



Breaking the Vise of Hopelessness: Targeting its Components, Antecedents, and Context

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Abstract

Hopelessness is a painful cognitive state that is related to depression and suicide. Despite its importance, only unsystematic efforts have been made to specifically target hopelessness in interventions, and no comprehensive review is currently available to guide future clinical studies. In this narrative review, we first analyze the phenomenon of hopelessness, by highlighting its components (e.g., dismal expectations, blocked goal-directed processing, and helplessness), antecedents (e.g., inferential styles), and contextual factors (e.g., loneliness and reduced social support). Then, we review the currently available interventions and manipulations that target these mechanisms, either directly or indirectly, and we highlight both their strengths and lacunae. Finally, we propose possible avenues to improve our clinical toolbox for breaking the vise of hopelessness.

Keywords Hopelessness · Intervention · Future expectation · Goal-processing · Helplessness · Memory specificity · Inferential style · Loneliness · Social support

Hopelessness is possible only because we do hope that some good, loving someone could come.

Jacques Derrida (2002)

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Introduction

Human beings are fundamentally future-oriented (Seligman et al., 2013) and, despite the turbulence and inherent disappointments of life, they maintain markedly positive expectations about what the future holds (Fischer & Chalmers, 2008; Gallagher et al., 2013). Such an optimistic perspective has been associated with a gamut of favorable outcomes, ranging from psychological and physical well-being to higher socioeconomic status and greater social resources (for a review, see Carver et al., 2010). Yet, a substantial minority of people views their future as gloomy and feels they can do nothing to change such a dismal scenario. In other words, they experience *hopelessness*.

Hopelessness is a phenomenon that is associated with a variety of negative cognitions and emotions, such as sadness, lack of positive emotions, low self-esteem, demoralization, and suicidal ideation (Abramson et al., 1989; Klonsky et al., 2016; Ratcliffe, 2015), which makes this phenomenon highly relevant for both clinicians and researchers. First, hopelessness is present at a clinically relevant level in 9–12% of the general population globally (Greene, 1981; Haatainen et al., 2003, 2004; Mair et al., 2012), with roughly similar magnitude in men and women (Greene, 1981; Poch et al., 2004). Second, strong evidence indicates that hopelessness is a major predictor of important future outcomes, such as depressive symptoms and episodes (Abramson et al., 1989; Alford et al., 1995; Hamilton et al., 2013; Joiner, 2005; Joiner et al., 2005; Mac Giolla-bhui et al., 2018), suicidal ideation and suicide death (Beck et al., 1989; Franklin et al., 2017), poor health (Roane et al., 2017), and increased mortality (Everson et al., 1996; Stern et al., 2001). Third, hopelessness is a critical indicator to consider in treatment contexts, given its association with reduced help-seeking behavior among university students with high levels of suicidal ideation (i.e., help-negation; Wilson & Deane, 2010, although see Deane et al., 2001). Additionally, treatment-unresponsive hopelessness has been found to predict negative outcomes in cognitive therapy (Kuyken, 2004), and higher levels of pre-treatment hopelessness have been linked to dropout in cognitive-behavioral group therapy (Westra et al., 2002).

Notwithstanding the necessity for targeting hopelessness, little conceptual work has been conducted on this construct and there is no overview of clinical interventions and experimental manipulations available to clinicians and researchers. This likely has prevented the implementation of specific clinical programs addressing this important phenomenon. To bridge this gap, we present a narrative review of the literature that investigates the conceptual nature of hopelessness in relation to possible ways to remediate hopelessness. Our review involves a thorough examination of the current interventions, highlighting both their strengths and lacunae, and we propose possible avenues for future basic and clinical research.

Theoretical Considerations

Hopelessness and its Components

Hopelessness is a multifaceted construct, with different theoretical perspectives being proposed across the decades (Table 1). In 1969, Stotland defined this

phenomenon as a system of negative expectations concerning the self and the future, highlighting the primary role of future prospection, which is strongly detrimental and self-salient in hopeless individuals. In the same year, Melges and Bowlby (1969) proposed that hopelessness arises when the person's estimate of the probability to achieve specific goals is pessimistic and they think that the plans of action in the pursuit of the goals are unlikely to lead to their attainment. According to this definition, hopelessness is mostly centered around goal blockage and motivational strive. Later, in 1989, the theorists of the Hopelessness Theory (Abramson et al., 1989) defined the construct of hopelessness as the negative expectation of highly desired outcomes, along with the belief that one is helpless to bring about change in this situation. According to this perspective, hopelessness entails a number of core features, such as the existence of specific outcomes that the person is strongly longing for, negative expectations that the person will actually fulfil these outcomes, and the belief of having no power to modify the situation in a favorable manner.

Reconciling these three classical definitions of hopelessness, which have propelled a large number of studies, we propose that hopelessness is a cognitive state characterized by at least three major components, namely *dismal expectations about one's future* (Abramson et al., 1989; Beck et al., 1974), *blocked goal-directed processing* (Abramson et al., 1978; Melges & Bowlby, 1969), and *helplessness* (Abramson et al., 1978). We propose that the interaction between these three components provides the essential framework for understanding hopelessness. Although preliminary, this theoretical analysis may be useful to capture the intrinsic complexity of this phenomenon and provide a helpful guide to evaluate the different types of clinical interventions and experimental manipulations. Then, we discuss each of these components and the possible ways to intervene on them, in more detail below.

Hopelessness Involves Dismal Expectations about One's Future

Dismal expectations about the future are a quintessential feature of hopelessness, as the future is painted as impossible, bleak, and fundamentally devoid of any positivity (Marchetti, 2019). Indeed, research shows that positive future thinking is markedly reduced in hopeless individuals (MacLeod & Cropley, 1995; MacLeod et al., 1997, 1993, 2005; O'Connor et al., 2000; Roepke & Seligman, 2016), with positive scenarios being less frequent, less likely, less specific, and more difficult to generate (MacLeod & Cropley, 1995; MacLeod et al., 2005; Miranda et al., 2008). Moreover, the lack of positive future thinking seems to be particularly relevant only when the thought content is self-relevant rather than focused on other people (Alloy & Ahrens, 1987; MacLeod & Conway, 2005, 2007). Interestingly, the evidence about the association between hopelessness and negative future thinking is mixed (Roepke & Seligman, 2016). Reconciling this pattern of findings, Beck et al. (2001) argued that hopelessness represents a cognitive correlate of low positive affect, more so than of high negative affect.

Table 1 Definitions of hopelessness

Year	Author(s)	Definition of Hopelessness	Dismal expectations about one's future	Blocked goal-directed processing	Helplessness
1969	Stotland	<i>"a system of negative expectations concerning oneself and one's future life"</i>	X		
1969	Melges & Bowlby	<i>"a feeling that the future holds little promise"; "hopelessness reflect[s] a person's estimate of the probability of his achieving certain goals"</i>	X	X	
1974	Beck, Weissman, Lester, & Trexler	<i>"system of cognitive schemas whose common denomination is negative expectations about the future"</i>	X		
1989	Abramson, Metalsky, & Alloy	<i>"highly desired outcomes will not occur or that highly aversive outcomes will occur coupled with an expectation that no response in one's repertoire will change the likelihood of occurrence of these outcomes"; "highly desired outcomes that [...] are "on our mind," "in the realm of possibility", "troubling us now"</i>	X	X	X

Recent theoretical and empirical studies have proposed several, non-mutually exclusive mechanisms to account for such distortions in time perspective and emotionality in hopelessness. For instance, it has been suggested that biased foresight in depression and anxiety largely relies on biased retrieval of episodic/semantic information, as these two phenomena share common neural mechanisms (Miloyan et al., 2014). In keeping with this perspective, Marchetti et al. (2018) showed, across different paradigms and measures, that negative memory bias for depressotypic material is strongly related to pessimism and hopelessness. Moreover, the degree of specificity while retrieving a memory appears to be a relevant feature for episodic future thinking (Schacter et al., 2008; Williams et al., 1996), with overgeneral autobiographical memory being moderately associated with hopelessness (Evans et al., 1992). Finally, a network analysis study showed that expecting gloomy future scenarios is related to the inability to imagine the future in a vivid and confident way (Marchetti, 2019).

In sum, evidence suggests that hopeless individuals largely rely on their negative past in order to foresee what will happen (Ghaemi, 2007; Hamilton et al., 2013), with this leading to a narrowing of positive expectations and, eventually, hopelessness (*"I can't see any future for myself or the rest of the human race"*; *"To me it looks like the colour and joy has been sucked out of the world and that the world looks completely dull"*; Ratcliffe, 2015, pp. 111–112).

Hopelessness Involves a Blocked Goal-Directed Process

Hopelessness arises from experiencing that important goals and highly desired outcomes are blocked along with the inability to detach from these goals (Marchetti, 2019; Melges & Bowlby, 1969). Although a strong pursuit of goals usually is related to well-being (Sheldon et al., 2010) and meaning in life (Feldman & Snyder, 2005), it may have drawbacks as well (Pomerantz et al., 2000). In fact, if one experiences goal failure and the foreseeable future does not hold any promise of change, hopelessness is likely to develop (Marchetti, 2019; Melges & Bowlby, 1969).

In keeping with this perspective, Hadley and MacLeod (2010) and Vincent et al. (2004) found that individuals who engage in deliberate but non-fatal acts of self-harm and those with high levels of hopelessness do not report fewer goals compared to healthy controls. However, they perceive their goals as less attainable, less within their control, and more obstructed. Moreover, hopelessness, as compared to depression and anxiety, is uniquely related to the belief that future well-being (e.g., happiness, self-worth, and fulfillment) is dependent on the achievement of specific goals (Hadley & MacLeod, 2010). An example may clarify this point. A couple may have the strong goal of having a baby, but, if all their efforts turn out in vain, they may experience hopelessness, especially if having a baby is considered the only way to reach life fulfillment. Conditional goal setting, which refers to the belief that happiness and personal well-being are contingent on achieving specific goals, is a phenomenon identified by Street (2002). This type of goal setting is often observed in clinical populations with high levels of hopelessness, such as individuals who engage in deliberate but non-fatal acts of self-harm (Danchin et al., 2010).

In sum, hopeless individuals are strongly committed to goals that are perceived as irremediably narrowed, blocked, and obstructed. Intriguingly, some research shows that their motivational hierarchy may be characterized by a specific structural pattern, referred to as “painful engagement” (MacLeod & Conway, 2007), where they believe that future happiness is fully conditional upon specific goal(s) being achieved (“*I’ll never get what I want and need –and, that is really horrible*”; Crawford & Ellis, 1989, p 13).

Hopelessness Involves Helplessness

Helplessness is defined as the expectation that a given outcome is independent of one’s actions (Seligman, 1975). In other words, hopeless people feel they have no power or ability to change the problems they are currently facing and feel that attaining positive outcomes is outside of their control.

In line with this, there is evidence that hopelessness is associated with perceived ineffective problem solving, namely the individual’s appraisal that their problem-solving skills will be insufficient or inadequate to deal with life’s problems (Heppner et al., 2004). Both healthy and depressed individuals with high levels of hopelessness lack confidence in their skills to solve problems (for an excellent review, see Heppner et al., 2004), and such impairments predict, in interaction with stress, future levels of hopelessness in college students (Priester & Clum, 1993a).

Furthermore, given the partial overlap between perceived and actual problem-solving skills (Heppner et al., 2004), hopelessness is correlated concurrently with actual ineffective problem solving in individuals who engaged in deliberate but non-fatal acts of self-harm, inmates, and healthy individuals (Biggam & Power, 1999; Evans et al., 1992). Interestingly, individual problem-solving deficits are related to lesser anticipation of future positive experiences (MacLeod & Conway, 2005; Vincent et al., 2004) and, in interaction with stress, also predict future levels of hopelessness in college students (Priester & Clum, 1993b).

In sum, accumulating evidence suggests that hopelessness is robustly related to perceived and actual problem-solving deficits (“*I have a feeling of pointlessness and inevitability of outcome so feel powerless to make changes*”; Ratcliffe, 2015, p. 112).

Antecedents: Negative Inferential Style and Enhancing Inferential Style

The Hopelessness Theory (Abramson et al., 1989) posits that hopelessness stems directly from a specific way of making inferences about negative events, called *negative inferential style*. When exposed to negative events (i.e., failing an exam), a person with a negative inferential style tends to draw negative inferences about the cause of the event (i.e., stable and global; “this will always cause me to fail other exams and fail in all areas of my life”), consequences of the event (i.e., “this will lead to other negative things happening to me”), and self-characteristics given the fact of occurrence of the event (i.e., “I am flawed in some way”). Over time, such a style leads to hopelessness and, in turn, to depression (for an excellent review, see Liu et al., 2015).

Confirming its role as a vulnerability factor, negative inferential style is stable over time (i.e., one-year follow-up $r=0.80$; Alloy et al., 2000; seven-year stability $r_s=0.62$; Romens et al., 2009) and more negative inferences were found in remitted depressed individuals than healthy controls with no history of depression (Haefel et al., 2005). This provided support to the view that this specific cognitive style is not just a concomitant of depression. Moreover, although negative inferential style is associated with concurrent levels of hopelessness only with modest-to-moderate magnitude (Gibb et al., 2001, 2003; Johnson et al., 1996; Kleiman et al., 2015; O’Connor et al., 2000), drawing negative inferences about events can predict future hopelessness on its own (Hong et al., 2006), and in interaction with stressful life events (Haefel et al., 2008; Mac Giollabhui et al., 2018; Met al.,sky & Joiner, 1992; Panzarella et al., 2006; but see Abela, 2001).

Rose and Abramson (1992) proposed a theoretical expansion of the Hopelessness Theory, which emphasized the role of childhood maltreatment in the development of a negative inferential style. Specifically, they highlighted the impact of emotional maltreatment, where the abuser directly provides the child with depressogenic inferences and attributions. For example, a parent may tell their child that they are hopelessly stupid, leading the child to adopt stable and global attributions that reinforce negative thinking patterns. In contrast, in cases of physical or sexual abuse, children usually generate their own inferences based on the adverse events happening to them. As a result, Rose and Abramson (1992) argued that growing up in an

emotionally abusive environment is more likely to result in the development of a negative inferential style and hopelessness, at the expense of more positive thinking patterns. Evidence confirms that having experienced childhood emotional abuse, as compared to physical and sexual abuse, increases the likelihood to adopt a negative inferential style and, in turn, hopelessness (Gibb & Abela, 2008; Gibb et al., 2001, 2012; Hankin, 2005; Mezulis et al., 2006; Paredes & Calvete, 2014).

