

Chapter 9

Future-Oriented Treatments for Suicide: An Overview of Three Modern Approaches



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Suicide leads to over 800,000 deaths a year worldwide (World Health Organization, 2014). As an important public health concern, it is not surprising that researchers have sought to identify constructs, including protective factors, which are related to suicide risk. Future-oriented cognitions, as either potential risk or protective factors for suicide, may be important targets for interventions. Indeed, the role of future thinking has long played a role in theories of depression and suicide. Negative views of the future, lack of control of future events, negative expectancies, helplessness, and hopelessness have all been theorized to be positively related to depression and suicide risk (Abramson, Metalsky, & Alloy, 1989; Beck, 1972; Beck, Steer, Kovacs, & Garrison, 1985; Seligman, 1975). More recently, greater attention has been paid to the role of positive future cognitions in relation to suicide. Findings have indicated that positive future thinking, such as optimism, hope, and future orientation, may serve as important protective factors against suicide and are inversely related to suicide risk (e.g., Chang et al., 2017; Chang, Yu, Kahle, Jeglic, & Hirsch, 2013a; Cheavens, Cukrowicz, Hansen, & Mitchell, 2016; Hirsch, Conner, & Duberstein, 2007; Hirsch & Kelliher Rabon, 2015; Hirsch, Nsamenang, Chang, & Kaslow, 2014; Huffman et al., 2016).

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In this chapter, treatments that focus on future-oriented cognitions for suicidal behavior are discussed. Specifically, three individual treatments for suicidal behavior and suicide-related correlates (e.g., depression) are highlighted, including the theoretical background, model, application, and future directions of each treatment intervention. Hope Therapy is an intervention designed to increase hopeful thought without regard to specific diagnoses or type of presenting problem. Future-Directed Therapy is an intervention developed for the treatment of depression, focusing on increasing positive expectations about the future. Given the utility of this intervention for depression, a common precursor and a risk factor for suicide, it may help to inform development of future-oriented therapies specific to suicide. Finally, Future-Oriented Group Training for Suicidal Patients is an adjunctive intervention to supplement traditional therapies and is used to address suicidal ideation or risk.

Hope Therapy

Theoretical Background

Snyder and colleagues (Snyder et al., 1991) defined hope as the synthesis of pathways thinking, the belief that one can generate various routes that successfully connect the present to a desired future, and agency, the perception that one can successfully use said routes to reach goals. Goals are central in this conceptualization of hope (Snyder, 1994, 2002; Snyder, Cheavens, & Sympson, 1997); goals are the mental endpoints of hopeful thought and, according to these theorists, account for the variability in within-person hope. In the context of Hope Theory (Snyder, 2002), emotions are outcomes of the goal pursuits; successful goal pursuits result in positive emotions, and unsuccessful goal pursuits lead to negative emotions (Snyder et al., 1996; Snyder, Rand, & Sigmon, 2018). One's trait level of hope develops over time as the individual generates a history of goal successes and failures and develops thoughts about his or her role in these goal outcomes (Snyder, 1994, 2002). A history of goal pursuit successes should lead to beliefs that one can attain goals by using multiple clear routes to those goals and by maintaining the determination to complete the goal process. Additionally, this pattern, over time, should lead to the frequent experience of joy, happiness, and pride. Alternatively, a history of failure to meet important goals likely results in doubts about one's ability to successfully maneuver through challenges that are relevant to goal pursuits. Such a pattern is likely associated with the frequent experience of negative emotions, including frustration, sadness and, eventually, shame, despair, and hopelessness. In this way, goal pursuit outcomes and the associated emotional experiences interact with one another and forge individual differences in hope (Cheavens & Ritschel, 2014).

In the context of Hope Theory, suicide and the associated behaviors could be conceptualized as either goal or pathway. In terms of conceptualizing suicide as a goal, someone who has had a history of hopelessness, depression or other forms of

psychopathology, trauma, or other psychological or physical stressors might come to believe that suicide is a reasonable goal and move suicide to the top of one's goal hierarchy. Many investigators have demonstrated that hope is inversely associated with suicidal ideation such that at lower levels of hope, participants report higher levels of suicidal ideation (e.g., Cheavens et al., 2016; Davidson, Wingate, Rasmussen, & Slish, 2009). If suicide is the specified goal, the person would engage in pathways thinking to generate a suicide plan and acquire lethal means, while simultaneously engaging in agentic thinking to shore up determination to use the developed pathways. In this model, pathways thinking maps onto suicide plans and the lethality of the method, while agency thinking would be most relevant to intent. In early writings, Snyder (1994) suggested that suicide could be considered one's "last act of hope," as death by suicide requires a goal as well as sufficient amounts of both pathways and agency thinking. Several recent investigations show that while hope is negatively associated with suicidal ideation (e.g., Cheavens et al., 2016; Davidson et al., 2009), it is positively associated with acquired capability for suicide (e.g., Anestis, Moberg, & Arnau, 2014; Mitchell, Cukrowicz, Van Allen, & Seegan, 2015). This pattern of findings suggests that hope might be a protective factor associated with reduced risk of setting suicide as a goal, but once an individual with high hope engages in suicidal ideation or sets suicide as a goal, they may be more likely to generate and commit to viable pathways toward that goal.

It is also possible to conceptualize suicide and related behaviors as pathways to other goals. Nock and Prinstein (2004) posited that non-suicidal self-injury (NSSI) primarily functions to regulate emotions (either increase or decrease the experience of emotion) or regulate social environments (either escape from an aversive task/punishment or gain attention or support). Each of these functions can be conceptualized as a desired goal, and NSSI and other suicide-relevant behaviors as pathways that, albeit ineffective in the long-term, could bring an individual closer to each of these goals. For example, telling others about suicidal ideation and plans might be a pathway to communicating pain, distress, and a need for support. Similarly, given that individuals who engage in NSSI often report emotional relief following NSSI (Klonsky & Glenn, 2009), it might be considered a pathway for that goal. Theoretically, within the context of Hope Theory, when considering intervention strategies, it is important to determine whether suicide and suicide-relevant behaviors are best classified as a goal or pathway, and to determine the best means of substituting adaptive, life-affirming goals for suicidal goals.

