Understanding and Preventing the Dynamics of Suicide: An Introduction to the Self Preservation Theory of Human Behavior

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ABSTRACT: The Self Preservation Theory of Human Behavior (SPT) posits that humans are predisposed to unconsciously need and seek out purpose in life within social contexts, and this drive is a holdover from when, in human evolution, social interdependence fostered group-goal oriented behavior and enabled a survival advantage. Until the profound neurological developments of humans in recent millennia of our evolution, social interdependence drove individuals to identify and employ their unique strengths in ways that had tangible benefits for their social groups of connection, and when this contribution was valued and welcomed, an individual's lifepurpose was determined and social-group inclusion and all the advantages of such inclusion resulted. Referred to as the "existential preservation dynamic," an individual's orientation to his/her social groups of connection can be distilled down to four key attributes: to be socially engaged, to be an agent of change, to offer unique contribution, and to have the experience of being valued. SPT purports that suicide vulnerability has its foundation in the perception and often the reality of the breakdown of these social connection attributes. Specifically, the suicidal individual perceives himself or herself as socially disconnected and alienated (rather than socially engaged), ineffectual or useless (rather than an agent of change), without value or even burdensome to others (rather than offering a unique contribution), and/or unappreciated or unloved (rather than having an experience of being valued). SPT asserts that these underlying vulnerabilities also magnify several other dynamics of suicide crises, including elevated sensitivity and reactivity to life stressors, reduced coping capacities, and a premature readiness for death. Based on the tenants of SPT, new guidance is offered on how to screen for and assess suicide risk, as well as how to provide treatment that minimizes risk and amplifies the will to live.

KEYWORDS: *Self preservation theory, Human behavior, Suicide.*

BACKGROUND

Suicide is a worldwide problem that varies in incidence from as few as 0.5 suicides per 100,000 residents in countries such as the Bahamas and Barbados to as many as 31.9 per 100,000 in Lithuania (World Health Organization, 2019). However, even within countries, the rates can vary by region. For example, in the United States (US), the District of Columbia's rate was 6.6 per 100,000, which compares to the state with the highest rates, Montana, at 28.9 per 100,000 residents. (National Vital Statistics System, 2019). Like many other countries, suicide is a leading cause of death in the US, with a generally higher incidence among males, elders and those living in rural areas (World Health Organization, 2019). It has been estimated that for every US suicide, as many as 135 people are affected (Cerel, et al.

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2018). In the US, there were 47,173 suicides recorded in 2017 (Centers for Disease Control and Prevention, 2019), so the total number of Americans affected by suicides is well into the millions. It has been estimated that suicides in the US cost \$93.5 billion, which amounts to nearly \$300 per person per year (Cerel, et al. 2018).

The theory and research on suicide risk screening and assessment, as well as intervention, is arguably at its infancy; however, certain conditions seem to belie the situations that surround suicide crises. For example, in the US, regardless of whether or not there is a mental health diagnosis, the following situational risk factors have been identified: a relationship problem (42 percent of the time), problematic substance use (28 percent of the time), crisis in the past or upcoming two weeks (29 percent of the time), criminal legal problem (9 percent of the time), physical health problem (22 percent of the time), loss of housing (4 percent of the time), and job/financial problem (16 percent of the time) (Center for Disease Control and Prevention, 2018). Suicide has been traditionally viewed as a consequence of a mental health disorder, such as affective disorders, psychotic disorders or anxiety disorders, yet often times in cases of suicides, there is no prominent mental health disorder (Center for Disease Control and Prevention, 2018), and, as noted, many other factors appear to be implicated.

INTRODUCTION TO THE SELF PRESERVATION THEORY OF HUMAN BEHAVIOR

The Self Preservation Theory of Human Behavior (SPT) approaches suicide as a condition of human behavior that has its roots in how an individual fundamentally relates to others, and it encompasses an explanation of a complex set of variables associated with suicide ideation, intent and behavior. SPT reveals a plausible process by which one's individual identity evolved to become inextricably linked to social relationships, thus giving rise to purpose-driven social behavior that, to this day, fosters the will to live and thrive.