The Hopelessness Theory also maintains that the development of hopelessness can be hindered by a specific way of making inferences about positive events, defined as *enhancing inferential style* (Abramson et al., 1989; Needles & Abramson, 1990). Mirroring negative inferential style for negative events, enhancing inferential style consists of evaluating the cause of a positive event as stable and global, along with inferences of positive consequences and positive self-characteristics. Despite its clinical relevance, only a handful of studies have investigated the relationship between enhancing inferential style and hopelessness, where interesting results have been reported. For instance, an enhancing inferential style predicts reduced future levels of hopelessness in longitudinal studies, although the exact nature of its influence is unclear. That is, enhancing inferential style predicts lower levels of future hopelessness on its own (Johnson et al., 1996, 1998), as well as in interaction with positive events (Needles & Abramson, 1990, but see Johnson et al., 1996; Edelman et al., 1994).

In sum, robust evidence shows that hopelessness is concurrently and prospectively related to specific inferences about the cause, the consequences, and features of self, in relation to negative events (i.e., negative inferential style) and to general future orientation. The role of inferential processes with respect to positive events (i.e., enhancing inferential style) has so far been studied only to a limited extent, but appears to be worthy of further investigation.

Context: Interpersonal Factors

Being the outcome of several complex mechanisms, hopelessness does not unfold in a vacuum. On the contrary, many contextual factors can facilitate its onset and persistence. By relying on the Expanded Hopelessness Theory (Abramson et al., 1989; Panzarella et al., 2006), we review evidence linking hopelessness to loneliness and reduced social support. According to this model, loneliness and reduced social support act as contextual factors that increase the likelihood to experience (social) negative events and, in turn, to draw maladaptive causal attributions and inferences (Panzarella et al., 2006).

Loneliness is defined as the negative state derived from the discrepancy between a desired interpersonal relationship network and the one actually experienced (Peplau & Perlman, 1982). The need to belong is considered a basic human need (Baumeister & Leary, 1995); therefore, when such an important goal is frustrated, hopelessness may arise. Moreover, the absence of significant social interactions may favor negative inferences about life events, due to the lack of support that could provide more adaptive inferences (i.e., adaptive inferential feedback; Dobkin et al., 2004). In keeping with this, consistent evidence indicates that

loneliness and hopelessness are indeed positively correlated (Chang et al., 2010; Yang & Clum, 1994). However, the temporal order of these two constructs is still unclear, with longitudinal studies suggesting that loneliness can predict hopelessness (Bonner & Rich, 1991) and vice versa (Joiner & Rudd, 1996).

Social support is defined as information leading people to believe that they are cared for and loved, esteemed, and members of a network of mutual obligations (Cobb, 1976). Evidence shows that hopelessness is correlated concurrently with low levels of perceived social support in inpatients, youngsters, and college students (Chioqueta & Stiles, 2007; Kashani et al., 1997). Poor social support predicted higher levels of hopelessness after six months in men with HIV (Johnson et al., 2001), while lower quality in social support could account for more hopelessness after 18 weeks in individuals with spinal cord injury (Beedie & Kennedy, 2002). In addition, low social support combined with a negative inferential style and high numbers of stressful events was predictive of hopelessness in young adults (Panzarella et al., 2006). Finally, in the context of the Interpersonal Theory of Suicide (Joiner, 2005; Van Orden et al., 2010), hopelessness regarding future changes in interpersonal relationships was related to social disconnectedness (i.e., thwarted belongingness and perceived burdensomeness; Tucker et al., 2018).

Consequences: Depression, Suicidality, and Other Psychopathology

Hopelessness is associated with a variety of maladaptive consequences. Theoretical perspectives and strong evidence consistently show that hopelessness is related to concurrent depressive symptoms (Abramson et al., 1989; Beck et al., 1993) and future depressive symptoms and episodes (Abela et al., 2002; Alford et al., 1995; Mac Giollabhui et al., 2018; Russell et al., 2014; Waszczuk et al., 2016). Moreover, hopelessness appears to be uniquely related to depression, even after controlling for anxiety, whereas hopelessness is not related to anxiety when depression is controlled for (Beck et al., 1988; Marchetti et al., 2016a, b), indicating that hopelessness is a highly specific marker for depression.

Furthermore, Hopelessness Theory states that, whereas hopelessness plays a facilitating role for major depression, it is actually the cause of a specific type of depression, namely hopelessness depression (Abramson et al., 1989). Hopelessness depression is defined as the co-occurrence for at least 2 weeks of specific symptoms, such as sadness, retarded initiation of voluntary responses, suicidal ideation or behavior, sleep problems with initial insomnia, fatigue, self-blame, concentration problems, psychomotor retardation, negative repetitive thinking, low self-esteem, and dependency, along with hopelessness (Alloy et al., 2006). Evidence confirms that hopelessness is more strongly related to hopelessness depression than depression per se (Abela et al., 2007; Joiner et al., 2001) and that hopelessness predicts hopelessness depression symptoms better than other types of depression symptoms (Alloy & Clements, 1998). Marchetti et al. (2016a, b) also showed that hopelessness is related to specific symptoms, such as sadness, worthlessness, feelings of failure, suicidality, lack of energy, anhedonia, and concentration problems. Although previous evidence was mixed (Hankin et al., 2001; Hong et al., 2006), a recent

contribution provided strong support for Hopelessness Theory, in that negative inferential style in interaction with negative life events predicted future major depressive episodes and depressive symptoms after 2.5 years via mediation by hopelessness in adolescents (Mac Giollabhui et al., 2018).

Another well-known consequence of hopelessness is increased suicidality. Early work on hopelessness has identified this phenomenon as strongly associated with suicidal thoughts, attempted suicide, and suicide death in both cross-sectional and longitudinal studies (Beck et al., 1989, 1990). Solid research demonstrated that hopelessness is a powerful predictor of suicidality over long time intervals (i.e., 5–10 years). For instance, a meta-analysis reviewing the literature of the last fifty years showed that hopelessness is the best predictor of future suicidal ideation, after prior suicidal ideation (Franklin et al., 2017), while another meta-analysis shows that experiencing high levels of hopelessness almost doubles the probability of dying by suicide (Ribeiro et al., 2018). Although less frequently investigated, hopelessness also is considered to be a warning sign of near-term (i.e., from hours to days) risk of suicide by the American Association of Suicidology (Rudd et al., 2006) and clinical guidelines recommend that clinicians routinely incorporate hopelessness into risk assessment (Rudd, 2008).

Finally, in line with these pieces of evidence and clinical practices, several theoretical models have identified hopelessness as a significant factor in explaining suicide. However, these models differ in the specific roles they attribute to hopelessness. The Hopelessness Theory of Suicidality (Abramson et al., 2002) suggests that hopelessness is sufficient for suicide, without distinguishing between suicidal ideation and attempts. In contrast, the Interpersonal Theory of Suicide (ITS; Van Orden et al., 2010) proposes that hopelessness plays a necessary role in facilitating the transition from passive suicidal ideation to active suicidal desire, particularly in the context of social disconnectedness and feelings of being a burden. More recently, the Three-Step Theory of Suicide (3ST; Klonsky & May, 2015; Klonsky et al., 2021) proposed that it is the combination of unbearable pain (usually psychological) and hopelessness that causes the onset of suicidal desire (i.e., first step). The intensity of the suicidal desire is a function of the discrepancy between pain and social connectedness, with the desire to die being higher when pain outweighs social connectedness (i.e., second step). The final step towards suicide attempt is facilitated by various dispositional, acquired, and contextual factors that contribute to an individual's capability for suicide (see Klonsky et al., 2018).

Finally, hopelessness has been reported in a variety of mental disorders, such as schizophrenia (Lysaker et al., 2004), alcoholism (Sher, 2006), and borderline personality disorder (Nisenbaum et al., 2010). It is noteworthy that depressive symptoms are highly comorbid in these disorders; thus, the specificity of hopelessness for these psychopathologies is currently unclear.

Targeting Hopelessness

Clinical experience and research unambiguously indicate that reducing the intensity and pervasiveness of hopelessness is of major importance. Unfortunately, several longitudinal and psychometric studies showed that hopelessness is fairly stable over

time (Beck et al., 1974; Steer et al., 1994), and an epidemiological study reported that over a period of two years, more than half of those who were classified as hopeless at baseline remained hopeless at follow-up (Haatainen et al., 2003). Thus, *if not actively targeted*, hopelessness is likely to persist and detrimentally impact people's lives (Costa & McCrae, 1980).

This raises the question of whether hopelessness can be reduced to non-clinical levels. Research indicates that hopelessness is stable, but not immutable, in that, under appropriate circumstances, its intensity can be significantly reduced. Indeed, a meta-analysis reported that psychotherapeutic interventions, mostly cognitive-behavioral therapy-oriented (i.e. CBT), have a large effect in reducing hopelessness (Cuijpers et al., 2013). However, this effect is attenuated by high heterogeneity; hence, this raises the question of what makes some interventions more successful than others in reducing hopelessness.

Furthermore, other important issues are left unresolved. First, it is yet unclear via which specific mechanism(s) hopelessness can be reduced. Psychotherapy is an extremely complex intervention and its active ingredients in targeting hopelessness remain opaque (Cuijpers et al., 2013). Second, clinical levels of hopelessness can be present without any concurrent psychopathology, thus implying that a significant number of hopeless individuals are likely not intercepted by current clinical interventions. For instance, Haatainen et al. (2003) showed in a large epidemiological study that about 5% of their sample remained clinically hopeless over a period of two years with no psychiatric diagnosis. This is interesting as it suggests that a minority of the general population could be experiencing distressing levels of hopelessness without receiving any professional help given the absence of any major disorder. This evidence also suggests that, although frequently co-occurring, hopelessness and depression are distinct phenomena, with partially different underlying mechanisms and characteristics (Greene, 1981; Marchetti et al., 2013, 2016a, b). Third, there is an abundance of research showing that there is substantial variability in the extent to which depressed individuals respond to treatment (Gorwood et al., 2010). This is particularly important, considering that high levels of hopelessness before treatment and treatment non-responsive hopelessness both are associated with poorer clinical outcomes and drop-out (Kuyken, 2004; Westra et al., 2002; Whisman et al., 1995).

In our analysis of potential interventions for hopelessness, we start by examining the current state-of-the-art with regard to psychotherapeutic interventions that either directly or indirectly focus on mental distress and hopelessness. Then, in order to spur the development of more fine-grained interventions, we use our theoretical analysis to classify available interventions and manipulations, and provide an analysis of the major lacunae in therapeutic approaches to hopelessness.

Psychotherapeutic Approaches Targeting Hopelessness and its Correlates

The international guidelines for treating clinical and subclinical depression recommend the use of cognitive-behavioral therapy (CBT; Beck, 2020) as an effective intervention, according to the National Institute for Health and Care Excellence

(NICE, 2009). Empirical evidence suggests that CBT can lead to an initial improvement in hopelessness, which is subsequently followed by changes in self-view, motivation, mood, and vegetative symptoms (Rush et al., 1981, $n = 35$; but see Hollon & DeRubeis, 2009). Similarly, CBT in combination with pharmacotherapy has been shown to outperform medication alone in reducing hopelessness (Whisman et al., 1991, $n = 39$). In conclusion, it is reasonable to contend that CBT may target this important phenomenon, either in a direct or indirect way.

Specific CBT techniques may be effective in increasing positive expectations about the future, restructuring goal hierarchy, and improving helplessness (Roepke & Seligman, 2016). First, cognitive restructuring specifically aims at modifying patients' cognitive distortions, such as those depicting their future as inevitable and doomed to failure and loss (i.e., fortune-telling; Beck & Alford, 2009; Yurica & DiTomasso, 2005). Second, CBT-oriented interventions regularly focus on changing goal hierarchy by setting goals that are realistic and achievable (Dobson & Dobson, 2009), thus preventing the patient from committing to unattainable goals that trigger hopelessness. Third, cognitive rehearsal is used to mentally simulate each successive step for attaining a certain goal, which helps to identify potential "roadblocks" that might impede successful achievement of the goal (Beck et al., 1987). Fourth, behavioral activation, namely scheduling multiple pleasant activities (Kanter et al., 2010), is adopted to increase feelings of mastery and pleasure (Dobson & Dobson, 2009).

Earlier theoretical work has indicated that automatic negative thoughts are related to negative inferences (Hartlage et al., 1993). This association has been further supported by a recent network analysis study conducted on adolescents, which confirmed the specific relationship between these two phenomena (Marchetti et al., 2021). Therefore, it can be concluded that interventions aimed at modifying negative inferences are likely to impact automatic thoughts. For instance, when a therapist helps a patient identify automatic thoughts about negative events and proposes alternative interpretations, the clinician is actively providing a more adaptive way to make inferences (Panzarella et al., 2006; Rubenstein et al., 2016). More broadly, across different types of psychotherapies, the therapeutic relationship indirectly targets hopelessness, with the instillation of hope playing a particularly relevant role (Wampold, 2007). For instance, when facing a patient's negative expectations about improving, the therapist can promote realistic hopes and, in turn, break the vise of hopelessness.

In sum, specific psychotherapeutic techniques and the quality of the therapeutic relationship can target hopelessness. However, based on our analysis, many current techniques are indirect and not based on a comprehensive understanding of hopelessness. This lack of specificity may explain the partial and heterogeneous efficacy in addressing this phenomenon. For instance, in a naturalistic outcome study, almost 40% of depressed patients were characterized by unresponsive hopelessness during the first four sessions of cognitive therapy and this predicted less favorable therapy outcomes (Kuyken, 2004). Hence, improving the current therapeutic repertoire is warranted and timely.

Components-Focused Interventions and Manipulations

Our theoretical analysis stresses three main processes that could be targeted to reduce hopelessness, namely i) dismal expectations about the future, ii) blocked goal-directed processing, and iii) helplessness. Below, established and promising interventions and manipulations for each component of hopelessness are reviewed and discussed (Table 2).

Interventions and Manipulations Targeting Future Expectations

Common interventions or manipulations for hopelessness are those directly targeting the dismal expectations about one's future, by actively engaging the individual in the generation and evaluation of more benign future events. A major representative of this type of intervention is the Best Possible Self technique (BPS; King, 2001). The BPS technique requires the person to envision himself or herself in an imaginary future where everything turns out in the way the person wishes. More specifically, the person has to vividly imagine and write down the feelings, thoughts, and situations about their major goals being completely and satisfactorily fulfilled. Instructions may specify the themes to focus on (e.g., personal, professional, relationship, etc.) or leave them open. The participant is required to think about what to write for about one minute and then write incessantly for 15/20 min, followed by five minutes of imagery on what was written (Loveday et al., 2018). Research showed that a single-session BPS manipulation led to a significant increase in expectation of positive future scenarios and reduction in negative future scenarios in healthy individuals, independently from mood change (Boselie et al., 2014, $n=80$; Hanssen et al., 2013, $n=79$; Peters et al., 2010, $n=82$).

