Psychology Therapies and Interventions that Raise Subjective Well-Being

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Abstract:

Research and practice in mental health has a long history of focusing on what is wrong with people. By contrast, relatively little work has examined how to raise subjective well-being. This chapter provides a general overview of some therapies and interventions shown to increase well-being. An underlying theme is that despite recent progress, more work is needed to understand what therapies increase well-being and the putative mechanisms involved. Well-being researchers should learn from the lessons of clinical psychology, such as thinking carefully about issues regarding reach and accessibility.

Keywords: Clinical psychology, Subjective well-being, Therapies, Mental health

Dominic has struggled with debilitating anxiety for as long as he can remember. Over the years, he has figured out ways to compensate for his extreme fears and negative thoughts. For example, he is good at blending into the background at work and avoids eye contact with people he sees on his street. However, Dominic recently decided that he wanted more out of life, so he sought out a local psychotherapist who could provide anxiety treatment. Over the past three months, Dominic has acquired a set of skills to manage his fears and negative thoughts. However, despite experiencing some relief from his symptoms, Dominic feels his overall quality of life is not where he would like it to be. While he feels more at ease contributing to projects at work and interacting with people in his neighborhood, Dominic does not experience optimism in his day-to-day life, nor is he on the path to deep and fulfilling personal growth. Unfortunately, Dominic's experience is common for those who receive psychotherapy. Researchers are recognizing that therapies delivered in clinical settings are focused on decreasing symptoms rather than increasing subjective well-being (e.g., Seligman, 2002; Sin & Lyubomirsky, 2009). In the case of Dominic, while anxiety treatment has allowed him to lead a less symptomatic lifestyle, the likelihood that his anxiety symptoms will surface in the future remains relatively high (full remission occurs in a minority of patients). Most importantly, anxiety treatment has not given Dominic the skills he needs to grow and flourish.

Most theory and research in clinical psychology has focused on what is wrong with people. For example, prominent theories and research in depression and anxiety highlight the cognitive, emotional, and behavioral factors that contribute to the development and maintenance of symptoms (Beck, 1974; Clark & Watson, 1991). For example, much research has examined the role of negative cognitive biases in the development and maintenance of anxiety symptoms (Dodge & Frame, 1982; Foa, Franklin, Perry, & Herbert, 1996; Mathews, Mackintosh, & Fulcher, 1997; Mineka & Sutton, 1992). By contrast, relatively little work has examined psychological therapies that *promote* subjective well-being. Thus, the focus of this chapter is on providing a brief overview of psychological interventions and therapies that increase subjective well-being. This chapter begins by briefly discussing some historical trends in how mental health is conceptualized, as well as how a dysfunction model of mental health contrasts with models of well-being promotion. Next is a discussion of traditional and third wave cognitive behavioral therapies, with an emphasis on components that have been empirically shown to raise subjective well-being. There is also a brief discussion of humanistic therapies and how they relate to modern day well-being interventions.

Finally, the conclusion of this chapter will focus on some critical unanswered questions and recommendations for future work.

Well-Being and Mental Health

The history of mental health is marked by efforts to identify weaknesses in people (Szasz, 1974). For example, some of the earliest attempts to assess mental status in the United States led to discriminative and exclusionary practices against refugees trying to enter the country (e.g., those labeled as "Undesirables"). This early focus on people's perceived shortcomings has had far-reaching implications for how mental health is conceptualized and researched. For example, the Diagnostic and Statistical Manual of Mental Disorders (DSM), now in its fifth revision, and the International Classification of Diseases (ICD), currently in its tenth revision, are the two widely used classification systems that influence how we view mental health status. Both systems rely on symptom checklists to classify individuals based on perceived weaknesses. This method of classifying mental health status has dominated the way researchers and the public perceive mental health, which is to view mental health from a lens of harm and dysfunction (Wakefield, 1992). This systematic bias has, in part, led to the vast majority of mental health research being focused on how to alleviate distress rather than promote well-being.