A fundamental tenant of the Self Preservation Theory of Human behavior, described as the "existential preservation dynamic," asserts that an individual's orientation to his/ her social groups of connection can be distilled down to four key attributes: to be socially engaged, to be an agent of change, to offer unique contribution, and to have the experience of being valued. SPT purports that suicide vulnerability has its foundation in the perception and often the reality of the breakdown of these social connection attributes. Specifically, the suicidal individual perceives himself or herself as socially disconnected and alienated (rather than socially engaged), ineffectual or useless (rather than an agent of change), without value or even burdensome to others (rather than offering a unique contribution), and/or unappreciated or unloved (rather than having an experience of being valued). SPT asserts that these underlying vulnerabilities also magnify several other dynamics of a suicide crisis, including elevated sensitivity and reactivity to life stressors, reduced coping capacities, and a premature readiness for death. Furthermore, SPT suggests that our vulnerability to suicide is also a consequence of profound neurological advanced capacities of the Homo sapiens' brain, acquired in the most recent millennia of human evolution. These advances gave rise to complex motivational factors characteristic of modern society that largely supplanted the purpose-driven behavior and the related dynamics of the existential preservation dynamic. No existing theory identifies these dynamics of human behavior, yet the major tenants of SPT dovetail and extend prominent perspectives and theories.

RELATING SPT TO PROMINENT THEORIES AND PERSPECTIVES

The Self Preservation Theory of Human Behavior is consistent with the Life Model Perspective (LMP). LMP

explains how behavior can be manifested differently between individuals based on numerous contexts and experiences unique to an individual over the course of his/ her life (Gitterman, 2008). SPT adds that individuals are biologically wired to instinctively need and seek out mutually beneficial relationships with others, so social experiences over the course of life can have profound effects on how individuals perceive themselves in relationship to others. Those social experiences can reinforce a perception of life meaning and purpose, or, on the other end of the continuum, undermine such a perception, thus amplifying the risk for suicide. Therapeutic change, according to SPT, involves helping individuals realign life pursuits to establish (or reestablish) a sense of life meaning and purpose. Treatment addressing both individual and environmental factors, out of an understanding of their interconnectedness, is an aim shared by treatments informed by LMP and SPT.

Self-Determination Theory (SDT) as described by (Britton, et al. 2008), like SPT, highlights the importance of intrinsic motivation to behave in effective and healthy ways. SDT asserts that people have an innate motivation to engage in activities that promote health and growth. SDT-informed treatments help patients develop "integrated motivation" to address fundamental needs for autonomy, competence, and relatedness according to the patient's core values and beliefs. Similarly, SPT posits that intrinsic motivation is catalyzed and sustained by aligning the individual's strengths to support his/her social passions, and that the benefits of the person-environment exchange are maximized when the outcomes of these pursuits produce the intended benefits and are visibly appreciated within the social environment.

Psychodynamic theories offer ways to explain how early relationships between the child and caregivers have the potential to dramatically impact the trajectory of social relationships and mental health. SPT purports that the mechanisms of early healthy attachment are a result of the right-brain's search for mutuality, and the quest for mutuality starts within the primary relationships of early family life and bridges out to other social groupings over the course of life. For example, when an infant or young child experiences discomfort and the child cries, the parent becomes distressed and addresses the child's need. The child then stops crying and smiles, feeling loved, cared for and protected, and so the parent smiles, experiencing relief, confidence, happiness, pride and love. This is an example of mutuality behavior wherein there is a give-and-take, like a dance, between the individual and his/her accessible social contacts. Research confirms that right brain to right brain attunement, in a parent's response to a child's needs, is critical for the child's social-emotional development (Schore, 2001).

Unconscious and powerful emotional injunctions that are highly sensitive to social cues and interactions that run counter to mutuality are also informed by right brain processes in support of the mutuality orientation. For example, studies have shown that the right brain is activated by maternal separation (Davidson, et al. 1989) and facial expressions of disgust (Davidson, et al. 1990). These studies reinforce the notion that human brains have "right brain" and largely unconscious but socially-informed emotional injunctions that drive us away from social discord and toward mutuality.

COGNITIVE-BEHAVIORAL THEORY (CBT) IS CEN-TRAL TO UNDERSTANDING HUMAN BEHAVIOR

Broadly, it offers an understanding of how cognitions are developed, how they interconnect with behavior, and how behavioral changes are reinforced through learning. In therapy, cognitive treatment techniques are utilized to address problematic beliefs and shape productive, successful and/or satisfying thoughts and related behavior (Granvold, 1995; Coon, et al. 2004). As CBT pertains to treatments to address suicide risk, it instructs the clinician to help the patient develop daily living skills, cope with challenging circumstances (often through better problem solving), reduce unhelpful cognitions, engage helpful supports, and increase engagement in pleasant activities (Coon, et al. 2004).

Like CBT, SPT embraces the notion that behavior problems often stem from problematic beliefs, but SPT specifies that the thinking errors leading to suicide vulnerability are those that lead to or reinforce behaviors that undermine the existential preservation dynamic. Furthermore, SPC sheds light on the neurological origins of such thinking errors, noting that our beliefs depend on the brain's "interpreter," a term used by renowned neurologist Gazzaniga (2018), which can enable an individual's belief system that to be fraught with faulty assumptions. For example, an addict might believe that he/ she can only feel good by getting high, so the addict neglects responsibilities at home and/or work to get high.

