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A Positive Psychological Approach to Suicide

Theory, Research, and Prevention

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Chapter 1
Positive Psychology and Suicide Prevention: An Introduction and Overview of the Literature

Jessica Kelliher Rabon, Jameson K. Hirsch, and Edward C. Chang

At first glance, the combination of suicidology and positive psychology might seem counterintuitive, with one field focused on despair and death, and the other focused on happiness and living life to the fullest. Yet, we know that even in joy, there is sadness, and, in misery, there is often a bright spot to be found. For clinicians and researchers working in these respective fields, however, the melding of a strengths-based approach to an often-difficult and taboo therapeutic endeavor—saving someone's life—is likely commonplace as, for example, mental health service providers routinely try to strengthen resilience, improve quality of life, and increase happiness in their patients, even suicidal ones. Why, then, is it necessary to explicitly link positive psychology to suicide prevention, if "being positive" is a frequent goal of therapeutic endeavors? Why do we need positive suicidology?

First, it is important to note that although suicide is a preventable cause of death, it is also a global epidemic and public health concern that researchers, clinicians, and policymakers seem somewhat powerless to eradicate. Conceptualized as the act of deliberately killing oneself, suicide results in over 800,000 deaths annually worldwide (World Health Organization [WHO], 2016). Rates of suicide have steadily increased since 1999 (Kuehn, 2014) and, in the United States, suicide is the tenth leading cause of death (American Association of Suicidology [AAS], 2014). Equally concerning is suicidal behavior, or thoughts of suicide and suicide attempts, which is more prevalent than death by suicide and a strong marker of risk for future suicidality; for example, prior suicide attempts are considered the most robust risk

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factor for eventual death by suicide (Gvion & Apter, 2012; WHO, 2016). Thus, despite clinical concern, treatment development, and research funding, mental health professionals have collectively faltered in their ability to prevent suicide, which is why new treatment paradigms, such as a positive psychological approach to suicide prevention, are necessary and emerging.

Second, much effort has been expended to identify risk factors for psychopathology and suicide, and a century of psychosocial research has uncovered a variety of individual, relational, community, and societal factors related to increased suicide risk (Centers for Disease Control and Prevention [CDC], 2017). Indeed, most of the treatments developed for the reduction of suicide and its correlates, such as depression, are deficit-oriented, meaning they rely on the amelioration of maladaptive thoughts, emotions, or behaviors to provide relief from distress.

This classical approach has yielded much success, as evidenced in the extant literature, and most experts would agree that risk factors must be addressed to prevent suicide. As examples, at the individual level, risk factors include mental illness, substance abuse, financial strain, and feelings of hopelessness (CDC, 2017; WHO, 2016). At the level of interpersonal, group and community functioning, collective traumas (e.g., disasters, war), as well as discrimination, social isolation, and interpersonal violence, heighten risk for suicide (CDC, 2017; WHO, 2016). Further, at the societal level, difficulty accessing mental healthcare, stigma surrounding mental health and suicide, and easy access to lethal means (e.g., guns, pesticide) are all prominent suicide risk factors (WHO, 2016).

Yet, this is a one-sided approach that, as evidenced by suicide rates that continue to rise despite best efforts, may represent only a partial solution to the problem of suicide. It is critical, therefore, to recognize that the development of efficacious suicide prevention and intervention strategies is dependent on the identification of not only risk factors, but also protective factors that reduce the likelihood of suicide. In general, however, protective factors for suicide have not been as extensively studied as risk factors; although, even from the time of Durkheim, who touted the benefits of social integration, there has been a somewhat-underground movement exploring their presence and effects. Broad psychosocial variables including access to healthcare, social support, holding beliefs that discourage suicide, and adaptive coping skills have been acknowledged as elements to be promoted by healthcare providers (CDC, 2017; WHO, 2016), and positive cognitions (e.g., hope for the future) and emotions (e.g., happiness, rather than sadness) are routinely promoted therapeutically to reduce distress and suicide risk (Huffman et al., 2014). Religion and spirituality have also been perennially discussed as protective factors against suicide; however, their effects are not always based in a positive framework and are sometimes conformity-demanding (e.g., suicide prohibited) and fear-based (e.g., unable to enter heaven if death is by suicide), which may precipitate suicide risk in some cases. In the 1980s, the construct of "reasons for living" (Linehan, Goodstein, Nielsen, & Chiles, 1983) emerged as an early precursor to positive suicidology, identifying factors (not all positive) that might keep a person alive if they were considering suicide, followed by hope-based prevention efforts in the 1990s. Since the turn of the new millennium, however, and with the rise of positive psychology as a

science, an increasing number of positively valenced, adaptive and strengths-based approaches to resolving stressors, and reducing risk for psychopathology and suicide, have emerged.

It is at this intersection of suicide prevention, protective characteristics, and positive psychology that this volume is centered, and the contributing authors are passionate in their global efforts to understand the synergy of joining these fields in the fight against suicide. As educators, clinicians, and researchers, we have come together to pool our knowledge in this area, to provide a translational framework for moving forward with a new paradigm of suicide prevention—one that emphasizes the strengths and character of not only the individual, but also the strengths of communities and cultures. In the following sections, we briefly introduce and integrate the fields of positive psychology and suicidology and discuss the theoretical and empirical support for our premise. As many of our authors note, current therapeutic frameworks, such as Cognitive-Behavioral and Interpersonal Therapies, which have shown some success in suicide prevention, are also well suited to accommodate positive psychological approaches to reducing suicide risk, even preemptively; therefore, we also briefly review both classic and modern theories of suicide, noting areas where positive psychological principles may be complementary or preferable. Finally, we conclude with an introduction to the work of our contributing authors, setting the stage for them to share their expertise on this new field of positive suicidology.

An Introduction to Positive Psychology

Compared to other areas of psychology, the field of positive psychology, pioneered by Martin Seligman, is relatively young and aims to understand and promote factors that allow individuals and communities to thrive (Hefferon & Boniwell, 2011). Positive psychology emphasizes valued subjective experiences, including well-being, contentment, satisfaction, hope, optimism, flow, and happiness, which are characteristics that are believed to apply to all humans (Seligman & Csikszentmihalyi, 2000), although their cross-cultural applicability has sometimes been questioned (e.g., see Chap. 6). Positive psychology focuses on positive experiences across the lifespan, and includes three nodes: (1) subjective, which encompasses positive experiences and states across the past, present, and future; (2) individual, which focuses on characteristics of the "good person" such as talent, wisdom, and love; and, (3) group node, which comprises positive institutions, citizenship, and communities (Hefferon & Boniwell, 2011).