A follow-up study reported that practicing daily BPS imagery over a period of two weeks induced an increase in expectation of positive future scenarios and less negative attributional style, along with an increase of optimism (Meevissen et al., 2011, $n=54$). It is important to stress that all of these studies reported small-to-medium effect sizes for the change of future expectations and mostly involved healthy (undergraduate) individuals. A more relevant clinical investigation with suicidal inpatients showed that BPS interventions focused on social relationships and accomplishments led to a significant reduction of hopelessness, with medium-to-large magnitude (Huffman et al., 2014, $n=20-22$).

At a more mechanistic level, cognitive training boosting memory specificity with the aim to reduce overgeneral autobiographical memory may potentially lead to a reduction of hopelessness. For instance, Serrano et al., (2004, $n=43$) showed that older adults participating in a life-review intervention focused on reducing overgeneral autobiographical memory reported a significant reduction of hopelessness, and this was specifically due to an increase in memory specificity. Similarly, a pilot study adopting "MEemory Specificity Training" (MEST) reported a significant reduction of hopelessness in depressed inpatients (Raes et al., 2009, $n=10$). More broadly, a recent meta-analysis on memory specificity trainings reported a large

Table 2 Examples of interventions and manipulations targeting components, antecedents, and contextual factors of hopelessness

Type	Focus	Interventions and manipulations
<i>Hopelessness components</i>	a. Dismal expectations about one's future	<ul style="list-style-type: none"> • Best Possible Self (King, 2001) • Life Review Therapy (Serrano et al., 2004) • Memory Specificity Training (Raes et al., 2009)
	b. Blocked goal-directed processing	<ul style="list-style-type: none"> • Self-regulation manipulation (Wrosch, 2011) • Hope Therapy (Snyder, 2002) • Goal-Focused Group Psychotherapy (Klausner et al., 1998) • Goal Setting and Planning approach (MacLeod et al., 2008) • Systematic Motivational Counseling (Cox & Klinger, 2004) • GOALS Program (Johnson & Fulford, 2009) • Behavioral activation (Busch et al., 2009)
	c. Helplessness	<ul style="list-style-type: none"> • Acceptance and Commitment Therapy (Hayes et al., 2006) • Problem Solving Therapy (Nezu et al., 2013) • Hope Therapy (Snyder, 2002)
<i>Antecedents</i>	a. Negative inferential style	<ul style="list-style-type: none"> • Penn Resiliency Program (Brunwasser et al., 2009) • Causal attributions training (Peters et al., 2011) • Inferential style training (Avirbach et al., 2019) • Adaptive inferential feedback (Panzarella et al., 2006) • Inferential style training (Avirbach et al., 2019)
	b. Enhancing inferential style	<ul style="list-style-type: none"> • Maladaptive social cognitions intervention (Masi et al., 2011) • Enhancing social support (Masi et al., 2011)
<i>Contextual factors</i>	a. Loneliness and reduced social support	<ul style="list-style-type: none"> • Perceived burdensomeness intervention (Allan et al., 2018) • Face-to-face support group (Stewart et al., 2001) • Gratitude letter exercise (Huffman et al., 2014) • Acts of kindness exercise (Huffman et al., 2014)

effect on hopelessness from pre- to post-intervention and no evidence of heterogeneity between individual studies (Barry et al., 2019).

Interventions and Manipulations Targeting Goal-Directed Processing

Goal failure represents a major locus of intervention in order to reduce hopelessness (Hadley & MacLeod, 2010). It is important to note, however, that not all goals are equally attainable, as their degree of reachability lies on a continuum from possible/realistic to impossible/unrealistic, due to individual and contextual factors (Wrosch et al., 2003). By relying on previous literature on coping flexibility and self-regulation (Wrosch, 2011), we describe below two prototypic ways to cope with goal failure.

Repeated failures in goal attainment could be due to ineffective and inefficient goal-pursuit, *when the goal at hand is plausibly attainable*. For instance, a person could feel hopeless because of repeated failures to find a new job, given lack of experience. Although potentially difficult, this goal does not appear out of reach and specific interventions can be implemented to overcome the goal blockage. In this case, research indicates that it is preferable to focus on strategies that strengthen goal-pursuit and make it more fit for the specific goal (Brandstädter & Rothermund, 2002; Wrosch, 2011). In other words, if the blocked goal is deemed as controllable by the individual, improving the ability to select the most appropriate strategy and pursue it is to be preferred.

For instance, Hope Therapy specifically focuses on helping people specify concrete and realistic goals (i.e., goal-setting), visualize multiple means to obtain them (i.e., pathways thinking), and enhance people's motivation for pursuing them (i.e., agency thinking) (Snyder, 2002). Moreover, Klausner et al., (1998, $n = 13$) preliminarily showed that in older depressed patients, their Goal-Focused Group Psychotherapy (GFPG), based on goal setting, psychoeducation, and skill training, led to a significant increase in hope and a decrease in hopelessness. Similarly, the Goal Setting and Planning approach (GAP) is a manualized intervention focused on teaching the participant to identify suitable goals and to generate realistic plans to achieve them (MacLeod et al., 2008). GAP interventions have been found to improve expectations about reaching goals in healthy individuals (MacLeod et al., 2008, $n = 64$) as well as to reduce levels of hopelessness after the intervention and in a two-month follow-up in mentally disordered offenders (Ferguson et al., 2009, $n = 14$).

When the goal pursued is likely unattainable, the individual needs to recognize that the adopted strategy no longer works, disengage from it, and re-engage in more attainable goals (Greenberg & Paivio, 2003; Kato, 2012; Klinger, 1975; Wrosch et al., 2003). Unfortunately, this process can be problematic. First, the ability to appraise the situation as desperately blocked may be biased in the context of hopelessness. In keeping with this, negative interpretation bias has been associated with both hopelessness and negative cognitive style (Beevers & Miller, 2004, $n = 121$; Giuntoli et al., 2019, $n = 72$). Second, disengaging from important goals is difficult and such a process usually requires a series of steps, namely reduction of the expected gratification deriving from achieving the goal, inhibition of the beliefs and

cognitions that promote the original goal, and broadening of the information processing focus in order to become more receptive to potentially new goals (Brandtstädter & Rothermund, 2002).

It is important to stress that disengagement has to be understood in a broad sense, as both “soft” and “hard” types of disengaging may occur. Soft disengagement mostly consists of downscaling one’s aspirations or restructuring the goal with the aim to make it more attainable. For instance, a couple facing infertility may reappraise their goal to have a biological baby into having a baby, thus opening up their goal commitment to new scenarios, such as adoption or child fostering. Alternatively, hard disengagement requires the person to entirely give up on a specific goal, because it is blatantly unreachable or maladaptive. It is of primary importance, though, that the disengaged goal is replaced by a new goal that has meaning for the self, in order to avoid feelings of emptiness and aimlessness (Wrosch et al., 2003). In keeping with this perspective, the combination of both disengaging from unattainable goals and re-engaging in more adaptive ones has been associated with more favorable expectations (i.e., less hopelessness) and change in depressive symptoms (Eddington et al., 2016, $n = 56$) and less future suicidal thoughts (O’Connor et al., 2009, $n = 329$).

A promising way to tackle unattainable goals is Systematic Motivational Counseling (SMC; Cox & Klinger, 2004), which specifically focuses on resolving conflicts among goals and disengagement from inappropriate goals. In a similar vein, specific clinical modules, developed to target goal-dysregulation in bipolar disorder, could be helpful in tackling the typical goal structures in hopelessness, such as those addressing unrealistically high goal-setting and goal pacing (GOALS Program; Johnson & Fulford, 2009). To our knowledge, no study yet has investigated the effectiveness of the SMC or GOALS in reducing hopelessness. This represents an interesting avenue for future experimental and clinical research.

Furthermore, there is some evidence that hopeless individuals’ goal structures are characterized by conditional goal setting, namely they believe that their happiness, self-worth, and fulfillment entirely depend on specific goals (Hadley & MacLeod, 2010, $n = 86$). Hence, regardless of whether the goal is attainable or not, it is vital to broaden the range of goals and activities from which an individual can derive positive mood, purpose, and feelings of self-worth. To accomplish this, a valuable intervention could be behavioral activation, which specifically tackles the person’s goals (Dickson et al., 2017). In fact, behavioral activation involves reintroducing enjoyable activities that may have been neglected during life transitions, while still aligning with personal values. By doing so, this intervention could be effective in introducing diversity in the range of goals that the individual is committed to (i.e., “not putting all of one’s eggs into one basket”; Busch et al., 2009).

Collectively, these pieces of evidence suggest that a promising clinical target could be improving psychological flexibility, which is defined as the ability to adapt in response to changes in external or internal circumstances (Stange et al., 2017). When applied to hopeless individuals, this view implies that problems in appraising, modifying, adjusting, or relinquishing blocked goals that are creating difficulties into matching functioning to contextual demands. Accordingly, Acceptance and Commitment Therapy (ACT; Hayes et al., 2006) could be a promising psychotherapeutic

intervention to target hopelessness, in that it specifically addresses psychological inflexibility. Interestingly, in ACT it is considered important that people reach a stage of so-called “creative hopelessness”, because their past strategies have turned out to be ineffective. This feeling of being stuck can be a catalyst to seek new ways of relating to oneself and re-connecting with important personal goals and values. Preliminary data shows that ACT, as an added component to standard interventions, can strongly ameliorate hopelessness in individuals with borderline personality disorders, specifically by improving both psychological flexibility and emotion regulation strategies (Morton et al., 2012, $n = 41$).

In sum, despite the strong theoretical background linking hopelessness with blocked goal-directed processing, only a few attempts have been made to directly target the individual’s motivational structure. Future research efforts should focus on reliably assessing the individual motivational structure behind hopelessness and developing effective ways to target it in order to facilitate the achievement of attainable/realistic goals.

Interventions and Manipulations Targeting Helplessness

Hopelessness is intrinsically characterized by the (perceived) inability of the person to reach their important goals. Hence, it is of importance for the achievement of (attainable) goals and the reduction of hopelessness that individuals’ perceived and actual problem-solving skills are potentiated.

A major representative of interventions directly targeting both problem-solving attitudes and skills is Problem Solving Therapy (PST; Nezu et al., 2013). PST is a short-term type of intervention focused on helping patients tackle their current problems and cope with future goal blockages (Nezu et al., 2013). Specifically, PST consists of several modules, such as problem analysis, boosting of confidence about skills, concrete thinking, goal-setting, pathways brainstorming, and metacognition strategies. A meta-analysis of three studies in individuals who engage in deliberate but non-fatal acts of self-harm showed that PST and PST-like interventions led to an improvement of both perceived and actual problem-solving skills and reduction of hopelessness (Townsend et al., 2001). Besides, effective problem solving-focused interventions seem to extend their beneficial effect over a period of one year in repeated suicide attempters (Salkovskis et al., 1990, $n = 20$).

Antecedents-Focused Interventions and Manipulations

In the last twenty-five years, research has tested and confirmed the important role of negative causal inferences in boosting hopelessness. More specifically, considering negative events as being due to stable and global causes, along with having detrimental consequences and self-implications (i.e., negative inferential style), reliably has been associated with concurrent and future levels of hopelessness (Liu et al., 2015). Importantly, several clinical studies showed that negative causal attributions and inferences are not immutable. In fact, negative causal attributions are impacted by a variety

of therapeutic interventions, such as cognitive therapy (Barber & DeRubeis, 2001, $n=27$; DeRubeis, et al., 1990, $n=62$; Seligman et al., 1988, $n=39$), behavioral activation (Jacobson et al., 1996, $n=150$), cognitive behavioral analysis system of psychotherapy (Blalock et al., 2008, $n=517$), psychodynamic therapy (Zilcha-Mano et al., 2016, $n=149$), and pharmacotherapy (Blalock et al., 2008, $n=517$; Zilcha-Mano et al., 2016, $n=149$). Although encouraging, this evidence raises the question as to how different types of intervention can lead to an improvement in the processing of causal attributions. While certain types of psychotherapy specifically target explanatory processes (i.e., CBT; Rubenstein et al., 2016), others do not involve any direct intervention on cognitive processes (i.e., behavioral activation).

That being said, only a few intervention programs or studies have attempted to directly modify causal attributions and inferences and scarce evidence is available about their direct impact on hopelessness. The Penn Resiliency Program (PRP) is a 12-session cognitive-behavioral program, typically administered to youth ranging in age from 10 to 14 years old (Brunwasser et al., 2009). Its main goal is to promote optimism and prevent depressive symptoms, by specifically tackling psychosocial and cognitive mechanisms, such as causal attribution (Gillham et al., 2008). In detail, depressogenic causal attributions are targeted by means of guided group discussions on scenarios depicting adaptive and maladaptive causal attributions about negative events. Studies showed that PRP is effective in reducing the tendency to evaluate stressful events as stable (Jaycox et al., 1994, $n=142$; but see Cardemil et al., 2002, $n=977$) and this effect lasted over a 2-year period (Gillham et al., 1995, $n=118$). It is also worth mentioning that this intervention also seems able to reduce hopelessness (Cardemil et al., 2002, $n=977$, 2007, $n=168$). It is worth mentioning, however, that a recent meta-analysis (Bastounis et al., 2016) of nine trials in which the PRP was implemented showed no significant effect on explanatory style, hence caution is recommended.

At an experimental level, Peters et al., (2011, $n=54$) developed a training for altering causal attributions specifically, by engaging participants in mentally simulating negative scenarios where the causal attributions provided were either favorable (i.e., unstable and unrelated to self-worth) or unfavorable (i.e., stable and self-deficient). The intervention successfully reduced negative attributions and depressed mood after a task failure. Although promising, this study is silent with respect to changing hopelessness and, given its sample type (i.e., healthy college students), represents a preliminary test of Hopelessness Theory. Avirbach et al., (2019, $n=37$) further developed an experimental procedure for targeting inferential styles. Participants were trained to draw either negative inferences or enhancing inferences in reaction to a stressful task. The experimental manipulation (i.e., negative vs. enhancing inferences manipulation) could account for subsequent negative mood and negative self-esteem, via mediation of inferences related to task failure. However, results for state hope, used as a marker of state hopelessness, were mixed. By relying on the same cognitive bias modification (CBM) procedure as implemented by Avirbach et al. (2019), Perlman et al., (2021, $n=91$) demonstrated that it is possible to successfully train individuals to adopt more positive (or more negative) inferences in reaction to negative events. Unfortunately, no information on (state) hopelessness was reported.