The Interpersonal-Psychological Theory of Suicide Behavior (IPT) described by (Joiner, et al. 2008) is a CBT approach that informs our understanding of the suicidal individual and how to shape effective cognitive interventions. ITP posits that suicide is not a natural act, and it is through the "habituated" lack of fear of death in combination with the desire to be dead that drives suicide attempts (Joiner, et al. 2008). IPT posits that suicide intent arises from the suicidal individual's perception of failed belongingness and/or burdensomeness to others. Congruent with, but also extending these concepts, SPT focuses on how life meaning and purpose could be viewed as a continuum, such that on one end, a person is a fully integrated, active, contributing and valued participant in his/her social environment(s); in the middle, there is self-sufficiency but ambivalence about belongingness with minimal connectedness; and, at the other end of the continuum, there is a perceived lack of self-efficacy, perception of being unloved or unappreciated, a lack of social connection, and/or a perception of having no value, or in extreme, being burden on others.

The other fundamental contribution of IPT is the previously referenced notion of "habituated" lack of fear of death, a term from behavioral psychology. According to IPT, an individual can acquire the capacity to engage in suicide, in the sense that a lack of fear of death can be learned over time, for example through repeated exposure to death, dying, trauma or suicide (Joiner, et al. 2008). SPT posits that the psychological task of facing and accepting one's inevitable death is part of a natural process over the course of life, but death ideation and/or preparations (in one's life course) can be prematurely caused by extreme disruption in one's life meaning and purpose, regardless of age. SPT posits that premature death ideation and preparations are the end result of a confluence of social and personal factors that lead a person to conclude that suicide is an viable option, because the individual perceives one's life no longer has purpose and that being dead is an acceptable and good option in the context of unbearable life circumstances. SPT shares the notion that excessive exposure to death, dying and suicide may hasten this process of psychologically preparing for one's own death.

Cognitive and behavior theory in general, and Joiner's and Van Orden's IPT (2008) in particular, offer important insights into suicidal behavior. A recent meta-analysis, however, revealed only a weak to modest level of significance was found to be associated with these variables (Chu, et al. 2017). In fact, to date, no theory has completely explained why suicides occur and comprehensively describe the primary dynamics implicated in a suicide crisis. The Self Preservation Theory of Human Behavior (SPT) fills the gaps, offering a well-supported and complete understanding of the dynamics of the suicide crisis.

SPT AND MEANING AND PURPOSE IN LIFE

SPT offers explanation for why a perceived lack of life meaning and purpose correlates so strongly with suicide vulnerability on one extreme and psychological resilience when perceived meaning and purpose in life is strong at the other end of the continuum, and other behavioral health and sociological theories of suicide do not address the relevance of life meaning and purpose. The important function meaning and purpose in life serves for resilience is underscored by Existential Theory (Yalom, 1980). However, unlike Existential Theory, SPT identifies purpose in life as a separate concept from life meaning (rather than a synonym). SPT posits that there can be a disconnect between perceived life meaning and life purpose. The consequences of this disconnect, regardless of cause, are anxiety and depression, and can drive self-destructive coping behavior such as substance abuse and, in extreme, self-directed violence.

The perception of having life meaning and/or purpose has been linked to belongingness, protection against suicide, and overall mental health. A strong correlation between perceived life meaning and belongingness has been shown through research. In a review of correlational, longitudinal and experimental studies, a stronger sense of belongingness was correlated with individuals perceiving life as more meaningful (Stillman, et al. 2009). Additionally, these authors identified studies that also have shown that social exclusion and self-reported loneliness are correlated with the view that life is less meaningful. Meaning and purpose in life has also been shown to be an important protective factor against depression and suicide. For example, a correlation between decreasing life meaning and purpose and increasing suicide risk emerged in study of a sample of 1,050 Chinese college students (Xie, et al. 2012). Purpose in life was found to be a moderating variable in the association between adverse childhood experiences (ACEs), specifically emotional abuse and neglect, and decreases in a range of measures of mood in adults, including depression (Hartanto, et al. 2020).

The relationship between perceived life meaning and purpose and suicide has also been established in research for seniors, a population known to be at greater risk for suicide compared to other age groups (Centers for Disease Control and Prevention, 2019). In fact, in one study consisting of a large sample of seniors, hierarchical linear regression analyses revealed that a lack of perceived meaning in life was associated with significantly higher levels of suicide ideation when compared to mental health and medical problems (Heisel, et al. 2008). In addition, Krause (2004) noted that emotional support appears to buffer the impact of stressors in major life roles by restoring a sense of life meaning and purpose among seniors. A strong sense of purpose in life has been associated with better health, mental health and quality of life for older Americans (Musich, et al. 2018), as well as significant decreases in all-cause mortality for this age group (Alimujiang, et al. 2019).