Many prominent psychologists have questioned psychology's focus on the negative aspects of life. For example, influential figures such as Carl Rogers and Abraham Maslow argued that people should be seen as more than the sum of their symptoms, and that individuals should strive to achieve their full potential (these ideas would serve as the basis for humanistic therapies and an impetus for the positive psychology movement, discussed later in this chapter). More recently, the field of positive psychology (Seligman & Csikszentmihalyi, 2000) is focused on how to cultivate people's strengths in order to achieve greater life meaning and fulfillment.[1] Although seemingly nuanced, the difference between models of stress reduction and well-being promotion has far-reaching implications. Chief among them is the notion that acquiring skills for symptom reduction is not a sufficient replacement for those needed to develop and maintain healthy levels of social and emotional well-being. A tacit assumption among many mental health providers is that focusing on symptom reduction will necessarily translate into higher levels of well-being. However, a burgeoning area of research is proving this assumption to be misguided, as researchers are developing interventions that specifically target well-being promotion (e.g., Seligman, Steen, Park, & Peterson, 2005).

How people think and feel about their lives are core components of subjective well-being (Diener, Lucas, & Oishi, 2002; for a more thorough discussion of definitions and components of well-being, the reader is encouraged to visit the corresponding section and chapters "Introduction/Theory/Measurement" in this handbook). Importantly, a high level of positive affect alone is not sufficient for a high level of subjective well-being, as researchers have stressed the importance of conceptualizing subjective well-being as a general area of scientific interest rather than as a single construct (Diener, Suh, Lucas, & Smith, 1999). Thus, as discussed further below, therapies that raise well-being commonly target how people think, feel, and behave in everyday life.

It is important to note that despite clinical psychology's focus on mental disorders, much work has been dedicated to understanding factors relevant to well-being. For example, literature on resilience has uncovered a great deal regarding how people adapt to stressors in their environments (e.g., Betancourt & Khan, 2008; Davydov, Stewart, Ritchie, & Chaudieu, 2010). Although psychologists interested in pleasurable emotions have most frequently studied joy or happiness, researchers have uncovered numerous discrete (or highly similar) pleasant emotions, such as joy, contentment, interest, pride, and love (e.g., Berenbaum, 2002; Berenbaum, Chow, Schoenleber, & Flores, 2016; Shiota, Neufeld, Yeung, Moser, & Perea, 2011). Likewise, studies have found that how people think about different types of pleasurable emotions, such as happiness and appreciation/gratitude, is linked to a range of important outcomes (e.g., Chow & Berenbaum, 2015; Mauss, Tamir, Anderson, & Savino, 2011). Although most studies on cognitive biases have focused on negative or threat related biases, studies have also examined how positive cognitive biases contribute to life satisfaction (e.g., Cummins & Nistico, 2002; Peeters, 1971). Importantly, continued research on these types of psychological factors will enhance our ability to understand the putative mechanisms through which therapies increase subjective well-being.

Cognitive Behavioral Therapies and Emerging Third Wave Therapies

Cognitive behavioral therapy (CBT) is based on a wealth of empirical research demonstrating strong connections between cognitive, emotional, and behavioral processes (Butler, Chapman, Forman, &

Beck, 2006). Thus, CBT[2] is a goal-oriented approach that targets the ways people think, feel, and/or behave. For example, CBT changes maladaptive thoughts (e.g., "I am such a loser") that cause emotional distress (e.g., sadness) and interpersonal dysfunction (e.g., excessive reassurance seeking from peers). CBT is typically conducted through face-to-face therapy sessions. A key component of CBT is homework, focused on skill acquisition through repetition, that clients are expected to complete between sessions. Compared to other types of psychotherapy (e.g., psychoanalysis), the length of CBT is usually shorter on a scale of weeks. CBT is best thought of as a family of interventions rather than as a solitary treatment, and therapists will tailor treatments depending on the patient's background as well as the specific skills the patient needs to acquire. Among all therapies, CBT is among the most effective in treating a range of mood and anxiety disorders (Barlow, Gorman, Shear, & Woods, 2000; Covin, Ouimet, Seeds, & Dozois, 2008; Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012).