Positive psychology, with its focus on strengths, exists in stark contrast to the field's general deficit-oriented focus on psychological disorders and the negative effects of stressors (Seligman & Csikszentmihalyi, 2000). Clinically, Seligman and Csikszentmihalyi (2000) suggest that by solely focusing on the maladaptive side of human behavior to understand psychopathology, we are missing out on a substantial portion of human psychology, particularly given that most people will not develop

psychopathology during their lives. They also noted an imperative, that the field of psychology should focus not only on personal weakness, but also on human strengths and virtues, to effectively prevent and treat psychopathology (Seligman & Csikszentmihalyi, 2000), including suicide. To this end, Peterson and Seligman (2004) published *Character Strengths and Virtues: A Handbook and Classification*, which describes and classifies human strengths and virtues that enable thriving, with the intention of doing for psychological well-being what the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* does for psychological disorders. In general, this movement of applying positive psychological principles to the promotion of physical and mental well-being has been successful, with a growing body of research indicating that positive psychological characteristics are associated with better health outcomes, including less risk for suicide.

Positive Psychology and Health Outcomes

Positive emotions, characteristics, and traits are beneficially related to a variety of outcomes including increased well-being, better physical and emotional health, and increased social connectedness (Hefferon & Boniwell, 2011). However, with psychology's historical focus on mental illness, the field has developed a distorted view of what the normal human experience looks like, often forgetting to examine and address these positive traits (Seligman & Csikszentmihalyi, 2000). When viewing psychopathology through a positive psychological lens, Seligman and Csikszentmihalyi (2000) suggest examining the strategies used to overcome the pain and despair caused by mental illness, rather than focusing on the despair itself. Likewise, suicidal behavior may be a possible target for positive psychological intervention by shifting the focus from the causes of the suicidal behavior or current negative emotional state toward a better understanding of resilience factors and processes that may decrease suicide risk (Wingate et al., 2006).

Positive Psychology and Suicide. Although there are many established and effective risk-reduction interventions for suicide and its psychopathological correlates, less attention has been paid to identifying protective factors, and even less effort has been expended to incorporate protective factors into prevention and intervention efforts. Positive experiences such as optimism, hope, and coping ability, among others, may play a role in understanding and reducing suicidality (Osman et al., 1998; Wingate et al., 2006) by disrupting the typical associations between stressors and suicidal outcomes (Wingate et al., 2006). For example, the positive psychological factors of reasons for living, meaning in life, social support, and gratitude are negatively related to suicide ideation and its associated risk factors of depression and loneliness (Heisel, Neufeld, & Flett, 2016), suggesting that protective factors may reduce suicide risk both directly and indirectly via ameliorative influences on typical contributors to suicidality, such as through self-soothing or enhanced emotion

regulation (Kleiman, Riskind, & Schaefer, 2014; Krysinska, Lester, Lyke, & Corveleyn, 2015; Wingate et al., 2006).

Indeed, positive psychological interventions for suicide have begun to be developed and tested, as described in several chapters of this book (e.g., see Chap. 9 for Future Oriented and Temporal Therapies). In an additional study, a variety of positive psychological exercises, including promotion of gratitude and use of personal strengths, were administered to a psychiatric inpatient sample of suicidal patients (Huffman et al., 2014) and were associated with reductions in hopelessness and increased optimism. Importantly, a positive psychological approach does appear to accomplish at least some of the goals of traditional therapy, that is, the elimination of distress or risk of harm to self (Kleiman et al., 2014; Krysinska et al., 2015; Wingate et al., 2006), making such strategies an excellent fit with existing etiological and therapeutic frameworks that promote emotion regulation, social well-being, and adaptive cognitive-emotional functioning. Below, we discuss the cognitive-behavioral perspective as an umbrella framework for understanding a broad range of both suicidology and positive psychology theories, given that both fields rely primarily on understanding and promoting "healthy" thoughts, emotions, and behaviors, despite any utilitarian differences.

Cognitive-Behavioral Framework for Understanding Suicide

In his classic formulation, Aaron Beck hypothesized that depressive symptoms arise from negative views of the self (e.g., as worthless or a burden), the world (e.g., overwhelmed by stressors), and the future (e.g., hopelessness), known as the "cognitive triad" (Beck, 1967). As a well-established risk factor for suicide, depression is present in approximately 50% of all persons who die by suicide (Chehil & Kutcher, 2012), and much suicidology research has focused on hopelessness, or a negative view of the future, as a primary contributor of risk (Beck, Weissman, Lester, Trexler, 1974). Emerging from unremitting stressors and goal frustration, hopelessness, and its counterpart of helplessness are characterized by negative expectations and attribution of negative events to stable, global causes, resulting in a maladaptive and erroneous view of the self, the environment, and the future (Abramson et al., 2000; Klonsky, Kotov, Bakst, Rabinowitz, & Bromet, 2012; Zhou, Chen, Liu, Lu, & Su, 2013). Across numerous samples and studies, hopelessness is consistently related to greater suicide risk, often more robustly than depression itself (Wetzel & Reich, 1989), and may also mediate the relation between suicidal ideation and death by suicide (Abramson et al., 2000), contributing to transitions between suicidal thoughts and actions.

Cognitive-behavioral theory also suggests that the way a person thinks, feels, and behaves all influence one another (Beck, 1995). In the context of suicidal behavior, for example, thoughts of being "better off dead" may result in feelings of depression and hopelessness and, in turn, to engagement in behaviors such as self-injury or a

suicide attempt. Given its direct overlap with many aspects of suicidality, Cognitive-Behavioral Therapy (CBT) has been successfully utilized to reduce suicide risk in adult and adolescent populations (Alavi, Sharifi, Ghanizadeh, & Dehbozorgi, 2013; Gotzsche & Gotzsche, 2017; Stanley et al., 2009), often by challenging maladaptive beliefs, improving problem-solving skills, and increasing social competence (Alavi et al., 2013). Developed specifically as a suicide prevention technique, Cognitive Behavior Therapy for Suicide Prevention (CBT-SP) includes additional components such as developing a chain analysis of events associated with suicidal behavior, safety planning, psychoeducation, and developing reasons for living and hope, before teaching the more traditional CBT skills of behavioral activation, mood monitoring, emotion regulation and distress tolerance skills, and cognitive restructuring (Stanley et al., 2009).

Just this brief description of cognitive-behavioral theory and therapy (CBT) allows many opportunities for a synergistic coupling with positive psychological principles. As just one example, regarding hopelessness, positive psychological factors such as future orientation, positive future thinking, optimism, hope, and positive problem orientation may serve functions that are in opposition to hopelessness, reducing suicide risk (Chang, Yu, Kahle, Jeglic, & Hirsch, 2013; Wingate et al., 2006). Given that CBT targets maladaptive cognitions and teaches patients to challenge these beliefs and replace them with accurate, adaptive beliefs (Beck, 1995), increasing positive future thinking appears to be a natural, complementary strategy to be accommodated within a CBT-based suicide prevention framework. Several other prominent theories of suicide fit well within a CBT framework and emphasize psychological pain and emotion dysregulation, and interpersonal dysfunction, as prominent risk factors (Joiner, 2005; Linehan, 1993; O'Connor, 2011; Shneidman, 1993). We briefly discuss these theories below, and highlight potential points of intersection where positive psychological principles and strategies might be integrated.