FUNDAMENTAL ASSUMPTIONS REGARDING HUMAN ORIENTATION TO PURPOSE IN LIFE

The SPT purports that millions of years of evolution placed the quest for mutuality at the center of human behavior and emotions. Mutuality is defined to be a drive to accomplish mutually beneficial relationships that achieve a harmonious balance between the individual and the social environment. As such, it is a way of relating to others that follows principles of reciprocity (with give and take), flexibility, shared pleasure seeking, shared pain avoidance, shared gain, and companionship. This mutuality-oriented behavior fuels resilience through social connection, and, in so doing, satisfies the human unconscious desire for social belongingness, establishes the formation of individual identity that is inextricably linked to social environment, and begets individual perceived life purpose. Life goals and actions that seek to accomplish mutually beneficial relationships can lead individuals to have meaningful lives that are perceived as full of purpose; however, SPT posits

that life pursuits lacking in this mutuality orientation lead to existential depression and a lack of life-fulfillment that fosters social isolation, depression, anxiety, and increased risk for both addiction and suicide.

The Self Preservation Theory of Human Behavior (SPT) relies on three complementary and fundamental assumptions about the evolution of human behavior, and these offer an explanation for the significance of the drive for purpose in life. The first is that, over millions of years of human evolution, there has been a continuous interchange between individuals and the social environment that promoted mutually beneficial co-existence, a notion consistent with the Ecological Systems Theory (Bronfenbrenner, 1979). Human behavior was, over time, shaped by the needs and conditions of the social environment; in turn, productive adaptations served to accommodate changes in the social environment preserving mutually beneficial relationship, thus affording our ongoing human preservation. SPT assumes that, even today, individuals are genetically predisposed to this symbiotic orientation of mutual benefit (i.e., mutual pain avoidance and mutual gain).

A natural extension of this assumption is that social cooperation was an outgrowth of mutuality. Naturally over generations, individual well-being grew increasingly reliant upon the social groups because of the mutually beneficial survival advantage social groups offered. Social groups provided more hands to: protect against predators; hunt, gather and prepare food; build and maintain shelters; make and use tools; protect and raise the young; and so forth. This assumption is consistent with the Interdependence Hypothesis that comes from the field of anthropology. The authors of the Independence Hypothesis postulate that human collaboration began as "mutualistic cooperation" (Tomasello, et al. 2012). By comparing collective behavior, such as foraging, to that of other primates, these anthropologists identified the uniqueness of the human race's "joint intentionality" (i.e., individuals with a shared goal), which does not exist in other primates. They explain how interdependence and mutualistic cooperation likely drove the evolution of human altruistic behavior that enabled uniquely human cooperation and collaboration-orientated behavior (Tomasello, et al. 2012).

The second fundamental assumption of SPT addresses the connection between contribution, inclusion, belongingness and life purpose. Over time, our distant relatives developed a social understanding that in order to be included within their social group of choice, they had to contribute a talent or skill that was uniquely beneficial to the larger social entity. Inclusion was achieved when an individual's contribution(s) offered obvious benefits to that social group, those contributions were best or uniquely provided by that individual, and the associated benefits were needed and appreciated. Belongingness was experienced when the individual became a welcomed and accepted member

of the larger social entity and the rewards of social group living were then fully enjoyed. In this way, an individual's contribution(s) to the larger social group became a fundamental requirement for inclusion and ultimately led to the experience of belongingness. This is again consistent with the Interdependence Hypothesis that asserts that mutualistic cooperation likely promoted social selection against cheaters (Tomasello, et al. 2012), which is in contrast to collaboration through individual contribution (to the social groups of affiliation). Furthermore, as individuals successfully discovered ways to offer their unique talents to benefit their social groups, the resulting social acceptance and belongingness defined an individual's life purpose. For this reason, over the course of the evolution of the mutuality orientation, purpose-based connection to the larger social group(s) established the primary goal-directed actions of individuals. Therefore, an inherent purpose-driven goal of human behavior was to discover, hone and apply unique strengths and talents to serve the larger community (i.e., social group of affiliation), which will heretofore be referred to as the individual's social spheres of care and concern. SPT asserts that when such contributions were obvious, beneficial and welcomed, individual "purpose" was defined and reinforced, and this resulted in feelings of being worthy, important, needed and uniquely talented. One's life purpose within social spheres of care and concern became defined by what she or he had to offer that contributed to the wellbeing of those within one's spheres of care and concern under the conditions of social interdependence.

