

Happiness Interventions

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To appear in G. M. Walton & A. J. Crum (Eds.) *Handbook of wise interventions: How social-psychological insights can help solve problems*. New York: Guilford Press.

## Abstract

Happiness interventions are brief, often self-guided, reflective or behavioral activities designed to boost people's happiness (i.e., their overriding sense of emotional and cognitive well-being) by prompting them to mimic the thoughts and behaviors of naturally happy people. The content of happiness interventions ranges widely (e.g., expressing gratitude, performing kind acts, focusing on one's strengths), but all variations seek to address the same underlying potential—that people can increase their own happiness. Across dozens of experiments, happiness interventions have successfully boosted well-being, often via changes in how people perceive themselves, their situations, and their relationships. Here I review empirical evidence demonstrating the efficacy of happiness interventions, the conditions that make happiness interventions more or less effective, the instructions for particular happiness interventions, and some of the nuances and misconceptions surrounding their implementation. In addition, I discuss the process by which happiness interventions may affect long-term changes in happiness and other outcomes, as well as the potential for happiness interventions to contribute to broader psychological theory. Future research should explore the process of happiness change via longer follow-up periods, include measures of more objective outcomes, implement happiness interventions within closed networks (e.g., in schools and workplaces), and continue to explore person-activity fit. A truly wise happiness intervention would be one that hits the right lever for the right person at the right time, setting off a promising upward trajectory toward greater well-being. (230 words)

## **Happiness Interventions**

Happiness interventions are brief, often self-guided, reflective or behavioral activities designed to boost people's happiness (i.e., their overriding sense of emotional and cognitive well-being) by prompting them to mimic the thoughts and behaviors of naturally happy people. Researchers often use the terms positive psychology interventions (PPIs) or positive activity interventions (PAIs) with the former being an umbrella term that includes happiness interventions performed in the context of group- and individual-level therapy, as well as self-guided formats, and the latter being a term specific to the self-guided format. By self-guided, I mean that a person receives activity instructions (maybe from a researcher, website, app, or book) and then engages in the activity without therapeutic supervision. Lyubomirsky and Layous (2013) also use the term "positive activities" instead of "positive activity interventions" to refer to the naturalistic practice of happiness-promoting activities outside the context of an experiment.

## **Background**

Across the globe, people report happiness as an important goal for themselves (Diener, 2000) and their children (Diener & Lucas, 2004). Extensive research demonstrates that happiness is not only a pleasant emotional and cognitive experience, but is also predictive of and causally related to positive outcomes in relationships, career, and physical health (Lyubomirsky, King, & Diener, 2005). Thus, happiness aids success in important life domains, which likely feeds back into one's happiness in a virtuous recursive cycle.

Therapists have been attempting to relieve patients' psychological suffering by modifying maladaptive thoughts and behaviors since the late 1800s (see Smith & Glass, 1977 for the efficacy of therapy), but a direct focus on increasing happiness, rather than simply alleviating

distress, is relatively new (Seligman & Csikszentmihalyi, 2000, but see Fordyce, 1977, 1983). Critics of happiness pursuit warned, “trying to be happier is as futile as trying to be taller...” (Lykken & Tellegen, 1996, p. 189), but, in their seminal work, Lyubomirsky, Sheldon, and Schkade (2005) refuted this and other sources of pessimism regarding happiness pursuit. They argued that, despite relatively stable influences on happiness like genetics and life circumstances (estimated to explain about 50 and 10% of individual differences in happiness, respectively), a large proportion of happiness is left unexplained by these factors and is likely subject to change by altering how one behaves and how one perceives themselves and their social world. Indeed, during the last two decades, research on happiness interventions has burgeoned, demonstrating that increasing happiness is possible, even with brief and cost-effective strategies (Bolger et al., 2013; Sin & Lyubomirsky, 2009).

To explore ways to promote happiness, Lyubomirsky, Sheldon et al. (2005) analyzed the thought patterns and behaviors of naturally happy people (see also Fordyce, 1977, 1983). For example, past research has demonstrated that happy people think gratefully, perform kind acts, and strive for personally meaningful goals, so Lyubomirsky, Sheldon et al. (2005) reasoned that prompting people to engage in these types of thoughts or behaviors might boost their well-being. They demonstrated that instructing people to think gratefully or perform kind acts increased happiness relative to a control group (see also Emmons & McCullough, 2003; Seligman, Steen, Park, & Peterson, 2005 for concurrent happiness intervention studies). These findings provided proof of their concept that engaging in certain types of thoughts and behaviors—which can be under one’s control—boosts happiness.

Thus, initial happiness interventions were empirically, not theoretically, driven—researchers explored whether the correlates of happiness could be packaged and administered to

cause increases in happiness. That said, Walton and Wilson (2018) offer a helpful theoretical framework to understand why these happiness interventions work. They propose that “wise interventions” are psychologically wise to the way people see themselves, other people, or a particular situation and use precise theory- and research-informed strategies to alter these meanings. They reason that almost every situation is open to some type of interpretation and it is the inferences that people draw that most proximally drives behavior. Thus, if meanings can be changed, so can behaviors and, ultimately, changes in objective life circumstances may follow.

Happiness interventions can readily be interpreted through this wise intervention framework. First, happiness interventions are wise to the particular thoughts and behaviors that promote happiness. Second, via structured reflection exercises or the enactment of new behaviors, happiness interventions help people make meaning of themselves and their social world in ways that promotes happiness. Third, although the initial change within a person is subjective (i.e., they view themselves, their relationships, or their circumstances more positively), this altered state may lead to changes in behavior that builds on itself in a self-enhancing recursive cycle.

In contrast with other wise interventions in this volume, happiness interventions are quite varied in content, focusing on different behaviors or thought processes entirely (e.g., gratitude, kindness, optimism). Nevertheless, all happiness interventions seek to address the same underlying potential—that people can increase their own happiness. I will highlight some unifying threads among happiness interventions, as well as specific information about two types of interventions with strong empirical support—those that focus on gratitude and kindness.

## **Psychological Processes**

Walton and Wilson (2018) argue that, in order to alter potentially problematic ways of viewing the self and the social world, researchers need to consider three basic motives that underlie people's meaning-making processes: the need to understand oneself and ones surroundings (including their social relationships), the need for self-integrity, and the need to belong. Promoting psychological need satisfaction may be particularly important in the context of happiness interventions because psychological need fulfillment relates directly to happiness, which is the primary desired outcome of happiness interventions (Ryan & Deci, 2000).

