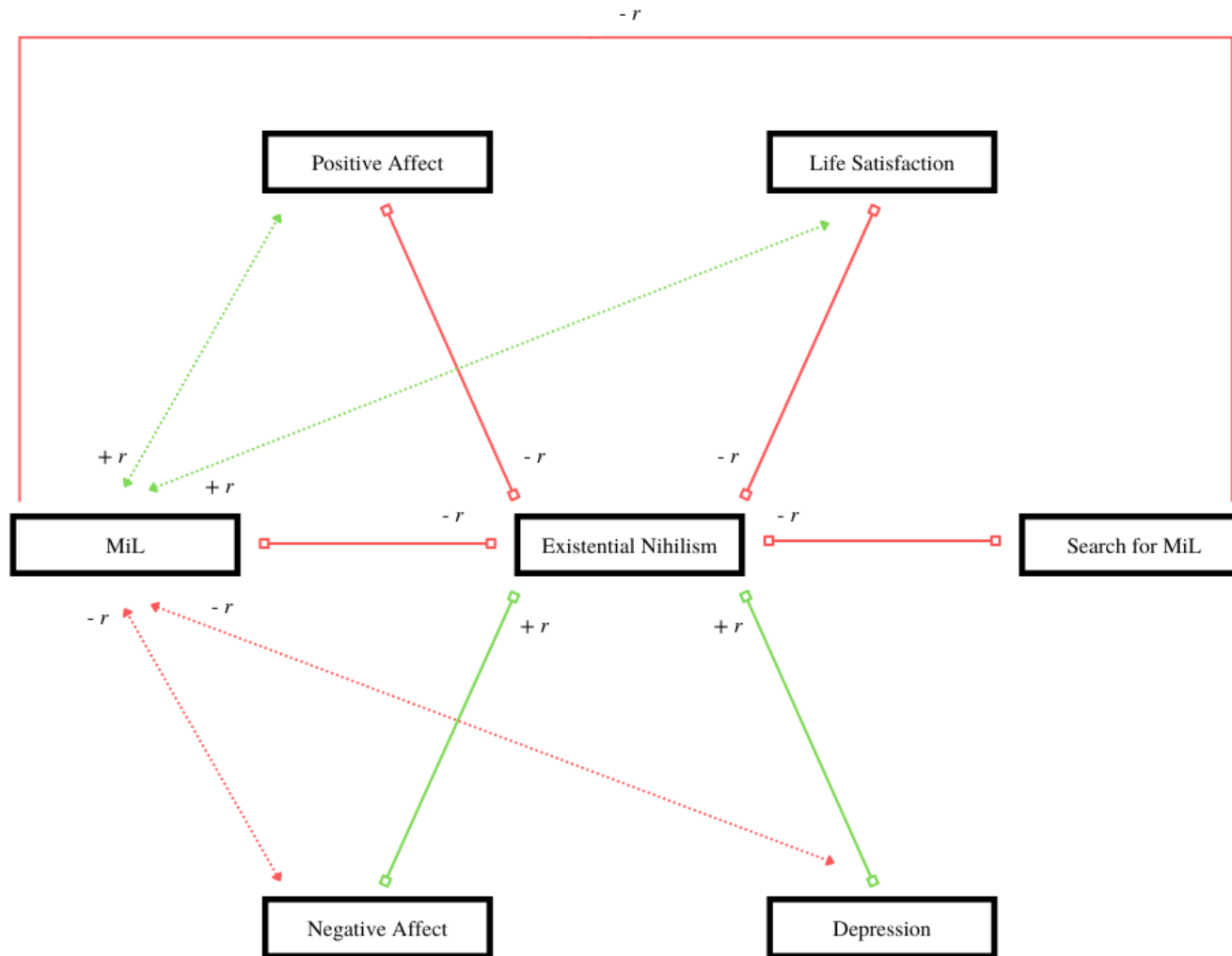
Note. ENS = The Existential Nihilism Scale, AT-N = Nihilism subscale on the Alienation Test, MLQ-P = Presence of Meaning subscale on the Meaning in Life Questionnaire, MLQ-S = Search for Meaning subscale on the Meaning in Life Questionnaire, PIL = Purpose in Life Questionnaire, PIL-4 = Schulenberg and Melton's (2010) proposed short form measure for the Purpose in Life Questionnaire, OTHALS-LoM = Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 10