The final assumption addresses how the "social-self" evolved in such a way that one's identity became inextricably linked to the social environment within those spheres of care and concern. The social-self is defined here as the individual and his/her spheres of care and concern, such that the individual's conscious identity is inextricably linked to social reference group(s) to which an individual attributes belongingness. This notion is again consistent with assertions of Tomasello and colleagues (2012) who emphasized the critical role of "group minded practices and modes of collaboration" characteristic of evolving cultural groups. In modern times, the most basic conceptualization of one's social-self is one's family, traditionally defined as me and my grandparents, parents, siblings and children. Between family members, there is special trust, kinship and shared identity. Family members also develop normative social rules, share common beliefs, and act together to help and support one another. The identity of one's social-self in the family is anchored by the use of last names. It is important to note that many family names are linked to a trade or skill, such as Hunter, Taylor, Scribner, Baker, Carpenter, Smith, and so forth, which likely referenced, at some point in the history of the family, that family's contribution to (or purpose with respect to) the larger community.

Historically, families existed within larger social groupings such as tribes or villages, and these social entities have their own cultural norms and rules, which expanded individuals' social spheres of care and concern beyond that of just their own families. Over time, in human history, villages were named which further solidified the individual-social group identity link. Further expansion of the social-self can be seen in the way that countries or other physical-boundarybased entities were acknowledged and identified by a name, language, and rules of governance.

These three fundamental assumptions underpin the dynamics of mutually beneficial interdependence, which are illustrated in Figure 1. This orientation of interdependence purportedly gave humans a unique advantage in our evolution, compared to other primates, and there are profound implications



Figure 1. Interdependence, Social-Self Identity and Life Purpose Orientation.

pertaining to human behavior in today's world. Specifically, under the conditions of social interdependence where there are shared needs, problems and goals, individuals seek to accomplish shared harm avoidance and mutual gain through cooperation and collaboration. Individuals maximize the success of the larger group effort by bringing their uniquely beneficial contributions to the overall effort. When there is clear and necessary benefit attributable to the contribution of an individual, the associated behaviors are reinforced socially by expressed appreciation and acceptance. This interchange begets social group inclusion and ultimately group belongingness over time. Simultaneously, one's role (unique contribution in support of the social group), defined his/her purpose. These social dynamics contribute to a strong sense of wellbeing, security and life purpose, but, in their absence, one's sense of safety and subjective wellbeing can be compromised, eroding one's positive self-regard and perception of life purpose. If, in fact, individual identity evolved to be inextricably linked to the social environment as shown in Figure 1, it stands to reason that humans are highly sensitive to social influences, especially those within individuals' social spheres of care and concern.

In this way, SPT extends the notion of human interdependence to explain how and why individuals were driven to identify and employ their unique strengths in ways that had tangible benefits for their social groups of connection, and when these unique offerings were valued and welcomed, socialgroup inclusion and all the advantages of such inclusion resulted. Therefore, an individual, within the context of meeting the needs and addressing the goals within his/ her social spheres of care and concern, was driven to be a cooperatively engaged agent of meaningful change that made unique contributions (to those social spheres of care and concern) that were valued and appreciated. This dynamic has been previously described as the existential preservation dynamic, which can be distilled down to four key attributes: to be socially engaged, to be an agent of change, to offer unique contribution, and to have the experience of being valued. SPT purports that suicidal thoughts and intent are consequences of the perception and often the reality of the breakdown of these key domains.

In Figure 2, the key domains of the existential preservation dynamic are described in the upper boxes. These are: socially engaged, agent of change, unique contribution and experience of being valued, and, below these domains, the related predictable disruptions in meaning (self-perceptions) and corresponding purpose (emotional consequences and core emotions) are listed in the same order below each construct. Those who are not socially engaged perceive themselves as lacking belongingness and/or as an outsider, feel ostracized, lonely, or disconnected, and experience a sense of alienation and loneliness. Those who don't experience themselves as an agent of positive change, will perceive themselves to be ineffectual or useless, feel trapped or hopeless, and will experience overall mental anguish and a sense of futility. Those who don't find ways to contribute uniquely to an important cause will doubt their own value in life and/or perceive themselves as without value or burdensome, and feel worthless or guilty and experience shame. Finally, those who do not experience being valued will perceive themselves to be unappreciated and/or unloved, feel used or betrayed, and experience anger or abandonment as a result. SPT posits that depression, anxiety and vulnerability to suicide ideation and intent is fundamentally caused by the breakdown in one or more of these four dynamics of the existential preservation dynamic. In the next section, through discussion of the blossoming human leftbrain capacities in recent millennia, the implications of purpose-driven social behavior for modern society will be more completely elucidated.



Figure 2. Manifestations of Disruptions in the Existential Preservation Dynamic.