### **The Need to Understand**

People have a fundamental need to make sense of themselves and others and they do their best to make inferences that match their own experiences and the information available to them (Walton & Wilson, 2018). For example, if parents, mentors, or friends tell a child that happiness is determined at birth, the child may hold the perception that happiness is fixed—there is no use trying to live a happier life. In this instance, trusted sources have informed the child how to understand happiness and this belief may hold long after the child remembers how the belief was initially instilled. Thus, a happiness intervention that conveys the knowledge that happiness is malleable, rather than fixed, could drastically change a person's meaning-making process around happiness. Indeed, those who hold a growth mindset toward happiness (a belief that happiness can grow through effort) are happier than those who hold a more fixed perspective (Van Tongeren & Burnette, 2016). In a causal test of the effect of growth mindset on happiness, participants randomly assigned to receive information about the malleability (versus the stability) of happiness reported higher growth mindsets toward happiness, which in turn related to greater

happiness (Van Tongeren & Burnette, 2016). Thus, altering the understanding of happiness as malleable rather than fixed promotes greater happiness.

In addition, due at least partially to individual differences in inborn personality traits (Larsen & Ketelaar, 1991) or learned tendencies from parents who model emotion regulation (Eisenberg, Cumberland, & Spinrad, 1998), people are predisposed to view the world and respond to it in ways that either promote or detract from their happiness (Lyubomirsky, 2001). As noted by Walton and Wilson (2018) almost every situation is open for interpretation and some people interpret the situation in a way that promotes their happiness whereas others do not. Happiness interventions redirect people's attention to the positive in their lives and help them view themselves and their social world in happiness-promoting ways. Thus, even if people are predisposed to view situations in a way that undermines their happiness, happiness interventions can alter these thought-processes and behaviors.

For example, happiness interventions focused on gratitude, such as listing what one is grateful for (in a journal-type framework; Emmons & McCullough, 2003) or writing a letter of gratitude to someone who has done something for you (e.g., Lyubomirsky, Dickerhoof, Boehm, & Sheldon, 2011) amplify people's recognition and appreciation of the good things they already have, helping them construe their lives as more positive than they did before.

Emmons and McCullough (2003) provided the following examples from people's gratitude lists: "waking up this morning," "the generosity of friends," "for wonderful parents," "to the Lord for just another day," and "to the Rolling Stones." None of these blessings were new positive events happening to participants, but the gratitude activity helped them actively appreciate aspects of their lives they likely take for granted on most days. Although this initial change in perception is subjective, over time, this shift in perspective may help people take

action that leads to more enduring changes in their objective circumstances (more on this in the Effects Over Time section).

Similarly, when writing a gratitude letter, people actively appreciating the influential relationships they already have (or have had in the past). Common themes include close others giving letter writers unconditional love or social support in times of adversity, as well as believing wholeheartedly in their ability to succeed. These letters also often reveal a drive to work hard to prove that their benefactor's efforts were not wasted which may point to ways in which gratitude can affect future behavior. Below are two excerpts from letters that were representative of many written by college students (unpublished excerpts from the Layous, Lee, Choi, & Lyubomirsky, 2013 study).

*Dear [High School Teacher],*

*If it wasn't for your [English] class in high school, I probably wouldn't be the person I am today. I feel that after I took your class I grew up so much more. I became a better person in regards to forming my own opinions about life. You were a strict teacher, you pushed us to our limits, but never did you ever tell us we couldn't handle it. I know that you pushed us to our limits because you had so much confidence in us. You had so much belief in us as individuals and that you pushed us because you wanted us to know that we are capable of becoming the best that [our school] had to offer... Thank you for believing in my capabilities. Thank you for pushing me to my limits. Thank you for making me believe in myself. Thank you for teaching me to like myself for who I am. Thank you for changing my life for the better.*

*Sincerely,  
Student*

*Brother,*

*I wanted to write to you to let you know how grateful I am for everything you have done for me. You are an amazing brother and mentor, someone who I look up to. I hope one day I can come close to achieving the goals you have hoped I accomplish. You did not have to be there for me like you were when we were younger. With mom and dad always being gone, you raised me and [our other brother], something that would not be easy for anyone to do, you only being 9 years old when I was born. I will never forget the nights you stayed home to help*



*me with my homework instead of being a typical teenager who enjoyed the life with friends, parties, and living carefree...Every day I go to school knowing I have to work hard, and then work harder, not to let you down. You have never placed worry or pressure on me to succeed in life, but I know deep down, that that is all you want. I look at you not only as a brother, but as a role model, a father figure, and one of my best friends. I refuse to mess up my life, and make unforgettable mistakes, knowing you sacrificed so much just for me to be able to do so. I am forever in debt to you, in the most loving way possible. I want to do well in school, personal relationships, work and in life, so I can make myself proud, and you proud. I don't think I have ever written out on paper just what exactly you have done for me, or how thankful deep down I really am. So thank you [brother], thank you so much. If it weren't for you, I honestly don't know what I would be doing. I promise I won't let you down, [we're] so close to accomplishing our life dreams.*

*I love you...[you're] an amazing brother and you will be an amazing father one day.  
Your sister*

One study clearly illustrated the ability of happiness interventions to change people's construal of their life events. Participants were randomly assigned to one of two happiness interventions or a control condition (Dickerhoof, 2007). In all three conditions, people were asked to write down personally satisfying experiences from the week (e.g., "I went on a job interview, and I got the job on the spot!") and then participants and independent coders rated how satisfying the experiences were. Participants in the happiness intervention conditions reported that their experiences were becoming marginally more satisfying over time compared to participants in the control group. Alternatively, independent coders actually rated participant experiences as becoming less satisfying over time, indicating that participant perceptions of increased satisfaction were not objective—they were due to improved construal of these situations. This perception of satisfaction mediated the relationship between condition and well-being, indicating that an important way in which happiness interventions boost well-being is by improving people's perception of the events in their lives. Importantly, this altered view of one's experiences is likely to lead to altered behavior—perhaps trying new activities or taking on new

challenges—that feeds back into one’s happiness is a recursive cycle. The altered understanding of one’s life is just the first step to changing cycles of unhappiness.

### **Need for Self-Integrity**

People also have the need to view themselves as capable, competent agents in the world—morally and adaptively adequate (Bandura, 1997; Cohen & Sherman, 2014). The gratitude letter examples demonstrate that people often write to close others who have believed in them. Although the gratitude letter prompt does not explicitly ask participants to write about others who have made them feel worthy, implicit in the activity is writing to someone who has invested in the letter writer, thus demonstrating the target’s view of the letter writer as worthy.