Application of Hope Therapy

Hope Therapy was designed to increase hopeful thought, without regard to specific diagnoses or type of presenting problem. Hope Therapy interventions include targets in three domains: (1) pathways generation, (2) agency enhancement and maintenance, and (3) goal-setting. Goal-setting, although not directly measured in the

Hope Scale (Snyder et al., 1991), is an important component of Hope Theory and Hope Therapy. Pathways and agency interventions are easier to enact and tend to be more successful when they are in the context of well-specified goals (Snyder, 2002). With Hope Theory, Snyder (1994) posited that the most hopeful goals are those that are approach oriented, have measurable endpoints, and include sub-goals. These goal characteristics allow for celebration of progress across the course of a goal pursuit as the person gets feedback (from measurable endpoints) along the way (sub-goals) for intrinsically and extrinsically rewarding goals that capitalize on forward movement (approach oriented). Thus, Hope Therapy interventions are designed to help people set and meet these types of goals. Additionally, attending to whether goals are in concordance with one's values is an important part of goal-setting lessons in Hope Therapy.

In terms of pathways interventions, the primary goal in Hope Therapy is to teach participants to generate multiple, workable routes to their non-suicidal goals while anticipating potential obstacles and set-backs. Evidence suggests that higher hope is associated with generating more pathways in response to both personal (Snyder et al., 1991) and standardized (Heiy, Feldman, Rand, & Cheavens, 2015) goals. Relatedly, the first pathways skill addressed in Hope Therapy is generation of pathways. This is typically accomplished through brain-storming techniques that allow participants to be open to myriad possibilities for goal solutions without judgment of any particular possibility. After several pathways have been generated, the focus moves to selecting primary pathways, such that the participant is able to focus attention on the route(s) most likely to lead to goal completion. Another critical component of the pathways interventions is the identification of potential obstacles or difficulties for any given pathway to a goal. Individuals with low hope often stop at the pathway generation phase and fail to plan for difficulties that may arise during goal pursuit, and therapeutic efforts are made to change this pattern. The cumulative objective of developing pathways skills is a goal-mapping exercise in which participants create a visual display of their goals, including the identification of pathways most likely to lead to successful goal completion, and addressing, pro-actively, potential obstacles and responses to obstacles for each pathway.

Agency interventions in Hope Therapy, which are aimed at igniting and sustaining determination and motivation, are adapted from Cognitive Behavioral Therapy (Beck, Rush, Shaw, & Emery, 1979). Agency is required to use the pathways that have been generated and maintain effort through goal completion, even when progress is slow. One agency enhancement intervention is targeting goal-relevant self-talk that undermines progress. For example, individuals with low agency may be in the habit of saying things to themselves such as, "I won't be able to do this," or "This will be too hard." To build agency, participants are asked to examine the evidence for these thoughts, recall successful past goal pursuits (even as small as making it to the Hope Therapy sessions), and turn their minds toward agency-enhancing thoughts such as "Although it may be difficult, I know I can accomplish this goal." In addition to targeting self-talk, agency-relevant interventions also aim to increase overall energy levels, via promotion of physical self-care (e.g., sleep, exercise, eating).

Hope Therapy was initially tested as a group therapy delivered over several weeks (8 weeks, Cheavens, Feldman, Gum, Michael, & Snyder, 2006; 11 weeks, Klausner et al., 1998); however, since that time, many variations have been tested, including brief one-session interventions (e.g., Feldman & Dreher, 2012). Tests of Hope Therapy in community (Cheavens et al., 2006), college-student (Feldman & Dreher, 2012), older adult (Klausner et al., 1998), and medically compromised (Thornton et al., 2014) samples suggest that hope interventions result in changes of self-reported levels of hope although these changes are, at times, limited to changes in either pathways (Thornton et al., 2014) or agency (Cheavens et al., 2006). For a more comprehensive review of Hope Therapy, see Cheavens and Guter (2018).

Adapting Hope Therapy to Target Suicide Behaviors

It is important to start this section by acknowledging that Hope Therapy has not been tested specifically with individuals struggling with suicide and associated behaviors. Thus, while it is tempting to assume that Hope Therapy might be useful for these targets, based on evidence that hope is inversely associated with suicidal ideation (e.g., Cheavens et al., 2016) and Hope Therapy results in increases in hope (e.g., Cheavens et al., 2006; Feldman & Dreher, 2012; Thornton et al., 2014), this needs to be tested in future work. Here, we provide thoughts on the ways in which Hope Therapy might be useful in decreasing NSSI, as well as suicidal ideation, plans, and intent, with the hope that these suppositions will be tested in future work.

People tend to have several goals at any given time. Suicide may become a primary goal when progress on other important goals has been unsuccessful or impeded in some way. For example, Joiner (2005) proposed that suicidal ideation (i.e., suicide as a goal) emerges when someone experiences blockages in the goals to belong (i.e., thwarted belongingness) and live in ways that contribute as much to others as they receive (i.e., perceived burdensomeness). Sustained blockages in these goals may lead an individual to develop thoughts about suicide and, eventually, come to set suicide as a goal with specific plans and acquired capabilities for enacting these plans. In this example, a health service professional providing Hope Therapy would likely want to shift patient focus from the goal of suicide to other valued goals.