Although CBT is typically employed in clinical populations, where the primary focus is on reducing psychological distress, an undercurrent of research suggests that interventions targeting the way people think and behave can also increase aspects of well-being. For example, a robust body of literature on gratitude interventions suggest that increasing the experience of gratitude influences well-being by targeting the way people think (e.g., Emmons & McCullough, 2003; McCullough, Emmons, & Tsang, 2002; Wood, Froh, & Geraghty, 2010; Wood, Maltby, Gillet, Linley, & Joseph, 2008). These interventions often involve engaging in some type of repetitive activity, such as counting one's blessings or recalling positive memories, which promotes positive thinking, feeling states, and prosocial behaviors.

Behavioral activation (BA) is another type of CBT intervention that is based on models of behavior (for a review, see Jacobson, Martell, & Dimidjian, 2001). BA draws upon foundational learning principles, whereby individuals are taught to understand how their environmental responses are linked to the way they think and feel. Individuals are typically asked to schedule activities (e.g., starting up a conversation with a stranger, exercising) that allow for reinforcement and introspection to occur. Importantly, because a key component of BA is positive reinforcement, some of the first studies demonstrated that BA not only reduced depressive symptoms, but also increased the frequency of both pleasurable activities and prosocial interactions (Lewinsohn, Biglan, & Zeiss, 1976). Further, engaging in behavioral activities has also been found to lead to an increase in positive affect (e.g., Jacobson & Gortner, 2000; Martell, Addis, & Jacobson, 2001).

Although CBT is one of the most widely studied therapies, more research is needed before concluding that it can raise subjective well-being. One reason is that studies of CBT almost exclusively focus on symptom reduction in clinical populations. In these studies, a between-groups design is usually employed where one group receives CBT and the other receives either no treatment or a placebo. Participants in these studies often have high symptom levels (e.g., depression, anxiety, alcohol use) and are desperate for relief. Thus, the outcome of interest is almost always symptom level rather than variables linked to well-being. Although CBT packages could be useful in boosting well-being among the general population, such as cultivating an optimistic thinking patterns and behaviors that foster strong interpersonal relationships, these issues require more attention from researchers.

A "third wave" (also referred to as "new wave", "next generation", and "third generation") of CBT has increasingly caught the attention of researchers and clinicians. While there is ongoing debate regarding what qualifies as a third wave therapy (Hofmann, Sawyer, & Fang, 2010), newer therapies such as acceptance and commitment therapy (ACT; Hayes, Luoma, Bond, Masuda, & Lillis, 2006) and mindfulness based treatments (Segal, Williams, & Teasdale, 2002) largely aim to change how people respond to events, rather than changing the events themselves. For example, third wave acceptance-based therapies encourage individuals to develop a meta-awareness of recurring thoughts and feelings. With enough practice, individuals learn to objectify their subjective experiences and to monitor their reactions. This allows people to effectively distinguish between what is real and what is imagined. By contrast, traditional CBT aims to teach skills that change the content of thoughts. Through repeated practice, individuals learn to identify maladaptive thoughts and generate alternative, healthier thinking patterns.

Despite their shift in focus, third wave therapies have much in common with traditional CBT approaches. A central component of all CBT approaches is a shared focus on how cognitive processes relate to affective experiences and behavior. For example, as discussed further below, an important mechanism of mindfulness is cultivating awareness and attention to experiences in the present moment. Thus, mindfulness practice leads to desired outcomes by restructuring how people respond to the automatic thoughts and feelings that arise in response to events (e.g., accepting and describing a thought or feeling, rather than pushing it away). This is similar to a more traditional CBT approach that might target thoughts (and their underlying connections with emotions and behavior) by identifying and untwisting distorted thoughts that give rise to maladaptive feelings and behavior (e.g., the distorted thought of "I'm terrible at

everything" gives rise to the alternative thought of "I know I'm a responsible husband and father"). Therefore, third wave CBT approaches can be seen as largely building on a traditional CBT framework.