THE SELF PRESERVATION THEORY OF HU-MAN BEHAVIOR AND NEUROLOGICAL PRO-CESSES

We now turn our attention to how the evolution of the brain in recent millennia, while opening seemingly infinite new insights into the functioning of the world and humanity, in so doing also made humankind more vulnerable to anxiety, depression, addictions and suicide. It is generally accepted that over the most recent millennia of human evolution, profound advancements occurred within the brain, specifically when changes in the Corpus Collosum enabled specialization of the left hemisphere. Among these, pioneering neurologist (Gazzaniga, 2000) conducted numerous split-brain studies, identified an important left-brain function that evolved that he referred to as the "interpreter." It is believed that the evolution of this interpreter function gave rise to selfconsciousness by providing human's the capacity to retrospectively reflect on and make sense of our own behavior (Gazzaniga, 2000; Gazzaniga, 2018). It also enabled humans to rationalize ways to connect events in a "post hoc" fashion, which provided (and continues to provide) a subjective continuity of reality (Gazzaniga, 2018). It is important to note that this "interpreter" is not necessarily a truth detector, and, in fact, we know that it can be responsible for constructing largely inaccurate interpretations and erroneous conclusions (Gazzaniga, 2000; Gazzaniga, 2018).

The scientific discovery of left brain specialization and the interpreter function has profound implications in consideration of the evolution of human behavior in social contexts. SPT posits that as the brain evolved, the quest for mutuality had less influence over goal-directed actions, and instead, the evolving interpreter function, along with language development, complex thought, selfconsciousness, rationality and executive function, enabled individuals to make life decisions according to an everwidening variety of pursuits in a context of increasingly complex social environments and influences. As a result, over time, the natural predisposition toward the ongoing and pervasive orientation to achieve social mutuality became largely supplanted and/or suppressed, thus making human beings more susceptible to misguided efforts to achieve subjective wellbeing, in addition to vulnerability to anxiety, depression, addictions and suicide.

Despite these neurological advancements, we know that mutuality continues to play an important role in relationships. For example, in a study of women's responses to threats in couples relationships, higher levels of perceived mutuality predicted decreased self-regulatory effort and attenuated preparatory motor activity in response to threat cues (Coan, et al. 2013). This and similar studies strongly support the notion that humans have a deeply engrained predisposition toward mutuality.

THE COMPLETE DYNAMICS OF THE SUICIDE CRISIS

Heightened vulnerability to suicide goes beyond breakdown of one or more attributes of the existential preservation dynamic (i.e., socially isolated and disconnected, unappreciated/ devalued, ineffectual, and/or without contribution or burden on others). SPT posits that three additional psychological factors, magnified in potency by these vulnerabilities, elevate the acuity of suicide risk: subjective distress, overwhelmed coping capacity, and a premature readiness for death.

First, SPT posits that the aforementioned suicide vulnerabilities magnify an individual's degree of experienced subjective distress associated with life strain and stressors, such as a divorce, loss of job, losing one's home, financial strain or a new medical diagnosis, all of which have been found to associated with increased risk for suicide (Center for Disease Control and Prevention, 2018). Furthermore, the combination of heightened vulnerability and major life stressors can overwhelm an individual's capacity to cope. In fact, an increase in subjective distress has been found to be correlated with poor coping and suicide, especially for those who are depressed. Increased psychological distress was found to be positively associated with escapeavoidance behavior for higher education college students (Deasy, et al. 2014). In addition, especially for older men and unmarried adults, two groups at elevated risk for suicide, chronic stress was found to be associated more reliance on avoidance coping, leading to poorer outcomes in the health, work/financial and interpersonal domains (Moos, et al. 2006). In contrast with healthy people, it was found that patients with depression in stressful situations more often use strategies based on avoidance and denial (Orzechowska, et al. 2013). For adolescents, stress caused by interpersonal loss in particular has been found to be significantly associated with increased suicide risk (Stewart, et al. 2019).

SPT explains that premature death ideation and preparations are driven by the combination of heightened subjective distress and overwhelmed coping capacity, in the context of the aforementioned vulnerabilities associated with the breakdown in the existential preservation dynamic. Specifically, the psychological pain and suffering caused by this combination of conditions drives an individual to consider death and dying sooner in their life course than would otherwise be the case, as death and suicide become a viable alternative to living. Prior research has suggested that suicide is more likely when the individual has high levels of exposure to death, dying or suicide (Cerel, et al. 2015), especially for adolescents (Randall, et al. 2015). Exposure to death, dying and suicide may also contribute to death ideation and preparation earlier in the life course than might otherwise be expected without such exposure.