Six life domains involving hope have been outlined, namely social relationships, academics, romantic relationships, family life, work, and leisure activities (see Lopez, Ciartelli, Coffman, Stone, & Wyatt, 2000). Increasing belongingness, social activity, contributions to one's environment, and competence are all hopeful goals that may be used to replace suicide-related goals. If the perceived blockage of hopeful goals is associated with the individual moving to another goal (i.e., suicide), one way to intervene would be to reframe lack of progress on non-suicidal goals as an addressable challenge (i.e., positive problem orientation; D'Zurilla & Nezu, 2006). Indeed, Chang et al. (2013b) found that positive problem solving buffered the inverse association between low levels of hope and suicidal ideation and behaviors. Efforts could also be made to promote skills related to goal-setting, pathways

generation, and agency enhancement, which may enhance ability to engage in positive problem orientation and view perceived goal blockages as challenges. For example, someone who has experienced a thwarted need for belongingness might benefit from revisiting the goal of belongingness and working to characterize that goal within the hope framework. This person might work with the therapist to set measurable endpoints, develop sub-goals, and elucidate ways in which this goal fits into one's larger network of goals and values (Cheavens & Guter, 2018). Further, the therapist (and other group members, if in group) could help this person generate many pathways to move toward the goal of increased belongingness. Narrowing down to approximately three viable pathways would allow for anticipating obstacles along the way and developing responses to potential obstacles that permit continued use of the primary pathways. Finally, the therapist would want to address agency enhancement and maintenance. Particularly, for goals that have been experienced as thwarted or blocked in some way, it can be difficult for someone to maintain determination to keep trying and moving forward. It is important for therapists to maintain their own sense of agency for a client's goals and avoid joining the clients in thoughts that sap agency.

If suicidal ideation or other suicide-relevant behaviors (e.g., NSSI) are functioning as a pathway to another goal (e.g., escape from pain, communication to others), then the focus of the intervention might be more heavily weighted toward pathway generation and choice. Presumably, someone has selected the suicide-relevant pathways for one of several reasons. First, thinking of suicide as a means to escape difficult circumstances or engaging in NSSI can provide immediate relief from psychological distress (Klonsky & Glenn, 2009). Thus, as a pathway for the goal of reducing distress, these behaviors are likely strongly negatively reinforced. Second, it can be difficult to engage in pathways thinking while experiencing strong emotions. Decades of research suggests that intense negative emotion narrows attentional focus (Caccioppo, Berntson, & Crites, 1996), which works against the broad and flexible cognitive processing required for pathways thinking. Third, particularly if suicidal ideation and/or NSSI are chronic, engaging in pathways thinking is likely more difficult than engaging in habitual behavior. Thus, a therapist working in the context of Hope Therapy could, along with the aid of other group members as appropriate, assist in generating and narrowing (e.g., pros/cons) alternative pathways, identifying several primary, non-suicidal pathways to which the individual could commit in the upcoming weeks. Attention should be paid to potential obstacles to these pathways and viable work-arounds of those obstacles, as disruptions in progress may be associated with returning to suicide as a pathway. Although the focus in these interventions may be primarily on pathways, it would still likely be important to address agency and goal-setting skills to increase the likelihood of successfully using the generated pathways. Indeed, in Hope Therapy, cognitive-behavioral skills and strategies are utilized to increase self-care, and goal-related self-talk (e.g., positive statements like "I believe I can do this") and motivation (Cheavens & Guter, 2018). Taken together, Hope Therapy provides a foundation for interventions focused on increasing future-oriented cognitions and has strong potential benefits for use with suicidal individuals. Further work is needed to adapt Hope

Therapy for specific usage in addressing suicidality and its psychopathological correlates, including depression.

Future-Directed Therapy for Depression

Theoretical Background

The role of future thinking has long played a role in theories of depression. Beck's theory of the cognitive triad of depression posited that people with depression have a negative view of the future (Beck, 1972). Seligman (1975) believed depression resulted when people felt they did not have control over the negative events in their future; and, Abramson hypothesized that depression was the result of a combined negative and helpless expectancy (Abramson et al., 1989). These theories were unified by the view that depression was the result of negative expectations. This view was challenged in the mid-1990s, when Andrew MacLeod at Royal Holloway University delineated positive and negative thinking about the future as orthogonal constructs and not polarities of the same dimension. He demonstrated that people with depression did not think more negatively about the future than people without depression but, rather, they produced fewer positive expectations. MacLeod and colleagues concluded that this is not due to an inability of people with depression to anticipate pleasure in general but, rather, a reduced ability to generate positive expectancies about the future (MacLeod & Salaminiou, 2001). Having been replicated many times, this finding has emerged as one of the most robust cognitive indicators in people with depression (e.g., Bjarehed, Sarkohl, & Andersson, 2010; MacLeod & Byrne, 1996; MacLeod & Copley, 1995; MacLeod & Salaminiou, 2001; MacLeod, Tata, Kentish, & Jacobsen, 1997b; Miranda & Mennin, 2007; Stöber, 2000). The revelation that people with depression think less positively about the future maps to biological models that have also emerged over the past several decades, implicating an impairment in reward processing as a marker of depression. Specifically, fMRI imaging of the brain has repeatedly demonstrated that people with depression appear to have reduced functioning in the striatal system during the anticipatory processing of rewards (e.g., Beck et al., 2009; Berman et al., 2009; Juckel et al., 2006; Schlagenhauf et al., 2008, 2009; Stoy et al., 2012; Ströhle et al., 2008; Wrase et al., 2007). In other words, people with depression have an impaired ability to view future events as rewarding and, thus, have less positive expectations about the future.

The ability to engage in behavior directed at positive future outcomes is viewed as an acquired skill (Reading, 2004). Research shows that people with depression tend to have fewer skills that are critical components of future thinking, such as goal-setting, planning, and problem solving, and that those who are skillful in these areas demonstrate a greater sense of well-being (Diener & Emmons, 1984; Emmons, 1992; MacLeod, 2012; MacLeod, Coates, & Heatherton, 2008; Schmuck & Sheldon,

2001). Studies with clinical and non-clinical samples have also shown that teaching goal-setting and planning skills can increase positive future thinking and self-reported subjective well-being and can reduce negative affect and hopelessness (Cheavens et al., 2006; Lyubomirsky, 2008; MacLeod et al., 2004, 2008).

The theoretical premise behind Future-Directed Therapy (FDT) is based on Humanistic models of behavior and has three primary concepts: (1) the desire to thrive is the primary drive of all human beings because it promotes the evolutionary process, (2) thought and behavior are limited resources that humans utilize to promote their thriving, and (3) our emotions provide feedback on our perceived state of thriving.