Whereas gratitude interventions prompt reflection as a first step, kindness interventions first prompt a behavior and then leave it up to the participants to reflect upon the meaning of that behavior. One way in which performing acts of kindness boosts happiness is likely by fostering a sense of accomplishment in the performer (e.g., they feel like a good person). For example, across three experiments, participants prompted to help others increased in positive self-evaluations relative to those who did not help (Williamson & Clark, 1989). The self-evaluations included a variety of personal characteristics that may make up one’s sense of themselves as morally and adaptively adequate (e.g., successful, helpful, trustworthy, considerate, useful, and kind). In one specific type of kindness intervention, participants were randomly assigned to “make someone else happy” throughout the week for four weeks (excerpts from Layous, Kurtz, Margolis, Chancellor, & Lyubomirsky, 2018 included below). A consistent theme across these entries was the person performing kind acts feeling proud of themselves for investing in others.

*I chose to make my boyfriend happier last week. I made him dinner and tried to be nicer to him and not be so critical of him. I chose this person because hes the person I spend most of my free time with. I knew treating him nicely would make him happy because a lot of times when Im stressed I take it out on him. He was*

*much more appreciative toward me. I was very proud of myself that I could make him as happy as I did.*

*This week I chose one of my friends and housemates. During the week we don't have much time to hang out, so this weekend I made sure we did. We went out together Friday night and had a movie night the next night. I chose [friend] because we've been friends for a long time, and I knew she was someone I really cared about. I knew just spending time with her would make her happy. She was excited when she realized I wanted to spend so much time with her. I felt proud of myself that I took time away from doing things only for myself. I think I was successful in making her happy.*

## **Need to Belong**

People also have the fundamental need to belong—to feel close and connected with others (Baumeister & Leary, 1995; Ryan & Deci, 2000). Importantly, people's relationships with others are also open for interpretation with people pondering questions such as “does my significant other truly love me?” or “does this social group really care if I'm here?” (Walton & Wilson, 2018).

Gratitude and kindness interventions both highlight positive relationships in one's life. Gratitude journaling is a private activity, but people often bring to mind their valued social relationships. Similarly, although gratitude letters often go undelivered in experiments to isolate the effect of simply writing the letter, the activity brings to mind important others in one's life and highlights the investment of others in the letter writer's life. Whereas gratitude activities typically simply bring to mind positive social relationships (but see Walsh & Lyubomirsky, 2018 for the additional benefit of delivering the gratitude letter), kindness interventions prompt people to behave in positive ways toward others—strangers, acquaintances, or close others. Not surprisingly, both gratitude interventions and kindness interventions boost people's sense of connectedness to others (e.g., Kerr, O'Donovan, & Pepping, 2015). Research suggests that even interactions with strangers like your Starbucks barista promotes belonging and happiness

(Sandstrom & Dunn, 2014) and investing in close relationships provides even more of a boost in happiness than investing in acquaintances (Aknin, Sandstrom, Dunn, & Norton, 2011) perhaps because of the potential to trigger a positive feedback loop in your close relationships.

Importantly, performing kind acts and expressing gratitude may work in tandem to promote positivity in one's relationships. In the above excerpt, the person who invested time into making her boyfriend happier noted how appreciative he was of her efforts. Past theory and research has demonstrated that those who feel grateful toward their partner are more likely to engage in behaviors that strengthen the relationship (e.g., spending quality time with one's partner; Algoe, 2012). Thus, the initial kind act from Partner A may trigger gratitude in Partner B, which stimulates Partner B to invest further in the relationship, triggering an upward spiral of gratitude, positive relationship behaviors, and relationship satisfaction in Partner A and Partner B (Algoe, 2012). Although a great deal of gratitude research has taken place in the context of romantic relationships, research has also demonstrated the positive effects of gratitude in close friendships (e.g., Lambert & Fincham, 2011), indicating that gratitude has a role across relationship type, promoting fulfilling relationships (Algoe, 2012). Given people's inherent need to feel close to others, it is no surprise that activities that promote positive relationships also contribute to happiness.

## **Empirical Evidence**

### **Outcomes**

The primary outcomes of happiness interventions are subjective well-being and depression. In the tradition of Diener (1984), subjective well-being includes three primary components: positive affect, negative affect, and life satisfaction—sometimes reported separately and sometimes reported as part of a composite with negative affect reverse-scored (Busseri &

Sadava, 2011). In the literature, subjective well-being and “happiness” are used interchangeably, and subjective well-being is often used as an umbrella term that subsumes measures that ask participants directly about their happiness (e.g., Lyubomirsky & Lepper, 1999). Sometimes researchers also measure participants’ eudaimonic well-being—their sense of purpose and meaning in life—but research suggests that subjective and eudaimonic well-being have so much overlap that differences between the two are more conceptual than empirical (e.g., Disabato, Goodman, Kashdan, Short, & Jarden, 2016). Thus, for simplicity, I will focus mainly on the subjective well-being and depression results.

Two meta-analyses have investigated the efficacy of happiness interventions. The first included 51 studies and found that the effect of PPIs is moderate on subjective well-being and depression (Sin & Lyubomirsky, 2009). With stricter inclusion criteria (e.g., only peer-reviewed publications, only studies with randomization to condition), the second meta-analysis included 39 studies and found that the effect of PPIs is small but significant on subjective well-being and depression at post-intervention, with the small effects on subjective well-being persisting three to six months later (Bolier et al., 2013).

Recent papers also explored the effects of gratitude and kindness interventions specifically. A meta-analysis of gratitude interventions included 38 studies with 282 effect sizes from various outcome variables and comparison conditions (Dickens, 2017; see also Davis et al., 2016). Compared to a neutral control condition, people who engaged in a gratitude intervention reported higher quality of relationships, grateful mood and disposition, life satisfaction, positive affect, happiness, well-being, and optimism, and lower depression at post-intervention, with all effect sizes being small to moderate. The differences between the gratitude and control condition remained out to follow-up for well-being, happiness, positive affect, and depression, with the

follow-up period varying from two weeks to six months. A meta-analysis of kindness interventions included 27 studies with 52 effect sizes comparing the effect of performing kind acts versus various controls. Collapsing across comparison condition-types and various indicators of subjective well-being, the effect of kindness interventions on the well-being of the actor was small to medium (Curry et al., 2018).

In addition to boosting subjective well-being, happiness interventions also have positive effects on relationships, work, and physical health either directly or via increases in happiness. As mentioned before, happiness interventions promote feelings of connection with others (Dickens, 2017; Kerr et al., 2015) and may trigger positive feedback loops within one's relationships (Algoe, 2012). People induced into a positive mood are also better workers in a variety of ways—they set higher goals, persevere at challenging tasks longer, complete greater amount of work with no decline in quality, and come up with more mutually beneficial solutions in negotiations (Walsh, Boehm, & Lyubomirsky, 2018). In addition, happiness is related to physical health (Pressman, Jenkins, & Moskowitz, 2019), and people who engage in happiness interventions have reported fewer symptoms of physical illness (Burton & King, 2008; Emmons & McCullough, 2003, Study 1), and even fewer visits to the doctor (Burton & King, 2004; King, 2001) than comparison groups.