Other factors known to elevate one's risk for suicide include access to means of suicide and substance intoxication. The

acuity of a suicide crisis may be further enhanced when the suicidal individual is intoxicated on alcohol or drugs, which can impair judgment, lower inhibitions, and contribute to depressed mood and/or emotionally labile behavior. The final factor in a suicide is access to means of suicide in the moment of crisis.

In summary, SPT posits that perceived life meaning and purpose drives the will to live and thrive, and the absence of life meaning and purpose results in an extinguished will to live and thrive, which is manifested by increased anxiety and depression, excessive psychological reactivity to distressing life events and circumstances, reduced coping capacity, and premature death ideation and preparation. When these dynamics culminate in a single crisis, wherein there is ready access to means of suicide, self-directed violence with suicide intent is primed to occur. These dynamics of a suicide crisis are illustrated in Figure 3.

SUMMARY

SPT describes a new comprehensive paradigm to explain how social and emotional suffering, including the extinguished will to live and thrive, is a consequence of the absence of a purpose-driven and meaningful social behavior. SPT explains how individual identity is inextricably linked to one's spheres of care and concern, and how individuals are predisposed to be in service to those social entities; when such service is beneficial, it begets acceptance, inclusion and belongingness, while reinforcing purpose in life. This existential preservation dynamic enabled humans to accomplish group goals, thus offering a survival advantage in our evolution. However, based on the most recent and profound human neurological developments in the homo sapiens, SPT offers a plausible explanation for how and why human beings have become susceptible to a wide range of motivational forces that can move individuals in directions that are inconsistent with the existential preservation dynamic, thus creating anxiety, depression and vulnerability to suicide.

Many testable assertions, supported by existing research, have been offered in support of SPT. These assertions include: (1) subjective distress can overwhelm one's ability to cope effectively, and social support that conveys to the struggling person he/she has value (i.e., is worth loving and being cared for) serves as a buffer against suicide risk; (2) ongoing substantial subjective distress that is perceived as insurmountable can prompt premature thoughts of death and dving; (3) the perception of being ineffectual, without value (or burdensome) in primary relationships, socially disconnected, and/or unappreciated or unloved foundationally creates suicide risk; (4) decreased ability to function in salient life roles leads to decreased perceived life purpose and increased suicide risk; (5) increased dependency on others (in the absence of mutual interdependency) is associated with increased burdensomeness, less perceived life purpose and increased suicide risk; (6) decreased coping ability leads to an increased likelihood that suicide will be considered; (7) high utilization of one's unique talents and capacities strengthens one's perceived purpose in life and decreases suicide risk, especially when this contribution is visibly helpful and outwardly appreciated.

IMPLICATIONS OF SPT FOR APPROACHES TO SCREENING AND ASSESSMENT

SPT offers specific guidance for screening, assessment and treatment to prevent suicide and promote recovery



Figure 3. The SPT-Informed Dynamics of a Suicide Crisis.

from mental health and substance use disorders. One major implication of SPT pertains to screening for suicide risk. Current approaches to suicide risk screening focus primarily on depression screening, but SPT would suggest that suicide risk can be signaled by disruptions in the existential preservation dynamic in many ways that may not be detected when screening only for symptoms of depression. For example, a loss of job and an ongoing lack of meaningful employment may contribute to an individual's perceptions and feelings of being: unappreciated, without value to or a burden to others, socially alienated, and/or ineffectual and hopeless. These types of perceptions, in many different possible combinations, according to SPT, drive suicide thoughts and intentions. In addition, such suicidal individuals may not endorse common symptoms of depression found in traditional screening instruments, but instead be more likely to endorse a high level of subjective distress specific to the life challenges the individual is experiencing.

Therefore, a screening tool that systematically screens for subjective distress in combination with those selfperceptions reflecting the existential preservation vulnerabilities identified by SPT (shown in Figure 2) should be more effective in detecting suicide risk.

Suicide risk assessment, according to SPT, should seek to qualitatively understand the subjective burden across life areas that the at-risk individual is experiencing, explore strengths and deficits in coping, explore possible premature death ideation and preparations, reveal access to means of suicide, and determine the suicide vulnerabilities based on breakdown(s) in the existential preservation dynamic. Specifically, in a comprehensive suicide risk assessment, each of the following areas should be explored: the degree to which an individual is feeling ineffectual and powerless, unappreciated and/or unloved, without value or burdensome to others, and socially isolated. Such assessment should be conducted with attention to risk and protective factors, including the severity of mental health and/or addiction symptomology, as well as environmental contingencies (past, present or potentially in the future) that could further disrupt or erode the existential preservation dynamic.

