Introduction

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One of the most engaging aspects of psychological science is the challenge to better understand the fundamentally existential issues involved in human *being* and *becoming*. Throughout our lives, we each continuously navigate psychological experiences that are ultimately about the nature of our existence. We comprehend the passing of time, aging, and death. We grapple with freedom, authenticity, and moral responsibility. We struggle with isolation, uncertainty, and shared reality. We participate in culture and develop selves and identities. We yearn for meaning and purpose. We may believe in souls, gods, and afterlives. We strive for the "good life." And each of these existential concerns are no doubt interrelated in complex ways, with rich implications for better understanding human nature.

Building on recent theoretical and methodological advances in modern psychological science, a large and growing number of researchers around the world have begun to rigorously and systematically study the roles of various existential concerns in an increasingly broad range of the human experience. This *Handbook of the Science of Existential Psychology* is unique for being among the first handbooks covering this exciting and newly emerging field. As the field has been developing and growing over the past 40-plus years, this handbook offers an expansive coverage of the topic—with 65 chapters, authored by roughly 150 of the world's leading experts, showcasing the cutting-edge research that has been taking shape over the past several decades. The result is a text that we hope will usefully serve students, professionals, and scholars for years to come. Below, we outline some of the background of the field and provide an overview of the theory and research discussed in the various sections and chapters of this handbook.

PHILOSOPHICAL SEEDS: EXISTENCE PRECEDES ESSENCE

The broad range of existential concerns about the nature of being and becoming have been at the heart of many of humankind's richest reflections on ourselves and the world around us. Such reflections include religious teachings and scriptures from the Bible to the Bhagavad Gita, epics from Gilgamesh to Tolkien, meditations from Confucius to James Baldwin, poems and songs from Omar Khayyam to Bob Dylan, and even the moralistic folk tales, fables, and parables of Aesop and The Brothers Grimm.

These and mountains of other works represent some impressive efforts to better understand the human condition and collectively equip ourselves for a brighter future.

Adding to this chorus, direct philosophical considerations have tried to understand the nature of human existence. One common way of approaching the topic has been to assume that essence precedes existence. For many objects, that is certainly the case. People want to cut food for their meals, so a smith makes a chef's knife. People want to play and listen to music, so a luthier crafts a violin. Likewise, it can be tempting to assume that each of us humans also have an essential purpose that is the reason for our existence—the answer to questions like "Why am I here?" and "What is my purpose?" From that approach, discovering an object's essential purpose would be an important step both toward understanding it and toward achieving its optimal state of being, whether the object is a chef's knife, a violin, or oneself.

However, although essentialist conceptualizations of human nature are intuitive and common, some philosophers began to challenge the idea that we humans exist to fulfill some mysterious essential purpose. They turned the wisdom of essentialism on its head, arguing instead that *existence precedes essence*—that we exist first and then any essential purpose in life that we may perceive emerges because we humans, collectively and individually, create it for ourselves. From that view, it would not make sense to try to understand human nature by "discovering" some predefined essential purpose, nor that one ought to pursue it to achieve some predefined optimal state of being. Instead, the existentialist perspective redefined human nature as the *dynamic process* of navigating the ultimate concerns of *being* and *becoming*, contextualized by time and place, to fashion a sense of meaning and purpose in life.

In that regard, the existentialist philosophical movement was never about producing a coherent systematic ethic to prescribe who to be, what to do, how, and why. Rather, it has often been described as more focused on exploring the existential dynamics involved in human being and becoming and understanding the process of navigating them. Thinkers explored existential challenges such as time, aging, and death; freedom, authenticity, and moral responsibility; isolation, uncertainty, and shared reality; culture, self, and identity; meaning and purpose; religion and spirituality; and awe, personal growth, and the good life. Thus, the existential philosophical movement put existential dynamics "on the map," so to speak, and offered myriad ideas about how those experiences might unfold.

THE SCIENCE OF EXISTENTIAL PSYCHOLOGY: A BRIEF HISTORY OF THE TRADITION

The existentialist philosophical movement is often considered to have begun nearly two centuries ago, in the 1840s, when Søren Kierkegaard put his ideas to paper. His work was followed in the late 1800s by those of Fyodor Dostoyevsky and Friedrich Nietzsche, and in the 1900s by Martin Heidegger, Jean-Paul Sartre, Albert Camus, and various others throughout Europe. The central focus of existentialist philosophy spread quickly during that time, and many existentialist theoretical lenses were developed and applied across a variety of academic domains and therapeutic disciplines such as theology (e.g., Tillich; Buber), sociology (e.g., Émile Durkheim; Berger & Luckmann), and cultural anthropology (e.g., Ernest Becker), among others, but most directly and thoroughly to psychology (e.g., William James; Otto Rank; Erich Fromm) and psychotherapy (e.g., Viktor Frankl; Rollo May; Irvin Yalom).

The application of the scientific method, however, was held back in the early- and mid-1900s for two main reasons, both of which were related to the methodological limitations of psychology at the time. First, partly as a rejection of the Freudian "depth psychology," the dominant behaviorist views of scientific psychology placed strict emphasis on direct observations. However, the lack of sophisticated research methodologies in those early days meant internal mental experiences—such as the cognitive and emotional handling of existential concerns—were simply beyond the reach of the objective research methods available. Sec-

ond, although humanistic psychology broke from both Freudian theory and behaviorism and was influenced by existentialist philosophy in carving out a "third way," its proponents objected to scientific research methods as reductionist and generally inadequate for studying the rich complexities and nuances of human being and becoming. In those early days of lever-pressing pigeons and simple reward–punishment schemes, that was perhaps a reasonable objection.

But by the 1970s and 1980s, following the successes of the cognitive revolution, researchers in mainstream psychological science had developed techniques to objectively study subjective experiences, inner mental processes, and their behavioral indicators. Thus, equipped with the newly emerging methods, some of those researchers began conducting some of the first scientific studies establishing that it was indeed possible to apply the scientific method to productively study existential psychological dynamics in everyday life. As a result, interest in the science of existential psychology spread throughout the 1980s and 1990s, during which researchers began developing novel theoretical perspectives and innovative research methods to better understand the roles of various existential concerns in an increasingly broad range of the human experience.

In 2001, researchers held an International Conference on Experimental Existential Psychology in Amsterdam, which led to the *Handbook of Experimental Existential Psychology* (Greenberg et al., 2004) and an article introducing the field in *Current Directions in Psychological Science* (Koole et al., 2006). Since then, interest in the science of existential psychology has continued to grow. An increasing number of researchers have been using diverse methods—qualitative and quantitative—to rigorously and systematically explore and document the roles of various existential concerns in human mental and social functioning. A growing number of major peer-reviewed research journals began hosting "special issues" focused exclusively on existential psychology topics, and a growing number of handbooks began summarizing research on existential psychological topics (e.g., authenticity, meaning, religiosity).