Research on happiness interventions suggests potential pathways by which happiness may affect physical health. Specifically, participants who engage in happiness interventions (versus various comparison conditions) have reported greater sleep duration (Emmons & McCullough, 2003, Study 3) and sleep quality (Jackowska, Brown, Ronaldson & Steptoe, 2016), decreased diastolic blood pressure (Jackowska et al., 2016) and inflammation (Redwine et al., 2016), and healthier eating (Fritz, Armenta, Walsh, & Lyubomirsky, 2018). Thus, happiness

interventions may improve physical health by increasing the healthy cardiovascular profile associated with positive emotions (Boehm & Kubzansky, 2012) and by promoting healthier behaviors (e.g., better eating and sleep habits).

### **Mechanisms**

To understand how happiness interventions can affect long-term changes in well-being, we must first explore the feelings, thoughts, and behaviors of people directly following their engagement in a happiness intervention. In the Psychological Processes section of the current chapter, I focused on the potential for happiness interventions to change the way people construe themselves, their relationships, and their circumstances in general, which likely feed back into greater happiness over time in a recursive process. Here I focus on some evidence of these proximal changes in the way people understand their current circumstances and relationships (need to understand), feel about themselves (need for self-efficacy), and feel connected to others (need for belonging).

Immediately following a gratitude expression activity, participants felt more grateful (Lambert, Fincham, & Stillman, 2012; Layous, Sweeny, Armenta, Na, Choi, & Lyubomirsky, 2017), more positive overall (Layous et al., 2017; Watkins, Woodward, Stone, & Kolts, 2003), more connected to others (Layous et al., 2017), and more emotionally and cognitively engaged at school (King & Datu, 2018) than comparison groups. Directly after performing an act of kindness, participants felt more positive overall and evaluated themselves more positively on a variety of personal characteristics (e.g., successful, trustworthy) than participants who did not perform an act of kindness (Williamson & Clark, 1989). Importantly, participants reported these feelings directly after the activity—there had been no time for objective life circumstances to change. This means that participants' construal of themselves, their relationships, and their

circumstances had changed to view their life in a more positive light. These immediate shifts in construal, positivity, and psychological need satisfaction likely drive longer-term changes in well-being (Fredrickson, 2013; Layous & Lyubomirsky, 2014; Lyubomirsky & Layous, 2013).

Another possibility ripe for future exploration is that happiness interventions drive immediate changes in behavior (i.e., not just construal), which then feed back into happiness. For example, people induced into a grateful state are more likely to perform acts of kindness (Bartlett & DeSteno, 2006), a behavior that also leads to higher happiness (see Miller, Dannals, & Zlatev, 2017). More research needs to explore the proximal changes in feelings, thoughts, and behaviors that promote happiness change well after the initial intervention.

### **Effects Over Time**

Theoretically, happiness interventions may affect long-term well-being and related outcomes (e.g., relationship closeness, workplace success, and physical health) via two non-mutually exclusive pathways: recursive processes and continued practice. Regarding recursive processes, the broaden-and-build theory of positive emotions states that positive emotions broaden people's attention and prompt engagement in approach-oriented behaviors (e.g., playing, exploring, learning, engaging with new activities or people; Fredrickson, 2013). Although the boost in positive emotions is temporary, this broadened, exploratory state allows people to take actions that may lead to durable changes in well-being. For example, if a woman engages in a happiness intervention and feels more positive as a result, she may feel energized to attend a gym class. While at this gym class, she may meet someone with common interests who becomes a friend and an enduring source of social support. Thus, the initial positive state promoted actions that created an objective and stable happiness-promoting change—a new friend (see Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008 for empirical evidence).



Fredrickson (2013) focuses on positive emotions as the fuel that drives these happiness-promoting actions, but based on the psychological processes and mechanisms discussed earlier, I posit that other mediators are also at play (e.g., construal, psychological need satisfaction, or positive behaviors). Regardless of the precise mechanism, a happiness intervention may trigger a series of events that promotes sustained happiness (see also Cohen & Sherman, 2014; Yeager & Walton, 2011; Walton & Wilson, 2018 for a discussion of recursive processes). Although possible, the above scenario relies on a chain of fortuitous events that may not happen—perhaps no one is particularly friendly at the gym that day and therefore the upward spiral of positivity (i.e., the recursive process) is not triggered. Indeed, Walton and Wilson (2018) note the importance of a receptive environment for recursive processes to unfold.

This is where the second pathway, continued practice comes into play. If, instead of engaging in a happiness intervention only once—or only during a prescribed intervention period (e.g., over 6 weeks)—a person decides to continue his gratitude practice indefinitely, he increases the chance that this gratitude practice will set off a chain of positive events in his life, thus sustaining his happiness. Whereas at first, the gratitude intervention may only have changed his subjective construal of his life, eventually, this subjective construal leads to positive actions that will improve objective circumstances (e.g., more high-quality social relationships) when met with a receptive environment. An objective circumstance like more high-quality social relationships would itself promote greater happiness.

Another possibility is that the continued practice itself reinforces happiness by helping the person actively appreciate their lives as they are. Indeed, happiness researchers have posited that continued practice is necessary to sustainably boost happiness and therefore if the gratitude practice stopped, so would the associated gains in well-being (Lyubomirsky, Sheldon et al.,

2005, but see Cohn & Fredrickson, 2010). Researchers also theorize that, if continued practice is sustained long enough, the practice may become habitual, thus sustaining boosts in well-being without effortful practice (Lyubomirsky, Sheldon et al., 2005). Thus, for example, someone who practices gratitude over time may eventually have their immediate response to a situation be one of gratitude rather than dismay. This person may then resemble people who are naturally grateful due to personality or early learned tendencies. No research has been conducted yet to determine whether happiness interventions can become habitual after a certain amount of time and therefore sustain boosts in well-being.

More research also needs to explore evidence for whether recursive processes, continued practice, or both drive long-term changes in well-being. If continued practice is necessary, you may expect longer intervention periods (e.g., 10 weeks versus 4 weeks) to have similar (or even perhaps greater) gains in well-being than shorter interventions. Indeed, a meta-analysis found that interventions that were longer had larger effect sizes than those that were shorter, but this finding was confounded by the fact that many of the longer interventions also took place in group- or individual-therapy, another factor that boosted efficacy (Sin & Lyubomirsky, 2009). In my own work, I have seen evidence of a quadratic effect whereby the intervention boosts well-being out to a certain point (e.g., 3 weeks in), but does not sustain the boosts for everyone out to the end of the intervention (e.g., 6 weeks in; Layous, Kurtz, Wildschut, & Sedikides, 2019). Thus, continued practice alone does not seem to maintain boosts in well-being.