The concept of thriving is best represented as a part of a continuum that ranges from survival to thriving, similar to that described by Maslow in his Hierarchy of Needs (Maslow, 1999). What humans perceive to be a state of thriving is hypothesized to be subjective and relative. At its most basic level, it begins with physical survival and can eventually progress across the continuum to the development of complex psychological processes, such as self-actualization and self-transcendence. In FDT, increases in thriving are believed to be achieved by actions taken that are born from a desire to close the gap between where one presently is and where one wants to be in the future. In FDT, this desire is viewed as a fundamental drive referred to as the “need to want.” Everything that is wanted is in the future. It is the “need to want” that promotes thriving and the continued evolution of the human experience. No matter how much anyone has, there is always the desire for continuous movement forward toward an increased state of thriving. No one ever reaches a state where the desire to thrive stops. Thought and behavior, from the FDT perspective, are the most powerful resources that humans have, to promote their own thriving. However, due to time constraints (i.e., you can only think and do a certain number of things concurrently), thought and behavior are limited resources. In FDT, the premise is that the more resources that are spent on activities that promote thriving, the better one will feel.

In FDT, it is hypothesized that when people feel they have the power to thrive, by creating a desired future state and obtaining what is wanted, they feel a sense of well-being that leads to emotions such as hope and optimism. When the ability to move forward into a desired future state is hindered in some way, however, the perception is that thriving is being inhibited, and people experience psychological distress, which, if not corrected, can evolve into pathological disorders.

Several unique cognitive models were developed to conceptualize the anticipatory process of human behavior and the cognitive process of reward achievement. In the FDT Anticipatory Cognitive Model of Human Experience (Fig. 9.1), a distinction is made between anticipatory beliefs and the present or past beliefs on which anticipatory assessments are based. It also highlights the anticipatory response process of choice calculation, in which people decide what actions they will take based on what they anticipate will happen in any given situation. Unlike traditional cognitive therapy, in FDT, the focus is on the anticipatory part of the human experience, in understanding both the patient’s problem and where primary interventions occur. If a patient is aware of his/her faulty thoughts about a future situation, then they can be changed before the situation occurs and, potentially, a different outcome can be created.

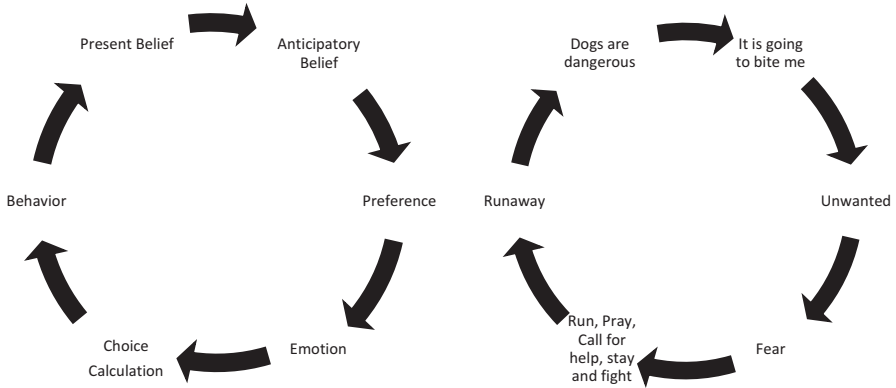


Fig. 9.1 FDT anticipatory cognitive model of human experience



Fig. 9.2 FDT cognitive bias model of reward processing

As faulty reward processing is an identified component of depression, a primary goal of FDT is to help patients identify impaired cognitions related to goal or reward-related behavior. The FDT Cognitive Bias Model of Reward Processing (Fig. 9.2), which represents the cognitive process of reward achievement, is adapted from the combined cognitive biases model (CCBM) of depression (Everaert, Duyck, & Koster, 2014; Everaert, Tierens, Uzieblo, & Koster, 2013). Research has supported the CCBM, showing that diminished attentional control plays a significant role in the maintenance of negative affect, and that people with depression and dysphoria have a negative attentional selection bias and difficulty disengaging from a negative stimulus once they have selected it (i.e., they spend longer processing it; Everaert et al., 2014; De Raedt & Koster, 2010). This model maps to research on reward processing, which shows that during the attentional selection phase, those with dysphoria focus more on the risks and cost associated with the reward. Unlike people without depression, who tend to be biased toward focusing their attention on rewarding and/or positive elements in their environment, people with dysphoria do not develop this positive attentional bias (Brailean, Koster, Hoorelbeke, & De Raedt, 2014). This influences the valuation process in a negative way (e.g., overestimate costs) and can lead to decisions to avoid taking action or exerting effort, which increases the likelihood of a negative outcome (e.g., does not get reward). As negative outcomes are learned, an expectation develops through which attainment of future same or similar potential rewards are processed, and which then guides attention selection toward risks and costs.

Treadway and colleagues have suggested that anergic and anhedonic behavioral patterns commonly observed in the course of a major depressive episode (MDE) may result from a core deficit in cost/benefit decision-making, such that individuals fail to engage in rewarding behaviors because they either overestimate the costs of obtaining rewards, under-estimate the anticipated benefits, or simply fail to integrate cost/benefit information in an optimal manner (Treadway, Bossaller, Shelton, & Zald, 2012; Treadway & Zald, 2011). This model uniquely allows the clinician to conceptualize the cost/benefit decision-making process of the patient involved in reward-related behavior and to develop interventions accordingly. For example, when talking about whether to go to a social event (a potentially rewarding future experience), someone with depression may focus on all the things that would go wrong, such as the anxiety of not knowing what to say and appearing awkward to others. The more attention the individual gives to the possibility of a negative experience, the greater the magnitude of the anticipatory anxiety, which is perceived to be a high emotional cost. This focus on the emotional cost may cause the individual to decide that the cost exceeds the potential of the reward and may, ultimately, affect the individual's decision to attend. By being able to conceptualize a patient's emotional experience of future events as a function of attention to cost versus reward, a clinician can guide the patient's attention away from costs by instead focusing their attention on reward using structured exercises such as positive process and outcome visualizations, and by generating solution-oriented tasks that will help an individual influence a situation to achieve a desired outcome, as opposed to exerting mental resources expecting it to turn out badly.