A few small studies have targeted negative inferential style, by adopting an interpersonal perspective, namely by means of adaptive inferential feedback (AIF; Panzarella et al., 2006). AIF takes place when a “supporter” attributes the cause of a negative event occurring to a “partner” to specific and unstable reasons, unrelated to negative consequences and negative self-implications. In other words, the supporter helps the partner make adaptive inferences that hinder hopelessness and promote more adaptive interpretations. For instance, Dobkin et al., (2004, $n = 150$) showed that, after a single AIF intervention in the lab delivered by a natural supporter (e.g., friend, family member), participants experienced a reduction in negative inferences regarding failure on a stressful task and a reduction of negative mood. Similarly, effects were reported in a pilot study on ten clinically depressed patients that underwent 10–14 weekly AIF sessions, where a decrease of negative inferences and depressive symptoms were observed after the intervention and at the two-month follow-up (Dobkin et al., 2007, $n = 15$). Unfortunately, no measures of hopelessness were included.

In sum, despite the relevant research line propelled by the Hopelessness Theory, clinical and experimental interventions specifically targeting either negative or enhancing inferential style are modest and evidence about their impact on hopelessness is still rather limited. Interestingly, given that stable causal attributions are the dimension most associated with depression and clinical improvements (Gillham et al., 2008; Hu et al., 2015; Jacobson et al., 1996), future studies could consider focusing on this feature as a preferential lever to reduce hopelessness. Finally, although promising, no intervention so far has been demonstrated to target hopelessness via mediation of change in inferential style.

Context-Focused Interventions and Manipulations

At the interpersonal level, loneliness and reduced social support have been proposed to facilitate hopelessness (Abramson et al., 1989; Panzarella et al., 2006). Therefore, it is possible to speculate that interventions focused on the emotional and cognitive consequences of these phenomena could hinder the onset and persistence of hopelessness. A meta-analysis showed that several approaches are effective in reducing loneliness, with interventions targeting maladaptive social cognitions and enhancing social support being the most effective (Masi et al., 2011). Similarly, a few clinical interventions showed that the perception of being a burden on others (i.e., perceived burdensomeness) can be intentionally changed, via peer companionship and psychoeducation, in a variety of samples (e.g., older adults, adults, and adolescents) (Allan et al., 2018, $n = 138$; Hill & Pettit, 2019, $n = 80$; Van Orden et al., 2016). Two points are noteworthy: these interventions were ineffective in targeting thwarted belongingness (i.e., insufficient social connectedness through loss of interpersonal contact) and their impact on hopelessness is unknown. Furthermore, Stewart et al., (2001, $n = 28$) showed that, after a 20-week face-to-face support group for widows, participants reported an increase of hope and confidence, while interventions facilitating social bonding (i.e., “gratitude letter” or “acts of kindness” exercises) have been found to significantly reduce hopelessness in suicidal inpatients (Huffman et al., 2014, $n = 18–21$).

In sum, although interventions and manipulations targeting the interpersonal context seem to be a promising way to reduce hopelessness, the exact nature of their action mechanisms is still unknown.

Discussion

Hopelessness is defined as the extent to which the person believes that the future is bleak and she/he is destined to suffer or fail, along with feelings that nothing can be done to change this dismal scenario. Notwithstanding the negative outcomes associated with hopelessness, current clinical interventions target this phenomenon rather indirectly and do not have specific modules dedicated to it. To bridge this gap, we have identified promising loci of clinical attention. For instance, the components of hopelessness are features that are fully active in the acute phase of distress, while the antecedents of hopelessness act as proximal factors increasing the likelihood for its emergence and recurrence (Hollon & DeRubeis, 2009). Finally, interpersonal contextual factors seem to facilitate and, perhaps, potentiate the phenomenon of hopelessness and its temporal dynamics.

With the aim to review the different ways to target these loci, we have considered a wide gamut of interventions. Interestingly, the reported effects show marked variability across different approaches (i.e., from experimental to psychosocial) and sample types (i.e., healthy/subclinical vs. clinical), with this calling for a better understanding and sharpening of our clinical tools. In our view, a clear theoretical analysis of the key processes involved in hopelessness should drive such developments.

A Timing-Based Classification of Interventions and Manipulations for Hopelessness

One simplistic, but useful way to classify the reviewed interventions and manipulations is distinguishing between those that could be preferentially adopted *during* the active phase of hopelessness and those more apt to *prevent* its occurrence and recurrence (Fig. 1).

Targeting the Active Phase of Hopelessness Acute clinical hopelessness requires that its components become the preferential focus of clinical attention (Hollon & DeRubeis, 2009). Unfortunately, however, most of the current interventions and manipulations do not target all the components in a synergistic fashion. For instance, the BPS technique and similar interventions are based on imagining desired future scenarios, whereas they are largely silent as to how to reach these imagined goals (King, 2001). This calls for caution, as research shows that simply indulging in positive fantasies may sap the individual's agency (Oettingen & Reininger, 2016) and eventually lead to low goal attainment and future depression (Oettingen & Mayer, 2002; Oettingen et al., 2016). Hence, the adoption of such techniques minimally should be accompanied by other interventions improving individuals' strategies

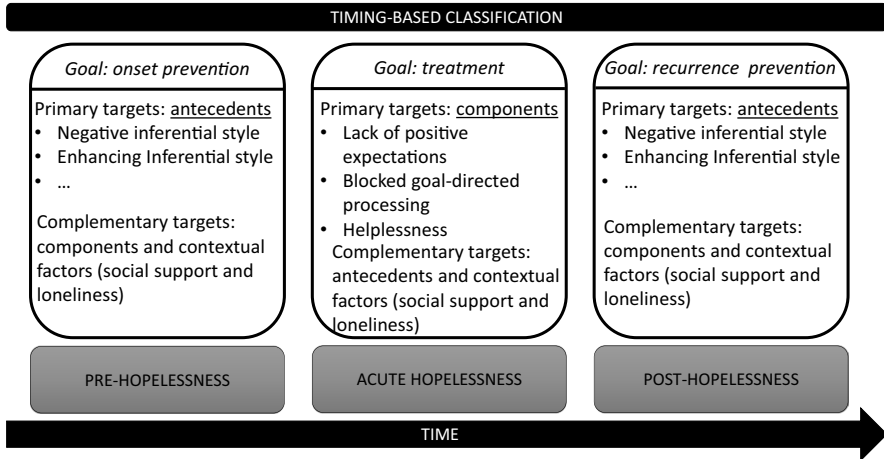


Fig. 1 Timing-based classification of interventions and manipulations for hopelessness

for goal pursuit. Similarly, few approaches explicitly take into account the individual's goal features, such as their attainability and hierarchical structure. This is unfortunate, considering that different, and sometimes, antithetical strategies may be implemented, such as goal-pursuit potentiation for attainable goals vs. goal-disengagement and re-engagement for unattainable goals (Wrosch et al., 2003). Finally, perceived and actual problem-solving skills are an integral part only of a minority of the clinical interventions for hopelessness (i.e., PST), whereas more mechanistic manipulations are silent with respect to a person's ability to pursue goals efficiently (i.e., BPS or MEST).

To overcome these limitations, we advocate for a closer integration of different types of interventions, where the three components are targeted in a synergistic way. This could be done by setting up interventions that explicitly consider the different components of hopelessness in an idiographic manner. For instance, in individuals with marked deficiencies in the generation of positive future scenarios, techniques addressing this impairment could be preferred, especially in conjunction with potentiation of the individual's problem-solving skills. Similarly, strong commitment to blocked, but attainable, goals could be targeted by strengthening goal-pursuit and problem-solving skills. A cautionary note is warranted, when dealing with unattainable goals (i.e., conditional goal setting; Street, 2002). In dealing with such a motivational structure, the most important therapeutic goal should be the disengagement from such maladaptive goals and this could be done via either goal broadening and redefinition (i.e., soft disengagement; Wrosch et al., 2003) or actual goal disengagement and re-engagement (i.e., hard disengagement; Wrosch et al., 2003). In conclusion, future research and clinical programs should consider the complexity of hopelessness and aim to develop more integrative approaches.

Importantly, although it is undisputed that we should reduce active hopelessness whenever present, it is reasonable to wonder at what stage of the clinical intervention this should be done. In response to this question, the three-phase model of change in psychotherapy (Howard et al., 1996) suggests that reducing hopelessness is a primary goal at the beginning of any intervention (i.e., “remoralization” phase), when the patient experiences pervasive hopelessness. In keeping with this view, Rush et al. (1981) showed that an initial reduction in hopelessness is associated with subsequent changes in self-esteem and other symptoms, while treatment-unresponsive hopelessness during the first four CT sessions predicts less favorable clinical outcomes (Kuyken, 2004). Similarly, a substantial drop of depressive symptoms during the initial sessions of exposure-based CBT (i.e., rapid early response pattern; Tang & DeRubeis, 1999) is associated with narratives focused on hope in depressed patients (Hayes et al., 2007). In sum, the reduction of hopelessness (and the instillation of hope) is a particularly favorable signal of change and it usually occurs at the beginning of the clinical intervention, whereas the persistence of demoralization may be considered a marker of (future) treatment failure.

Preventing the Occurrence and Recurrence of Hopelessness

No effective intervention can only strive for the reduction of mental distress, but it also should prevent its occurrence or recurrence (Holmes et al., 2018). This is particularly the case with hopelessness, which can rapidly spiral into (recurrent) depression and suicidal ideation (Abramson et al., 1989). In line with Hollon and DeRubeis (2009), we suggest that targeting antecedents of hopelessness, such as inferential styles, could be a powerful strategy to block the emergence of hopelessness. While preventing hopelessness could be done with specific antecedents-focused interventions (either in vivo or with online settings), the prevention of relapse and recurrence seems to be a major clinical intervention (Haefffel et al., 2005), in that it requires inhibiting maladaptive, well-learned processes (i.e., rehabilitation phase; Howard et al., 1996). Notwithstanding the pivotal importance of primary and secondary prevention, our review of the literature revealed that only a handful of studies so far has addressed these factors directly. This is unfortunate, considering that depressogenic attributional style has been found to predict subsequent depressive relapse even when controlling for treatment (Hollon et al., 1990). Hence, this evidence suggests that future experimental and clinical studies should focus more on the role of inferential styles for preventing hopelessness and its relapse/recurrence.

Complementary Interventions Targeting Hopelessness and its Related Phenomena

Interventions focused on interpersonal contextual factors (e.g., loneliness and reduced social support) could be an effective strategy, especially when targeting both the actual and perceived social support. Although current evidence does not support their use as stand-alone interventions, interpersonal interventions could

be applied across different phases of hopelessness. For instance, improving actual and perceived social support (i.e., social cognitive training or enhancing social support) could mitigate the temporal and motivational narrowing due to hopelessness and facilitate more focused interventions on its components. Hence, future studies should investigate the efficacy of these types of clinical interventions singularly and, more importantly, in conjunction with other ones.

Limitations and Future Directions

Our review of the literature indicates a number of implications and future directions. First, although based on solid research, our components-based framework of hopelessness is speculative, as no full test of it has been carried out so far. Future studies could directly investigate whether the co-occurrence of lack of positive expectations, important blocked goals, and helplessness is associated with hopelessness. This could be carried out by applying innovative variance partitioning methods, such as commonality analysis (see Marchetti et al., 2018, 2016a, b). Another option that needs to be considered is that each of these features can uniquely lead to hopelessness, namely equifinality. Future research could consider testing this specific model, by setting up appropriate longitudinal studies. Moreover, it is possible that antecedents, components, and contextual factors may create multiple feedback loops and partially overlap with one another over time. To further investigate this scenario, a direct comparison between at-risk individuals, clinical patients, and remitted individuals could be used to shed light on the temporal interplay of the different mechanisms involved in the phenomenon of hopelessness.

Second, given the lack of a coherent framework for understanding the mechanisms of hopelessness, the current research on this topic is somewhat scattered. This suboptimal scenario is reflected in the marked differences of sample size across the reviewed studies, with both pilot studies and large studies being reported. Future efforts for targeting hopelessness should include medium-to-large samples, firmly based on power-analysis. Moreover, the available literature has provided limited information regarding dropout rates, leaving it unclear whether interventions and manipulations targeting hopelessness are well-received by patients. Similarly, the extent to which evidence-based hopelessness-focused interventions are accepted by healthcare providers remains unclear. Previous research on disseminating evidence-based practices has highlighted the potential lack of knowledge, skills, and attitude among healthcare providers and their organizations to effectively implement these practices (Corrigan et al., 2001). To address these challenges, it is recommended that strategies be developed to (i) provide guideline-based interventions, (ii) enhance staff members' knowledge and skills, and (iii) improve the organization's flexibility and ability to work collectively. Therefore, further research is necessary to examine the level of compliance among both patients and clinicians regarding clinical interventions designed to reduce hopelessness. Such investigations would provide insights into the effectiveness and feasibility of these interventions in real-world clinical settings.

Third, more experimental, clinical, and longitudinal studies are needed. In particular, we advocate for studies that may shed light on short-, medium-, and long-term effects of current interventions targeting hopelessness. This point is of particular importance as previous studies suggest that simply indulging in positive future scenarios may lead to maladaptive consequences over time, such as low goal attainment and depression (Oettingen & Mayer, 2002; Oettingen et al., 2016). Thus, especially interventions focusing on single components of hopelessness (i.e., lack of positive expectations, helplessness, or blocked goal-processing) should consider the full range of implications on a variety of outcomes that go beyond the targeted mechanism, such as goal structure, goal pursuit, etc.

Fourth, given the well-established relationship between hopelessness and life-threatening mental conditions (i.e., suicide), interventions delivered by trained professionals are preferable. However, negative expectations about the possibility to change represent a major barrier to treatment (Goldman et al., 1999). Similarly, hopelessness sometimes has been related to reduced help-seeking (Wilson & Deane, 2010). Thus, it is crucial to reach individuals who require assistance in ways that are not typically employed, such as in- or out-patient treatment settings. For instance, online assessments of hopelessness, ranging from small-scale to large-scale, could be readily implemented at different levels, from local healthcare providers to government policies (Klonsky & May, 2015). Encouragingly, preliminary research suggests that a short four-item self-report on hopelessness could be as effective in predicting suicidal ideation and attempts as a full assessment (Yip & Cheung, 2006). Furthermore, individual levels of hopelessness during the euthymic phase could predict current and future suicide attempts over the subsequent 6–8 years (Young et al., 1996). Consequently, short, relatively infrequent, and online assessment programs for hopelessness could be highly promising in identifying individuals at risk of developing suicidal ideation and attempts, while specific hopelessness-focused interventions, such as Internet-based programs in primary care (Hoek et al., 2011; Van Voorhees et al., 2009) and online interventions (Robinson et al., 2016), could be easily implemented. Despite these promising future directions, in-vivo assessments and interventions continue to represent the gold-standard approach for treating hopelessness and its associated outcomes.