Some studies have measured the degree to which people continue to practice the intervention of their own free will after the prescribed intervention period and found that continued practice was related to sustained increases in well-being (Dickerhoof, 2007; Proyer, Wellenzohn, Gander, & Rush, 2015; Seligman et al., 2005; Sheldon & Lyubomirsky, 2006).

Unfortunately, most of these studies do not provide enough information to know whether the continued practice was necessary to maintain sustained well-being increases, or merely additionally beneficial.

Complicating matters, most of the evidence on continued practice is correlational, so the relationship between continued practice and sustained well-being could be due to other factors. For example, Sheldon and Lyubomirsky (2006) found that continued practice was related to participant self-reports of self-concordance with their activity (e.g., the degree to which they enjoyed the activity and identified with its importance versus felt forced to engage in the activity by external forces or guilt). Similarly, Cohn and Fredrickson (2010) noted that those who continued their happiness-promoting practice were also the ones who reacted more strongly in the initial weeks of the intervention. This early reactivity could be an indication of fit between the person and the happiness intervention. Thus, quite rationally, those who felt the intervention working for them were more likely to continue practicing it beyond the prescribed intervention period and those who were slower to react (not reaping benefits until near the end of the intervention and reaping less benefits overall) stopped the practice when the study stopped. Nevertheless, Cohn and Fredrickson (2010) noted that what little gains the non-continuers reaped in the initial intervention were sustained at the follow-up, indicating continued practice may not be necessary because it is possible the intervention helps the person build other sources of positivity in their lives that sustain well-being regardless of continued practice.

All of this is to say that more research needs to be conducted to explore the degree to which continued practice is necessary and under which conditions (e.g., under optimal person-activity fit) continued practice is most beneficial. Following recommendations by Miller and colleagues (2017), more research also needs to measure behavioral changes following happiness

interventions and how those behavioral changes may sustain boosts in well-being in a recursive process.

Adding to the difficulty of exploring the “how” of well-being change over time, many happiness interventions include either no follow-up after the intervention or a relatively short follow-up (e.g., one month). Given how difficult behavior change is, longer follow-up periods are needed to know whether and how the changes instigated by happiness interventions stick beyond the prescribed intervention period. Nevertheless, some articles point to the potential longevity of these effects. Bolier and colleagues (2013) found nine happiness interventions that examined follow-up effects from three to six months after the intervention and found a small but significant effect of the interventions (versus control) on well-being at the follow-up.

### **Heterogeneity**

Theory and research proposes various aspects of the happiness intervention (e.g., its dosage) and the people practicing it (e.g., their personality) that moderate the degree to which the activity works to increase well-being (Layous & Lyubomirsky, 2014; Lyubomirsky & Layous, 2013). For example, one study found that a gratitude exercise was more effective if performed once per week rather than three times a week and another study found that a kindness intervention was more effective if all kind acts were done in one day during the week rather than spread out across the week (Lyubomirsky, Sheldon et al., 2005). Authors later reasoned that both studies suggest that happiness interventions performed once per week are most effective, perhaps because many cultural routines are performed weekly (e.g., church, television programs; Lyubomirsky & Layous, 2013). Although authors cannot be sure why these patterns of implementation were the most effective, at the very least, these studies point to the dosage of the intervention affecting its efficacy. Lyubomirsky and Layous (2013) discuss various other aspects

of happiness intervention implementation that may affect its efficacy (e.g., variety, built-in social support).

In addition, research points to aspects of the person that might make them more likely to improve in well-being following a happiness intervention. For example, in one study, people who were relatively more extraverted gained more in well-being from happiness interventions indicating the role of personality (Senf & Liao, 2013). Past research has demonstrated that extraverted people consistently experience more positive emotions than their more introverted counterparts (Costa & McCrae, 1980), perhaps because they react more positively to similar daily events (Larsen & Ketelaar, 1991). Thus, it seems that extraverted people are predisposed to construe events as positive and, when given overtly positive material like a happiness intervention, they benefit more than their peers. Lyubomirsky and Layous (2013) discuss other characteristics of people that may affect their likelihood of gaining in well-being following a happiness intervention (e.g., how motivated they are to boost their happiness, how much they believe that happiness interventions can increase well-being).

Importantly, the optimal dosage of a happiness intervention (i.e., how often it is practiced) may vary by person and whether particular personality profiles (i.e., extraversion) gain more in well-being from a happiness intervention may depend on the happiness intervention itself. Thus, perhaps more important than the main effects of activity or person characteristics is the fit between a particular person and a particular activity (i.e., person-activity fit; Lyubomirsky & Layous, 2013). For example, giving random acts of kindness to complete strangers may not be the best intervention for introverted people (Pressman, Kraft, & Cross, 2014). Indeed, participants who indicate that an activity feels relatively more natural and enjoyable to them are more likely to increase well-being over time (Dickerhoof, 2007) and to continue practicing the

intervention beyond the prescribed period (Sheldon & Lyubomirsky, 2006). Similarly, people who indicate a good fit with the happiness intervention are more likely to sustain benefits to well-being (Proyer et al., 2015; see also Cohn & Fredrickson, 2010). More research needs to address the issue of person-activity fit to best maximize well-being benefits for happiness seekers.

### **Cousins**

Happiness interventions incorporate a broad range of activities, both inside (e.g., Fava & Ruini, 2003; Seligman, Rashid & Parks, 2006) and outside (e.g., Seligman et al., 2005) of therapy, so I will not be able to discuss all of them here. The below mentioned activities (and the gratitude and kindness activities already mentioned) are similar in that they all help people view themselves, their relationships, or their environments in ways that promotes happiness, but they are different in the exact way they focus attention.

Various interventions—broadly classified as savoring interventions—direct people’s attention to the positive in their past, present, or future experiences. Some researchers characterize savoring as an umbrella term that encompasses gratitude, with gratitude being a specific type of savoring in which one recognizes and appreciates a direct benefit received from the goodwill of another person (Adler & Fagley, 2005). Many savoring interventions have successfully boosted positive emotions by prompting people to remember positive experiences from their past (e.g., Burton & King, 2004; Sedikides et al., 2015). Perhaps unsurprisingly given the fundamental need for humans to feel connected to others (e.g., Baumeister & Leary, 1995), the two most frequent subjects of these positive memories is close others and momentous events (e.g., weddings, graduations) during which close others are an important part (Wildschut, Sedikides, Arndt, & Routledge, 2006). Following this theme, the boost in positivity following the

recollection of positive memories was predicted by an increased sense of connectedness to others, as well as an increased sense of meaning in life, self-esteem, and self-continuity (one's sense that they are connected with their past and that their personality has remained the same across time; Sedikides et al., 2015).