Flash forward two decades, and the field had grown to the point that it warranted organizational support. In 2019, researchers began what is now an annual conference on the science of existential psychology. Soon after, in 2020, researchers founded the International Society for the Science of Existential Psychology (*issep.org*), which gives awards to recognize excellent contributions to the field, disburses grant funding to stimulate further research advances, runs a dedicated peer-reviewed journal, organizes the field's annual conference, curates pedagogical resources for teaching and learning about existential psychology research, and communicates the science of existential psychology to the general public through an e-magazine program, among a variety of other resources offered.

Thus, the science of existential psychology of today is unique in tradition, method, and scope. Whereas the existential–humanistic tradition, which sprouted in the early 1900s, developed an excellent body of scholarship on existential psychotherapy, it has remained almost entirely limited to therapy and continues to largely resist the application of modern scientific research methods. The science of existential psychology did not stem from that tradition. Rather, it stemmed from the mainstream psychological science tradition, with researchers gaining the methodological sophistication to expand their reach to existential psychological topics. As a result, the field actively applies the methods of modern psychological science to develop an improved understanding of existential dynamics in human functioning and broadly explores those dynamics in all aspects of life. We turn now to a brief overview of some of the more common methodological approaches employed, followed by an illustrative sampling of the scope of theory and research in the field.

RESEARCH METHODS IN THE SCIENCE OF EXISTENTIAL PSYCHOLOGY

One of the things that makes the science of existential psychology new and unique is its embrace of the full range of the research methods available in modern psychologi-

cal science. Here, the field participates in the traditional scientific process of acquiring knowledge and understanding through observation, evaluation, interpretation, and theoretical explanation, and it does so through the application of rigorous scientific research methods—systematic techniques to acquire, update, or integrate knowledge about the roles of existential psychological phenomena in everyday life. Though a full treatment of the details of psychological science research methods is of course beyond the scope of this introduction, here we highlight some of the relevant issues: defining and measuring variables, considering levels of processing, and gathering and analyzing qualitative and quantitative data.

A Foundation of Objective and Replicable Observation

As with the rest of psychological science, the goals of the science of existential psychology are to understand the roles of existential psychological dynamics so well that they can be described, explained, predicted, and even controlled. What are the relevant existential concerns? How do they work; what are their causes, mechanisms, and consequences? Can we anticipate when they will emerge and how they will impact our thoughts, feelings, and behaviors? If so, can we control the conditions necessary for them to occur or not occur, or to impact one outcome or another? Progress toward these goals requires the gathering of valid and reliable information, and the continual organization and reorganization of that information in a cumulative way. In that regard, the collection of information can lead to the development of scientific theories to understand that existing cumulative body of information, and hypothesis testing can further interrogate any lingering questions about the implications of theoretical ideas.

The foundation of scientific advances in understanding existential dynamics, as in the rest of modern psychological science, is objective and replicable observation. This stands in contrast to the subjective and nonreplicable methods typical of (nonbehaviorist) psychology in the early 1900s, when it was not uncommon for a researcher to "study" a phenomenon (in themself or another person) and then publish a report describing their interpretation of the relevant process. In that approach, the "empirical data" was the *researcher's subjective* description or interpretation of the participant's lived experience. Although sometimes impressive, such reports were largely unverifiable; nobody else could examine whether the "results" were valid (because they were the original researcher's subjective interpretations) nor could they rerun the study to see if the results could be reliably reproduced under similar circumstances (because the observational "instrument" was the original researcher).

But researchers eventually became aware of and addressed these problems, and in the second half of the 1900s they began developing sophisticated techniques to observe *subjective mental experiences* in *objective* and *replicable* ways. To be objective, the observation technique must be impartial, independent of any given researcher's personal opinions and biases. To be replicable, the observation technique must be able to be repeated by any researcher in the same way. These strictures make it important to clarify theoretical constructs and operational definitions of observed variables. A construct is a conceptual variable that is known or thought to exist but cannot be directly observed, whereas an operational definition is a specific expression of the construct that can be indirectly observed.

For example, George and Park (2017) conceptualized meaning in life as a tripartite construct involving the sense of coherence (life makes sense, things are clear and seem to fit together), purpose (overarching life goals, a reason for being), and significance (one's existence matters in profound and lasting ways). They operationally defined it as agreement, on a 7-point Likert-type scale (1 = Strongly disagree, 7 = Strongly agree), with 15 statements, such as "I can make sense of the things that happen in my life" (coherence), "I have overarching goals that guide me in my life" (purpose), and "I am certain that my life is of importance" (significance). Although meaning in life is a subjective mental experience, the observation technique is objective because the response scores are recorded objects that can be analyzed independent of any given researchers'

opinions and biases, and replicable because this technique can be repeated by other researchers. Thus, the data and their interpretation is now verifiable—other researchers can independently analyze the original data objects (in this case, survey response scores) and even rerun the study to see if the same results can be reliably reproduced under similar circumstances.

Level/Depth of Processing

Throughout the science of existential psychology, researchers give much attention to considering the relevant level(s) of processing—behavioral, conscious, nonconscious, physiological—and tailor research methods accordingly. A useful (but imperfect) metaphor is to think of the body and mind as one might think of computer hardware and software; the hardware is the body/brain that creates the software experiences of the mind, with some software programs that the user consciously operates and some that automatically run in the background, all of which may contribute to behavioral outcomes. When studying an aspect of existential dynamics within participants' conscious awareness, the door is open to direct methods such as interviews or surveys. But when studying behaviors or experiences that might be outside conscious awareness, or that participants might like to avoid or deny (even to themselves), more indirect methods would be appropriate.

Qualitative Methods

Qualitative research is often about gathering information for the arts and humanities disciplines, but it can also play a role in the scientific process. Qualitative research typically gathers data from "natural settings" where people live their lives and typically involves written transcripts of spoken interviews, but might also include notes about observed behaviors, documents, and/or audiovisual media. The researcher then examines the data gathered and functions as the analytic "instrument" to identify, interpret, and report what they see as important patterns in the data. Thus, it is important to keep in mind that the level of analysis is typically limited to thoughts, feelings, and behaviors that can be consciously experienced and reported by participants and consciously noticed and described by researchers; participants cannot report and researchers cannot observe the mountains of nonconscious mental or biological processes that might be occurring. Thus, qualitative research is most effective when it is done to provide a detailed, complex, and holistic description of conscious cognitive or emotional experiences or overt behaviors.

There are many types of qualitative research, but we highlight three of the most relevant: phenomenology, grounded theory, and narrative. Phenomenological research draws heavily from Edmund Husserl and those he influenced, such as Heidegger, Sartre, and Merleau-Ponty, and aims to be atheoretical in describing conscious lived experiences rather than explaining them. In a phenomenological study, the researcher identifies a phenomenon of interest (e.g., grief, authenticity, awe), typically interviews several participants who have experienced that phenomenon, and then seeks to identify, describe, and interpret the common aspects of their experience. In grounded theory research, the goal is to inductively develop a testable theory about the processes and actions surrounding an experience. The researcher typically interviews several participants, often multiple times, to identify and describe the core phenomenon as well as possible causal or mitigating conditions, mechanisms, and outcomes. Narrative research is similar but focuses on individuals lived and told stories, with sensitivity to contextual factors, longitudinal chronology, and story turning points. Researchers can employ these methods in scientific ways by, for example, developing detailed codebooks, doing negative case analysis, and soliciting third-party coding reviews, such that the analyses become more objective and replicable.