Conclusions

In our review, we have highlighted major features of hopelessness, a phenomenon that deserves attention from both researchers and clinicians. Despite its clear importance, hopelessness has received little attention as a main focus of clinical interventions and manipulations, in that no fully dedicated module is currently available. To fill this gap, we have identified a number of clinical loci and reviewed promising maneuvers to target them. Finally, we have suggested possible pathways for new clinical and research programs. By doing so, we hope that in the future, effective interventions will help people break the vise of hopelessness.

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Declarations

Conflict of Interest All authors declare that they have no conflicts of interest.

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References

- Abela, J. R. Z. (2001). The hopelessness theory of depression: A test of the diathesis-stress and causal mediation components in third and seventh grade children. *Journal of Abnormal Child Psychology*, 29, 241–254. <https://doi.org/10.1023/A:1010333815728>
- Abela, J. R. Z., Brozina, K., & Haigh, E. P. (2002). An examination of the response styles theory of depression in third- and seventh-grade children: A short-term longitudinal study. *Journal of Abnormal Child Psychology*, 30, 515–527. <https://doi.org/10.1023/A:1019873015594>
- Abela, J. R. Z., Gagnon, H., & Auerbach, R. P. (2007). Hopelessness depression in children: An examination of the symptom component of the hopelessness theory. *Cognitive Therapy and Research*, 31, 401–417. <https://doi.org/10.1007/s10608-007-9144-z>
- Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87, 49–74. <https://doi.org/10.1037/0021-843x.87.1.49>
- Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness depression - a theory-based subtype of depression. *Psychological Review*, 96, 358–372. <https://doi.org/10.1037/0033-295x.96.2.358>
- Abramson, L. Y., Alloy, L. B., Hogan, M. E., Whitehouse, W. G., Gibb, B. E., Hankin, B. L., & Cornette, M. M. (2002). The hopelessness theory of suicidality. In T. Joiner & M. D. Rudd (Eds.), *Suicide science: Expanding the boundaries* (pp. 17–32). Kluwer Academic Publishers.
- Alford, B. A., Lester, J. M., Patel, R. J., Buchanan, J. P., & Giunta, L. C. (1995). Hopelessness predicts future depressive symptoms: A prospective analysis of cognitive vulnerability and cognitive content specificity. *Journal of Clinical Psychology*, 51, 331–339. [https://doi.org/10.1002/1097-4679\(199505\)51:3%3c331::Aid-Jclp2270510303%3e3.0.Co;2-T](https://doi.org/10.1002/1097-4679(199505)51:3%3c331::Aid-Jclp2270510303%3e3.0.Co;2-T)
- Allan, N. P., Boffa, J. W., Raines, A. M., & Schmidt, N. B. (2018). Intervention related reductions in perceived burdensomeness mediates incidence of suicidal thoughts. *Journal of Affective Disorders*, 234, 282–288. <https://doi.org/10.1016/j.jad.2018.02.084>
- Alloy, L. B., & Ahrens, A. H. (1987). Depression and pessimism for the future: Biased use of statistically relevant information in predictions for self versus others. *Journal of Personality and Social Psychology*, 52, 366–378. <https://doi.org/10.1037/0022-3514.52.2.366>
- Alloy, L. B., & Clements, C. M. (1998). Hopelessness theory of depression: Tests of the symptom component. *Cognitive Therapy and Research*, 22, 303–335. <https://doi.org/10.1023/A:1018753028007>

- Alloy, L. B., Abramson, L. Y., Whitehouse, W. G., Hogan, M. E., Panzarella, C., & Rose, D. T. (2006). Prospective incidence of first onsets and recurrences of depression in individuals at high and low cognitive risk for depression. *Journal of Abnormal Psychology, 115*, 145–156. <https://doi.org/10.1037/0021-843x.115.145>
- Alloy, L. B., Abramson, L. Y., Hogan, M. E., Whitehouse, W. G., Rose, D. T., Robinson, M. S., ... & Lapkin, J. B. (2000). The temple-wisconsin cognitive vulnerability to depression project: Lifetime history of Axis I psychopathology in individuals at high and low cognitive risk for depression. *Journal of Abnormal Psychology, 109*, 403–418. <https://doi.org/10.1037/0021-843x.109.3.403>
- Avirbach, N., Perlamn, B., & Mor, N. (2019). Cognitive bias modification for inferential style. *Cognition & Emotion, 33*, 816–824. <https://doi.org/10.1080/02699931.2018.1476321>
- Barber, J. P., & DeRubeis, R. J. (2001). Change in compensatory skills in cognitive therapy for depression. *The Journal of Psychotherapy Practice and Research, 10*, 8–13.
- Barry, T. J., Sze, W. Y., & Raes, F. (2019). A meta-analysis and systematic review of Memory Specificity Training (MeST) in the treatment of emotional disorders. *Behaviour Research and Therapy, 116*, 36–51. <https://doi.org/10.1016/j.brat.2019.02.001>
- Bastounis, A., Callaghan, P., Banerjee, A., & Michail, M. (2016). The effectiveness of the Penn Resiliency Programme (PRP) and its adapted versions in reducing depression and anxiety and improving explanatory style: A systematic review and meta-analysis. *Journal of Adolescence, 52*, 37–48. <https://doi.org/10.1016/j.adolescence.2016.07.004>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human-motivation. *Psychological Bulletin, 117*, 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Beck, J. S. (2020). *Cognitive behavior therapy: Basics and beyond*. Guilford Publications.
- Beck, A. T., & Alford, B. A. (2009). *Depression: Causes and treatment*. University of Pennsylvania Press.
- Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology, 42*, 861–865. <https://doi.org/10.1037/h0037562>
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1987). *Cognitive therapies of depression*. The Guilford Press.
- Beck, A. T., Riskind, J. H., Brown, G., & Steer, R. A. (1988). Levels of hopelessness in Dsm-III Disorders - a partial test of content specificity in depression. *Cognitive Therapy and Research, 12*, 459–469. <https://doi.org/10.1007/Bf01173413>
- Beck, A. T., Brown, G., & Steer, R. A. (1989). Prediction of eventual suicide in psychiatric inpatients by clinical ratings of hopelessness. *Journal of Consulting and Clinical Psychology, 57*(2), 309–310. <https://doi.org/10.1037/0022-006x.57.2.309>
- Beck, A. T., Brown, G., Berchick, R. J., Stewart, B. L., & Steer, R. A. (1990). Relationship between hopelessness and ultimate suicide - a replication with psychiatric outpatients. *American Journal of Psychiatry, 147*, 190–195. <https://doi.org/10.1176/foc.4.2.291>
- Beck, A. T., Steer, R. A., Beck, J. S., & Newman, C. F. (1993). Hopelessness, depression, suicidal ideation, and clinical diagnosis of depression. *Suicide and Life-Threatening Behavior, 23*, 139–145. <https://doi.org/10.1111/j.1943-278X.1993.tb00378.x>
- Beck, R., Perkins, T. S., Holder, R., Robbins, M., Gray, M., & Allison, S. H. (2001). The cognitive and emotional phenomenology of depression and anxiety: Are worry and hopelessness the cognitive correlates of NA and PA? *Cognitive Therapy and Research, 25*, 829–838. <https://doi.org/10.1023/A:1012983726272>
- Beedie, A., & Kennedy, P. (2002). Quality of social support predicts hopelessness and depression post spinal cord injury. *Journal of Clinical Psychology in Medical Settings, 9*, 227–234. <https://doi.org/10.1023/A:1016003428370>
- Beevers, C. G., & Miller, I. W. (2004). Perfectionism, cognitive bias, and hopelessness as prospective predictors of suicidal ideation. *Suicide and Life-Threatening Behavior, 34*, 126–137. <https://doi.org/10.1521/suli.34.2.126.32791>
- Biggam, F. H., & Power, K. G. (1999). A comparison of the problem-solving abilities and psychological distress of suicidal, bullied, and protected prisoners. *Criminal Justice and Behavior, 26*, 196–216. <https://doi.org/10.1177/0093854899026002003>
- Blalock, J. A., Fouladi, R. T., Cinciripini, P. M., Markowitz, J. C., Klein, D. N., Rothbaum, B. O., ... & McCullough, J. P. (2008). Cognitive and behavioral mediators of combined pharmacotherapy

- and psychotherapy of chronic depression. *Cognitive Therapy and Research*, 32, 197–211. <https://doi.org/10.1007/s10608-006-9092-z>
- Bonner, R. L., & Rich, A. R. (1991). Predicting vulnerability to hopelessness - a longitudinal analysis. *Journal of Nervous and Mental Disease*, 179, 29–32. <https://doi.org/10.1097/00005053-199101000-00006>
- Boselie, J. J. L. M., Vancleef, L. M. G., Smeets, T., & Peters, M. L. (2014). Increasing optimism abolishes pain-induced impairments in executive task performance. *Pain*, 155, 334–340. <https://doi.org/10.1016/j.pain.2013.10.014>
- Brandtstädter, J., & Rothermund, K. (2002). The life-course dynamics of goal pursuit and goal adjustment: A two-process framework. *Developmental Review*, 22, 117–150. <https://doi.org/10.1006/drev.2001.0539>
- Brunwasser, S. M., Gillham, J. E., & Kim, E. S. (2009). A meta-analytic review of the Penn Resiliency Program's effect on depressive symptoms. *Journal of Consulting and Clinical Psychology*, 77, 1042–1054. <https://doi.org/10.1037/a0017671>
- Busch, A. M., Rusch, L. C., & Kanter, J. W. (2009). *Behavioral activation: Distinctive features*. Routledge.
- Cardemil, E. V., Reivich, K. J., & Seligman, M. E. (2002). The prevention of depressive symptoms in low-income minority middle school students. *Prevention & Treatment*, 5, 8a. <https://doi.org/10.1037/1522-3736.5.1.58a>
- Cardemil, E. V., Reivich, K. J., Beevers, C. G., Seligman, M. E., & James, J. (2007). The prevention of depressive symptoms in low-income, minority children: Two-year follow-up. *Behaviour Research and Therapy*, 45, 313–327. <https://doi.org/10.1016/j.brat.2006.03.010>
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. Cambridge University Press.
- Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. *Clinical Psychology Review*, 30, 879–889. <https://doi.org/10.1016/j.cpr.2010.01.006>
- Chang, E. C., Sanna, L. J., Hirsch, J. K., & Jeglic, E. L. (2010). Loneliness and negative life events as predictors of hopelessness and suicidal behaviors in hispanics: Evidence for a diathesis-stress model. *Journal of Clinical Psychology*, 66, 1242–1253. <https://doi.org/10.1002/jclp.20721>
- Chioqueta, A. P., & Stiles, T. C. (2007). The relationship between psychological buffers, hopelessness, and suicidal ideation: Identification of protective factors. *Crisis-the Journal of Crisis Intervention and Suicide Prevention*, 28, 67–73. <https://doi.org/10.1027/0227-5910.28.2.67>
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38, 300–314. <https://doi.org/10.1097/00006842-197609000-00003>
- Corrigan, P. W., Steiner, L., McCracken, S. G., Blaser, B., & Barr, M. (2001). Strategies for disseminating evidence-based practices to staff who treat people with serious mental illness. *Psychiatric Services*, 52, 1598–1606. <https://doi.org/10.1176/appi.ps.52.12.1598>
- Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38, 668–678. <https://doi.org/10.1037//0022-3514.38.4.668>
- Cox, M. W., & Klinger, E. (2004). Systematic motivational counseling: the Motivational Structure Questionnaire in action. In W. Miles Cox & E. Klinger (Eds.), *Handbook of motivational counseling: concepts, approaches, and assessment*. Wiley.
- Crawford, T., & Ellis, A. (1989). A dictionary of rational-emotive feelings and behaviors. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 7(1), 3–28. <https://doi.org/10.1007/BF02175569>
- Cuijpers, P., de Beurs, D. P., van Spijker, B. A. J., Berking, M., Andersson, G., & Kerkhof, A. J. F. M. (2013). The effects of psychotherapy for adult depression on suicidality and hopelessness: A systematic review and meta-analysis. *Journal of Affective Disorders*, 144, 183–190. <https://doi.org/10.1016/j.jad.2012.06.025>
- Danchin, C. L., MacLeod, A. K., & Tata, P. (2010). Painful engagement in deliberate self-harm: The role of conditional goal setting. *Behaviour Research and Therapy*, 48, 915–920. <https://doi.org/10.1016/j.brat.2010.05.022>
- Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2001). Suicidal ideation and help-negation: Not just hopelessness or prior help. *Journal of Clinical Psychology*, 57, 901–914. <https://doi.org/10.1002/jclp.1058>
- DeRubeis, R. J., Evans, M. D., Hollon, S. D., Garvey, M. J., Grove, W. M., & Tuason, V. B. (1990). How does cognitive therapy work? Cognitive change and symptom change in cognitive therapy and pharmacotherapy for depression. *Journal of Consulting and Clinical Psychology*, 58, 862–869. <https://doi.org/10.1037//0022-006x.58.6.862>