Brief Overview of Psychosocial Theories of Suicide

To understand the potential application of positive psychological theories and factors to suicide prevention, it is first important to understand current, predominant risk-based theories of suicide. To begin, as we noted earlier, from a cognitive-behavioral framework, hopelessness theory of suicidality persists in the literature and is based on a person's expectation that highly desired outcomes will not occur, or that highly aversive outcomes will occur, and that these outcomes are unchanging, resulting in depressive symptoms (Abramson et al., 2000). As a core characteristic of depression, hopelessness may serve as the link between depression and suicide (Beck, Steer, Kovacs, & Garrison, 1985), and, according to hopelessness theory, suicidality is a core symptom of hopelessness depression (Abramson et al., 2000). As will be discussed in Chaps. 2 and 9, the development of adaptive future orientation, including forward-thinking motivation toward goals, a positive problem

orientation, and a positive outlook, may counteract hopelessness and can be cultivated therapeutically to reduce suicide risk. In the following paragraphs, we note several additional theories of suicide and potential positive psychological factors that appear to align with each perspective.

Emotion Dysregulation Theory. Dialectical behavior therapy (DBT), a therapeutic approach based on cognitive-behavioral principles, but rooted in emotion dysregulation theory, has also been shown to be effective in reducing suicidality (Neece, Berk, & Combs-Ronto, 2013). From a developmental perspective, pervasive emotion dysregulation is thought to occur because of interruptions, during childhood, of normal evolvement of emotion regulation abilities (Linehan, 1993). For example, during infancy and childhood, when emotion regulation skills are dependent on caregivers, inconsistent or inappropriate responses to children's needs may thwart the development of adaptive emotion regulation skills (Neece et al., 2013). According to the DBT framework, in the face of life stressors, suicidal individuals are thought to have fewer, and more-undeveloped, emotion regulation skills, resulting in use of self-injury or suicidal behavior to cope with negative emotions. Therefore, to reduce suicidality, therapeutic endeavors should involve training in emotion regulation skills, and DBT provides a range of skills designed to do so (Linehan, 1993; Neece et al., 2013), including cultivation of distress tolerance, interpersonal effectiveness, emotion regulation, and mindfulness. Several of these components are directly addressed in this volume, including the critical role of successful social and interpersonal functioning, in Chap. 7 by Kleiman and colleagues, and the usefulness of mindfulness, in Chap. 11 by Le and colleagues, as buffers against suicide risk. As our authors note, proactive and adaptive social engagement and use of contemplative practices may result in many psychosocial benefits, including better coping ability and improved well-being, as well as less likelihood of suicide and its risk factors. Although these positive psychological principles are already a component of some traditional therapies, they could also be used to supplement other treatment approaches or be practiced independently outside of the scope of therapy.

Interpersonal Theory of Suicide. Arguably one of the most prominent modern theories of suicide is Joiner's (2005) interpersonal theory of suicide, which posits that the desire to die by suicide is caused by the simultaneous presence of perceived burdensomeness and thwarted belongingness (Van Orden et al., 2010). Thwarted belongingness is defined as an unmet need to belong, whereas perceived burdensomeness is the belief that one is a burden to others (Joiner, 2005). When these two interpersonal constructs are present, in addition to acquired capability (e.g., reduced fear) to engage in suicidal behavior (Van Orden et al., 2010), suicidal behavior is more likely to occur. Several of our contributing authors discuss positive psychological principles and constructs relevant to the interpersonal theory of suicide. For example, Chaps. 3, 5, and 7, on forgiveness, gratitude, and interpersonal relationships, respectively, are all focused on the improvement of perceived and actual social and interpersonal functioning and include strategies that can be conducted by

an individual, on their own time and according to their own values and needs. Other positive psychological constructs, such as future orientation (e.g., to transcend current interpersonal stressors; Chaps. 2 and 9) and meaning-making (e.g., in the face of illness burden; Chap. 10), may also be helpful in resolving the thwarted needs of burdensomeness and belongingness.

Psychache. Thwarted needs also play a central role in Shneidman's classic theory of psychache as the key contributor to suicide risk. Psychache refers to psychological pain that has become unbearable, unending, and inescapable, arising due to unmet psychological needs (Shneidman, 1993). Unlike Joiner's interpersonal theory of suicide (Joiner, 2005), which identifies only interpersonal deficits, Shneidman's notes that the type of unmet need and its accompanying psychological pain may be a distinct entity for each person (Shneidman, 1993), but ultimately result in depression, hopelessness, and suicide. Empirical support for this theoretical model exists; for instance, psychache is a risk factor for suicidal behavior, over and above the effects of depression and hopelessness (Patterson & Holden, 2012; Troister & Holden, 2012), and serves as a mediator of the relation between other potential risk and protective factors (e.g., forgiveness) and suicidal behavior (Dangel, Webb, & Hirsch, 2018). Accordingly, Shneidman (1993) postulated that psychache is the penultimate risk factor for suicide, and all other risk factors are only pertinent to the degree that they amplify the intensity of psychache.

As we have noted, many of the positive psychological constructs and theories discussed by our contributing authors are well suited to address an array of unmet psychological needs, whatever they may be. For example, many unmet needs might be satisfied via goal-directed behaviors, improved motivation and an adaptive future orientation, which are the topics of discussion in Chap. 2 by Kirtley and colleagues, and Chap. 9 by Yu and colleagues. Cultivation of internal meaning, including for benefits received and for making relationships whole, is an additional positive psychological strategies that might help to resolve unmet internal needs (e.g., for closeness, for resolution, for purpose), and is discussed in our chapters on meaning-making (Chap. 10), forgiveness (Chap. 3), and gratitude (Chap. 5).

Integrated Motivational-Volitional Model of Suicidal Behavior. Finally, we discuss a modern, transdiagnostic theory, the Integrated Motivational-Volitional (IMV) Model of Suicidal Behavior, which is a tripartite diathesis-stress model that suggests individual vulnerabilities are activated in the presence of stressors and increase risk for suicidal behavior (O'Connor & Kirtley, 2018). Several stages are proposed, including the pre-motivation phase, which includes background factors and triggering events which, in turn, develop into suicidal thoughts and planning in the motivational phase. Chronic and acute stressors in the pre-motivation phase are associated with the development of defeat and humiliation appraisals, leading to feelings of entrapment, where suicidal behavior is seen as a reasonable solution to life's circumstances and, ultimately, to suicidal intent and suicidal behavior. The transition between stages is impacted by stage-specific moderators that either enable or hinder movement between stages (e.g., coping skills, thwarted belongingness, fearlessness

about death; O'Connor, 2011). Stages may also be cyclical, in that the ideation-attempt progression may also feedback so that attempt behaviors prompt additional ideation (O'Connor & Kirtley, 2018).

Given that positive psychology is based on principles of empowerment, volition, and motivation, it makes intuitive sense that they could integrate functionally within the IMV model. For example, this model may be accepting of an additional layer of stage-specific volitional moderators; that is, positive psychological factors such as future orientation (Chaps. 2 and 9), reasons for living (Chap. 4), and social and emotional coping (Chaps. 7 and 11) may serve as buffers, halting the progression from vulnerability to ideation, from ideation to attempt, and from attempt to death by suicide. Our contributing authors propose many ways that the constructs comprising positive psychology might be applied to this new field of positive suicidology, and we can take many of these suggestions at face value (e.g., that hopefulness might counteract hopelessness). It is important, however, to also understand some of the underlying theories supporting the premise of positive psychology, so that the two fields might be increasingly etiologically and empirically linked together by clinicians and researchers. In the following sections, we briefly review several prominent theories that focus on well-being, motivation, and the enhancement of positive emotions and experiences, noting their sometimes-obvious overlap with theories of suicide.