For example, Maxfield, Peckham, and James (2024) conducted a thematic analysis of the experiences, context, and phenomena associated with dementia-related anxiety. The researchers conducted semi-structured interviews with 50 community-dwelling adults, ages 58–89, without dementia diagnoses, about their thoughts, feelings, and reactions to the possibility of being diagnosed

with dementia. Researchers identified seven themes suggesting participants (1) considered dementia anxiety-provoking, with negative emotions and catastrophic thinking; (2) worried about how they might be treated by others; (3) worried about losing their self and becoming dehumanized; (4) worried about a loss of freedom, self-determination, and control; (5) worried about becoming a burden on others; (6) worried about risk from family history; and (7) worried more about dementia than about decline in physical health. Concerning dementia's implication for sense of self, one participant said, "It's scary to think of losing yourself . . . who you are . . . your soul"; another said, "I'll be gone, and I'll not be coming back"; and another said, "You are no longer you . . . you might as well be dead." Concerning the implications for freedom and self-determination, one said, "If I were to get it . . . losing control . . . that would just terrify me"; another said, "I would hate to give up my ability to choose what I do, when I can do it"; and another said, "I don't want to lose control . . . fear . . . terror is a better word." This analysis highlights some of the intense and complex existential dynamics in the process of adult development and aging.

Quantitative Methods

The bulk of research in the science of existential psychology, as in the rest of mainstream psychological science, employs quantitative methodologies. These methods entail a highly rigorous and systematic approach to the collection and analysis of numerical data with a strong emphasis on objective and replicable observation and the ability to study systematic relationships between variables, including possible causal relationships.

At the heart of quantitative methods is the numeric measurement and analysis of human functioning. Quantitative data can address all levels of human functioning—behavioral, conscious, nonconscious, and physiological—and can be collected from natural settings or from tightly controlled laboratory settings. To illustrate, consider just a few of the measurement techniques used by researchers studying death-related concerns and their mechanisms and consequences.

- *Behavioral.* Researchers studying health/fitness-related self-esteem striving had participants squeeze a hand-dynamometer and recorded strength output in pounds per square inch (Peters et al., 2005), and researchers studying cleaning behavior among people with obsessive–compulsive disorder recorded the duration of handwashing (in seconds), amount of soap used (in milliliters), and number of paper towels used (Menzies & Dar-Nimrod, 2017). Quantitative measurement of such overt behaviors is important because any systematic changes are likely subtle but could be deeply informative.

- *Conscious thoughts and feelings.* Surveys can be used when participants might be consciously aware of, and willing to honestly report, cognitive and emotional experiences. For example, researchers studying death anxiety (Lester, 1994) might ask "How disturbed or made anxious are you by the following aspects of death and dying?" and numerically measure, on a 5-point scale (1 = Not at all, 5 = Very much), responses to 36 aspects, such as "The shortness of life," "The pain involved in dying," "Losing someone close to you," and "Watching a dying person suffer from pain."

- *Nonconscious thoughts and feelings.* Many important existential dynamics may take place nonconsciously, such that participants cannot consciously report on them and researchers cannot directly observe them. Thus, researchers devise indirect indicators of nonconscious cognitive and affective phenomena. For example, researchers have devised both analog and computerized techniques to measure the nonconscious activation of death-related cognition (Cox et al., 2019). In the word-stem completion task, participants complete 36 partially completed words (e.g., GRA_ _), 12 of which can be completed in either neutral (e.g., GRANT) or death-related ways (e.g., GRAVE). The sum of the death-related word-stem completions indicates the accessibility of death-related cognitions. In the lexical decision task, a computer screen shows a series of 70 letter strings, 30 of which are words and 40 of which are gibberish nonwords (e.g., *zudric*, *mablko*), and participants use two buttons to categorize the strings as words or non-

words as quickly and accurately as possible. The computer measures the response latencies, in milliseconds, of correctly categorized strings. Of the 30 words, 18 are neutral (e.g., cloak, bottle), 6 are negative (e.g., suffer, fail), and 6 are death-related (e.g., dead, killed). The average latency on the death-related (neutral vs. negative) strings indicate the relative direction and magnitude of nonconscious death-thought accessibility.

- *Psychophysiological processes.* Deeper still are psychophysiological processes. Eye-tracking technology, for example, can measure attentional biases toward or away from death-related stimuli, presenting a series of image arrays and recording the location, number, and duration (in milliseconds) of gaze fixations on death-related images (Chen et al., 2022). Other "existential neuroscience" research focuses more directly on measuring brain activity during the conscious and nonconscious processing of existential concerns, using techniques such as cranial electroencephalogram (EEG) and functional magnetic resonance imaging (fMRI). With cranial EEG, electrodes are placed on standard scalp locations adjacent to various cortical structures and electrical waveforms are recorded (in milliseconds) at each location throughout the duration of the experience, such that existential event-related changes in amplitudes at particular locations indicate changes in the activity of corresponding brain regions (Henry et al., 2010). With fMRI, magnetic fields are applied and radio frequency images of sequential slices of the brain are captured at regular intervals to measure hemodynamic changes in specific brain locations as existential psychological dynamics unfold (Chapter 12). Electrical techniques such as cranial EEG offer high temporal but low spatial precision, whereas hemodynamic techniques such as fMRI offer low temporal but high spatial precision.

Sometimes researchers study just one variable, analyzing its descriptive statistics. But typically, researchers study more complex relationships between two or more variables, analyzing their inferential statistics. Such studies might use correlation-based designs to calculate the direction and strength of the relationship. For example, George and Park (2017) found meaningful comprehension of the world was correlated with greater life satisfaction and lower depression, anxiety, and stress. More sophisticated statistical techniques can go beyond simple zero-order correlations to more complex models capable of controlling for confounds and isolating analyses to the relationships of interest. However, correlation is not causation, and no amount of statistical sophistication can change the fact that the variables were merely measured; we cannot know whether or how they might be causally related. Comprehension might have caused greater life satisfaction, or vice versa, or some third variable might have caused both to rise and fall together.

Experiments, however, can test a hypothesized causal relationship. Consider the hypothesis that death awareness causes religious believers to strengthen their faith (Chapter 52). To test that idea, researchers would first select/develop a technique to manipulate the presumed causal variable: the awareness of death. In a mortality salience condition participants might be prompted to think about death, whereas in a comparison condition they might be prompted about dental pain (a non-death-related topic). Second, researchers would randomly assign religious believers into one of those manipulated conditions, so the manipulated variable changes independent of other variables (e.g., age, political orientation) and any preexisting differences among participants would be evenly spread across conditions. Third, researchers would measure the outcome variable in all participants, such as by having participants use a 10-point scale to indicate their strength of religious faith. Finally, researchers would statistically analyze the religious faith score distributions in the two conditions. If the distribution in the mortality salience condition is higher than in the control condition, then the experiment indicates the awareness of death caused religious believers to increase their religious faith.