The FDT Cognitive Bias model is consistent with decades of research on goal achievement and motivation, which has demonstrated that reward effort (i.e., behavioral action) is mediated by the cognitive appraisals of reward anticipation, which has two primary components: expectancy regarding the possible outcomes of behaviors or performance (i.e., expectation), and perception of a goal or reward value (i.e., valuation; Berridge, 2004; Clithero, Reeck, Carter, Smith, & Huettel, 2011; Salamone, Correa, Farrar, Nunes, & Pardo, 2009; Sun, Vancouver, & Weinhardt, 2014). Demeyer and De Raedt (2014) recently demonstrated that training dysphoric individuals to have a more expansive future time perspective results in those individuals allocating less of their attentional resources to negative stimulus. They also showed that dysphoric individuals with an enhanced attentional bias for reward have a higher expectation that they can control reward outcomes.

These core models are incorporated into what is referred to as the 4-A achievement model (i.e., Anticipate, Activate, Assess, Act), to conceptualize the relations between valuation, expectation, knowledge, attention, and reward effort, and to promote an understanding of what is preventing action toward goals and where to intervene. In the *anticipation* phase, the individual identifies what they want and how much they want to achieve the goal (valuation), what steps are necessary to achieve the goal and what the obstacles are (knowledge), and what their current beliefs are about their ability to achieve their goal (expectations). Then, the patient *activates* attention to benefits (e.g., journal exercises, worksheets) to increase goal value and attention to obstacles, and to generate implementation plans to overcome perceived

barriers, which has been shown to facilitate action and increase the expectation of success (Oettingen, 2012). In the third phase, the patient *assesses* the planned steps toward their goal, along with their plan to overcome obstacles, and they also determine whether they perceive the *action* necessary to be worth the effort and, if so, they engage in planned actions.

Another unique component of FDT is that it uses affect-biased attention as a direct emotion regulation strategy (Todd, Cunningham, Anderson, & Thompson, 2012), by training patients to self-monitor attentional process and to redirect attention to rewards. Anhedonia, for instance, has been linked to difficulty with sustaining engagement in structures involved in positive affect and reward (i.e., result of impaired attentional control; Heller et al., 2009), and cognitive control over reward processing impacts not only the expectation period but also the reward signals in the outcome period (Staudinger, Erk, Abler, & Walter, 2009). People with depression tend to have difficulty redirecting their attention away from negative stimuli, relative to positive stimuli (De Raedt & Koster, 2010). Recent work has demonstrated that attentional biases may be retrained with instruction, and depressed patients can learn to develop a positive attentional bias that not only improves mood but reduces risk of relapse (Browning, Holmes, & Harmer, 2010; Browning, Holmes, Charles, Cowen, and Hamer, 2012).

FDT is distinct from CBT, in that it does not focus on changing irrational thinking but, rather, focuses on anticipatory thoughts and building effective thought patterns that will maximize likelihood of effort toward achieving a desired future state. The FDT approach is also distinct from Behavioral Activation (BA), which does not incorporate training on cognitive components of expectation and motivation that research has indicated as precursors to decision-making and facilitation of successful reward effort. Finally, FDT is also distinct from these treatments, in that it considers attentional and perceptual processing to be a means of understanding cognitive assessments made by an individual and acknowledges their potential use as a tool in change and emotion regulation processes.

Application of Future-Directed Therapy

Future-Directed Therapy (FDT) was developed as an evolved form of cognitive therapy to map more closely onto the cognitive and biological knowledge that has emerged regarding future thinking and depression. The “future” in Future-Directed Therapy is not necessarily far off in time; it can refer to any point in time beyond the present moment, near or far. Rather, FDT is about understanding that because we can only move forward, most of our thinking and behavior is anticipatory or future oriented. We constantly speculate about what will happen, whether it is in the very next moment, tomorrow, or 5 years from now, and that speculation has a huge impact on how we process information, how we feel about different situations and, ultimately, how we create our lives.

FDT is designed as a full clinical intervention intended to reduce symptoms of depression and improve well-being by promoting a paradigm shift from dwelling on the past, or highlighting one's limitations in the present, toward creating more positive expectancies about the future, by developing and employing a comprehensive and well-defined set of skills. To address the social isolation associated with depression, as well as to employ a format that was conducive to teaching the skill-based nature of material, FDT was originally conceptualized as a group-based intervention, taught in twice-weekly, 90-min sessions, over a 10-week period, in a classroom style setting.

The FDT intervention was developed over a 5-year period, utilizing workshops and focus groups with patients in an outpatient clinical setting at a large urban hospital center. Patients with depression were involved in all aspects of the development, providing feedback on the content and the utility of the material. Two non-randomized clinical studies have been completed using FDT. The first study involved comparing 16 patients in an FDT group with 17 patients treated simultaneously in traditional Cognitive Behavioral Therapy groups. All patients had a confirmed diagnosis of DSM-IV Major Depressive Disorder and were compared pre- and post-treatment (10 weeks) on The Quick Inventory of Depressive Symptoms (QIDS), the Beck Anxiety Inventory (BAI), and the Quality-of-Life Enjoyment and Satisfaction Questionnaire (QLES-Q) short form. Patients treated with FDT demonstrated significant improvements from baseline to post-treatment, with a reduction of symptoms of depression ($p = .001$) and anxiety ($p = .021$), and reported improvement in quality of life ($p = .035$). Additionally, they also reported high satisfaction with the therapy. Both CBT and FDT were found to be effective at treating depression; compared to the CBT group, the FDT group showed greater improvements in depressive symptoms ($p = .049$; Vilhauer et al., 2012).