Positive Psychological Theories Applied to Suicide Prevention

Broaden-and-Build Theory. Developed by Barbara Fredrickson, the Broaden-and-Build Theory of positive emotions is ideally suited for the application of positive psychology to clinical endeavors, as the basis of this theory and most therapies is to enhance opportunities for positive experiences, thoughts, and emotions, with the hope that well-being will improve. The Broaden-and-Build Theory suggests that positive emotions broaden one's awareness and, in turn, encourage a variety of novel thoughts and actions; that is, positive experiences and emotions result in a broadened thought-action repertoire that leads to the development of new skills and resources. In contrast, negative emotions narrow attention, resulting in a limited range of possible responses or urges (Fredrickson, 2004).

Although not developed as an explanation for psychopathology, the Broaden-and-Build theory of positive emotions easily applies to suicide prevention. Joiner et al. (2001) found that suicidal patients who tended to experience at least some positive moods manifested enhanced symptom remission and improved problem-solving attitudes compared to patients with primarily negative moods, and that problem-solving attitudes mediated the relation between positive affect and improved suicide symptoms (Joiner et al., 2001). That is, positive mood was associated with enhanced problem-solving ability and, in turn, to less suicide risk, suggesting that this positive psychological theory holds great promise for potential

application to suicide prevention (Wingate et al., 2006). Based on previous research indicating that it is not always the presence of negative emotions but, rather, the absence of positive emotions that contributes to suicide risk, an explicit plan to broaden-and-build our patient's repertoire of resiliency seems to be a paramount task for intervention efforts, and one which is not automatically accomplished via deficit-reduction therapeutic strategies. All our contributing authors adhere to this principle, and evidence for the beneficial psychological, emotional, and social effects of positive psychological constructs and experiences for suicide prevention is presented throughout each chapter in this volume.

Hope Theory. Another positive psychological construct that can be explicitly enhanced in therapy, or independently, is hopefulness, which is a motivational and goal-oriented construct and process that is linked to a broad array of positive psychosocial outcomes, such as better psychological and physical health, and negatively related to suicide risk factors such as hopelessness and loneliness, as well as to suicidality (Cheavens, Cukrowicz, Hansen, & Mitchell, 2016). Conceptualized as related to, but independent from, hopelessness, the construct of hope, according to Snyder's Hope Theory, frames our life experiences in terms of goal striving, and suggests that hopefulness arises from the perceived ability to determine desired goals (e.g., agentic choice) and the motivation and ability to attain identified goals (e.g., pathways problem-solving; Snyder, 1994).

Importantly, Hope Theory can explain multiple etiological mechanisms of suicide risk. On the one hand, as we have noted, the ability to identify and strive for positive goals appears to buffer suicide risk (Grewal & Porter, 2007). Further, Vincent et al. (2004) found that suicidal patients can identify positive life goals but have difficulty identifying methods to achieve those goals, consistent with Snyder's suggestion that blocked goals lead to suicidal ideation (Snyder, 2002). Therefore, when conceptualizing suicide prevention in the context of Hope Theory, not only is generation of positive life goals important, but so is development of tangible ways to achieve such goals (Snyder, 1994), such as identifying smaller, feasible sub-goals or securing social support to assist with goal attainment.

On the other hand, we must consider that suicide itself can become a desired goal, and, in fact, Snyder (1994) described suicide as the final act of hope. With repeated goal frustration, hopelessness may occur, and an individual may forsake previously set goals, setting a new goal of suicide (Snyder, 1994, 2002). If, as Shneidman (1993) suggests, suicide is conceptualized as an escape from unbearable pain, suicide may become a logical, viable goal in such instances (Snyder, 1994, 2002). Both considerations (i.e., frustrated goals as hindrances to hope; suicide as a goal) are discussed in this volume, in Chap. 2, which is focused on future orientation, hope, and optimism as protective factors against suicide, and in Chap. 9, which presents treatment strategies for therapeutically enhancing future orientation in suicide prevention efforts. Interestingly, Hope Theory and the Broaden-and-Build Theory are both predicated on motivational and volitional principles (e.g., via goal setting processes), and on experientially based growth (e.g., via positive emotions), which are also the cornerstones of the framework for Self-Determination Theory

(SDT). Indeed, SDT may be one of the best-suited theories for understanding how the human psyche and personality, and its accompanying motivational forces, contribute to the presence or absence of suicidality.

Self-Determination Theory. Comprised of numerous mini-theories, Self-Determination Theory (SDT), broadly, suggests that human motivation is a product of the satisfaction of the innate psychological needs of competence (e.g., self-efficacy), autonomy (e.g., personal choice), and relatedness (e.g., connectedness to others; Deci & Ryan, 2000), elements we have already discussed as being beneficially linked to suicidality.

According to self-determination theory, goal pursuit and attainment is dependent on the degree to which people can satisfy these basic psychological needs as they pursue and achieve their valued outcomes (Deci & Ryan, 2000). Self-determined people experience a sense of freedom to do what is interesting and important to them but are also able to regulate their behaviors according to their personal values, in the service of obtaining their desired goals (Deci & Ryan, 2012). Our contributing authors discuss similar pathways to suicide prevention; for instance, in Chap. 10, Heisel and colleagues discuss living according to one's purpose and making meaning, and Kleiman and colleagues note in Chap. 7 the importance of relatedness to others, as strategies for suicide prevention.

If we dig a bit deeper into self-determination theory, we see that it proposes four types of processes that regulate behaviors, all of which have meaning for suicide prevention, including: intrinsic motivation, identified regulation, introjected regulations, and external regulation. Intrinsic motivation represents behavior that is motivated by the enjoyment resulting from the activity, and in Chaps. 8 and 10, our contributing authors discuss physical and behavioral activities and engaging in meaningful life activities as pathways to suicide prevention. Identified regulation represents self-determined action in that even though the specific activity may not be enjoyable, it aligns with the person's values and beliefs. Such "struggle" to engage in behaviors that are difficult but rewarding suggests the process of forgiveness, which can be difficult, but which promulgates both physical and mental health benefits, as noted by Webb in Chap. 3. Next, introjected regulation represents an internally controlled functioning where the individual does not experience self-determination but, rather, behaves out of externalized pressures, such as shame and guilt. Our authors discuss this perspective explicitly, for instance, in Chaps. 3 and 11, whereby positive psychological processes such as self-forgiveness and the compassionate components of mindfulness are utilized to prevent suicide. Finally, external regulation refers to behavior that is carried out to gain material rewards or avoid punishments (Bureau, Mageau, Vallerand, Rousseau, & Otis, 2012). Again, many of the core constructs of positive psychology address such cognitive-emotional-behavioral patterns; for example, searching both inward and outward to gain meaning and purpose in life (Chap. 10), constructing valued future goals (Chap. 2), or practicing mindfulness, in the here-and-now, to regulate impulsive emotions and replace external reward patterns (Chap. 11).