Integrative Methods

Researchers in the science of existential psychology also employ a variety of integrative methods. Mixed methods, for example,

employ both qualitative and quantitative methods within a single study, allowing researchers to report the rich descriptions of conscious phenomena and the precise numeric trends of relevant dynamics at various levels of processing. A variant on the mixed-methods technique is to convert qualitative into quantitative data and analyze it statistically. Raw narrative data, for instance, might be transcripts of personal stories; but researchers might then develop sophisticated manuals for quantifying the narratives, for example, giving numeric values to the presence, magnitude, and valence of significant themes and turning points in those stories, and then analyzing the statistical patterns of those characteristics in participant narratives (Chapters 40, 59).

Researchers also conduct systematic reviews and meta-analyses that synthesize findings—sometimes hundreds of studies conducted over decades—to learn from the whole of the field's accumulated research. Systematic reviews follow rigorous protocols to gather and organize relevant prior studies on a topic, and meta-analyses statistically combine and analyze findings from those previous studies to identify overall patterns and variations. Lastly, just as no single piece of a puzzle shows the overall picture, no single study can fully capture the complexity of any one individual's experience nor the entirety of any existential dynamic. Rather, each study represents one piece of the larger puzzle. As the field accumulates more pieces, researchers can learn more about how those pieces fit together to illustrate an increasingly complete overall picture.

SCOPE OF THE SCIENCE OF EXISTENTIAL PSYCHOLOGY

To provide an illustrative sampling of the scope of theory and research in the field, we turn now to an overview of the contents of this handbook. Authored by roughly 150 of the world's leading experts, this handbook includes 65 chapters arranged in eight parts. After laying a broad topical foundation in the first section, the remaining seven sections provide in-depth coverage of research exploring how various existential dynamics impact mental and social life.

Section I: Philosophical Roots, Scientific Methods

Section I covers some key topics relevant to existential philosophy and how researchers have begun to address existential psychological questions using the broad range of research methods available in modern psychological science.

In Chapter 1, Höfer and Buben discuss some of Kierkegaard's ideas about the importance of death in life. For Kierkegaard, and many he inspired, one is not born with meaningful conceptualizations of one's self. Rather, crafting a meaningful sense of self is something that unfolds throughout one's daily lived experiences. The challenge, he noted, is that it can be all too easy to simply go along with activities in life that are, in the grand scheme of things, rather unimportant. In that regard, he pointed to death as the ultimate taskmaster in helping us stay grounded in crafting a self that is more squarely based in meaningful life projects. One complication, however, is that people may not give death its due—either because it is uncomfortable to think about or because they neglect to see death as self-relevant until their final hour, or both. People may engage in some form of motivated death denial, to push death thoughts out of the mind as much as possible, or they might understand death in objective terms that apply to others (e.g., cancer patients, soldiers, elderly) rather than themselves.

In contrast, Kierkegaard argued for an "earnest" recognition of the relevance of death to one's own subjective experiences, recognizing that death is both certain and uncertain. Death will undoubtedly come, but with unknown time and place—decades from now, next week, or this afternoon—which should serve as a wake-up call for our self, our life goals, and our daily actions. The earnest thought of death involves an awareness of the scarcity of time in which every moment is precious and should not be wasted. What becomes crucial, then, is to develop a sense of self oriented toward meaningful goals and life projects that are valuable regardless of whether they are completed in one's lifetime or not.

Indeed, a central theme in existentialist thought is that a limited time frame, which

comes with the human awareness of mortality, is what orients us to engage our freedom—motivating us to want to be our most authentic self in any given moment. There are seemingly infinite paths in the world; countless career paths to join, clothing styles to adopt, people to befriend, and so on. If we knew we had unlimited time, we would not need to choose—we could engage with all of them. But we know that our time is limited; we know we are mortal; and so we can only engage with a few of them. Thus, the question is whether we allow our lives to be shaped by external forces (e.g., parents, employers, cultural norms) or by our own self-determined expression of ourselves.

In Chapter 2, Kearns and Mele consider various conceptualizations of free will, found in contemporary analytic philosophy, alongside Sartre's existentialist account of freedom. Four of the most common ways of understanding freedom are that an agent acts freely when they are able to choose an action from a variety of options (leeway), when they are the origin of their actions independent of external forces (sourcehood), when they have the capacity to act on good reasons for an action (reason), or when their action expresses what they truly value, reflectively endorse, or who they truly are (deep self). The experience of each of these conceptualizations of free will bears important implications for moral responsibility for one's actions and even the meaning of one's life, more broadly. If one does not have any leeway ("I had no choice"), sourcehood ("my boss made me do this"), capacity to follow good reason ("I didn't know about that"), or deep self-expression ("that doesn't reflect my true self"), then one would hardly be responsible for their actions and life experiences.

Thus, one important question is: Do we have free will? The primary threat to free will is determinism: the idea that any given state of the universe, following the laws of nature, determines every subsequent state of the universe. There is no special exception for human agency. If determinism is true, then all our actions are controlled by the systematic unfolding of external forces stretching back to the Big Bang. Some view determinism as incompatible with free will, as it seems to undermine the genuine ability to have done otherwise (leeway) and means we are not the true authors of our actions (sourcehood). But others accept that we have free will, either by viewing free will in a way that is compatible with determinism (even if no leeway or sourcehood, action can be freely chosen if people act on reasons or express their deep/true self) or by rejecting the constraints of determinism on human agent-determined (libertarian) free will.

Here, it is worth recalling that there is no one existential philosophical view. Individual philosophers certainly advocated for one or another theoretical perspective, but thinkers often had substantial differences of opinion. Nietzsche contributed to existentialist thought as a hard determinist free will skeptic, whereas Sartre contributed as an agent-deterministic libertarian. In an important way, the science of existential psychology is not interested in the philosophical debate about the metaphysics of free will. Instead, the point is to better understand the *psychology* of free will. People can experience situations and make decisions that guide thoughts, feelings, and behaviors; they can appraise those phenomena in ways ranging from determined to freely chosen; and those appraisals matter. A thought, feeling, or behavior could be "truly" metaphysically determined or free, or mistaken as determined or free; that doesn't matter. What matters, in either case, is the psychological experience of freedom and responsibility, and researchers can take steps to better understand the *psychological* dynamics involved.

At one end of the spectrum, Chapter 2 explores some of the dynamics associated with Sartre's account of free will. In Sartre's view, one might feel anguish about any course of action if one perceives it as only possible, rather than determined. He also devoted considerable attention to exploring the connections between the experiences of freedom and nothingness (the mental separation of oneself from things that already exist in the world). Such processes as imagination, expectation, doubt, and questioning (will Pierre be at the café?) all involve a possibility of what might *not be*, which suggests a freedom to understand situations and act independent of—and thus not determined by—what already *is*. Sartre also highlighted the

importance of our fundamental life projects, or who we aim at being or becoming. Our fundamental projects are a sort of ideal self that gives shape to ends, animates means, and breathes life into reasons and motives. Sartre acknowledged the presence of limiting external forces, such as family, race, class, or nation, but he argued that we are nevertheless free to choose any fundamental life projects, and pursue any ends, and are thus ultimately responsible for our own frustrations or joys and for the meaninglessness or meaningfulness of our lived experiences.