Hierarchical Regression Analysis with ENS and Related Variables Predicting Life Satisfaction in Study 2

| | β | p | R^2 | ΔR^2 | df | ΔF |
|---------------------|---------|------|-------|--------------|----------|------------|
| Life Satisfaction | | | | | | |
| Model 1: AT-N | -.025 | .000 | .079 | - | (1, 305) | - |
| Model 2: AT-N | -.017 | .003 | .095 | .016 | (1, 304) | 5.472* |
| Model 2: ENS | -.156 | .020 | - | - | - | - |
| Life Satisfaction | | | | | | |
| Model 1: MLQ-P | .637 | .000 | .407 | - | (2, 304) | - |
| Model 1: MLQ-S | -.168 | .000 | - | - | - | - |
| Model 2: MLQ-P | .649 | .000 | .407 | .000 | (1, 303) | .214 |
| Model 2: MLQ-S | -.164 | .000 | - | - | - | - |
| Model 2: ENS | .024 | .644 | - | - | - | - |
| Life Satisfaction | | | | | | |
| Model 1: PIL | 1.039 | .000 | .550 | - | (1, 305) | - |
| Model 2: PIL | 1.105 | .000 | .558 | .008 | (1, 304) | 5.708* |
| Model 2: ENS | .105 | .018 | - | - | - | - |
| Life Satisfaction | | | | | | |
| Model 1: PIL-4 | .730 | .000 | .416 | - | (1, 305) | - |
| Model 2: PIL-4 | .783 | .000 | .422 | .006 | (1, 304) | 3.251 |
| Model 2: ENS | .093 | .072 | - | - | - | - |
| Life Satisfaction | | | | | | |
| Model 1: OTHALS-LoM | .681 | .000 | .128 | - | (1, 305) | - |
| Model 2: OTHALS-LoM | .576 | .000 | .142 | .014 | (1, 304) | 5.195* |
| Model 2: ENS | -.136 | .023 | - | - | - | - |

Note. ENS = The Existential Nihilism Scale, AT-N = Nihilism subscale on the Alienation Test, MLQ-P = Presence of Meaning subscale on the Meaning in Life Questionnaire, MLQ-S = Search for Meaning subscale on the Meaning in Life Questionnaire, PIL = Purpose in Life Questionnaire, PIL-4 = Schulenberg and Melton's (2010) proposed short form measure for the Purpose in Life Questionnaire, OTHALS-LoM = Life of Meaning subscale on the Orientations to Happiness and Life Satisfaction Questionnaire, * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 1*Nomological Network of Existential Nihilism*

Note. MiL is measured by a number of instruments (e.g., MLQ-P, PIL, PIL-4, OTHALS-LoM), $+r$ = Hypothesized positive relationship, $-r$ = Hypothesized negative relationship.

Appendix A

The Existential Nihilism Scale (ENS)

Please read each of the following statements carefully and respond as truthfully and accurately as you can. These are very subjective statements, and there is no right or wrong answer. Try not to let your response to one statement influence your responses to other statements. Please answer each statement according to the scale provided.

Scale:

- 1 = Strongly disagree
 - 2 = Disagree
 - 3 = Slightly disagree
 - 4 = Neither agree nor disagree
 - 5 = Slightly agree
 - 6 = Agree
 - 7 = Strongly agree
-

1. Despite our best efforts, nothing truly matters.
2. There is no such thing as a real purpose to life.
3. All things considered, our lives are insignificant and pointless.
4. Existence is meaningless.
5. No matter how hard one looks, a real meaning to life can never be found.
6. Nothing can be done to give life real, lasting significance.
7. All human experience - from suffering to joy - is empty of meaning.
8. There is no point to life.