There have been numerous preliminary studies applying self-determination theory to suicide prevention. For example, the satisfaction of basic psychological needs (e.g., being self-determined) is associated with lower levels of suicidal ideation and related risk factors such as perceived burdensomeness and thwarted belongingness (Tucker & Wingate, 2014). Self-determined individuals, because of their competence, choice, and connectedness, may be better able to cope with external stressors. In one study, self-determination moderated the relation between negative life events and suicidal ideation, such that individuals higher in self-determination were less likely to develop hopelessness and suicidal ideation in the face of negative life events (Bureau et al., 2012). Other research suggests that satisfying the basic psychological needs of autonomy, competence, and relatedness may help to increase perceived internal locus of control, bolster self-esteem, and foster interpersonal connectedness and, in turn, reduce suicide risk (Tucker & Wingate, 2014). In sum, current research is being conducted that links aspects of self-determination theory to reduced suicide risk, as well as tenets of Hope Theory and the Broaden-and-Build Theory, all indicating direct and indirect linkages between these theory-based approaches and suicide prevention.

In the following chapters, the reader will learn about a variety of positive psychological constructs that have empirical support in their application to suicide prevention. Whether interpersonal or intrapersonal, individually focused or community focused, positive psychology appears to have something to offer toward the amelioration of mental distress and suicidality. Historically, suicide has been a taboo topic, fraught with stigma and moral disregard, and is often thought to be a sign of weakness; however, current theory and our contributing authors have proposed a new field of exploration, that of positive suicidology, which focuses on human strengths and attributes in the service of preventing death by suicide (Hefferon & Boniwell, 2011). Given the evidence for the association between positive psychological constructs and increased well-being, better physical and emotional health, and increased social connectedness (Hefferon & Boniwell, 2011), our authors make the argument that these same principles should be applied to the prevention of suicide. Preliminary evidence suggests that our assertion is a worthwhile endeavor, as factors such as optimism, hope, reasons for living, gratitude, social support, and meaning in life have all been shown to be related to less suicidality (Heisel et al., 2016; Kleiman et al., 2014; Krysinska et al., 2015; Wingate et al., 2006). Further, treatment approaches, including bolstering personal strengths and gratitude, are associated with reductions in hopelessness and improvements in optimism, and reduced suicide risk (Huffman et al., 2014). Thus, theory and research, as well as clinical evidence, suggest that there is a role for such positive psychological variables in the prevention of suicidality.

What follows is an overview of our proposed positive psychological approach to the study of suicide and suicide prevention, and our attempt to conceptualize the burgeoning field of positive suicidology. The topics of our chapters span numerous subjects and many clinical and research areas related to both positive psychology and suicidology, including future orientation, forgiveness, reasons for living, gratitude, interpersonal needs and social support, physical health and health related

quality of life, and meaning and purpose. As well, we discuss these constructs in the context of culture and community, and as applied to prevention and intervention efforts. Our hope is that the reader will gain an understanding of the relation between positive psychology and suicidality, appreciate psychology and suicidology from a strength-based rather than deficit-oriented approach, and be able to apply positive psychological interventions to future research and clinical work focused on reducing psychopathology, promoting well-being, and lowering the risk of suicidality across diverse populations and settings.

References

Abramson, L. Y., Alloy, L. B., Hogan, M. E., Whitehouse, W. G., Gibb, B. E., Hankin, B. L., & Cornette, M. M. (2000). The hopelessness theory of suicidality. In T. Joiner & M. D. Rudd (Eds.), *Suicide science: Expanding the boundaries* (pp. 17–32). New York: Kluwer Academic.

Alavi, A., Sharifi, B., Ghanizadeh, A., & Dehbozordi, G. (2013). Effectiveness of cognitive-behavioral therapy in decreasing suicidal ideation and hopelessness of the adolescents with previous suicide attempts. *Iranian Journal of Pediatrics, 23*(4), 467–472.

American Association of Suicidology [AAS]. (2014). *U.S.A. suicide: 2014 official final data* [Fact sheet]. Retrieved from http://www.suicidology.org/Portals/14/docs/Resources/FactSheets/2014/2014datapgsv1b.pdf.

Beck, A. T. (1967). *Depression: Clinical, experimental and theoretical aspects*. New York: Harper & Row.

Beck, A. T., Steer, R. A., Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: A 10-year prospective study of patients hospitalized with suicidal ideation. *American Journal of Psychiatry, 142*, 559–563.

Beck, A. T., Weissman, M., Lester, D., & Trexler, L. (1974). The measure of pessimism: The Hopelessness Scale. *Journal of Consulting and Clinical Psychology, 42*, 861–865. https://doi.org/10.1037/h0037562

Beck, J. S. (1995). *Cognitive therapy: Basics and beyond*. New York: Guilford.

Bureau, J. S., Mageau, G. A., Vallerand, R. J., Rousseau, F. L., & Otis, J. (2012). Self-determination: A buffer against suicide ideation. *Suicide and Life-threatening Behavior, 42*(2), 377–393. https://doi.org/10.1111/j.1943-278X.2012.00097.x

Centers for Disease Control [CDC]. (2017). *Suicide facts at a glance 2017* [Fact Sheet]. Retrieved from http://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.PDF.

Chang, E. C., Yu, E. A., Kahle, E. R., Jeglic, E. L., & Hirsch, J. K. (2013). Is doubling up on positive future cognitions associated with lower suicidal risk in Latinos?: A look at hope and positive problem orientation. *Cognitive Therapy and Research, 37*(6), 1285–1293. https://doi.org/10.1007/s10608-013-9572-x

Cheavens, J. S., Cukrowicz, K. C., Hansen, R., & Mitchell, S. M. (2016). Incorporating resilience factors into the interpersonal theory of suicide: The role of hope and self-forgiveness in an older adult sample. *Journal of Clinical Psychology, 72*(1), 58–69. https://doi.org/10.1002/jclp.22230

Chehil, S., & Kutcher, S. P. (2012). *Suicide risk management: A manual for health professionals* (2nd ed.). Hoboken, NJ: John Wiley & Sons.

Dangel, T. J., Webb, J. R., & Hirsch, J. K. (2018). Forgiveness and suicidal behavior: Cynicism and psychache as serial mediators. *The Journal of Psychology, 152*(2), 77–95. https://doi.org/10.1080/00223980.2017.1408555

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

Deci, E. L., & Ryan, R. M. (2012). *Self-determination theory.* Retrieved June 18, 2018, from Rochester University, Self-Determination Theory Website: http://www.psych.rochester.edu/SDT.

Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society B, 359*, 1367–1377. https://doi.org/10.1098/rstb.2004.1512

Gotzsche, P. C., & Gotzsche, P. K. (2017). Cognitive behavioral therapy halves the risk of repeated suicide attempts: Systematic review. *Journal of the Royal Society of Medicine, 110*(10), 404–410. https://doi.org/10.1177/0141076817731904

Grewal, P. K., & Porter, J. E. (2007). Hope theory: A framework for understanding suicidal action. *Death Studies, 31*(2), 131–154. https://doi.org/10.1080/07481180601100491

Gvion, Y., & Apter, A. (2012). Suicide and suicidal behavior. *Public Health Review, 34*, 1–20.

Hefferon, K., & Boniwell, I. (2011). *Positive psychology theory, research, and applications*. New York, NY: McGraw-Hill.

Heisel, M. J., Neufeld, E., & Flett, G. L. (2016). Reasons for living, meaning in life, and suicide ideation: Investigating the roles of key positive psychological factors in reducing suicide risk in community-residing older adults. *Aging & Mental Health, 20*(2), 195–207. https://doi.org/10.1080/13607863.2015.1078279

Huffman, J. C., DuBois, C. M., Healy, B. C., Boehm, J. K., Kashdan, T. B., Celano, C. M., … Lyubomirsky, S. (2014). Feasibility and utility of positive psychology exercises for suicidal inpatients. *General Hospital Psychiatry, 36*, 88–94. https://doi.org/10.1016/j.genhosppsych.2013.10.006

Joiner, T. E. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.

Joiner, T. E., Pettite, J. W., Perez, M., Burns, A. B., Gencoz, T., Gencoz, F., & Rudd, M. D. (2001). Can positive emotion influence problem-solving attitudes among suicidal adults? *Professional Psychology: Research and Practice, 32*(5), 507–512. https://doi.org/10.1037//0735-7028.32.5.507

Kleiman, E. M., Riskind, J. H., & Schaefer, K. E. (2014). Social support and positive events as suicide resiliency factors: Examination of synergistic buffering effects. *Archives of Suicide Research, 18*, 144–155. https://doi.org/10.1080/13811118.2103.826155

Klonsky, E. D., Kotov, R., Bakst, S., Rabinowitz, J., & Bromet, E. J. (2012). Hopelessness as a predictor of attempted suicide among first admission patients with psychosis: A 10-year cohort study. *Suicide and Life-Threatening Behavior, 42*(1), 1–10. https://doi.org/10.1111/j.1943-278X.2011.00066.x

Kuehn, B. M. (2014). Rates of suicide increases in middle age: Primary care key to suicide prevention. *Journal of the American Medical Association, 312*(17), 1727–1728. https://doi.org/10.1001/jama.2014.12816

Krysinska, K., Lester, D., Lyke, J., & Corveleyn, J. (2015). Trait gratitude and suicidal ideation and behavior: An exploratory study. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 36*(4), 291–296. https://doi.org/10.1027/0227-5910/a000320

Linehan, M. M., Goodstein, J. L., Nielsen, S. L., & Chiles, J. A. (1983). Reasons for staying alive when you are thinking of killing yourself: The reasons for living inventory. *Journal of Consulting and Clinical Psychology, 51*(2), 276–286.

Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York, NY: Guildford Press.

Neece, C. L., Berk, M. S., & Combs-Ronto, L. A. (2013). Dialectical behavior therapy and suicidal behavior in adolescence: Linking developmental theory and practice. *Professional Psychology: Research and Practice, 44*(4), 257–265. https://doi.org/10.1037/a0033396

O'Connor, R. C. (2011). Towards an integrated motivational-volitional model of suicidal behaviour. In R. C. O'Connor, S. Platt, & J. Gordon (Eds.), *International handbook of suicide prevention: Research, policy, & practice* (pp. 181–198). Chichester: Wiley-Blackwell.

O'Connor, R. C., & Kirtley, O. J. (2018). The integrated motivational-volitional model of suicidal behaviour. *Philosophical Transactions of the Royal Society B, 373*, 20170268.

Osman, A., Downs, W. R., Kopper, B. A., Barrios, F. X., Baker, M. T., Osman, J. R., … Linehan, M. M. (1998). The Reasons for Living Inventory for Adolescents (RFL-A): Development and psychometric properties. *Journal of Clinical Psychology, 54*(8), 1063–1078.

Patterson, A., & Holden, R. (2012). Psychache and suicide ideation among men who are homeless: A test of Shneidman's model. *Suicide and Life-Threatening Behavior, 42*, 147–156. https://doi.org/10.1111/j.1943-278X.2011.00078.x

Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.

Seligman, M. E. P., & Csikszentmihalyi, M. (Eds.) (2000). Positive psychology—An introduction. *American Psychologist*, *55*, 5–14. https://doi.org/10.1037/0003-066X.55.1.5

Shneidman, E. (1993). *The suicidal mind*. New York, NY: Oxford University Press.

Snyder, C. R. (1994). *The psychology of hope: You can get there from here*. New York, NY: Free Press.

Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry, 13*, 249–275.

Stanley, B., Brown, G., Brent, D., Wells, K., Poling, K., Curry, J., … Hughes, J. (2009). Cognitive behavior therapy for suicide prevention (CBT-SP): Treatment model, feasibility and acceptability. *Journal of the American Academy of Child & Adolescent Psychiatry, 48*(10), 1005–1013.

Troister, T., & Holden, R. (2012). A two-year prospective study of psychache and its relationship to suicidality among high-risk undergraduates. *Journal of Clinical Psychology, 68*, 1019–1027. https://doi.org/10.1002/jclp.21869

Tucker, R. P., & Wingate, L. R. (2014). Basic need satisfaction and suicidal ideation: A self-determination perspective on interpersonal suicide risk and suicidal thinking. *Archives Suicide Research, 18*(3), 282–294. https://doi.org/10.1080/13811118.2013.824839

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E. (2010). The interpersonal theory of suicide. *Psychological Review, 117*(2), 575–600. https://doi.org/10.1037/a0018697

Vincent, P. J., Boddana, P., & MacLeod, A. K. (2004). Positive life goals and plans in parasuicide. *Clinical Psychology & Psychotherapy, 11*, 90–99.

Wetzel, R. D., & Reich, T. (1989). The cognitive triad and suicide intent in depressed in-patients. *Psychological Reports, 65*, 1027–1032.

Wingate, L. R., Burns, A. B., Gordon, K. H., Perez, M., Walker, R. L., Williams, F. M., & Joiner, T. E. (2006). Suicide and positive cognitions: Positive psychology applied to the understanding and treatment of suicidal behavior. In T. E. Ellis (Ed.), *Cognition and suicide: Theory, research, and therapy* (pp. 261–283). Washington, DC: American Psychological Association. https://doi.org/10.1037/11377-012

World Health Organization [WHO]. (2016). *Suicide* [Fact sheet]. Retrieved from http://www.who.int/mediacentre/factsheets/fs398/en/.