Mindfulness is a third wave therapy that has received considerable attention in recent years (for reviews, see: Chiesa & Serretti, 2009; Grossman, Niemann, Schmidt, & Walach, 2004; Hoffman, Sawyer, Witt, & Oh, 2010; Hoffman et al., 2012; Khoury et al., 2013; Piet & Hougaard, 2011). In scientific literature, mindfulness is thought of both as a trait, or a characteristic that varies between individuals and that is relatively stable, as well as a skill that can be acquired through practice. Most studies examining the effectiveness of mindfulness practice conceptualize it as the latter. As a skill, mindfulness involves the capacity to purposefully attend to one's present experiences while taking a nonjudgmental stance (Kabat-Zinn, 2003).[3] Relative to other therapies, a strong body of research supports the notion that mindfulness not only decreases symptoms, but conveys numerous benefits to well-being (e.g., Brown & Ryan, 2003; Carmody & Baer, 2008) and use of adaptive coping strategies (e.g., Weinstein, Brown, & Ryan, 2009). As mindfulness was originally developed to promote spiritual growth in Buddhism (Shonin, Van Gordon, & Griffiths, 2014), relative to traditional CBT considerably more mindfulness research has been focused on how mindfulness practice develops strengths rather than shores up weaknesses.

An emphasis of mindfulness interventions is on cultivating attention and awareness to present moment experiences. Thus, in contrast to the many automatic behaviors (e.g., accepting thoughts as one's reality, dwelling on past mistakes or future threats, daydreaming) that prevent people from fully living their day-to-day lives, practicing mindfulness leads to an enhanced vividness, clarity, and appreciation of the present. Individuals learn to be an observer of their own lives, developing a capacity to self-regulate and weigh options. For example, mindfulness is consistent with self-determination theory (Deci & Ryan, 2000), whereby increasing awareness of the present leads to enhanced feelings of autonomy, competence, and relatedness. Along these lines, cognitive researchers theorize that mindfulness may directly impact well-being by allowing for more intense pleasure through connection with present moment experiences (for a review of mindfulness and theories of well-being, see Brown & Ryan, 2003). Not surprisingly, mindfulness overlaps with constructs such as emotional intelligence (i.e., clarity and attention to one's emotional states; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995), self-consciousness (e.g., Fenigstein, Scheier, & Buss, 1975), and the personality trait dimension of openness to experience (Costa & McCrae, 1992).

Although studies examining mindfulness have been around for decades (e.g., Kabat-Zinn, Lipworth, & Burney, 1985), recent years have seen a proliferation in research demonstrating that practicing mindfulness[4] leads to increases in factors of well-being. Noted increases in well-being have also been documented in studies focused on symptom reduction. For example, short-term meditation training has been found to increase levels of empathy and spirituality in medical students (Shapiro, Schwartz, & Bonner, 1998) and levels of well-being in adults (Carmody & Baer, 2008). Research also indicates that mindfulness training has other benefits, such as increasing positive affect and frequency of positive thoughts (Garland, Geschwind, Peeters, & Wichers, 2015), job-related affect (e.g., optimism and self-efficacy; Malinowski & Lim, 2015), and use of adaptive emotion regulation strategies (Hülsheger, Alberts, Feinholdt, & Lang, 2013; Teper, Segal, & Inzlicht, 2013).

Meta-analyses have found that mindfulness practice leads to positive outcomes, in part, by increasing levels of mindfulness and decreasing cognitive and emotional reactivity, as well as repetitive negative thinking (Gu, Strauss, Bond, & Cavanagh, 2015). For example, researchers theorize that mindfulness training leads to changes in thought processes and the ability to shift one's perspective (for a review, see Shapiro, Carlson, Astin, & Freedman, 2006). This in turn allows individuals to achieve a degree of objectivity regarding their internal experiences, which is consistent with models of personal growth outlined by developmental psychologists (e.g., Deikman, 1982; Kegan, 1982). Taken together, among all empirically supported therapies, mindfulness-based therapies are some of the strongest ones found to increase well-being.