Other savoring interventions attempt to direct people's attention to the positivity in their present experience by engaging in activities like taking pictures of their surroundings in a thoughtful way (i.e., looking for and appreciating beauty; Kurtz, 2015) or sharing positive news with a significant other (Gable, Reis, Impett, & Asher, 2004). Counterintuitively, many savoring interventions induce a sense of scarcity to promote present savoring—either by having people mentally subtract someone important from their lives (Koo, Algoe, Wilson & Gilbert, 2008) or by framing time as scarce in a given location (i.e., at their college campus; Kurtz, 2008; Layous, Kurtz, Chancellor & Lyubomirsky, 2018; see also Carstensen, Isaacowitz, & Charles, 1999). In one study, inducing a sense of time scarcity boosted feelings of psychological need satisfaction in the moment (feelings of autonomy, competence, and connectedness) which predicted boosts in well-being over time (Layous, Kurtz, Chancellor et al., 2018). Thus, imagining time as scarce made people construe their current environments as more fulfilling than they previously had.

Anticipating positive future events also boosts happiness (Quoidbach, Hansenne, & Mottet, 2008). In a specific type of positive future anticipation, people “visualize their best possible future self” imagining that everything in their lives has gone as well as it possibly can and then write about what they envision (King, 2001). Common themes that arise in these essays are job success, self-improvement, marriage and family, and home ownership—success in career and social relationships. Researchers also adapted the “best possible self” activity into a multi-week intervention, with each week focusing on a specific domain of life (e.g., family, friends,

career, or health; Boehm, Lyubomirsky, & Sheldon, 2011; Layous, Nelson, & Lyubomirsky, 2013). Although the “best possible self” intervention is often viewed as a self-oriented activity compared to more socially oriented activities like expressing gratitude (e.g., Boehm et al., 2011), when discussing their ideal future life, people spontaneously bring up close others, indicating their central importance to visions of future success (King, 2001). Indeed, participants randomly assigned to a “best possible self” condition not only reported greater positive affect than a control condition, but also marginally greater connectedness (Layous, Nelson et al., 2013).

Another happiness intervention often viewed as self-oriented assesses participants’ strengths with the “Values in Action Inventory” (Peterson & Seligman, 2004) and then prompts participants to use one of their top strengths in a new way (Seligman et al., 2005; Senf & Liao, 2013). Importantly, on this particular strengths assessment, many of the strengths that participants may have are inherently socially oriented like gratitude, kindness, love, social intelligence, or teamwork, so this activity may not actually be as self-focused as it may seem on the surface. Past research has shown that this activity is effective in boosting happiness and decreasing depressive symptoms (Seligman et al., 2005; Senf & Liao, 2013), but more research needs to be conducted to explore the exact mechanisms of the effect. For example, do the socially relevant strengths drive the effect on well-being or can focusing solely on individualistic strengths also benefit well-being?

Meditation has also been found to boost happiness. Many meditation programs are meant to boost mindfulness—a non-judgmental present awareness of one’s experience (Kabat-Zinn, 2003). Mindfulness-based meditation practices do not focus on boosting positivity—they are meant to adjust people’s inherent tendency to evaluate each experience as good or bad. Nevertheless, evidence suggests that mindfulness-based meditation practices not only reduce



negativity, but also boost positivity (Davidson et al., 2003). Other meditation practices directly focus on boosting positivity. For example, loving-kindness meditation prompts participants to direct love and compassion toward themselves, loved ones, acquaintances, strangers, and all living beings and increases positive emotions, mindfulness, meaning in life, perceptions of social support, and perceptions of physical health (Fredrickson et al., 2008).

A theme in all of the above interventions is the importance of social relationships for happiness. Many other wise interventions also focus on helping people view their relationships in a positive light, although not typically with the primary goal of increasing personal happiness. For example, across multiple studies, the social-belonging intervention has helped students construe their challenges as normal and temporary, not as a sign they do not belong in their educational setting (e.g., Walton & Cohen, 2011). The primary goal of the social belonging intervention is to improve academic achievement among marginalized groups, but it also boosts happiness and physical health (Walton & Cohen, 2011). Thus, a common theme across wise interventions, including happiness interventions, is the focus on positive social relationships.

### **Intervention Content and Implementation**

Happiness interventions within therapy can be quite intensive (Fava & Ruini, 2003; Seligman et al., 2006), but the self-guided variety are often brief and typically performed once per week for about six weeks (although six weeks is an arbitrary time frame to permit completion of a study during a school term). Writing activities (e.g., gratitude) are often scheduled for as few as two minutes (Burton & King, 2008) to as many as 15 minutes (Lyubomirsky et al., 2011), whereas kindness activities can take much longer with participants often reporting spending quality time with loved ones.

Gratitude interventions typically focus on either keeping a gratitude journal (e.g., “counting blessings” or “three good things”; Emmons & McCullough, 2003; Seligman et al., 2005) or writing gratitude letters (e.g., Layous, Lee et al., 2013; Lyubomirsky et al., 2011).

Typical instructions for keeping a gratitude journal are as follows: “There are many things in our lives, both large and small, that we might be grateful about. Think back over the past week and write down on the lines below up to five things in your life that you are grateful or thankful for” (Emmons & McCullough, 2003). This activity prompts participants to reflect upon and appreciate aspects of their lives that they may take for granted, giving them an opportunity to extract positivity from mundane experiences that they otherwise would have taken for granted.

Typical instructions for a gratitude letter writing activity are as follows:

Please take a moment to think back over the past several years of your life and remember an instance when someone did something for you for which you are extremely grateful. For example, think of the people – parents, relatives, friends, teachers, coaches, teammates, employers, and so on – who have been especially kind to you but have never heard you express your gratitude. Although you should try to write your letter of gratitude to a new person each week; if you prefer, you can write another letter to the same person you wrote to previously.

Then, participants are given a list of more specific instructions (abbreviated) 1) write in a letter format, 2) do not worry about perfect grammar or spelling, 3) describe in specific terms why you are grateful to this individual and how the individual’s behavior affected your life, and 4) describe what you are doing now and how you often remember their efforts. Participants are also reminded that their letter will be completely confidential. Although the typical instructions ask the participant to write in a letter format, research suggests that simply writing about the person in a non-letter format is equally effective (Layous et al, 2017). In many gratitude letter writing interventions, the letter is not shared with the target to isolate the causal effect of the gratitude expression itself, but recent research suggests that delivering the gratitude letter boosts

well-being more than simply writing it and, as an added bonus, also boosts the well-being of the recipient (Walsh & Lyubomirsky, 2018).