Zhou, L., Chen, J., Liu, X., Lu, D., & Su, L. (2013). Negative cognitive style as a mediator between self-compassion and hopelessness depression. *Social Behavior and Personality, 41*(9), 1511–1518. https://doi.org/10.2224/sbp.2013.41.9.1511

Chapter 2
Future-Oriented Constructs and Their Role in Suicidal Ideation and Enactment

Olivia J. Kirtley, Ambrose J. Melson, and Rory C. O'Connor

Introduction

Philosopher Friedrich Nietzsche wrote that 'the future influences the present just as much as the past'. Numerous studies have demonstrated that individuals experiencing suicidal ideation struggle with recalling autobiographical memories (Williams & Broadbent, 1986) and that this may negatively impact individuals' ability to think about their future (Williams et al., 1996; 2007). Furthermore, those who are suicidal are less able to generate positive thoughts about the future, relative to individuals who are not suicidal (MacLeod et al., 1997; O'Connor et al., 2008). Individuals who are suicidal are, therefore, trapped in limbo; their past self is inaccessible and, simultaneously, their future, or at least any semblance of a positive future, is unimaginable. The future, it would seem, is as distant and inaccessible as the past.

In as much as an absence of positive future thinking can be pernicious and increase a person's likelihood of becoming suicidal, the presence of positive future thoughts and specific beliefs in a changeable future (future orientation) can be protective. Future orientation is a broad construct, but it also encompasses other 'microconstructs', including future thinking, optimism, hope, and goal-directedness (Hirsch, Wolford, et al., 2007). Future orientation is, however, greater than simply

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the sum of its parts; it is a specific belief in a changeable future (Chang et al., 2013). Hopefulness is a cognitive set proposed to comprise three elements: goals, mechanisms of achieving such goals, and the motivation to strive for these goals (Snyder et al., 1991), whereas optimism is a more general and non-specific sense of positive future possibilities (Carver & Scheier, 2014). The absence of future orientation, in all its various forms, has been highlighted as having a deleterious relationship with suicidal ideation and behaviour.

Suicide research and prevention have traditionally maintained a strong focus on psychiatric disorders as being central to the development of suicidal behaviour (Mann, Waternaux, Haas, & Malone, 1999). A shift away from psychiatric models and towards prioritising a broader array of psychosocial risk and protective markers, including future orientation, has much to offer. There is much appeal in the transdiagnostic nature of these constructs, which represent multifaceted targets for intervention and treatment development that could mitigate risk of suicide.

Among the general population, greater ability to conceive of a positive potential future is related to higher subjective wellbeing (Macleod & Conway, 2007). For example, among individuals with chronic pain—a population at elevated risk of suicide (Tang & Crane, 2006; Tang et al., 2016)—difficulties reconciling a desired future self with their actual self are associated with greater presence of depressive symptoms (Morley, Davies, & Barton, 2005). Yet, the protective effects of future orientation, such as future thinking, optimism, and hopefulness, remain largely overlooked in suicide research. Virtually everyone asks the question, 'why do individuals who are suicidal want to die?', but too few consider the opposite question, 'why do individuals who are suicidal want to live?' (Hirsch, Wolford, et al., 2007; Malone et al., 2000). Whether an individual will die by suicide or not is more than a simple scoreboard of reasons to die and reasons to live; it is the two elements in combination (Gutierrez, 2006; Jobes & Mann, 1999).

Within this chapter, we will discuss the literature around suicide risk and its relation to the future-oriented constructs of goal setting, future thinking, optimism, and hopefulness. We begin by situating these constructs within the context of three contemporary theoretical frameworks of suicide: the Interpersonal-Psychological Theory of Suicide (IPT; Joiner, 2005; Van Orden et al., 2010), the Integrated Motivational-Volitional Model of Suicide (IMV; O'Connor, 2011; O'Connor & Kirtley, 2018), and the Three Step Theory of Suicide (3ST; Klonsky & May, 2015). There are many other models of suicide (e.g. Baumeister's (1990) Escape Model of Suicide); however, we focus here on the IMV, IPT, and 3ST, as they have been the focus of substantial attention in contemporary suicidological research within the last decade. This theoretical perspective allows us to better understand how future-oriented constructs relate to other key variables of interest. We then describe the literature that underpins the relationship between suicide and each of these constructs, in turn. Finally, we make suggestions for potentially fruitful avenues for future research in this area and highlight some examples of interventions with a future-oriented focus.

Future-Oriented Constructs Within Contemporary Theoretical Frameworks of Suicide

The Interpersonal-Psychological Theory of Suicide (IPT; Joiner, 2005; Van Orden et al., 2010)

Joiner's IPT model of suicide consists of three main elements: thwarted belongingness, perceived burdensomeness, and acquired capability (encompassing fearlessness about death and elevated physical pain tolerance) (Van Orden et al., 2010). According to the theory, each of these elements may be present in isolation; however, it is only when all three exist concurrently that a suicide attempt may ensue (Ribeiro & Joiner, 2009). Future-oriented constructs are not specifically characterised within the IPT; however, hopelessness has been found to independently interact with both thwarted belongingness and perceived burdensomeness (Christenson et al., 2013) and has been studied widely for approximately 50 years (O'Connor & Nock, 2014). Rasmussen and Wingate (2011) also found that optimism moderates the relationship between suicidal ideation and both thwarted belongingness and perceived burdensomeness, even when controlling for depressive symptoms.

The Integrated Motivational-Volitional Model of Suicide (IMV; O'Connor, 2011; O'Connor & Kirtley, 2018)

The IMV (O'Connor, 2011; O'Connor & Kirtley, 2018) model is a contemporary tripartite model that seeks to explain the transition from suicidal thoughts to suicidal behaviour. The pre-motivational phase of the model centres on a diathesis-stress paradigm (Hawton & Van-Heeringen, 2009; Van Heeringen, 2012), in which pre-existing vulnerability combines with acute life stress to increase the likelihood that an individual will think (ideate) about suicide. Central to the motivational phase of the model are experiences of defeat, humiliation, and entrapment, as a final common pathway towards developing the intention to act upon suicidal thoughts. Future-oriented constructs of future thinking and goals are specifically included within the IMV model as motivational moderators, the presence or absence of which inhibits or facilitates the transition from feelings of entrapment to forming the intention to make a suicide attempt. The final phase of the model, the volitional phase, describes variables that differ between individuals who ideate about suicide (but do not make an attempt) and those who act upon their thoughts of suicide and attempt to end their life.

The Three Step Theory (3ST; Klonsky & May, 2015)

The 3ST (Klonsky & May, 2015) is the latest addition to the theoretical landscape in suicidology and comprises three elements: the combination of pain (physical and/or emotional) and hopelessness, a sense of connectedness outweighed by pain, and the capability for attempting suicide (Klonsky & May, 2015). These elements represent a stepped dose-response pathway through ideation, strong ideation, and suicide attempt, respectively; only when all three elements are combined will a suicide attempt occur. Of particular relevance for the current chapter is the idea that in the presence of pain, a person who feels hopeful about the future will be less likely to develop suicidal ideation (Klonsky & May, 2015).

Overall, however, among the majority of contemporary theories of suicidal ideation and behaviour, future-oriented constructs receive short shrift. Only the IMV model (O'Connor, 2011; O'Connor & Kirtley, 2018) and the 3ST (Klonsky & May, 2015) explicitly characterise future orientation. Noticeably, research that has focused upon future thinking, goals, hopefulness, and optimism has yet to tease apart whether these constructs are differentially associated with suicidal ideation or enactment; consistent with the IPT and IMV model, the ideation to action framework is now a key guiding principle for all suicide research (Klonsky & May, 2014).