In a follow-up study that again compared FDT to group-based CBT, the Beck Hopelessness Scale (BHS) was added to assess positive and negative anticipation. In 1 year, 42 patients completed a 10-week, 20-session group therapy program (FDT [$n = 22$], and CBT [$n = 20$]). The controlled factors included the number of sessions (2/week \times 10 weeks /condition), the amount of training and supervision provided to the clinicians on each treatment, and adherence to protocols, which were assessed through periodic observation through a one-way mirror. Key findings were: from baseline to post-treatment showed that FDT improved depression ($p = .001$), positive anticipation (BHS-subfactor; $p = .001$), and quality of life ($p = .001$). In a between-group comparison, consistent with our pilot study, both treatments were effective at improving depression; however, there was suggestive evidence at 10 weeks that FDT improved depression ($p = .011$), positive anticipation ($p = .049$), and quality of life better than the CBT group ($p = .051$; Vilhauer et al., 2013). FDT was significantly better than CBT at reducing anhedonia (pre-post on item 13 of QIDS: $p = .01$). Regression analysis indicated that change in positive anticipation (BHS) predicted change in anhedonia ($p = .038$) and overall depression ($p = .008$) in the FDT group, but not the CBT control group. Even with small samples sizes and non-randomized assignment to condition, these findings

suggest that FDT is uniquely changing depressive symptoms via alteration of cognitions regarding positive expectations.

Can FDT Help Suicidal Patients?

FDT has the potential to help individuals decrease suicidal thinking by reducing hopelessness through the process of helping them to develop a more positive view of the future. Hopelessness is the best consistent predictor of the risk for suicidal behavior (O'Connor, Armitage, & Gray, 2006) and the cornerstone of many theories of suicidal thinking (e.g., Beck, Brown, & Steer, 1989; Beck, Kovacs, & Weissman, 1975). Hopelessness was originally posited, by Beck, to be a cognitive/motivational state characterized by negative expectancies, and a core feature of depression (e.g., Brown & Beck, 1989; Clark, Beck, & Brown, 1989; Young et al., 1996) that plays a significant role in mediating the relation between depressive syndromes and suicidal behavior (e.g., Beck et al., 1975; Fawcett et al., 1990; Wetzel, Margulies, Davis, & Karam, 1980). However, more recent research has not supported this definition. While hopelessness is believed to be a multi-faceted construct, several researchers have found that lack of positive future thinking plays a more important role in hopelessness than the presence of negative future thinking (MacLeod et al., 2005; MacLeod, Pankhania, Lee, & Mitchel, 1997a; MacLeod, Rose, & Williams, 1993; O'Connor & Cassidy, 2007).

Williams (2001) "Cry of Pain" model of suicidality posited that future thinking in suicide is an important variable. This model describes suicidal ideation as a reaction to a stressful situation that has three components: perception of defeat, no escape, and no rescue (i.e., feeling trapped, no positive future). Judgment about these three components are affected by information processing deficits (e.g., positive future thinking) and individual differences factors. The Cry of Pain model moves beyond other models that focused on escape to incorporate the states of entrapment and defeat (Gilbert & Allan, 1998). Resulting from impaired positive future thinking, when an individual with suicidal thoughts envisions the future, they can see no end to the entrapment, and hopelessness ensues. In this conceptualization of suicidality, it is the interaction between the desire to escape from a situation characterized by feelings of defeat and rejection and not having the internal or external resources to escape, which is pertinent to suicide risk. In the Cry of Pain model, the presence of rescue factors (e.g., positive future thinking) moderate or attenuate the deleterious effect of the perception of inescapability on one's wish to die. This moderating pathway has been supported by data from a clinical case control study (O'Connor, 2003). According to O'Connor et al. (2007), a higher level of positive future thinking reduces the sense of entrapment, resulting in the individual believing that he/she has more to look forward to and, consequently, greater reasons for living and better mental health outcomes.

MacLeod et al. (1998) have shown that a deficit of positive anticipation about the future increases hopelessness and differentiates between parasuicidal and non-

parasuicidal groups. Parasuicidal patients show an absence of anticipation of pleasurable future events, but not an increased anticipation of unpleasant events (MacLeod et al., 1993). Research among older individuals by Hirsch et al. (2006) reveals that positive future orientation is associated with less suicidal ideation. These authors suggest there is a need to develop cognitive-based treatments that focus specifically on enhancing future orientation. O'Connor and Cassidy (2007) found that in a group of repeated self-harmers that were 2 months post-suicide attempt, those with high levels of positive future thinking showed the best outcome on hopelessness and suicidal thinking. These authors believe that interventions which attempt to modify positive future thinking are warranted for suicide prevention. In addition to its potential value in suicide prevention, interventions focusing on increasing positive future cognitions can also be implemented as an add-on to other treatments.

Future-Oriented Group Training for Suicidal Patients

Theoretical Foundation/Background Information and Model

When suicidal patients enter treatment, they are confronted with a commonly held misconception among health care workers that suicidal thinking and behavior will vanish when underlying psychiatric problems are treated. However, there are good reasons to believe this is not the case. Suicidal thinking fluctuates over time (De Leo, Cerin, Spathonis, & Burgis, 2005; Gunnell, Harbord, Singleton, Jenkins, & Lewis, 2004) and is likely to reoccur in most depressed individuals in the future (Williams, Crane, Barnhofer, Van der Does, & Segal, 2006). For example, in a study among formerly suicidal patients, Williams, Barnhofer, Crane, and Beck (2005) showed that problem-solving abilities and autobiographical memory, which are commonly associated with suicidal thinking and behavior, deteriorate when the patient's mood lowers once again. This supports the notion that suicidality appears to become a syndrome, irrespective of underlying psychiatric morbidity (Ahrens & Linden, 1996). Autobiographical memories are important building blocks in the cognitive construction of hope, or positive future thinking.

There is a shortage of well-described, evidence-based treatment methods for suicidal behavior and suicidal ideation. A few randomized clinical trials focusing on self-harm and suicidal behavior have been published, such as MACT (Manual Assisted Cognitive-Behavior Therapy; Davidson, Brown, James, Kirk, & Richardson, 2014; Evans et al., 1999) and Cognitive Therapy and Cognitive-Behavioral therapies (Brown et al., 2005; Forkmann, Brakemeier, Teismann, Schramm, & Michalak, 2016; Rudd et al., 2015). There are also studies on suicidality as a component of treatment programs for borderline patients, such as Dialectical Behavioral Therapy (DBT; Andreasson et al., 2016; Linehan, 1993; Linehan et al., 2015; Verheul et al., 2001), Schema-Focused Therapy (Giesen-Bloo et al., 2006),

and Mentalization-Based Treatment (Bateman & Fonagy, 2004). Most of these interventions have been developed for specialized settings and specific patient groups.