Toward the other end of the spectrum, in Chapter 3, Pereboom adopts a determinist perspective, closer to Nietzsche's view, to explore the dynamic tension between our facticity (e.g., our limitations as mortal creatures) and our ability to transcend that facticity. This view leads to a somewhat different question about this existential dynamic: If our deliberations and choices seem determined by factors beyond our control, then how can we transcend our facticity to make a meaningful impact in our lives and in the world? It may be rather difficult to believe that our deliberations and choices matter while also believing that our path in life is causally determined by factors beyond our control. However, even lacking freedom, our (determined) choices still exert power over ourselves and our environments. Thus, one could reject a life of resentful resignation and (in Nietzschean terms) assert one's "will to power," embracing one's control despite the limitations of one's facticity. In his own twist, Pereboom suggests important implications for our emotional experiences (e.g., letting go of anger), cultural institutions (e.g., criminal justice, public safety), and hope for progress over suffering.

In Chapter 4, Golden discusses the unique set of ideas associated with Black existential thought. The chapter first covers some foundational phenomenological and existential ideas and then builds on the thought of Frederick Douglass, W. E. B. Dubois, Frantz Fanon, Lewis Gordon, George Yancy, Derrick Bell, and others to explore the application of existentialist ideas to better understanding the challenges of the Black experience across a variety of contexts (e.g., Afro-European, Afro-Caribbean, Afro-American). The problems of both hostile and systemic anti-Black racism, for example, can be understood through Sartre's notion of "bad faith." Although anti-Black racism is either perpetrated or permitted by the majority-White population, Whites might nevertheless live in "bad faith" by failing to appreciate or even lying to themselves about their freedom and responsibility in accepting it—consider some resigned or self-deceptive excuses: "that's just how it is" (leeway), "*I* don't do it" (sourcehood), "I don't think it's really a problem" (reason), or "that's not who I am" (deep self). A related issue of the bad-faith White gaze is the objectification and dehumanization of Black bodies, making it easier for Whites to attempt control or ownership (if viewed as chattel) or policing or death (if viewed as dangerous).

Black individuals, thus, may often experience an elevated sense of existential threat to life and limb, even during the most quotidian of activities (e.g., visiting a grocery store, going for a jog, being asleep in bed). Additionally, one may experience a state of double consciousness—an awareness of two very different views of oneself. The first is what would otherwise be one's own subjectively crafted self, oriented toward meaningful fundamental projects that might focus, for example, on being or becoming an excellent American, son, engineering student, artist, and so on. The second, however, is the view from the bad-faith White gaze, laden with all the associated stereotypes, prejudices, and suspicions. The latter introduces contradictions that threaten the development of coherent life projects and meaningful lived experiences. However, the chapter considers that, even if the limiting circumstances are bleak and difficult to change, one might find the strength to craft a meaningful life despite the circumstances and/or adopt into one's fundamental project the goal of changing the circumstances themselves. Either way, one might adopt an orientation to the world that fills life with meaning and makes it worth living.

In Chapter 5, Vess discusses the application of some of the research methods of modern psychological science to better understand existential psychological dynamics. He emphasizes the importance of clear theoretical conceptualization, thoughtful

operational definitions, and building theory through incremental gains in evidence across multiple studies. Then, he outlines the application of various research methodologies—including qualitative, correlational, longitudinal, and experimental—and highlights how each can contribute to better understanding existential experiences. He discusses the value of integrative methods, such as mixed methods and meta-analyses, for synthesizing findings and refining theory. He also considers judgment calls, such as whether to build upon prior measurement or manipulation techniques or to develop new ones and whether to collect data in the natural setting, in the lab, or online. Lastly, he concludes by considering best practices in psychological science more broadly.

Section II: Death, Aging, and Time

Section II focuses on mortality awareness, near-death experiences, suicide, limited time perspectives, nostalgia, and adult development and aging.

Three chapters consider death-related dynamics. In Chapter 6, Solomon and colleagues provide an overview of roughly 40 years of research on terror management theory (TMT), which posits the awareness of mortality motivates investment in cultural worldviews and pursuit of self-esteem. The authors outline TMT's development, empirical support, applications, criticisms, and refinements, and highlight its relevance to politics, health, mental illness, and culture. In Chapter 7, Lifshin and colleagues further apply TMT to consider how our interaction with nature—including the environment, animals, and our own bodies—can provoke complicated death-related existential dynamics, with implications for animal welfare, intergroup relationships, psychological well-being, and spirituality. In Chapter 8, Tassell-Matamua and colleagues discuss near-death experiences, highlighting their transformative impact on self-concepts, worldviews, and meaning. Near-death experiences often lead to reduced death anxiety, increased spirituality, and a deeper sense of purpose. The authors consider neurological and psychological explanations and highlight implications for promoting personal growth and reflection.

Three chapters consider TMT's implications for mental and physical health, including suicide. In Chapter 9, Menzies describes evidence that death anxiety is a transdiagnostic factor underlying various mental health disorders, including anxiety, mood, obsessive–compulsive, and trauma-related conditions. Drawing on TMT, she emphasizes the need for psychological treatments that directly target death anxiety, highlighting therapeutic approaches such as cognitive-behavioral therapy, acceptance and commitment therapy, and existential psychotherapy. In Chapter 10, Courtney and colleagues describe research on the terror management health model, which explains how mortality awareness influences physical health behavior. When death is consciously salient, people adopt "proximal" defenses, either health-promoting or threat-denying. When death thought is nonconsciously accessible, "distal" defenses guide behavior toward cultural values and self-esteem. The authors consider how culturally meaningful, esteem-based framing can promote better engagement with healthy behaviors. In Chapter 11, Hayes and Tupper consider why people die by suicide. As people are aware the goal to continue living is inevitably futile, the propensity to withdraw from that goal is ever-present. The pursuit of symbolic permanence can promote engagement with life, but obstructions and failures can lead to hopelessness and suicidal withdrawal. The authors discuss implications for suicide prevention and therapeutic intervention.

In Chapter 12, Quirin and Northoff review research on the neuropsychological basis of various existential psychological dynamics related to death, but also uncertainty, freedom, identity, authenticity, love, self-connectedness, meaning, and will or volition. Adopting a monistic brain-mind perspective, this chapter integrates psychological and neuroscience perspectives to better understand how existential experiences arise from brain activity. Brain structures such as the medial prefrontal cortex, anterior insula, amygdala, and the ventral striatum operate during existential experiences involving uncertainty, mortality salience, and latent angst; the ventral and dorsomedial striatum, medial prefrontal cortex, and amygdala are involved in love, attachment,

and isolation; the medial prefrontal cortex, posterior cingulate cortex, precuneus, right anterior insula, and ventral striatum are involved in self and identity development and authenticity; the superior temporal gyrus, medial and dorsolateral prefrontal cortex, amygdala, anterior cingulate cortex, anterior insula, and precuneus are involved in absurdity and meaning making; and the medial prefrontal and dorsolateral prefrontal cortices are involved in will. The authors consider the implications and discuss future directions.