- Dickson, J. M., Johnson, S., Huntley, C. D., Peckham, A., & Taylor, P. J. (2017). An integrative study of motivation and goal regulation processes in subclinical anxiety, depression and hypomania. *Psychiatry Research*, 256, 6–12. <https://doi.org/10.1016/j.psychres.2017.06.002>
- Dobkin, R. D., Panzarella, C., Fernandez, J., Alloy, L. B., & Cascardi, M. (2004). Adaptive inferential feedback, depressogenic inferences, and depressed mood: A laboratory study of the expanded hopelessness theory of depression. *Cognitive Therapy and Research*, 28, 487–509. <https://doi.org/10.1023/B:Cotr.0000045560.71692.88>
- Dobkin, R. D., Allen, L. A., & Menza, M. (2007). Cognitive-behavioral therapy for depression in Parkinson's disease: A pilot study. *Movement Disorders*, 22, 946–952. <https://doi.org/10.1002/mds.21455>
- Dobson, D., & Dobson, K. S. (2009). *Evidence-based practice of cognitive-behavioral therapy*. The Guilford Press.
- Eddington, K. M., Burgin, C. J., & Majestic, C. (2016). Individual differences in expectancies for change in depression: Associations with goal pursuit and daily experiences. *Journal of Social and Clinical Psychology*, 35, 629–642. <https://doi.org/10.1521/jscp.2016.35.8.629>
- Edelman, R. E., Ahrens, A. H., & Haaga, D. A. F. (1994). Inferences about the self, attributions, and overgeneralization as predictors of recovery from dysphoria. *Cognitive Therapy and Research*, 18, 551–566. <https://doi.org/10.1007/Bf02355668>
- Evans, J., Williams, J. M. G., O'Loughlin, S., & Howells, K. (1992). Autobiographical memory and problem-solving strategies of parasuicide patients. *Psychological Medicine*, 22, 399–405. <https://doi.org/10.1017/S0033291700030348>
- Everson, S. A., Goldberg, D. E., Kaplan, G. A., Cohen, R. D., Pukkala, E., Tuomilehto, J., & Salonen, J. T. (1996). Hopelessness and risk of mortality and incidence of myocardial infarction and cancer. *Psychosomatic Medicine*, 58, 113–121. <https://doi.org/10.1097/00006842-199603000-00003>
- Feldman, D. B., & Snyder, C. R. (2005). Hope and the meaningful life: Theoretical and empirical associations between goal-directed thinking and life meaning. *Journal of Social and Clinical Psychology*, 24, 401–421. <https://doi.org/10.1521/jscp.24.3.401.65616>
- Ferguson, G., Conway, C., Endersby, L., & MacLeod, A. (2009). Increasing subjective well-being in long-term forensic rehabilitation: Evaluation of well-being therapy. *Journal of Forensic Psychiatry & Psychology*, 20, 906–918. <https://doi.org/10.1080/14789940903174121>
- Fischer, R., & Chalmers, A. (2008). Is optimism universal? A meta-analytical investigation of optimism levels across 22 nations. *Personality and Individual Differences*, 45, 378–382. <https://doi.org/10.1016/j.paid.2008.05.008>
- Franklin, J. C., Ribeiro, J. D., Fox, K. R., Bentley, K. H., Kleiman, E. M., Huang, X. Y. N., . . . Nock, M. K. (2017). Risk Factors for Suicidal Thoughts and Behaviors: A Meta-Analysis of 50 Years of Research. *Psychological Bulletin*, 143, 187–U121. <https://doi.org/10.1037/bul0000084>
- Gallagher, M. W., Lopez, S. J., & Pressman, S. D. (2013). Optimism is universal: Exploring the presence and benefits of optimism in a representative sample of the world. *Journal of Personality*, 81, 429–440. <https://doi.org/10.1111/jopy.12026>
- Ghaemi, S. N. (2007). Feeling and time: The phenomenology of mood disorders, depressive realism, and existential psychotherapy. *Schizophrenia Bulletin*, 33, 122–130. <https://doi.org/10.1093/schbul/sbl061>
- Gibb, B. E., & Abela, J. R. Z. (2008). Emotional abuse, verbal victimization, and the development of children's negative inferential styles and depressive symptoms. *Cognitive Therapy and Research*, 32, 161–176. <https://doi.org/10.1007/s10608-006-9106-x>
- Gibb, B. E., Alloy, L. B., Abramson, L. Y., Rose, D. T., Whitehouse, W. G., & Hogan, M. E. (2001). Childhood maltreatment and college students' current suicidal ideation: A test of the hopelessness theory. *Suicide and Life-Threatening Behavior*, 31, 405–415. <https://doi.org/10.1521/suli.31.4.405.22042>
- Gibb, B. E., Alloy, L. B., Abramson, L. Y., & Marx, B. P. (2003). Childhood maltreatment and maltreatment-specific inferences: A test of Rose and Abramson's (1992) extension of the hopelessness theory. *Cognition & Emotion*, 17, 917–931. <https://doi.org/10.1080/02699930244000237>
- Gibb, B. E., Stone, L. B., & Crossett, S. E. (2012). Peer victimization and prospective changes in children's inferential styles. *Journal of Clinical Child and Adolescent Psychology*, 41, 561–569. <https://doi.org/10.1080/15374416.2012.703124>
- Gillham, J. E., Reivich, K. J., Jaycox, L. H., & Seligman, M. E. (1995). Prevention of depressive symptoms in schoolchildren: Two-year follow-up. *Psychological Science*, 6, 343–351. <https://doi.org/10.1111/j.1467-9280.1995.tb00524.x>

- Gillham, J. E., Brunwasser, S. M., & Freres, D. R. (2008). Preventing depression in early adolescence: The Penn Resiliency Program. In J. R. Z. Abela & B. L. Hankin (Eds.), *Handbook of depression in children and adolescents* (pp. 309–322). Guilford Press.
- Giuntoli, L., Marchetti, I., Panzeri, A., Spoto, A., Vidotto, G., & Caudek, C. (2019). Measuring cognitive vulnerability to depression: Further evidence on the factorial and predictive validity of negative cognitive style. *Journal of Behavior Therapy and Experimental Psychiatry*, *65*, 101479. <https://doi.org/10.1016/j.jbtep.2019.04.005>
- Goldman, L. S., Nielsen, N. H., & Champion, H. C. (1999). Awareness, diagnosis, and treatment of depression. *Journal of General Internal Medicine*, *14*, 569–580. <https://doi.org/10.1046/j.1525-1497.1999.03478.x>
- Gorwood, P., Rouillon, F., Even, C., Falissard, B., Corruble, E., & Moran, P. (2010). Treatment response in major depression: Effects of personality dysfunction and prior depression. *The British Journal of Psychiatry*, *196*, 139–142. <https://doi.org/10.1192/bjp.bp.109.067058>
- Greenberg, L. S., & Paivio, S. C. (2003). *Working with emotions in psychotherapy*. The Guilford Press.
- Greene, S. M. (1981). Levels of measured hopelessness in the general-population. *British Journal of Clinical Psychology*, *20*, 11–14. <https://doi.org/10.1111/j.2044-8260.1981.tb00490.x>
- Haatainen, K., Tanskanen, A., Kylmä, J., Honkalampi, K., Koivumaa-Honkanen, H., Hintikka, J., & Viinamäki, H. (2004). Factors associated with hopelessness: A population study. *International Journal of Social Psychiatry*, *50*, 142–152. <https://doi.org/10.1177/0020764004040961>
- Haatainen, K. M., Tanskanen, A., Kylmä, J., Honkalampi, K., Koivumaa-Honkanen, H., Hintikka, J., . . . Viinamäki, H. (2003). Stable hopelessness and its predictors in a general population: A 2-year follow-up study. *Suicide and Life-Threatening Behavior*, *33*, 373–380. <https://doi.org/10.1521/suli.33.4.373.25237>
- Hadley, S. A., & MacLeod, A. K. (2010). Conditional goal-setting, personal goals and hopelessness about the future. *Cognition & Emotion*, *24*, 1191–1198. <https://doi.org/10.1080/02699930903122521>
- Haefffel, G. J., Abramson, L. Y., Brazy, P. C., & Shah, J. Y. (2008). Hopelessness theory and the approach system: Cognitive vulnerability predicts decreases in goal-directed behavior. *Cognitive Therapy and Research*, *32*, 281–290. <https://doi.org/10.1007/s10608-007-9160-z>
- Haefffel, G. J., Abramson, L. Y., Voelz, Z. R., Metalsky, G. I., Halberstadt, L., Dykman, B. M., . . . & Alloy, L. B. (2005). Negative cognitive styles, dysfunctional attitudes, and the remitted depression paradigm: A search for the elusive cognitive vulnerability to depression factor among remitted depressives. *Emotion*, *5*, 343–348. <https://doi.org/10.1037/1528-3542.5.3.343>
- Hamilton, J. L., Shapero, B. G., Stange, J. P., Hamlat, E. J., Abramson, L. Y., & Alloy, L. B. (2013). Emotional maltreatment, peer victimization, and depressive versus anxiety symptoms during adolescence: Hopelessness as a mediator. *Journal of Clinical Child and Adolescent Psychology*, *42*, 332–347. <https://doi.org/10.1080/15374416.2013.777916>
- Hankin, B. L. (2005). Childhood maltreatment and psychopathology: Prospective tests of attachment, cognitive vulnerability, and stress as mediating processes. *Cognitive Therapy and Research*, *29*, 645–671. <https://doi.org/10.1007/s10608-005-9631-z>
- Hankin, B. L., Abramson, L. Y., & Siler, M. (2001). A prospective test of the hopelessness theory of depression in adolescence. *Cognitive Therapy and Research*, *25*, 607–632. <https://doi.org/10.1023/A:1005561616506>
- Hanssen, M. M., Peters, M. L., Vlaeyen, J. W. S., Meevissen, Y. M. C., & Vancleef, L. M. G. (2013). Optimism lowers pain: Evidence of the causal status and underlying mechanisms. *Pain*, *154*, 53–58. <https://doi.org/10.1016/j.pain.2012.08.006>
- Hartlage, S., Alloy, L. B., Vazquez, C., & Dykman, B. (1993). Automatic and effortful processing in depression. *Psychological Bulletin*, *113*, 247–278. <https://doi.org/10.1037/0033-2909.113.2.247>
- Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour Research and Therapy*, *44*, 1–25. <https://doi.org/10.1016/j.brat.2005.06.006>
- Hayes, A. M., Feldman, G. C., Beevers, C. G., Laurenceau, J. P., Cardaciotto, L., & Lewis-Smith, J. (2007). Discontinuities and cognitive changes in an exposure-based cognitive therapy for depression. *Journal of Consulting and Clinical Psychology*, *75*, 409–421. <https://doi.org/10.1037/0022-006x.75.3.409>
- Heppner, P. P., Witty, T. E., & Dixon, W. A. (2004). Problem-solving appraisal and human adjustment: A review of 20 years of research using the problem solving inventory. *Counseling Psychologist*, *32*, 344–428. <https://doi.org/10.1177/0011000003262793>

- Hill, R. M., & Pettit, J. W. (2019). Pilot randomized controlled trial of LEAP: A selective preventive intervention to reduce adolescents' perceived burdensomeness. *Journal of Clinical Child and Adolescent Psychology, 47*, 1–12. <https://doi.org/10.1080/15374416.2016.1188705>
- Hoek, W., Marko, M., Fogel, J., Schuurmans, J., Gladstone, T., Bradford, N., . . . Van Voorhees, B. W. (2011). Randomized controlled trial of primary care physician motivational interviewing versus brief advice to engage adolescents with an Internet-based depression prevention intervention: 6-month outcomes and predictors of improvement. *Translational Research, 158*, 315–325. <https://doi.org/10.1016/j.trsl.2011.07.006>
- Hollon, S. D., & DeRubeis, R. J. (2009). Mediating the effects of cognitive therapy for depression. *Cognitive Behaviour Therapy, 38*, 43–47. <https://doi.org/10.1080/16506070902915667>
- Hollon, S. D., Evans, M. D., & DeRubeis, R. J. (1990). Cognitive mediation of relapse prevention following treatment for depression: Implications of differential risk. In R. E. Ingram (Ed.), *Psychological aspects of depression* (pp. 117–136). Plenum Press.
- Holmes, E. A., Ghaderi, A., Harmer, C. J., Ramchandani, P. G., Cuijpers, P., Morrison, A. P., . . . Craske, M. G. (2018). The Lancet Psychiatry Commission on psychological treatments research in tomorrow's science. *Lancet Psychiatry, 5*, 237–286. [https://doi.org/10.1016/s2215-0366\(17\)30513-8](https://doi.org/10.1016/s2215-0366(17)30513-8)
- Hong, R. Y., Gwee, K., & Karia, M. (2006). The role of event-specific pessimistic inferences in the etiological chain of hopelessness depression. *Personality and Individual Differences, 41*, 1119–1129. <https://doi.org/10.1016/j.paid.2006.04.016>
- Howard, K. I., Moras, K., Brill, P. L., Martinovich, Z., & Lutz, W. (1996). Evaluation of psychotherapy - efficacy, effectiveness, and patient progress. *American Psychologist, 51*, 1059–1064. <https://doi.org/10.1037/0003-066x.51.10.1059>
- Hu, T., Zhang, D., & Yang, Z. (2015). The relationship between attributional style for negative outcomes and depression: A meta-analysis. *Journal of Social and Clinical Psychology, 34*, 304–321. <https://doi.org/10.1521/jscp.2015.34.4.304>
- 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>
- Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., . . . & Prince, S. E. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of Consulting and Clinical Psychology, 64*, 295–304. <https://doi.org/10.1037/0022-006x.64.2.295>
- Jaycox, L. H., Reivich, K. J., Gillham, J., & Seligman, M. E. (1994). Prevention of depressive symptoms in school children. *Behaviour Research and Therapy, 32*, 801–816. [https://doi.org/10.1016/0005-7967\(94\)90160-0](https://doi.org/10.1016/0005-7967(94)90160-0)
- Johnson, S. L., & Fulford, D. (2009). Preventing mania: A preliminary examination of the GOALS program. *Behavior Therapy, 40*, 103–113. <https://doi.org/10.1016/j.beth.2008.03.002>
- Johnson, J. G., Crofton, A., & Feinstein, S. B. (1996). Enhancing attributional style and positive life events predict increased hopefulness among depressed psychiatric inpatients. *Motivation and Emotion, 20*, 285–297. <https://doi.org/10.1007/Bf02856519>
- Johnson, J. G., Han, Y. S., Douglas, C. J., Johannet, C. M., & Russell, T. (1998). Attributions for positive life events predict recovery from depression among psychiatric inpatients: An investigation of the needles and Abramson model of recovery from depression. *Journal of Consulting and Clinical Psychology, 66*, 369–376. <https://doi.org/10.1037/0022-006x.66.2.369>
- Johnson, J. G., Alloy, L. B., Panzarella, C., Metalsky, G. I., Rabkin, J. G., Williams, J. B. W., & Abramson, L. Y. (2001). Hopelessness as a mediator of the association between social support and depressive symptoms: Findings of a study of men with HIV. *Journal of Consulting and Clinical Psychology, 69*, 1056–1060. <https://doi.org/10.1037/0022-006x.69.6.1056>
- Joiner, T. E. (2005). *Why people die by suicide*. Harvard University Press.
- Joiner, T. E., & Rudd, M. D. (1996). Disentangling the interrelations between hopelessness, loneliness, and suicidal ideation. *Suicide and Life-Threatening Behavior, 26*, 19–26. <https://doi.org/10.3329/dujbs.v25i1.28495>
- Joiner, T. E., Steer, R. A., Abramson, L. Y., Alloy, L. B., Metalsky, G. I., & Schmidt, N. B. (2001). Hopelessness depression as a distinct dimension of depressive symptoms among clinical and non-clinical samples. *Behaviour Research and Therapy, 39*, 523–536. [https://doi.org/10.1016/S0005-7967\(00\)00024-3](https://doi.org/10.1016/S0005-7967(00)00024-3)
- Joiner, T. E., Wingate, L. R., & Otamendi, A. (2005). An interpersonal addendum to the hopelessness theory of depression: Hopelessness as a stress and depression generator. *Journal of Social and Clinical Psychology, 24*(5), 649–664. <https://doi.org/10.1521/jscp.2005.24.5.649>