Broadly, most consistent and convincing theories on suicidal thinking and behavior include hopelessness as a contributing factor; therefore, this is the core component of the Future-Oriented Group Training for Suicidal Patients intervention (FOGT). According to Beck (1967), three variables constitute the negative triad: hopelessness, self-esteem, and a negative perception of the environment. Across many studies, hopelessness is a robust predictor or indicator of risk for suicidal behavior (Vinas, Canals, Gras, Ros, & Domenech-Llaberia, 2002). Research shows that lack of positive future expectancies, as a part of hopelessness, is an especially important factor in developing suicidal ideation and behavior (MacLeod et al., 1993). MacLeod et al. (1998) have shown that a deficit of positive anticipation about the future relates to hopelessness and discriminates between parasuicidal and non-parasuicidal groups. Specifically, parasuicidal patients show an absence of anticipation of pleasurable future events, but not an increased anticipation of unpleasant events (MacLeod et al., 1993). Indeed, lack of positivity seems to be especially related to borderline personality disorder (MacLeod et al., 2004), which confers high risk for suicide. MacLeod et al. (1997a) hypothesized that this shortage of positivity might reflect a lack of available sources of rewarding and enjoyable experiences, inaccessibility of cognitive representations of future positive outcomes, or an inability to derive pleasure from normally enjoyable events. Research among older individuals, by Hirsch et al. (2006), reveals that positive future orientation is associated with less current and less worst-point suicidal ideation. However, no cognitive-based treatment for suicide risk has focused specifically on enhancing future orientation, which is a central component of our group-based treatment.

Another important element of any new intervention for suicidal individuals should be problem solving. According to Hawton et al. (2000), forms of problem-solving therapy are promising in the treatment of suicidal patients. Research by Eskin, Ertekin, and Demir (2008) showed significant decrease of suicide risk when adolescents and young adults received problem-solving therapy. Consistent evidence has shown that people who attempt suicide have poor problem-solving skills (Linehan, Camper, Chiles, Strohsal, & Shearin, 1987; Pollock & Williams, 2001) and, further, problem-solving therapy reduced levels of depression and hopelessness in patients who have attempted suicide (Townsend et al., 2001). A study among suicide attempters, by Jollant et al. (2005), shows that decision-making is impaired in this group, evaluated in a period in which the participants had no axis I disorder. Indeed, several attempts have been made to therapeutically influence problem-solving skills, like STEPPS (Systems Training for Emotional Predictability and Problem Solving, Blum et al., 2008) and BATD (Behavioral Activation Treatment for Depression, Hopko, Sanchez, Hopko, Dvir, & Lejuez, 2003). In general health practice, Problem-Solving Therapy (PST), developed by Nezu, Nezu, and Perri (1990) has proven to be helpful. Furthermore, some other available interventions have a stronger focus on dysfunctional cognitions, like the time-limited approach by Rudd, Joiner, and Rajab (2001), and cognitive therapy for suicide attempters, evalu-

ated in a randomized controlled trial (RCT) by Brown et al. (2005). These authors developed a 10-week program in which they combined basic cognitive therapy with usual care, enhanced with tracking and referral services. They found a 50% lower reattempt rate in their cognitive therapy sample compared to the sample that only received usual care, even after 18 months. In our Future-Oriented Group Training, we have incorporated problem-solving development as an important therapeutic strategy.

Suicidal behavior is also characterized by isolation and social detachment (Duberstein et al., 2004). As a result, local and governmental incentives to encourage health-seeking behavior, decrease mental health stigma, and increase social support have been developed. Some examples include the Scottish “Choose Life” program, which introduced guidelines for the media coverage of suicide to discourage the reporting of suicide methods, and the “Breathing Space” helpline that targets young men, and Australia’s “Social Inclusion Suicide Prevention Initiative.” In a review and test of suicide rates in 21 countries with national suicide prevention programs, Matsubayashi and Ueda (2011) found suicide rates decreased overall after the implementation of the programs. On a smaller scale, FOGT encourages participants to seek out a coach or buddy to support them during the training, and to involve partners or friends. This supportive role is also an element in other programs, like in the Community Reinforcement Approach (Roozen et al., 2004).

The FOGT training addresses hopelessness and lack of future thinking and includes elements from cognitive therapy and problem-solving therapy. Furthermore, a main goal of FOGT is to reduce the extent and impact of social isolation, which most suicidal persons report experiencing. FOGT was developed with the intention to be used in conjunction with or in addition to other therapies.

Application

FOGT was developed to address the large and heterogeneous group of suicidal people who are met in everyday practice. As most other extant interventions require specialized training or focus on a specific group of patients (e.g., DBT), FOGT was developed to be a highly structured intervention, specifically developed to be easily implemented. The training is typically administered by psychologists and psychiatrists but may also be delivered by other licensed health care workers, such as psychiatric nurses and social workers. It requires only the basic knowledge of cognitive behavioral therapy that is part of most current educational training programs for mental health care professionals. The FOGT training is structured by a protocol, in which the goals and the components of each session are described. Groups of four (minimum) to a maximum of ten participants have been used in the past, and only patients with overt manic symptoms and psychosis were excluded. In the FOGT training, group interactions are managed, and participant contributions are limited to helpful and constructive feedback. Participants are encouraged to share ideas about how to overcome suicidal ideation and self-destructive behavior (e.g., hopeful

pathways thinking), and there is a focus on translating personal experiences into helpful insights and strategies toward meeting goals (e.g., agentic thinking). For instance, a depressed and suicidal participant who tends to further isolate himself after a disappointment discusses his way of coping during the session. After reading about social isolation in the workbook, further discussions about alternative and adaptive behaviors are facilitated. As well, the group may discuss the ways that negative expectations of one's future can affect behavior in the present, in terms of self-fulfilling prophecies. In this way, major themes in suicidality, like isolation, perfectionism and high standards, and typical thought patterns are discussed, along with topics like crisis management, drugs, and self-protection. There are several ways participants are encouraged to imagine possible future scenarios. For example, mental contrasting exercises are practiced, during which participants are encouraged to mentally explore potential different outcomes and practice with different behaviors. Desired and attainable short-term outcomes are focused on, instead of larger and often-infeasible goals. Finally, group sessions focus on the strengths and values of participants and how to apply them toward attaining goals, as well as on what is sometimes referred to as post-traumatic growth in positive psychology (for instance, Morrill et al., 2008); that is, what has the patient learned from their suicidality, and what elements in their life are truly important?