Three chapters cover savoring limited time, nostalgia, and aging. In Chapter 13, Kurtz and Murphy explain how perceived temporal scarcity can increase motivation to appreciate positive moments and savor experiences, with implications for happiness, sociability, and well-being. In Chapter 14, Sedikides and Wildschut tackle nostalgia—the sentimental longing for the past—and research showing it fosters meaning, social connectedness, and engagement in culture; impacts motivation and behavior; and buffers against death-related thoughts and emotions. In Chapter 15, Maxfield considers research on general perceptions of aging and older adults, age-related variations in how people handle the awareness of mortality, shifts in existential concerns over the lifespan, and how life experiences and existential concerns impact attitudes toward end-of-life planning and care.

Section III: Freedom, Authenticity, and Moral Responsibility

Section III focuses on experiences of autonomy and authenticity, choice and choosing, and the role of free will beliefs in perceiving agency, moral responsibility, and self-conscious emotions such as guilt, shame, and pride.

Five chapters focus on free will, autonomy, and authenticity. In Chapter 16, Zhao discusses cross-cultural developmental research on children's understanding of choice and beliefs about free will. In Chapter 17, Baumeister considers theory and research on free will, focusing on the evolved capacity for humans, as conscious and cultural animals, to effectively navigate complex social situations by exerting self-control and rational choice. These features are either free will or what is mistaken for free will; either way, he argues, they create the experience of existential agency. In Chapter 18, Ryan and Ryan discuss self-determination theory (SDT) and its relations with core existential themes and issues, including the phenomenology of autonomy, the role of awareness in self-regulation and wellness, authenticity in relationships, fulfilling and nonfulfilling life goals, and existential buffers to death anxiety. SDT research suggests that the key to eudaimonic living lies in reflectively addressing internal and external values and selectively embracing those that satisfy basic psychological needs for autonomy, competence, and relatedness. In Chapter 19, Sheldon considers the experience of authenticity, as an integration of conscious and nonconscious information processing, and the selection and pursuit of self-concordant goals. In Chapter 20, Schlegel and Rivera consider the role of the "true self" concept in authenticity and meaning. Although unlikely that a "true self" exists, in an ontological sense, people believe it is one's "essence" and is stable over time, causally powerful, and morally good. Thus, research suggests perceived authenticity is perhaps less about self-consistency and more about expressing self-enhancing, aspirational, or meaningful behaviors.

The next three chapters explore too little, too much, and a "happy medium" of freedom of choice. In Chapter 21, Rosenberg and colleagues cover research showing that perceived restrictions of personal freedom trigger reactance—the anger-based motivation to restore autonomy, often through oppositional defiance. The authors review foundational theory and research, measurement, and applications to clinical psychology, communication, and health interventions, and discuss strategies for managing or leveraging reactance, such as inoculation, providing compliance options, and triggering reactance as a persuasive strategy (colloquially known as "reverse psychology"). In Chapter 22, Cheek covers theory and research finding that too many options can create choice overload; too many choices can create decision fatigue; and too many types of choices can create self-uncertainty and a burden of self-expression. In such situations, freedom can be unpleasant and can motivate

efforts to "escape" it such as by reducing self-awareness or delegating one's decision-making responsibility to surrogates. In Chapter 23, Reutskaja and Misuraca highlight research on benefits and costs of choice and the "inverted-U" model—finding that too few or too many options can be problematic, whereas a moderate "happy medium" number of choices is motivating, yields the best decision-making outcomes, and is most satisfying.

Two chapters then focus on free will beliefs and moral responsibility. In Chapter 24, Seto discusses research on the definition and function of free will beliefs among lay people. Free will is typically understood as the ability to make a choice and pursue an outcome when one could have done otherwise. Belief in free will is widespread, and research shows it is important for holding people morally responsible for their actions and for motivating personal agency. In Chapter 25, Tracy and colleagues consider self-conscious emotions, which rise and fall as the standards of one's moral identity are met or surpassed (pride) or violated (guilt, shame), and which motivate behavior to either continue or rectify the situation. Research finds people feel guilt about negative outcomes of their behavior, shame about negative aspects of themselves, and authentic pride about individual or group achievements or prosocial actions congruent with their moral identity. The authors also consider other emotions such as envy, anger, gratitude, and awe.

Section IV: Isolation, Uncertainty, and Shared Reality

Section IV focuses on isolation and the role of social connection in the struggle to maintain a confident perception of truth and reality.

Two chapters explore existential isolation and shared reality. In Chapter 26, Bilal and Helm distinguish the objective self (tangible attributes) from the subjective, agentic self who perceives, interprets, and reacts to the world. Feeling alone in one's subjective experience can make it seem difficult to know, for certain, whether one is accurately perceiving and interpreting reality as it "truly" is, and whether one is "truly" connected with others in a common shared experience. Research finds that existential isolation experiences are commonplace, especially among members of minority groups, and related to a host of epistemic and social processes. In Chapter 27, Masi and Echterhoff review research finding that maintaining a shared reality with others—co-constructing reality and validating each other's experiences—serves important epistemic and affiliative needs and provides a foundation for healthy and meaningful engagement in the world. Sharing subjective experiences reduces uncertainty in beliefs about people and the world, helps people interpret and understand events, and brings sharers closer and improves relationship quality.

Three chapters consider the motivations to reduce epistemic uncertainty at the intrapersonal, interpersonal, and group levels. In Chapter 28, Bonarska and colleagues first discuss research on motivations for knowledge acquisition and cognitive closure, shaping the formation of attitudes and impressions, social judgments, and social processes such as empathy, communication, and persuasion. Then they cover research on the mechanisms of epistemic uncertainty reduction, such as information relevance and the availability of cognitive processing resources. Finally, they describe research on social factors affecting the process, such as perceived epistemic authority of the communicator and the inertia of one's prior belief. In Chapter 29, Anjewierden and colleagues explore research suggesting that motivation for epistemic uncertainty reduction, especially uncertainty about one's self-concept and identity, has major societal implications. The authors review research showing people can effectively reduce uncertainty through identification with groups, clarifying the characteristics of uncertainty-reducing groups, and exploring the consequences for leadership, social influence, polarization, and extremism. In Chapter 30, McGregor offers a neuromotivational account of how uncertainty might sometimes lead to hostile extremism by triggering reactive approach motivation.

Three chapters address the existential dynamics of social connections and isolation. In Chapter 31, Mikulincer and Shaver cover research on three core existential dynamics of interpersonal attachment. First, people

respond to existential stressors by seeking the proximity and support of competent and benevolent others. Second, the availability of loving support from others, and the resulting security, helps people navigate existential distress. And third, such security allows people to experience autonomy, self-continuity, meaning, and personal growth. In Chapter 32, Wicks and colleagues present research showing ostracism (being ignored and excluded) aggravates existential concerns and triggers responses in three distinct stages. First, a reflexive stage involves immediate and strong negative thoughts and painful feelings. Second, the reflective stage involves appraisals and attempts to repair the relationship or otherwise restore affiliation. If prolonged, people may enter the third stage of resignation. In Chapter 33, McKenna-Plumley and Groarke discuss research showing that existential loneliness, which is distinct from social and emotional loneliness, involves a feeling of profound separation from others and can generate feelings of deep emptiness, sadness, and longing. The chapter focuses on how existential loneliness is experienced at a range of stages across the lifespan.