Like literature on CBT, a drawback of mindfulness effectiveness literature, including meta-analyses of mindfulness studies, is that the focus has primarily been on treating mental disorders in clinical populations and settings, or symptom reduction rather than promotion of well-being (e.g., Khoury et al., 2013; Brown & Ryan, 2003). Thus, despite an accumulation of studies demonstrating that mindfulness training can enhance well-being, this issue has received relatively little attention. In addition, precisely *which* factors of well-being (e.g., positive affect, positive appraisals) are most reliably influenced by mindfulness-based interventions is still an open question.

Acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999), a therapy that counts mindfulness as one of its core components, has also received considerable attention from researchers in recent years. ACT extends traditional behavioral models (for a more detailed discussion, see Hayes,

Luoma, Bond, Masuda, & Lillis, 2006), and is largely based on Relational Frame Theory (RFT; Hayes, Barnes-Holmes, & Roche, 2001). RFT focuses on how people use language to relate to events. For example, subjective experiences (e.g., thoughts) can cause distress because of the language that is used to relate to them. Thus, a notable difference from traditional CBT is that ACT views cognitions as a type of behavior, and seeks to change the function of those behaviors rather than the content. ACT teaches people to accept their thoughts and feelings, rather than judging their acceptability, and to understand the functionality of their responses. Another notable difference from traditional CBT approaches is that, like mindfulness, ACT emphasizes contextual and experiential strategies to generate change, but only after accepting one's subjective experiences.

A primary aim of ACT is psychological flexibility, which encompasses an ability to connect with the present moment as well as the ability to regulate one's behavior in line with one's values. This is done through exercises focused on: acceptance, cognitive defusion (seeing thoughts as what they are, not as what they say they are), being present, understanding the self as context (that we are more than the sum of our subjective experiences), identifying and pursuing values, and committed actions (goals in accordance with one's values; for a more thorough review, see Hayes et al., 2006). Indeed, several of these domains are highly overlapping with core principles of mindfulness, such as those that involve cultivating acceptance, objectivity, and present-oriented awareness. ACT also incorporates striving for values and goal-oriented behaviors, components commonly found in traditional CBT. In addition, despite their different approaches, like CBT, a core function of ACT is to address experiential avoidance, or attempts to avoid unpleasant thoughts, feelings, and sensations, that contribute to long-term suffering.

Some research suggests that ACT can enhance aspects of well-being, although the bulk of this literature highlights the importance of mindfulness-related components of ACT. For example, fostering acceptance of thoughts, feelings, and sensations leads to enhanced ability to regulate one's affect and physiological response to events (e.g., Bishop, Duncan, & Lawrence, 2004; Kabat-Zinn, 2003). Other active components of ACT, such as cognitive defusion, are usually centered on unpleasant subjective experiences and therefore applications to raising subjective well-being have been largely ignored by researchers. Given that research and meta-analyses focusing on ACT is relatively new (the bulk of meta-analyses have occurred in the last decade), and the vast majority of research has been limited to examining effectiveness of symptom reduction in clinical populations (Öst, 2008; Powers, Vording, & Emmelkamp, 2009), whereas direct applications of ACT on increasing subjective well-being is relatively unknown.