IMPLICATIONS OF SPT FOR TREATING THE SUI-CIDAL PATIENT

Most excitingly, SPT provides direction for treatment that fosters the will to live, while extinguishing premature death ideation and suicide desire. Based on what the suicide risk evaluation reveals, successful treatment, according to SPT, should focus on addressing the self-perceptions and related feelings caused by the breakdown of the existential preservation dynamic. Treatment will therefore necessarily address one or more of the following existential realities and the related emotional consequences: being socially disconnected and alienated (and feeling lonely and like an outsider or misfit), being ineffectual or useless (and feeling trapped, hopeless and mental anguish), being without value or even burdensome to others (and feeling worthless, guilty and/or shame) and/or being unappreciated or unloved (and feeling used, betrayed and/or abandoned).

Not only does SPT identify the specific treatment issues to address, but it also offers specific direction for treatment. SPT informed interventions, or Self Preservation Therapy, seeks to guide individuals to find ways to employ their unique strengths and capacities to benefit social causes or entities that are important to them in ways that have clear benefit and are appreciated. These may be a function of employment, volunteer activities or productive use of free time. Self-Preservation Therapy will necessarily involve addressing cognitive, behavioral, interpersonal and environmental barriers that could prevent the individual from making these changes, while also reinforcing and building upon productive coping skills and capacities. Clinicians providing Self Preservation Therapy are foremost authentic and caring listeners who join with their clients to understand their perspective, challenges and needs, and, by way of a strong therapeutic alliance, creatively find pathways to healing consistent with the existential preservation dynamic.

Self-Preservation Therapy logically would also include the use of a safety plan to foster success in treatment. Such safety plans, completed in partnership with the suicidal individual, would foremost address access to means of suicide, such as access to guns, poisons, excessive medications, and other methods unique to the at-risk individual. The second step in the safety plan would be to identify the early indicators of suicide risk that occur prior to the start of the suicidal crises. These early indicators are unique to individuals, will relate directly to the existential preservation dynamic, and should be described descriptively in a safety plan. For example, I know I'm heading toward a suicide crisis when: "My son refuses to talk to me and I feel unloved and unappreciated." For each early indicator, there should be a specific set of sequential tasks that can be employed immediately to cope with the situation and refocus on building life meaning and purpose. In this example, the tasks may include, "journal my reactions for discussion in my next therapy session," "research volunteer opportunities to help homeless people in my community at the local library," "contact my daughter Denise and invite her for dinner," and, "if I'm still struggling with feeling unappreciated or have thoughts of suicide, contact my therapist or, afterhours, the crisis line." In this way, the safety plan is consistent with an individual's Self Preservation Therapy treatment plan and actively addresses the existential preservation vulnerabilities in real-world settings. In this example, the individual's strength (cooking) is offered in service to his/her social spheres of care and concern (homeless folks, daughter).

FUTURE DIRECTIONS

Future research should seek to confirm the proposed link between increased suicide risk and the absence of

those identified building blocks of purpose (agent of change, socially engaged, unique contribution, and being appreciated). A qualitative approach, grounded in the Self Preservation Theory of Human Behavior examining on well-articulated suicide notes and letters, might be particularly useful.

New suicide risk screening and assessment tools consistent with SPT should be developed and tested. The sensitivity and specificity of the previously described screening tool should be compared to that of traditional suicide risk screening approaches that rely on symptoms of depression and self-reports of suicide ideation. Finally, a complete suicide risk assessment that quantifiably stratifies risk level should be developed and tested. In addition to identifying risk and protective factors and the severity of any mental health and/or substance use disorder symptomology, this tool should thoroughly explore each aspect of the suicide crisis as identified by SPT (and noted in Figure 3): the existential preservation dynamic vulnerabilities, the level of distress in one or more life areas, the degree of death ideation and preparation, the extent of deficits in coping capacities, and access to means.

In addition to testing screening and assessment tools, wellexplicated treatments, consistent with the Self Preservation Theory of Human Behavior, should be developed and tested. Such treatments should be designed to help atrisk populations, including patients with mental health or substance use disorders, build life meaning and purpose by helping them identify and utilize their unique capacities in service to their own social interests and passions in ways that are valued and appreciated, while concurrently addressing barriers to such achievements. SPT-informed intervention studies should be conducted to determine their stand-alone impact on recovery and reduced suicide risk, in addition to studies that focus on the potential additive positive impact when the basic tenants of SPT are integrated within existing evidence-based or evidence-supported interventions.

CONCLUSION

The foregoing discussion describing the Self Preservation Theory of Human Behavior suggests the application of the theory expands beyond suicide prevention, offering insights into other mental health disorders, especially anxiety, depression and addictions. The value of SPT to help explain how other mental health disorders are formed and could be treated should be more fully articulated in future publications, and related assessments and treatments should be developed and tested in order to empower care providers to be as accurate in assessment and comprehensive in the treatment of these disorders as possible.

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