Kindness interventions prompt participants to perform three (e.g., Layous, Lee et al., 2013; Nelson, Layous, Cole, & Lyubomirsky, 2016) or five (Lyubomirsky, Sheldon et al., 2005; Nelson et al., 2015) acts of kindness during the week, all in one day (Lyubomirsky, Sheldon et al., 2005). Typical instructions are as follows (with the last sentence undoubtedly coming from the Institutional Review Board):

In our daily lives, we all perform acts of kindness for others. These acts may be large or small and the person for whom the act is performed may or may not be aware of the act. Examples include helping your parents cook dinner, doing a chore for your sister or brother, helping a friend with homework, visiting an elderly relative, or writing a thank you letter. During one day this week (any day you choose), please perform five acts of kindness – all five in one day. The acts do not need to be for the same person, the person may or may not be aware of the act, and the act may or may not be similar to the acts listed above. Next week you will report what acts of kindness you chose to perform. Please do not perform any acts that may place yourself or others in danger.

Asking people to report the kind acts they performed (i.e., the kindness check-in) has two purposes. The first purpose is to hold people accountable. Researchers do not want participants to blow off the activity, so they remind them that they will report their kind acts the following week. If participants do not perform kind acts, they can leave the kindness check-in blank and the researcher can decide whether to include them in the analyses. That said, even if participants did not purposely perform kind acts during the week, they likely still likely did nice things for others that they might report. Research suggests that recounting the kindnesses one has performed throughout the day boosts well-being (Kerr et al., 2015; Otake et al., 2006). Thus, the second purpose of the kindness check-in is to give participants one more chance to benefit. Kindness interventions that ask people to go out and intentionally do kind acts cannot be sure that participants actually did anything additional to what they usually do, but, by asking

participants to report their kind acts, they can be sure that participants who report their kind acts are becoming more aware of the kindnesses they perform.

For a comprehensive list of happiness-promoting activities, visit the Greater Good in Action website, part of the Greater Good Science Center at the University of California, Berkeley, which houses 58 research-tested practices for boosting well-being (<https://ggia.berkeley.edu/>).

### **Nuances and Misconceptions**

Research has found that valuing happiness to an extreme degree actually undermines it, so there seems to be a risk in people endorsing statements like “If I don’t feel happy, maybe there is something wrong with me,” and “I am concerned about my happiness even when I feel happy” (Mauss, Tamir, Anderson, & Savino, 2011). Alternatively, research also suggests that simply prioritizing positivity as an important part of daily life (e.g., “A priority for me is experiencing happiness in everyday life”) is predictive of well-being (Catalino, Algoe, & Fredrickson, 2014). Thus, Catalino et al. (2014) demonstrate that the explicit intention to pursue happiness is likely positive, but Mauss et al. (2011) demonstrates that overvaluing happiness is distinct from a simple intention and can be detrimental. These two different approaches to thinking about happiness and their distinct relationships with well-being inform the administration of happiness interventions.

Indeed, most happiness interventions do not focus participants directly on their own happiness (e.g., “Go make yourself happy”), but instead prompt participants to engage in activities that take the focus off of their personal happiness (e.g., write a gratitude letter, perform kind acts). A person engaging in these research-tested practices is obviously showing signs of prioritizing positivity by seeking out happiness-promoting strategies, but, when engaged in the

activity itself, will not be thinking about their own happiness in an “Are we there yet?” unhealthy way. Indeed, in general, self-focus is related to negative affect, particularly when that self-focus involves ruminative thoughts like, “Why do I feel the way I do?” (Mor & Winquist, 2002). Thus, happiness interventions like gratitude and kindness often take the focus off the self and direct it to others. This is a nuance of happiness interventions that has not been discussed much, but I think may be an important part of their success—happiness interventions do not typically focus directly on happiness.

Simply telling people to make themselves happy without giving them efficacious happiness-promoting activities may not work because people often do not know what will make them happy. For example, many people engage in retail therapy to boost their mood, but research has shown that experiential purchases promote greater happiness than materialistic ones, likely because experiential purchases are more open to positive reinterpretation and contribute to social relationships (Van Boven & Gilovich, 2003; see also Kasser & Ryan, 1993). In another experiment, participants randomly assigned to perform kind acts for others reported greater flourishing than those assigned to perform kind acts for themselves (Nelson et al., 2016). Presumably, the self-kindness group engaged in activities meant to boost their well-being, but they were unsuccessful in doing so. Thus, people may want to pursue happiness, but they may not know what will actually make them happy.

Although people may not know exactly what to do to pursue their happiness, theory suggests that their intention to pursue happiness is important to their success as happiness-pursuit takes at least some effort (Lyubomirsky, Sheldon et al., 2005). In one test of this theory, researchers advertised their study as either a “happiness intervention” or a “cognitive exercises” study (Lyubomirsky et al., 2011). Researchers thought that participants who signed up for the

happiness intervention study were likely motivated to pursue their own happiness and had the intention of doing so, whereas participants who signed up for the cognitive exercises were less motivated and had no explicit intention to pursue their happiness. Regardless of how participants initially entered the study (via happiness intervention or cognitive exercises title), all were randomly assigned to complete one of two happiness interventions or a control activity weekly for 6 weeks. Participants who were motivated to improve their happiness and were assigned to one of the happiness interventions reported greater increases in well-being than those who practiced happiness interventions but were not motivated, or the control groups. Researchers concluded that participants needed both a will (i.e., motivation/intention to pursue happiness) and a proper way (i.e., an efficacious happiness-promoting activity) to increase well-being (Lyubomirsky et al., 2011; see also Ferguson & Sheldon, 2013 for a replication with a completely experimental design).

The positive effects of intention during happiness pursuit is interesting compared to other wise interventions in which the purpose is rarely made explicit to participants. For example, some research suggests that making the purpose of self-affirmation interventions known undermines their effect (Sherman et al., 2009), but upon further examination, the awareness may only be detrimental if the activity is viewed to be externally imposed rather than internally chosen (Silverman, Logel, & Cohen, 2013). I further discuss the importance of intrinsic motivation later in this section.

One reason intention to pursue happiness may predict higher happiness following a happiness intervention is because intentional happiness seekers may put more effort into happiness-increasing activities. Lyubomirsky and colleagues (2011) had independent coders rate the degree to which participants put effort into completing their assigned activities (either the

happiness interventions or the control activity). Regardless of whether participants self-selected into the happiness activity or not, those who put more effort into the happiness interventions (but not the control activity), saw greater increases in well-being. This again supports the “will and proper way” logic—participants needed to put effort into an efficacious activity. Unfortunately, Lyubomirsky and colleagues (2011) did not report whether those who self-selected into the happiness intervention study also put forth more effort. Possibly, anyone who puts effort into happiness-promoting activities will reap the benefits, with or without the explicit intention to become happier.