Humanistic Therapies

When evaluating the landscape of therapies that raise subjective well-being, it would be remiss to not include humanistic therapies. Humanistic therapies have a rich history in the field of clinical intervention, and prominent psychologists such as Abraham Maslow, Otto Rank, and Carl Rogers have had a profound impact on how therapy is conducted in the present day. For example, common factors in psychotherapy such as therapeutic alliance, understanding the client's perspective, and positive regard for client experiences are among the most robust predictors of therapy success (Ackerman & Hilsenroth, 2003; Duncan, Miller, Wampold, & Hubble, 2010; Krupnick et al., 1996). At its core, humanistic approaches treat the whole person, rather than reducing individuals to their symptoms. An emphasis is placed on understanding the individual's subjective experience, such as how they perceive and interpret events, and an overriding assumption is that people are generally good and have a basic need for growth. However, early humanists were skeptical of quantitative methods and chose instead to use approaches such as unstructured interviews. However, it is generally accepted that humanistic psychology was a precursor to the now burgeoning field of positive psychology, although considerable tension between these fields has focused on the precise role humanism has played in positive psychology (see Friedman & Robbins, 2012; Seligman & Csikszentmihalyi, 2000; Waterman, 2013). This is not surprising given that humanists were among the first to advocate seeing people as composed of strengths and potential, whereas positive psychology emerged out of concerns that clinical psychology was only concerned with amelioration of distress. Using principles of humanism as a building block, positive psychology studies therefore have been instrumental to understanding how to encourage growth, flourishing, and well-being. Mounting evidence supports positive psychology interventions (for reviews, see Bolier et al., 2013 and Sin & Lyubomirsky, 2009), such as gratitude interventions (e.g., Emmons & McCullough, 2003; Wood et al., 2010) and well-being therapy (e.g., Fava & Ruini, 2003) in increasing well-being. For example, ENHANCE is a 12-week positive psychology program that targets knowledge and skills acquisition to improve subjective well-being in generally health community samples, with encouraging early findings (Kushlev et al., 2017). What makes ENHANCE different from most other positive psychology interventions is its use of a multi-pronged approach that targets ten principles of happiness (e.g., values and roles, goals, gratitude, prosocial behavior) organized around themes of building the *core self*, *experiential*

self, and *social self*. As a sustainable intervention package, programs like ENHANCE will continue to bridge the divide between research and application. In order to understand the modern day influence of humanistic theories and models on well-being, the reader is encouraged to review the chapter on positive psychology interventions in this handbook (Parks, 2018).

Effectiveness of Clinical Therapies on Subjective Well-Being

This chapter only covers some of the therapies employed in real-world settings, though careful consideration was made to present therapies that had at least some empirical support. Major scientific and government organizations are striving to set guidelines regarding what constitutes an evidence-based therapy. For example, Division 12 of the American Psychological Association (www.psychologicaltreatments.org), SAMHSA (www.nrepp.samhsa.gov), and the National Institute for Health and Care Excellence have all compiled such lists. However, it is important to note that these efforts are primarily based on literature concerned with ameliorating distress (Cloninger, 2006). This is largely driven by clinical psychology's traditional focus on discrete categories of mental disorders. For example, it is still rare to come across subjective well-being as a primary outcome in CBT studies. Instead, research tends to focus on a mental disorder type, such as depression, anxiety, and alcohol dependence. By contrast, literature focused on therapies that increase subjective well-being is relatively sparse, although early reviews are promising (e.g., Bolier et al., 2013; Goyal et al., 2014; Sin & Lyubomirsky, 2009). Thus, while it is likely that at some point organizations will compile lists of empirically supported therapies that raise subjective well-being, more work is needed.

Unanswered Questions

This is an exciting time for researchers and clinicians interested in raising subjective well-being. This is a burgeoning area of research and many unanswered questions remain. This section will focus on important issues that still need to be fully addressed by therapy and well-being researchers.

One critical issue is whether effectiveness of well-being interventions differs as a function of the population in question. Much theory and research in clinical psychology has focused on cultural considerations in therapeutic settings (e.g., Lin & Cheung, 1999; Helms & Cook, 1999; Sue & Zane, 2009), trying to take into consideration a client's cultural background when tailoring a treatment approach. However, despite significant progress, serious concerns remain (e.g., Sue & Zane, 2009). For example, there is confusion regarding to what degree one should factor in a client's cultural background, since studies have shown a large amount of variation within cultural groups. In addition, many guidelines for tailoring interventions are overly vague and lack the degree of specificity necessary to be useful to treatment providers. To date, very little research has focused on how to tailor interventions that raise subjective well-being. For example, some studies suggest that gratitude interventions are less impactful among East Asians than among Americans (Layous, Lee, Choi, & Lyubomirsky, 2013), and researchers are increasingly targeting well-being interventions towards specific populations and settings (e.g., Hamar, Coberley, Pope, & Rula, 2015; Siu, Cooper, & Phillips, 2014). However, this body of work is still relatively new and it will be important for researchers to pursue this line of inquiry.