- Kanter, J. W., Manos, R. C., Bowe, W. M., Baruch, D. E., Busch, A. M., & Rusch, L. C. (2010). What is behavioral activation? A review of the empirical literature. *Clinical Psychology Review, 30*, 608–620. <https://doi.org/10.1016/j.cpr.2010.04.001>
- Kashani, J. H., Suarez, L., Allan, W. D., & Reid, J. C. (1997). Hopelessness in inpatient youths: A closer look at behavior, emotional expression, and social support. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 1625–1631. <https://doi.org/10.1097/00004583-199711000-00028>
- Kato, T. (2012). Development of the coping flexibility scale: Evidence for the coping flexibility hypothesis. *Journal of Counseling Psychology, 59*, 262–273. <https://doi.org/10.1037/a0027770>
- King, L. A. (2001). The health benefits of writing about life goals. *Personality and Social Psychology Bulletin, 27*, 798–807. <https://doi.org/10.1177/0146167201277003>
- Klausner, E. J., Clarkin, J. F., Spielman, L., Pupo, C., Abrams, R., & Alexopoulos, G. S. (1998). Late-life depression and functional disability: The role of goal-focused group psychotherapy. *International Journal of Geriatric Psychiatry, 13*, 707–716. [https://doi.org/10.1002/\(Sici\)1099-1166\(199810\)13:10%3c707::Aid-Gps856%3e3.0.Co;2-Q](https://doi.org/10.1002/(Sici)1099-1166(199810)13:10%3c707::Aid-Gps856%3e3.0.Co;2-Q)
- Kleiman, E. M., Liu, R. T., Riskind, J. H., & Hamilton, J. L. (2015). Depression as a mediator of negative cognitive style and hopelessness in stress generation. *British Journal of Psychology, 106*, 68–83. <https://doi.org/10.1111/bjop.12066>
- Klinger, E. (1975). Consequences of commitment to and disengagement from incentives. *Psychological Review, 82*, 1–25. <https://doi.org/10.1037/h0076171>
- Klonsky, E. D., & May, A. M. (2015). The three-step theory (3ST): A new theory of suicide rooted in the “ideation-to-action” framework. *International Journal of Cognitive Therapy, 8*, 114–129. <https://doi.org/10.1521/ijct.2015.8.2.114>
- Klonsky, E. D., May, A. M., & Saffer, B. Y. (2016). Suicide, suicide attempts, and suicidal ideation. *Annual Review of Clinical Psychology, 12*, 307–330. <https://doi.org/10.1146/annurev-clinpsy-021815-093204>
- Klonsky, E. D., Saffer, B. Y., & Bryan, C. J. (2018). Ideation-to-action theories of suicide: A conceptual and empirical update. *Current Opinion in Psychology, 22*, 38–43. <https://doi.org/10.1016/j.copsyc.2017.07.020>
- Klonsky, E. D., Dixon-Luinenburg, T., & May, A. M. (2021). The critical distinction between suicidal ideation and suicide attempts. *World Psychiatry, 20*, 439–441. <https://doi.org/10.1002/wps.20909>
- Kuyken, W. (2004). Cognitive therapy outcome: The effects of hopelessness in a naturalistic outcome study. *Behaviour Research and Therapy, 42*, 631–646. [https://doi.org/10.1016/S0005-7967\(03\)00189-X](https://doi.org/10.1016/S0005-7967(03)00189-X)
- Liu, R. T., Kleiman, E. M., Nestor, B. A., & Cheek, S. M. (2015). The hopelessness theory of depression: A quarter-century in review. *Clinical Psychology-Science and Practice, 22*, 345–365. <https://doi.org/10.1111/cpsp.12125>
- Loveday, P. M., Lovell, G. P., & Jones, C. M. (2018). The best possible selves intervention: A review of the literature to evaluate efficacy and guide future research. *Journal of Happiness Studies, 19*, 607–628. <https://doi.org/10.1007/s10902-016-9824-z>
- Lysaker, P. H., Davis, L. W., & Hunter, N. L. (2004). Neurocognitive, social and clinical correlates of two domains of hopelessness in schizophrenia. *Schizophrenia Research, 70*, 277–285. <https://doi.org/10.1016/j.schres.2004.01.007>
- Mac Giollabhui, N., Hamilton, J. L., Nielsen, J., Connolly, S. L., Stange, J. P., Varga, S., . . . Alloy, L. B. (2018). Negative cognitive style interacts with negative life events to predict first onset of a major depressive episode in adolescence via hopelessness. *Journal of Abnormal Psychology, 127*, 1–11. <https://doi.org/10.1037/abn0000301>
- MacLeod, A. K., & Conway, C. (2005). Well-being and the anticipation of future positive experiences: The role of income, social networks, and planning ability. *Cognition & Emotion, 19*, 357–374. <https://doi.org/10.1080/02699930441000247>
- MacLeod, A. K., & Conway, C. (2007). Well-being and positive future thinking for the self versus others. *Cognition & Emotion, 21*, 1114–1124. <https://doi.org/10.1080/02699930601109507>
- MacLeod, A. K., & Cropley, M. L. (1995). Depressive future-thinking - the role of valence and specificity. *Cognitive Therapy and Research, 19*, 35–50. <https://doi.org/10.1007/Bf02229675>
- MacLeod, A. K., Rose, G. S., & Williams, J. M. G. (1993). Components of hopelessness about the future in parasuicide. *Cognitive Therapy and Research, 17*, 441–455. <https://doi.org/10.1007/Bf01173056>
- MacLeod, A. K., Pankhania, B., Lee, M., & Mitchell, D. (1997). Parasuicide, depression and the anticipation of positive and negative future experiences. *Psychological Medicine, 27*, 973–977. <https://doi.org/10.1017/S003329179600459x>

- MacLeod, A. K., Tata, P., Tyrer, P., Schmidt, U., Davidson, K., & Thompson, S. (2005). Hopelessness and positive and negative future thinking in parasuicide. *British Journal of Clinical Psychology, 44*, 495–504. <https://doi.org/10.1348/014466505x35704>
- MacLeod, A. K., Coates, E., & Hetherington, J. (2008). Increasing well-being through teaching goal-setting and planning skills: Results of a brief intervention. *Journal of Happiness Studies, 9*, 185–196. <https://doi.org/10.1007/s10902-007-9057-2>
- Mair, C., Kaplan, G. A., & Everson-Rose, S. A. (2012). Are there hopeless neighborhoods? An exploration of environmental associations between individual-level feelings of hopelessness and neighborhood characteristics. *Health & Place, 18*, 434–439. <https://doi.org/10.1016/j.healthplace.2011.12.012>
- Marchetti, I. (2019). Hopelessness: A network analysis. *Cognitive Therapy and Research, 43*, 611–619. <https://doi.org/10.1007/s10608-018-9981-y>
- Marchetti, I., Koster, E. H. W., & De Raedt, R. (2013). Rest-related dynamics of risk and protective factors for depression: A behavioral study. *Clinical Psychological Science, 1*, 443–451. <https://doi.org/10.1177/2167702613489668>
- Marchetti, I., Koster, E. H. W., Klinger, E., & Alloy, L. B. (2016a). Spontaneous thought and vulnerability to mood disorders: the dark side of the wandering mind. *Clinical Psychological Science, 4*, 835–857. <https://doi.org/10.1177/2167702615622383>
- Marchetti, I., Loeys, T., Alloy, L. B., & Koster, E. H. W. (2016b). Unveiling the structure of cognitive vulnerability for depression: Specificity and overlap. *Plos One, 11*. <https://doi.org/10.1371/journal.pone.0168612>
- Marchetti, I., Everaert, J., Dainer-Best, J., Loeys, T., Beevers, C. G., & Koster, E. H. W. (2018). Specificity and overlap of attention and memory biases in depression. *Journal of Affective Disorders, 225*, 404–412. <https://doi.org/10.1016/j.jad.2017.08.037>
- Marchetti, I., Pössel, P., & Koster, E. H. (2021). The architecture of cognitive vulnerability to depressive symptoms in adolescence: A longitudinal network analysis study. *Research on Child and Adolescent Psychopathology, 49*, 267–281. <https://doi.org/10.1007/s10802-020-00733-5>
- Masi, C. M., Chen, H. Y., Hawkey, L. C., & Cacioppo, J. T. (2011). A Meta-analysis of interventions to reduce loneliness. *Personality and Social Psychology Review, 15*, 219–266. <https://doi.org/10.1177/1088868310377394>
- Meevissen, Y. M. C., Peters, M. L., & Alberts, H. J. E. M. (2011). Become more optimistic by imagining a best possible self: Effects of a two week intervention. *Journal of Behavior Therapy and Experimental Psychiatry, 42*, 371–378. <https://doi.org/10.1016/j.jbtep.2011.02.012>
- Melges, F. T., & Bowlby, J. (1969). Types of hopelessness in psychopathological process. *Archives of General Psychiatry, 20*, 690–699. <https://doi.org/10.1001/archpsyc.1969.01740180074007>
- Metalsky, G. I., & Joiner, T. E. (1992). Vulnerability to depressive symptomatology: A prospective test of the diathesis-stress and causal mediation components of the hopelessness theory of depression. *Journal of Personality and Social Psychology, 63*, 667–675. <https://doi.org/10.1037//0022-3514.63.4.667>
- Mezulis, A. H., Hyde, J. S., & Abramson, L. Y. (2006). The developmental origins of cognitive vulnerability to depression: Temperament, parenting, and negative life events in childhood as contributors to negative cognitive style. *Developmental Psychology, 42*, 1012–1025. <https://doi.org/10.1037/0012-1649.42.6.1012>
- Miloyan, B., Pachana, N. A., & Suddendorf, T. (2014). The future is here: A review of foresight systems in anxiety and depression. *Cognition & Emotion, 28*, 795–810. <https://doi.org/10.1080/02699931.2013.863179>
- Miranda, R., Fontes, M., & Marroquin, B. (2008). Cognitive content-specificity in future expectancies: Role of hopelessness and intolerance of uncertainty in depression and GAD symptoms. *Behaviour Research and Therapy, 46*, 1151–1159. <https://doi.org/10.1016/j.brat.2008.05.009>
- Morton, J., Snowdon, S., Gopold, M., & Guymer, E. (2012). Acceptance and commitment therapy group treatment for symptoms of borderline personality disorder: A public sector pilot study. *Cognitive and Behavioral Practice, 19*, 527–544. <https://doi.org/10.1016/j.cbpra.2012.03.005>
- National Institute for Health and Care Excellence (NICE). (2009). *Depression in adults: Recognition and management*. National Institute for Health and Care Excellence.
- Needles, D. J., & Abramson, L. Y. (1990). Positive life events, attributional style, and hopefulness: Testing a model of recovery from depression. *Journal of Abnormal Psychology, 99*, 156–165. <https://doi.org/10.1037//0021-843x.99.2.156>

- Nezu, A. M., Nezu, C. M., & D’Zurilla, T. J. (2013). *Problem-solving therapy: A treatment manual*. Springer.
- Nisenbaum, R., Links, P. S., Eynan, R., & Heisel, M. J. (2010). Variability and predictors of negative mood intensity in patients with borderline personality disorder and recurrent suicidal behavior: Multilevel analyses applied to experience sampling methodology. *Journal of Abnormal Psychology, 119*, 433–439. <https://doi.org/10.1037/a0018696>
- O’Connor, R. C., Connery, H., & Cheyne, W. M. (2000). Hopelessness: The role of depression, future directed thinking and cognitive vulnerability. *Psychology, Health & Medicine, 5*, 155–161. <https://doi.org/10.1080/713690188>
- O’Connor, R. C., Fraser, L., Whyte, M. C., MacHale, S., & Masterton, G. (2009). Self-regulation of unattainable goals in suicide attempters: The relationship between goal disengagement, goal reengagement and suicidal ideation. *Behaviour Research and Therapy, 47*, 164–169. <https://doi.org/10.1016/j.brat.2008.11.001>
- Oettingen, G., & Mayer, D. (2002). The motivating function of thinking about the future: Expectations versus fantasies. *Journal of Personality and Social Psychology, 83*, 1198–1212. <https://doi.org/10.1037/0022-3514.83.5.1198>
- Oettingen, G., & Reininger, K. M. (2016). The power of prospection: Mental contrasting and behavior change. *Social and Personality Psychology Compass, 10*, 591–604. <https://doi.org/10.1111/spc3.12271>
- Oettingen, G., Mayer, D., & Portnow, S. (2016). Pleasure now, pain later: Positive fantasies about the future predict symptoms of depression. *Psychological Science, 27*, 345–353. <https://doi.org/10.1177/0956797615620783>
- Panzarella, C., Alloy, L. B., & Whitehouse, W. G. (2006). Expanded hopelessness theory of depression: On the mechanisms by which social support protects against depression. *Cognitive Therapy and Research, 30*, 307–333. <https://doi.org/10.1007/s10608-006-9048-3>
- Paredes, P. P., & Calvete, E. (2014). Cognitive vulnerabilities as mediators between emotional abuse and depressive symptoms. *Journal of Abnormal Child Psychology, 42*, 743–753. <https://doi.org/10.1007/s10802-013-9828-7>
- Peplau, L. A., & Perlman, D. (1982). *Loneliness: A sourcebook of current theory, research and therapy*. Wiley-Interscience.
- Perlman, B., Mor, N., Wisney Jacobinski, Y., Doron Zakon, A., Avirbach, N., & Hertel, P. (2021). Inference training affects memory, rumination, and mood. *Clinical Psychological Science, 21677026211009886*. <https://doi.org/10.1177/21677026211009886>
- Peters, M. L., Flink, I. K., Boersma, K., & Linton, S. J. (2010). Manipulating optimism: Can imagining a best possible self be used to increase positive future expectancies? *Journal of Positive Psychology, 5*, 204–211. <https://doi.org/10.1080/17439761003790963>
- Peters, K. D., Constans, J. I., & Mathews, A. (2011). Experimental modification of attribution processes. *Journal of Abnormal Psychology, 120*, 168–173. <https://doi.org/10.1037/a0021899>
- Poch, F. V., Villar, E., Caparros, B., Juan, J., Cornella, M., & Perez, I. (2004). Feelings of hopelessness in a Spanish university population: Descriptive analysis and its relationship to adapting to university, depressive symptomatology and suicidal ideation. *Social Psychiatry and Psychiatric Epidemiology, 39*, 326–334. <https://doi.org/10.1007/s00127-004-0756-2>
- Pomerantz, E. M., Saxon, J. L., & Oishi, S. (2000). The psychological trade-offs of goal investment. *Journal of Personality and Social Psychology, 79*, 617–630. <https://doi.org/10.1037/0022-3514.79.4.617>
- Priester, M. J., & Clum, G. A. (1993a). Perceived problem-solving ability as a predictor of depression, hopelessness, and suicide ideation in a college population. *Journal of Counseling Psychology, 40*, 79–85.
- Priester, M. J., & Clum, G. A. (1993b). The problem-solving diathesis in depression, hopelessness, and suicide ideation: A longitudinal analysis. *Journal of Psychopathology and Behavioral Assessment, 15*, 239–254. <https://doi.org/10.1007/Bf01371381>
- Raes, F., Williams, J. M. G., & Hermans, D. (2009). Reducing cognitive vulnerability to depression: A preliminary investigation of Memory Specificity Training (MEST) in inpatients with depressive symptomatology. *Journal of Behavior Therapy and Experimental Psychiatry, 40*, 24–38. <https://doi.org/10.1016/j.jbtep.2008.03.001>
- Ratcliffe, M. (2015). *Experiences of depression: A study in phenomenology*. Oxford University Press.