Future Thinking

A pervasive misconception among the general population is that individuals who are suicidal have more negative thoughts regarding the future. It is not, however, a greater volume of negative thoughts that characterises those who are suicidal; rather, it is a dearth of positive thoughts about the future that appears to be most pernicious (MacLeod et al., 1997; O'Connor, Connery & Cheyne, 2000). MacLeod and colleagues developed the Future Thinking Task (FTT; MacLeod et al., 1997), a novel way of assessing individuals' ability to generate positive and negative thoughts about the future whereby individuals are asked to generate their own responses to the questions 'what are you looking forward to in the next week/next month/next 5–10 years?' Negative future thoughts are assessed by asking 'what are you not looking forward to….?' Numbers of positive and negative future thoughts are totalled and compared. Conceptualisations of future orientation for individuals experiencing psychological distress often describe a more global negative outlook; for example, Beck's Cognitive Triad that describes a negative view of the self, world, and future, or the Beck Hopelessness Scale (BHS) that assesses broad feelings about the future, loss of motivations, and expectations (Beck et al., 1974). The work of MacLeod et al. (1997) may suggest, however, that the absence of positive future thinking may be less global, and more specific to individual-level future thinking.

To this end, MacLeod and Conway (2007) investigated future thinking ability in controls who had never engaged in suicidal behaviour, comparing them to individuals

with a 'parasuicidal[1]' behaviour history. The FTT was adapted to ask participants to generate positive thoughts about the future in relation to themselves, others, and 'shared' future thoughts (items that were repeated in both self and other categories). No significant differences were found between individuals in the parasuicide and control groups in their ability to generate positive future thoughts for others; however, those in the parasuicidal group generated significantly fewer positive future thoughts in relation to themselves, as well as fewer positive future thoughts that had a shared self-other component (MacLeod & Conway, 2007). Potentially, this suggests that the positive future thinking deficit is not pervasive. Individuals who are suicidal are able to envisage positive future outcomes; however, they are not able to do so in relation to themselves. Previous evidence also supports the idea that there is something about the self-referent nature of positive future thinking that is especially problematic for suicidal individuals. Vincent et al. (2004) examined ability to generate positive future goals and the means to achieving them in a sample of non-suicidal controls and those who had engaged in parasuicidal behaviour. Contrary to many prior (and subsequent) studies, there were no significant between-group differences in the number of goals generated. Those in the parasuicide group, however, rated both their control over achieving their goals and the likelihood of them being achieved, as significantly lower (Vincent et al., 2004). Findings from Vincent et al. (2004) ought to be interpreted cautiously given the small sample size ($n = 24$ in each group), but the idea that it is not just difficulties generating the positive future goal itself, but also the means of achieving it, is an important insight. This is also a theme which is echoed in recent research examining rumination about events or goals in the future (i.e. future-oriented repetitive thoughts).

The Future-oriented Repetitive Thought scale (FoRT; Miranda et al., 2017) comprises three subscales assessing pessimistic repetitive future thinking, repetitive thinking about future goals, and positive indulging about the future. Individuals with a lifetime history of a suicide attempt reported higher levels of pessimistic repetitive future thinking than those with no history of suicide attempt, but those without a suicide attempt history scored *lower* on repetitive thinking about future goals and positive indulging about the future. A similar pattern was observed when examining individuals with suicidal ideation, although no significant differences in positive indulging were found (Miranda et al., 2017). When examining the content of the repetitive thinking of future goals subscale, items include: 'I think about how to accomplish my future goals' and 'I make specific plans for how to get the things I want in life', all aspects that relate to the mechanisms by which goals can be achieved. Consistent with the findings of Vincent et al. (2004), it appears that those who are suicidal are also less able to think of the means by which a positive future event may be brought about. Problem-solving ability has been consistently highlighted as impaired in those who are suicidal (Linda, Marroquín, & Miranda, 2012; McAuliffe et al., 2005; Pollock & Williams, 2004). One avenue for future

[1] Parasuicide is a term previously used to refer to self-harm. According to current definitions used by the UK National Institute of Health and Care Excellence (NICE, 2004; 2011), self-harm is 'self-injury or self-poisoning irrespective of suicidal intent'.

research may be to explore the potential interaction between problem-solving skills and positive future thinking ability in those who are suicidal. It may be that positive future thinking ability could be enhanced by boosting problem-solving skills, so that the means by which one may achieve a desired positive future goal are more easily accessible to individuals when in a vulnerable psychological state.

Feelings that one is defeated and trapped with no prospect of rescue are all factors associated with suicidal ideation and behaviour (Williams, 1997); however, recent research has shown that these variables are not the most important in distinguishing between suicidal ideation and behaviour (Dhingra, Boduszek, & O'Connor, 2015, 2016). It is easy to see how individuals who feel trapped and defeated may struggle to envisage a positive future, particularly when they are experiencing low mood. Two experimental studies of healthy adults (n = 39; n = 70) assessed future thinking following administration of a brief negative mood induction, during which participants listened to a piece of slow, classical music and were presented with sentences such as 'just when I think things are going to get better, something else goes wrong' (O'Connor & Williams, 2014). The first study assessed whether brooding rumination moderated the relationship between negative mood and positive future thinking, finding that individuals high on brooding exhibited a more marked decrease from pre-mood induction baseline in the number of positive future thoughts they could generate. In Study 2, participants were again administered the negative mood manipulation and then assigned to receive either an impossible anagram task (defeat condition) or a solvable anagram task (control condition), followed by assessment of positive future thinking ability. Participants were also assessed for the presence of depressive symptoms and feelings of entrapment. Individuals who experienced the defeat manipulation and scored high on entrapment generated fewer positive future thoughts than those who scored low on entrapment (O'Connor & Williams, 2014). The directionality of this relationship should be explored further; it is also possible that inability to imagine a positive potential future may exacerbate or even directly contribute to feelings of entrapment and defeat.

Thoughts about the future can take many different forms. For example, one can look forward to an interpersonal event, such as meeting a friend for dinner or going on holiday with one's family, but it is also possible to look forward to things that are more individual (intrapersonal), such as gaining proficiency in a language, or enhancing one's ability to cope with stressful life events. Just as the valence of future thoughts may differ between individuals who are suicidal and those who are not, so too may the content of future thoughts. Prospective work by O'Connor, Smyth, and Williams (2015) has taken a more nuanced approach to teasing apart the nature of positive future thoughts and their relationship to suicidal behaviour. In a sample of 388 individuals admitted to hospital following a suicide attempt, patients completed the FTT (MacLeod et al., 1997) among other measures of depression and hopelessness. Participants' FTT responses were evaluated based on whether the positive future thoughts they generated were *intra*-personal (relating to improving a personal attribute) or *inter*-personal (relating to other people). Results from multivariate analyses showed that individuals with *highe*r levels of intra-personal