Another issue pertains to the precise mechanisms involved in therapies that raise subjective well-being. While some evidence suggests that the average effect sizes of well-being interventions is comparable to psychotherapy interventions targeting mental disorders (Sin & Lyubomirsky, 2009), the putative mechanisms involved in well-being interventions are not well understood. Some reviews have identified candidate factors in raising well-being. For example, Layous and Lyubomirsky (2012) proposed four mediating variables (positive emotions, positive thoughts, positive behaviors, and need satisfaction) and two moderating variables (characteristics of the activity and the person) in the link between positive activity interventions and well-being. In a review of mindfulness-based studies, Gu and colleagues (2015) found strong support for the mediating variables of cognitive and emotional reactivity, and moderate evidence for mindfulness, rumination, and worry (as well as preliminary support for self-compassion and psychological flexibility). Importantly, the authors found that many studies had key methodological shortcomings that limited the conclusions that could be made. This highlights the importance of conducting methodologically sound studies that can be connected to the broader literature. Efforts should be made to standardize paradigms and measures. In addition, future studies should systematically isolate mechanisms thought to play a role in well-being interventions. These efforts will allow for more reviews and meta-analyses that are instrumental to understanding how and why well-being interventions work (and for whom).

There is a great deal of overlap between well-being interventions and clinical psychology interventions aimed at attenuating distress. For example, both types of interventions typically involve

changing underlying cognitive processes tied to emotions and behavior. Thus, it would appear that these interventions could be used in tandem—while clinical interventions can be used to decrease distress, well-being interventions could be used to promote thriving and a healthy lifestyle. To date, the vast majority of studies have focused on either clinical interventions to alleviate distress *or* interventions designed to raise well-being. Thus, it will be important for future work to understand how these approaches can be integrated, ideally in single treatment packages. One way to facilitate this effort is for researchers to include outcome measures assessing psychopathology *and* well-being. This will enhance understanding of how an intervention or therapy can be used in the service of decreasing symptoms or increasing well-being. From a systematic perspective, it may also be useful for graduate programs to include well-being interventions in their standard training packages, since most programs (e.g., clinical psychology, social work) exclusively focus on training students to assess and alleviate psychological distress.

Prominent models and theories of well-being should continue to play a key role in developing and evaluating therapies that target well-being. Virtually all influential models of well-being identify subcomponents that can be targeted through intervention. For example, hedonic models of subjective well-being highlight the importance of increasing positive affect and minimizing negative affect. According to Ryff's model of eudaimonic well-being (Ryff, 1989), an effective intervention should seek to increase at least one of multiple factors (self-acceptance, personal growth, life purpose, positive relationships, environmental mastery, autonomy), in order to allow individuals to strive to reach their full potential. However, the existence of competing models of well-being may cause confusion among therapy researchers and practitioners. Future work should focus on how to integrate different models of well-being (e.g., Gallagher, Lopez, & Preacher, 2009) so that connections between interventions can be made more readily.