- Ribeiro, J. D., Huang, X., Fox, K. R., & Franklin, J. C. (2018). Depression and hopelessness as risk factors for suicide ideation, attempts and death: Meta-analysis of longitudinal studies. *The British Journal of Psychiatry*, *212*, 279–286. <https://doi.org/10.1192/bjp.2018.27>
- Roane, S. J., Pospel, P., Mitchell, A. M., & Eaton, W. W. (2017). Associations of depression status and hopelessness with blood pressure: A 24-year follow-up study. *Psychology Health & Medicine*, *22*, 761–771. <https://doi.org/10.1080/13548506.2017.1281977>
- Robinson, J., Hetrick, S., Cox, G., Bendall, S., Yuen, H. P., Yung, A. S., & Pirkis, J. (2016). Can an Internet-based intervention reduce suicidal ideation, depression and hopelessness among secondary school students: Results from a pilot study. *Early Intervention in Psychiatry*, *10*, 28–35. <https://doi.org/10.1111/eip.12137>
- Roepke, A. M., & Seligman, M. E. (2016). Depression and prospection. *British Journal of Clinical Psychology*, *55*, 23–48. <https://doi.org/10.1111/bjc.12087>
- Romens, S. E., Abramson, L. Y., & Alloy, L. B. (2009). High and low cognitive risk for depression: Stability from late adolescence to early adulthood. *Cognitive Therapy and Research*, *33*, 480–498. <https://doi.org/10.1007/s10608-008-9219-5>
- Rose, D. T., & Abramson, L. Y. (1992). Developmental predictors of depressive cognitive style: Research and theory. In D. Cicchetti & S. L. Toth (Eds.), *Rochester symposium on developmental psychopathology* (pp. 323–349). Erlbaum.
- Rubenstein, L. M., Freed, R. D., Shapero, B. G., Fauber, R. L., & Alloy, L. B. (2016). Cognitive attributions in depression: Bridging the gap between research and clinical practice. *Journal of Psychotherapy Integration*, *26*, 103–115. <https://doi.org/10.1037/int0000030>
- Rudd, M. D. (2008). Suicide warning signs in clinical practice. *Current Psychiatry Reports*, *10*, 87–90. <https://doi.org/10.1007/s11920-008-0015-4>
- Rudd, M. D., Berman, A. L., Joiner Jr, T. E., Nock, M. K., Silverman, M. M., Mandrusiak, M., ... & Witte, T. (2006). Warning signs for suicide: Theory, research, and clinical applications. *Suicide and Life-Threatening Behavior*, *36*, 255–262. <https://doi.org/10.1521/suli.2006.36.3.255>
- Rush, A. J., Kovacs, M., Beck, A. T., Weissburger, J., & Hollon, S. D. (1981). Differential effects of cognitive therapy and pharmacotherapy on depressive symptoms. *Journal of Affective Disorders*, *3*(3), 221–229. [https://doi.org/10.1016/0165-0327\(81\)90024-0](https://doi.org/10.1016/0165-0327(81)90024-0)
- Russell, A., Haefel, G. J., Hankin, B. L., Maxwell, S. E., & Perera, R. A. (2014). Moving beyond main effects: A data analytic strategy for testing complex theories of clinical phenomena. *Clinical Psychology: Science and Practice*, *21*, 385–397. <https://doi.org/10.1111/cpsp.12083>
- Salkovskis, P. M., Atha, C., & Storer, D. (1990). Cognitive-behavioral problem-solving in the treatment of patients who repeatedly attempt suicide: A controlled trial. *British Journal of Psychiatry*, *157*, 871–876. <https://doi.org/10.1192/bjp.157.6.871>
- Schacter, D. L., Addis, D. R., & Buckner, R. L. (2008). Episodic simulation of future events: Concepts, data, and applications. *Year in Cognitive Neuroscience*, *2008*(1124), 39–60. <https://doi.org/10.1196/annals.1440.001>
- Seligman, M. E. P. (1975). *Helplessness: On depression, development, and death*. Freeman.
- Seligman, M. E., Castellon, C., Cacciola, J., Schulman, P., Luborsky, L., Ollove, M., & Downing, R. (1988). Explanatory style change during cognitive therapy for unipolar depression. *Journal of Abnormal Psychology*, *97*, 13–18. <https://doi.org/10.1037//0021-843x.97.1.13>
- Seligman, M. E. P., Railton, P., Baumeister, R. F., & Sripada, C. (2013). Navigating into the future or driven by the past. *Perspectives on Psychological Science*, *8*, 119–141. <https://doi.org/10.1177/1745691612474317>
- Serrano, J. P., Latorre, J. M., Gatz, M., & Montanes, J. (2004). Life review therapy using autobiographical retrieval practice for older adults with depressive symptomatology. *Psychology and Aging*, *19*, 272–277. <https://doi.org/10.1037/0882-7974.19.2.272>
- Sheldon, K. M., Abad, N., Ferguson, Y., Gunz, A., Houser-Marko, L., Nichols, C. P., & Lyubomirsky, S. (2010). Persistent pursuit of need-satisfying goals leads to increased happiness: A 6-month experimental longitudinal study. *Motivation and Emotion*, *34*, 39–48. <https://doi.org/10.1007/s11031-009-9153-1>
- Sher, L. (2006). Alcoholism and suicidal behavior: A clinical overview. *Acta Psychiatrica Scandinavica*, *113*, 13–22. <https://doi.org/10.1111/j.1600-0447.2005.00643.x>
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, *13*, 249–275. https://doi.org/10.1207/S15327965pli1304_01

- Stange, J. P., Alloy, L. B., & Fresco, D. M. (2017). Inflexibility as a vulnerability to depression: A systematic qualitative review. *Clinical Psychology: Science and Practice*, 24, 245–276. <https://doi.org/10.1111/cpsp.12201>
- Steer, R. A., Rissmiller, D. J., Ranieri, W. F., & Beck, A. T. (1994). Use of the computer-administered beck depression inventory and hopelessness scale with psychiatric-inpatients. *Computers in Human Behavior*, 10, 223–229. [https://doi.org/10.1016/0747-5632\(94\)90005-1](https://doi.org/10.1016/0747-5632(94)90005-1)
- Stern, S. L., Dhanda, R., & Hazuda, H. P. (2001). Hopelessness predicts mortality in older Mexican and European Americans. *Psychosomatic Medicine*, 63, 344–351. <https://doi.org/10.1097/00006842-200105000-00003>
- Stewart, M., Craig, D., MacPherson, K., & Alexander, S. (2001). Promoting positive affect and diminishing loneliness of widowed seniors through a support intervention. *Public Health Nursing*, 18, 54–63. <https://doi.org/10.1046/j.1525-1446.2001.00054.x>
- Stotland, E. (1969). *The psychology of hope*. Jossey-Bass.
- Street, H. (2002). Exploring relationships between goal setting, goal pursuit and depression: A review. *Australian Psychologist*, 37(2), 95–103. <https://doi.org/10.1080/00050060210001706736>
- Tang, T. Z., & DeRubeis, R. J. (1999). Reconsidering rapid early response in cognitive behavioral therapy for depression. *Clinical Psychology-Science and Practice*, 6, 283–288. <https://doi.org/10.1093/clipsy/6.3.283>
- Townsend, E., Hawton, K., Altman, D. G., Arensman, E., Gunnell, D., Hazell, P., . . . Van Heeringen, K. (2001). The efficacy of problem-solving treatments after deliberate self-harm: meta-analysis of randomized controlled trials with respect to depression, hopelessness and improvement in problems. *Psychological Medicine*, 31, 979–988. <https://doi.org/10.1017/s0033291701004238>
- Tucker, R. P., Hagan, C. R., Hill, R. M., Slish, M. L., Bagee, C. L., Joiner, T. E., & Wingate, L. R. (2018). Empirical extension of the interpersonal theory of suicide: Investigating the role of interpersonal hopelessness. *Psychiatry Research*, 259, 427–432. <https://doi.org/10.1016/j.psychres.2017.11.005>
- 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, 575–600. <https://doi.org/10.1037/a0018697>
- Van Orden, K. A., Tu, X., Messing, S., Stone, D. M., Rowe, J., McIntosh, W. L., . . . Conwell, Y. (2016). *The senior connection: a randomized trial of peer companionship to reduce suicide risk in older adults*. Paper presented at the Annual Meeting of the American Association for Suicidology.
- Van Voorhees, B. W., Fogel, J., Reinecke, M. A., Gladstone, T., Stuart, S., Gollan, J., . . . Bell, C. (2009). Randomized clinical trial of an internet-based depression prevention program for adolescents (Project CATCH-IT) in primary care: 12-Week outcomes. *Journal of Developmental and Behavioral Pediatrics*, 30, 23–37. <https://doi.org/10.1097/DBP.0b013e3181966c2a>
- Vincent, P. J., Boddana, P., & MacLeod, A. K. (2004). Positive life goals and plans in parasuicide. *Clinical Psychology & Psychotherapy*, 11, 90–99. <https://doi.org/10.1002/cpp.394>
- Wampold, B. E. (2007). Psychotherapy: The humanistic (and effective) treatment. *American Psychologist*, 62, 857–873. <https://doi.org/10.1037/0003-066X.62.8.857>. *American Psychologist*, 49, 554–567.
- Waszczuk, M. A., Coulson, A. E., Gregory, A. M., & Eley, T. C. (2016). A longitudinal twin and sibling study of the hopelessness theory of depression in adolescence and young adulthood. *Psychological Medicine*, 46, 1935–1949. <https://doi.org/10.1017/S0033291716000489>
- Westra, H. A., Dozois, D. J. A., & Boardman, C. (2002). Predictors of treatment change and engagement in cognitive-behavioral group therapy for depression. *Journal of Cognitive Psychotherapy: An International Quarterly*, 16, 227–241. <https://doi.org/10.1891/088983902780906355>
- Whisman, M. A., Miller, I. W., Norman, W. H., & Keitner, G. I. (1991). Cognitive therapy with depressed inpatients: Specific effects on dysfunctional cognitions. *Journal of Consulting and Clinical Psychology*, 59, 282–288. <https://doi.org/10.1037//0022-006x.59.2.282>
- Whisman, M. A., Miller, I. W., Norman, W. H., & Keitner, G. I. (1995). Hopelessness depression in depressed inpatients - symptomatology, patient characteristics, and outcome. *Cognitive Therapy and Research*, 19, 377–398. <https://doi.org/10.1007/Bf02230407>
- Williams, J. M. G., Ellis, N. C., Tyers, C., Healy, H., Rose, G., & MacLeod, A. K. (1996). The specificity of autobiographical memory and imageability of the future. *Memory & Cognition*, 24, 116–125. <https://doi.org/10.3758/Bf03197278>
- Wilson, C. J., & Deane, F. P. (2010). Help-negation and suicidal ideation: The role of depression, anxiety and hopelessness. *Journal of Youth and Adolescence*, 39, 291–305. <https://doi.org/10.1007/s10964-009-9487-8>

- Wrosch, C. (2011). Self-regulation of unattainable goals and pathways to quality of life. In S. Folkman (Ed.), *The Oxford Handbook of stress, health, and coping* (pp. 319–333). Oxford University Press.
- Wrosch, C., Scheier, M. F., Miller, G. E., Schulz, R., & Carver, C. S. (2003). Adaptive self-regulation of unattainable goals: Goal disengagement, goal reengagement, and subjective well-being. *Personality and Social Psychology Bulletin*, *29*, 1494–1508. <https://doi.org/10.1177/0146167203256921>
- Yang, B., & Clum, G. A. (1994). Life stress, social support, and problem-solving skills predictive of depressive symptoms, hopelessness, and suicide ideation in an Asian student population: A test of a model. *Suicide and Life-Threatening Behavior*, *24*, 127–139. <https://doi.org/10.1111/j.1943-278X.1994.tb00797.x>
- Yip, P. S., & Cheung, Y. B. (2006). Quick assessment of hopelessness: A cross-sectional study. *Health and Quality of Life Outcomes*, *4*, 1–6. <https://doi.org/10.1186/1477-7525-4-13>
- Young, M. A., Fogg, L. F., Scheftner, W., Fawcett, J., Akiskal, H., & Maser, J. (1996). Stable trait components of hopelessness: Baseline and sensitivity to depression. *Journal of Abnormal Psychology*, *105*, 155–165. <https://doi.org/10.1037/0021-843X.105.2.155>
- Yurica, C. L., & DiTomasso, R. A. (2005). Cognitive distortions. In S. Felgoise, A. M. Nezu, C. M. Nezu, & M. A. Reinecke (Eds.), *Encyclopedia of cognitive behavior therapy* (pp. 117–122). Springer.
- Zilcha-Mano, S., Chui, H., Dolev, T., McCarthy, K. S., Dinger, U., & Barber, J. P. (2016). Changes in causal attributions and relationship representations: Are they specific or common mechanisms in the treatment of depression? *Journal of Affective Disorders*, *193*, 73–80. <https://doi.org/10.1016/j.jad.2015.12.073>

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