The distinction between one's behavioral and cognitive tendencies may be understandable from a suicidal perspective, and the desired behavior is essential in FOGT. Participants in FOGT have the autonomy to make their own choices between maintenance of maladaptive coping and feelings, or pro-active and adaptive coping that promotes well-being.

Future Directions for FOGT

To assess the effects of FOGT, a randomized clinical trial was conducted in The Netherlands for the initial study. Overall, the analysis revealed minor effects in suicidal thinking ($d = .21, p = .207$) in general, and suicidal desires ($d = .32, p = .53$), both not statistically significant. FOGT had a positive effect on deliberate self-poisoning ($d = .32$), and on distress ($d = .47$). Further, an adherer's analysis showed a significant effect on suicidality measured a year after the training ($d = .46, p = .011$). To the surprise of the researchers, no change in future thinking was found, with no significant effect on suicidality.

A larger scale RCT is currently being conducted in Belgium, in which FOGT is compared to MBCT and an online problem-solving focused intervention. Like in other composite programs (e.g., Dialectical Behavioral Therapy), further investigation of the components that contribute to the effect (i.e., dissemination studies) are a next step. During the study, analysis of the distinction between severely depressed and moderately depressed participants revealed that severely depressed participants have problems with FOGT, perhaps because a more active attitude is desirable. For severely depressed patients, medication might be necessary, before psychological

interventions like FOGT can be successfully administered. Further studies are needed to substantiate our effects, and the efficiency of FOGT in subgroups of suicidal patients, including patients with moderate versus severe depression, active versus passive suicidality, and chronic versus acute suicidality.

Future of Future-Oriented Treatments for Suicide

In this chapter, we have highlighted three future-oriented therapies for suicide or suicide-related outcomes. Each intervention has a strong theoretical foundation based in classic theories of suicide and depression, and in cognitive theories, such as Snyder's Hope Theory, Beck's Cognitive Triad, and MacLeod and colleagues, which assert that reduced positive expectancies, rather than greater negative expectancies, are related to suicide and its psychopathological correlates.

To begin, Hope Therapy was reviewed and, although it was not specifically developed for suicidality, it appears to be strongly suited for the treatment of suicide risk. In particular, this treatment intervention's theoretical foundation is rooted in Snyder's (2002) Hope Theory. Hope Therapy focuses on increasing adaptive pathway generation (i.e., generating multiple workable routes toward goals), increasing adaptive goal-setting (i.e., setting approach-oriented goals that are aligned with an individual's values with measurable endpoints and built-in sub-goals) and agency enhancement and maintenance (i.e., utilizing CBT techniques to increase determination and motivational positive self-talk). For the use of Hope Therapy in the context of suicide risk, the authors note that it is important to determine whether suicide/suicide behaviors are an individual's goal or pathway and, if so, to work toward replacing suicidal goals with healthier, more-adaptive goals.

Similarly, another therapeutic approach targeting suicide risk factors was discussed—Future-Directed Therapy for Depression (FDT). Based on Beck's (1972) theory that depression results from negative views of the future, as well as MacLeod and colleagues' (e.g., MacLeod & Salaminiou, 2001) consistent finding that depression results from reduced ability to generate positive expectancies about the future, FDT builds its theoretical foundation on three principles: (1) we all have the desire to thrive, or the "need to want"; (2) thoughts and behaviors are limited resources and, if utilized for engagement in activities to promote thriving, will result in greater well-being; and (3) emotions provide feedback on the perceived state of thriving (e.g., hope and optimism). Like Hope Therapy, a large component of FDT focuses on increasing adaptive skills geared toward positive future outcomes (e.g., goal-setting, planning, problem solving). As noted by the authors, FDT differs from traditional Cognitive Behavioral interventions because it is focused on the anticipatory part of human experience. Rather than emphasizing the alteration of irrational thinking, FDT works to build more-effective thought patterns, to increase one's likelihood of effort toward achieving future desired outcomes. The authors provide a layout of the FDT Anticipatory Cognitive Model of Human Experience and, as well, the FDT Cognitive Bias Model of Reward Processing is discussed, in which

reward effort (e.g., behavioral activation) is depicted as mediated by cognitive appraisals of reward anticipation (e.g., expectations and valuation). Given the high prevalence of depression in individuals who experience suicidality, and vice versa, and given that suicidal ideation can be a symptom of depression, further study of Future-Directed Therapy for Depression and its utility for targeting suicidality is warranted. As FDT has been shown to be effective in reducing hopelessness, a common marker of suicide risk, it is likely that further work focused on targeting other suicidal ideation or behaviors may be useful.

Finally, Future-Oriented Group Training for Suicidal Patients (FOGT), a group-based intervention that can be conjunctively added to already-established forms of intervention targeting psychopathology and suicidality, was discussed. Of note, FOGT has several elements in common with the first two interventions discussed, including a focus on teaching skills to enhance future-oriented thinking, problem solving, and social support seeking. In FOGT, participants work together in groups to learn and discuss ways to engage in more adaptive positive and future-oriented thought processes, problem solving, and other strategies. FOGT has shown minor effects on suicidality, and continued research is in progress to further test the effectiveness of FOGT compared to other interventions.

Taken together, this trio of interventions, although preliminary, provides a strong foundation for the continued development and implementation of therapeutic strategies focused on future thoughts and emotion, as a means of reducing risk for suicidal behavior and death by suicide. All three interventions emphasize the promotion of skills to increase positive future cognitions and outcomes, including the resolution of problems and attainment of goals, thereby reducing depression and suicide. As more is learned based on these interventions and theories of suicide, targeted interventions focused on future cognitions can continue to be developed.

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