An important issue is how to deliver well-being interventions in everyday life. It is noteworthy that evidence-based psychological treatments for mental disorders have come under scrutiny for their lack of reach (for reviews, see Barlow, Bullis, Comer, & Ametaj, 2013, and Harvey & Gumport, 2015) and standardization in real-world settings (Chow, Wagner, Lüdtke, Trautwein, & Roberts, 2017. Despite yearly increases in the prevalence of mental disorders, roughly half of individuals who need treatment do not have access to adequate treatment (Kessler et al., 2003). Thus, despite solid empirical work showing that evidence-based psychological treatments can be effective in attenuating psychological distress (Chambless & Ollendick, 2001; Layard & Clark, 2014), therapies targeting well-being will need to overcome the same barriers to treatment dissemination and standardization. Technology offers one potential solution. Many therapies that were once limited to the clinician's office can now be delivered remotely online, with many online therapies having comparable effect sizes to those delivered face-to-face (e.g., Barak, Hen, Boniel-Nissim, & Shapira, 2008; White et al., 2010). For example, there is emerging empirical support for the *Happify* app (www.happify.com) for increasing positive affect, which delivers a mindfulness-based intervention via people's personal smartphones (Howells, Ivtzan, & Eiroa-Orosa, 2016). Other apps such as *JOOL Health* (www.joolhealth.com) target well-being by creating personalized plans through predictive modeling, although the effectiveness of these apps are still being examined. Compared to face-to-face therapy, technology delivered interventions are more cost-effective, are capable of reaching a wider audience, and can be delivered where and when they are most needed (e.g., Nahum-Shani, Hekler, & Spruijt-Metz, 2015; Ritterband & Tate, 2009). For example, research leveraging mobile technology is enhancing our understanding of everyday life processes in psychopathology (e.g., Chow et al., 2017; Saeb et al., 2015) so that researchers can begin developing interventions that are woven into people's routines. Similar efforts are being made to understand processes important to well-being (e.g., Bentley & Tollmar, 2013). Such work is critical to personalizing well-being interventions (e.g., dynamically adapting an intervention to people's changing states) and understanding where, when, and how to deliver them. For example, traditional face-to-face CBT usually involves once a week hourly sessions. Thus, clinicians have little understanding of how their clients are doing outside the therapy office. Technology based approaches can allow therapists to monitor their client's well-being, as well as deliver an intervention (e.g., using a smartphone application) at critical times (e.g., when the client is alone) and locations (e.g., when the client is at home). However, the majority of technology based work (and works in mobile technology, in particular) is being done by engineers who have limited training in mental health models. Given the ubiquity of technology in modern society, it is therefore imperative for well-being researchers to bridge the divide in order to explore cutting-edge solutions to intervention development and dissemination.

Conclusion

The therapies and interventions covered in this chapter do not comprise an exhaustive list. A primary aim of this chapter was to provide a general scope of therapies that can raise subjective well-being. Although more work needs to focus on therapies and interventions that raise subjective well-being, this is

an exciting field that holds great promise for enhancing the lives of both clinical populations and the general population. Ideally, well-being researchers can learn from the trials and successes of clinical researchers, as individuals from these seemingly disparate fields continue to work towards a unifying field that focuses on improving people's lives.

Footnotes

[1]Because this book contains a separate chapter dedicated to positive psychology, interventions and therapies directly relevant to positive psychology will not be discussed in this chapter.

[2]There are several therapies with strong empirical support that are based on a CBT framework, such as Dialectical Behavior Therapy (DBT; Linehan, 2014), although those will not be discussed in this chapter. Relative to CBT, DBT emphasizes the relational aspects of psychopathology through skills training in a group format. People learn skills of interpersonal effectiveness, distress tolerance, emotion regulation, and mindfulness.

[3]In literature, mindfulness has been examined as both a unidimensional and a multidimensional construct (i.e., as a general factor versus one composed of several interrelated facets, respectively). As researchers have become increasingly interested in examining how mindfulness is associated with various outcomes, this has necessitated examination of mindfulness at the facet level (e.g., Baer et al., 2008; Desrosiers, Vine, Curtiss, & Klemanski, 2014). Research shows that mindfulness can be separated into five factors, which are *describing* and labeling one's experiences, *acting with awareness* and attending to one's activities in the present moment, *non-judging* of inner experiences, *observing* and noticing one's experiences, and *non-reacting* to unpleasant stimuli (for a review, see Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). For simplicity, mindfulness is presented as a single construct in the current chapter.

[4]There have been several mindfulness-based programs developed, such as mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1990) and mindfulness-based cognitive therapy (MBCT; Teasdale, Segal, & Williams,1995), that are all based on the foundational principles of cultivating attention and awareness to present moment experiences.

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