Section V: Culture, Self, and Identity

Section V explores how culturally shared existential dynamics shape self and identity, how existential dynamics of self and identity shape sociocultural phenomena, and the self-construction of identity and personality.

Three chapters address culture, self, and meaning. In Chapter 34, Heine and Mask cover research showing that meaning, in general, is about the perception of coherent relationships among objects and events in the world, and that people live in shared (cultural) ecologies of meaning. Likewise, meaning in life is shaped by connections with other people, with one's work, and with broader transcendent concepts. The authors cover cross-cultural differences, but also similarities, in sources of meaning in life. In Chapter 35, Landau and colleagues note that important existential concerns are conceptually abstract and difficult to grasp, so people cultivate metaphors to construct a meaningful understanding of themselves and the world around them. They describe conceptual metaphor theory and research, addressing the influence of metaphor target and source framing, with an emphasis on self-continuity, self-esteem, and authenticity. In Chapter 36, Sullivan and colleagues discuss theory and research in cultural–existential psychology, organized around two major ideas. First, cultures represent shared definitions about which experiences and events are existentially threatening. Second, cultures represent shared approaches to interpreting and responding to existential threats, such as by prioritizing collective meaning at the expense of guilt or individual esteem at the expense of uncertainty.

Three chapters explore the bidirectional relationship between self-identity and cultural context. In Chapter 37, Rothschild and Keefer review research finding people can manage existential concerns about uncontrollable chaos and death by using moral outrage to construct a heroic moral identity. By identifying clear villains and expressing righteous anger in the name of justice, sometimes through scapegoating and localized enemyship, people can cultivate a sense of moral clarity, tractable agency, and a sense of enduring value and significance. In Chapter 38, Goldenberg and colleagues offer a feminist existential perspective on the objectification of women. They review research finding that women's bodily functions (e.g., menstruation, pregnancy, lactation) represent "creaturely" reminders of human corporeality, raising death-related existential motivation to control women's bodies and prioritize a contrived "Barbie-like" appearance. The chapter explores feminist ideas about the self-determined reclamation of the creaturely, mortal body. In Chapter 39, Sedikides and Schmader describe research on the state authenticity as fit to the environment (SAFE) model, finding that people feel authentic based on self-perceptual fluency (self-concept fit), motivational fluency (goal fit), and interpersonal fluency (social fit). Fit motivates engagement with situations, whereas misfit promotes disengagement, which may culminate in cultural self-segregation even in the absence of overt bias and discrimination.

Two chapters address the existential dynamics involved in the self-construction of identity. In Chapter 40, McAdams and Ture

discuss narrative identity, the internalized and evolving story of the self, in which people construct meaningful interpretations of self and address concerns about death and freedom. They cover major theory and research advances through the lens of Sartre's "true novel," Becker's ideas about generativity, and Camus' ideas about life stories of acceptance. In Chapter 41, Xi and Jackson address existential themes of authenticity and self-creation in the tension between personality continuity and change. The chapter highlights key types of personality change, such as rank-order stability, mean-level change, structural changes, ipsative consistency, and idiographic changes. Importantly, mechanisms for personality development include intentional changes, such as when people consciously align their behaviors with evolving goals, values, and circumstances.

Section VI: Meaning and Purpose

Section VI focuses on the commonplace experience of meaning in everyday life, the experiences of aspects of meaning (coherence, purpose, significance) in various life domains, and the processes of maintaining, restoring, or searching for meaning.

Two chapters explore commonplace meaning in everyday life. In Chapter 42, Holberg and King define meaning in life and its facets (coherence, purpose, significance) and then review research on the way each facet is supported by common experiences in everyday life. They also consider how the three facets of meaning are intertwined (e.g., coherent understanding might energize purpose which might facilitate significance), and potentially interchangeable, before considering modern threats to meaning. In Chapter 43, Newman and Lutz describe research employing ecological momentary assessment, which measures meaning in-the-moment (vs. global or long-term recall assessments, influenced by memories of "peak" experiences) and illuminates within-person (vs. between-person/group) processes. This research suggests, for example, that people view their life as more meaningful when assessing it globally but perhaps less so during mundane lived experiences.

Four chapters more closely explore coherence, significance, and purpose in various life domains. In Chapter 44, Womick and colleagues review research finding that right-wing political beliefs, including conservativism, system justification, just-world beliefs, and right-wing authoritarianism, are largely about enhancing a sense of significance rather than coherence or purpose. Interestingly, research does not find a similar pattern among left-wing political views, raising important questions about how coherence, purpose, and significance manifest in left-leaning political orientations. In Chapter 45, Zarzeczna and Haimila explore how religion and science function as important meaning-making tools, and review research finding their incompatibility stems from their different answers to the same ontological and epistemological questions. Further, religion and science likely exert non-overlapping psychological leverage, in terms of coherence, purpose, and significance, such that their perceived incompatibility can negatively impact believers and lead to science rejection. In Chapter 46, Needy and colleagues review research distinguishing sociocultural significance (lasting impact on the world) and experiential significance (valuable/fulfilling activities). They review factors influencing the detection/overlooking of significance as well as frequent elicitors of significance, such as positive affect, epistemic emotions (curiosity, wonder, awe), creativity, mindfulness, nostalgia, care, prosociality, and authenticity. Last, they consider the interplay and balance of developmental, sociocultural, and intrapersonal factors. In Chapter 47, Oettingen explains how a self-regulatory process of mental contrasting affects purpose and goal pursuit, a process involving identifying a desired future outcome contrasted against anticipated present and future obstacles. Unfeasible goals are dropped, whereas feasible goals are retained. Combined with implementation intentions (if–then plans), the pursuit of such goals can imbue life with a meaningful sense of purpose.

Four chapters explore the ways people typically maintain meaning, restore meaning in adversity, and generally search for meaning. In Chapter 48, Igou and colleagues address boredom, the aversive experience of being unable or unwilling to allocate attention to subjectively meaningless activities. Research finds boredom triggers

self-regulatory mechanisms to prevent inaction, avoid meaningless action, and enhance meaningful action. In Chapter 49, Russo-Netzer and Schulenberg consider a variety of strategies for constructing and maintaining micro- and macro-level meaning, including motivational, narrative, therapeutic, and cross-cultural influences. In Chapter 50, Park discusses research finding that when stressful events occur (e.g., unemployment, illness, natural disaster) people appraise its situational meaning, evaluate its magnitude of violation of global meaning, engage in a compensatory meaning-making process, and potentially restore meaning or adopt new meanings. Park reviews the nuances of each step and implications for resilience to adversity. In Chapter 51, Steger and Marsh provide a major review of theory and research on the search for meaning. The chapter provides definitional clarity, reviews research substantiating the absence-to-search and search-to-presence models, and—in terms of functional well-being—finds that search for meaning may be negative, neutral, or positive depending on the context (e.g., age, culture).

Section VII: Religion and Spirituality

Section VII focuses on the roles of death and freedom in religion, nonreligious existential dynamics, and religious/spiritual struggles and anomalous experiences.

Two chapters cover the roles of death and freedom in religion. In Chapter 52, Vail and colleagues review research finding that death awareness motivates faith in core religious supernatural concepts (e.g., souls, gods, afterlife) and worldview defense such as supporting fellow believers, rejecting heathens, accommodating alternatives, assimilating converts, and annihilating threatening others. Research also finds these processes are impacted by skepticism (e.g., atheism) and faith orientations that vary in form and function (e.g., intrinsic/extrinsic, fundamentalism, quest). In Chapter 53, Green and colleagues explore the complexity of free will in religious faith. Religious believers typically have stronger belief in free will than less religious people have, but also selectively defer responsibility to their deity. Attributing responsibility to a deity may reduce one's perceived agency in exchange for reduced incoherence (divine plan), a sense of divine purpose, and a sense of divine significance.

Two chapters address nonreligious existential dynamics. In Chapter 54, Van Tongeren considers religious deidentification and various nonreligious identities, and reviews research on "religious residue," which is the persistence of cognitive, emotional, and behavioral patterns after religious deidentification among the formerly religious. Leaving religion can trigger new existential banes (e.g., angst, dread) but also boons (e.g., freedom, awe). In Chapter 55, Galen covers research finding nonreligious people can cultivate secular ways of life that guide their choices and inform their sense of moral responsibility, manage death-related concerns, bolster shared reality, build culture and identity, and promote meaning and purpose. Galen also argues the presumed existential benefits of religion for well-being and prosociality are often due to basic sociocultural factors, rather than belief content, which could be leveraged by secular cultures as well.

Two chapters consider religious/spiritual struggles and anomalous experiences. In Chapter 56, Exline and Pargament consider the existential dynamics of religious/spiritual struggles, such as difficulty with choices and following moral principles (freedom/moral struggle); confusion about beliefs (doubt struggle); anger or conflict within religious communities (social struggle); feeling attacked by the devil (demonic struggle); feeling angry or fearful about God (divine struggle); and whether one's life has any ultimate purpose (meaning struggle). The chapter addresses measurement, prevalence, and implications for mental and physical well-being, as well as the question of whether religious/spiritual struggles lead to growth. In Chapter 57, Hood and Dinsmore discuss anomalous or mystical experiences. As in this chapter, the topic is often addressed in ways that flout modern science to remain open to the possibility that such experiences might be "true glimpses" of another world. Nevertheless, the chapter briefly describes the importance and history of anomalous experiences—which we hope will put the topic on the map for more objective study by the science of existential psychology.

Section VIII: Awe, Growth, and the Good Life

Section VIII focuses on awe and personal growth, the good life, and existential psychotherapy.

Three chapters consider existential awe and growth dynamics. In Chapter 58, Edwards and Van Cappellen cover theory and research on awe—the perception of vastness that challenges and expands one's existing conceptualizations of the world, ranging in experience from negative and self-diminishing to positive and grounding. Awe can lead to a quiet and transcendent self, both existential isolation and connection, and can influence one's sense of coherence, purpose, and significance. In Chapter 59, Bauer explores the narrative identity of the transformative self, which features elements of narration (tone, theme, structure) that cultivate humanistic qualities of a good life—such as purpose, well-being, and wisdom. Although transformative self-narratives come in countless forms, they share features of thematic motives directed toward engaged experiencing and curiosity-driven reflection for oneself and others. In Chapter 60, Winet and O'Brien review research on repeat consumption of familiar, rather than novel, experiences, such as revisiting one's favorite movies, music, books, or cafés again and again. Repeat consumption can lead to growth through novel appreciation of the experience itself (e.g., seeing new connections in a book plot) and of oneself (e.g., shaping new self-concepts, identities, beliefs and values).

Two chapters consider existential dynamics of the good life. In Chapter 61, Martela considers the pursuit of happiness. Research finds that although happiness is generally associated with good things, the *pursuit* of happiness can, ironically, lead to reduced positive affect and even depressive symptoms. Martela notes that existential approaches to happiness typically regard it as the possible side-effect of the pursuit of meaning in life and a life well lived. In Chapter 62, Janey and Oishi review a broad swath of research suggesting the good life entails more than just hedonic well-being (e.g., happiness) and eudaimonic well-being (e.g., meaning in life); it also includes psychological richness—diverse, interesting experiences. Thus, the good life may be composed of happiness, meaning, and novelty.

The final three chapters consider the philosophy, research, and practice of existential psychotherapy. In Chapter 63, Aho and colleagues first cover the historical context and core philosophical ideas. Then, they describe research on eudaimonic well-being, purposeful life engagement, and the realization of personal potential. Next, they discuss Global Existential Summits, which focus on lived experiences in diverse contexts. Finally, they offer some critical reflections about the field. In Chapter 64, Schneider and colleagues describe existential–humanistic and existential–integrative psychotherapies. They cover the roots, basic principles, and expanded applications to therapy, multicultural diversity, and social crises. They also identify some relevant areas for research, such as existential psychotherapeutic intervention components, mechanisms, and outcomes. In Chapter 65, Van Tongeren and Showalter Van Tongeren offer a novel model of existential hope for working with clients who are suffering: an approach that is humble (engages honestly with reality), optimistic (anticipates positive outcomes), participatory (promotes meaningful engagement), and existential (engages with existential concerns). They also identify testable hypotheses and discuss practical clinical applications of the approach.

GOALS OF THIS HANDBOOK

Many of the field's initial advances were discussed in the *Handbook of Experimental Existential Psychology* (Greenberg et al., 2004). But in the 20-plus years since its publication, an enormous amount of new theory has been developed and new research conducted. Yet, over these two decades no handbook has attempted to cover the breadth and depth of those exciting advances. Thus, a new anthology providing an update on the state of the field's theory and research is not only necessary—it's long overdue.

Additionally, given that the previous anthology on the topic was produced when the field was still just emerging, casual observers may be under the impression that the science of existential psychology is still an emerging,

small, niche, or "specialty" topic. However, as can be seen in this handbook, that is not the case anymore. The field has grown into a robust and expansive enterprise over the past several decades. Researchers are now studying existential psychological dynamics across a broad range of many areas—social and personality, developmental, cognitive, affective, neuroscience, health, clinical/counseling, and many others. Indeed, existential psychological dynamics are of broad importance across nearly all areas of psychological science.

Thus, the goals of the present handbook are to provide a much-needed update on the state of the field, while demonstrating that the science of existential psychology has an incredibly broad relevance across many important areas of contemporary psychological science. We hope the volume encourages readers to see the value of studying existential psychological dynamics, recognize those dynamics can be studied using the full force of mainstream qualitative and quantitative research methods available in modern psychological science, and build on the recent advances described here to help push the science of existential psychology forward in productive new directions.

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