The Ferguson and Sheldon (2013) and Lyubomirsky and colleagues’ (2011) studies suggest that intentionality is an important component of benefitting from a happiness intervention, but many questions remain. For example, can the effect of intention and effort can be disentangled and, if so, which is more important? What exactly needs to be intentional—the pursuit of happiness more generally or just intentionality toward the practice of a specific happiness-promoting activity (e.g., intentionally practicing gratitude or kindness)? I suspect that the latter would be just as effective as the former, but no research to my knowledge has disentangled these effects. At what stage in happiness pursuit is intentionality necessary? In light of the potential for recursive processes to unfold, maybe intentionality is only necessary at the beginning of a happiness pursuit, but ceases to become necessary when activities either become habitual or trigger other positive processes that contribute to happiness. Finally, even at the beginning of a happiness intervention, is intention truly necessary, or is it merely helpful? I suspect if a group of non-happiness-seekers (i.e., people who do not have the goal improving their happiness) started writing in a gratitude journal weekly, at least some of them would experience improvements in well-being, indicating that the initial intention to pursue happiness

was not necessary for some. Similarly, in an experiment described earlier, participants randomly assigned to read information about happiness being malleable (versus fixed) reported higher happiness despite never expressing any intention to pursue happiness (Van Tongeren & Burnette, 2018). Thus, although initial theory suggested that intentionality is necessary for happiness pursuit (Lyubomirsky, Sheldon et al., 2005), many questions surround the exact nature of this intentionality.

Another nuance is that, as much as possible, happiness interventions need to be autonomy-supportive (see also Silverman et al., 2013; Vansteenkiste, Simons, Lens, Sheldon & Deci, 2004). People need to engage in happiness interventions because they want to and because the activities feel natural and enjoyable to them (intrinsically motivating). Even if people hold personal happiness as an intrinsically motivated goal because it feels good in and of itself, the way one pursues happiness (e.g., via gratitude expression or prosocial behavior) could start to feel unnatural or forced. Similarly, if people hold happiness as a goal only because others seem happier than they do or because society expects them to be happy, happiness pursuit may also feel mandated by extrinsic forces or by one's own guilt or shame (cf. Crocker & Park, 2004). Thus, as much as possible, people need to come to happiness pursuit on their own terms and the happiness interventions themselves need to underscore this autonomy. One experiment randomly assigned both U.S. and South Korean students to perform kind acts or focus on their academics (the control group) and then either provided autonomy supportive messages from a peer who purportedly completed this study previously (e.g., "Just wanted to let ya know that where u do these acts and who u do them for is totally up to u. Feel free to do this however u want! 😊") or just provided the other instructions with no peer support messages (i.e., no autonomy support; Nelson et al., 2015). Regardless of culture, the autonomy-supportive/kindness group showed



greater linear improvements in well-being over the six-week intervention than the other three groups, indicating that autonomy support boosted the efficacy of the kindness activity, but not the control group.

### **Implications for Practice**

Happiness interventions are quite scalable, as online versions of interventions have showed comparable results to in-person versions (Layous, Nelson et al., 2013) and preliminary results from a multi-component happiness intervention program show that the online version was even more successful than the in-person version (Heintzelman, 2018). Similarly, an iPhone application called *Live Happy*® features various happiness-promoting strategies and has shown increases in mood and global happiness in users, particularly those who engaged more frequently with the application and tried more of the activities (Parks, Della Porta, Pierce, Zilca, & Lyubomirsky, 2012). Given the self-guided, non-clinical nature of many happiness interventions, they are easy to implement in a variety of settings.

That said, one potential cause for concern about the implementation of happiness interventions in the public is whether particular activities could backfire among particular people (Fritz & Lyubomirsky, 2018). For example, one study found that a subset of participants actually decreased in happiness following a kindness intervention (Pressman et al., 2014). This kindness intervention was highly public—participants spent 90 minutes performing kind acts for strangers (e.g., giving a compliment, holding the door open, offering to carry something). Qualitative evidence revealed that participants who decreased in happiness reported being shy and uncomfortable engaging with strangers or reported being sad when they did not receive a positive response to their kind acts. The majority of kindness interventions give participants a choice in how they perform their kind acts, thus the likelihood of person-activity fit and

autonomous motivation is higher. Researchers and practitioners need to consider the participants in their happiness interventions and what type of complications they may experience, as well as leave enough flexibility in their administration as to give participants control and choice in their implementation.

In another example of a backfiring effect, one study found that writing gratitude letters actually decreased well-being among mildly depressed participants (Sin, Della Porta, & Lyubomirsky, 2011; see also Layous, Lee et al., 2013 for the null effect of gratitude letters among South Koreans). The authors reasoned that writing a letter of gratitude might have been too taxing for depressed participants. Indeed, in casual conversations with clinical psychologists, they caution that some of their patients with depression find it difficult to think of people in their lives who care about them, or, alternatively, if they can think of someone, patients quickly feel guilty about their family and friends wasting time on them (see also Layous et al., 2017). In a clinical setting, therapists can guide patients into a different way of thinking, but if people with depression are completing the gratitude letter activity by themselves, they may not have the proper support or wherewithal to benefit from the activity. Over half of happiness-seekers on the internet qualify as clinically depressed (Parks et al., 2012), so researchers need be careful about which activities they recommend and which caveats they may place. In one successful customization, researchers adapted the “visualize your best possible self” instructions for chronic pain patients by acknowledging their pain in the instructions (Peters et al., 2017). Thus, participants were asked to imagine their good life in the future “despite their pain”. This small customization may have made participants feel understood and may have made the activity feel less unreasonable given their current difficult circumstances.

## **Implications for Psychological Theory**

First, happiness interventions inform the degree to which a relatively stable and genetically influenced aspect of one's personality—happiness—can be meaningfully and sustainably changed through intentional practice. Although the heritability of happiness is well-established at about 40-50%, empirical evidence indicates that even identical twins can have substantially different well-being trajectories due to non-shared environmental influences (which could include intentional practice; see Layous, 2018 for a review). Many view heritability estimates to be concrete and deterministic, but they are highly influenced by non-genetic factors like variability in the environment and variability in the trait across people in the sample. Even if happiness was 100% heritable, improving environmental factors could still raise happiness in an entire population, boosting people's well-being relative to their own levels. For example, in one multi-week happiness intervention among identical and fraternal twins, the average well-being across the whole sample improved even though the estimates of the genetic effects on happiness remained consistent across the study (Haworth et al., 2016). Genetically-sensitive designs with an experimental intervention component can continue to help researchers understand the interplay between genes and environment on happiness and other personality processes.

Second, intervening to improve happiness among people in different cultures helps psychologists learn about processes of well-being that are culturally specific and those that might be more universally important. For example, although gratitude interventions consistently boost well-being among Western samples, one study found that gratitude letters were not effective in boosting well-being in a South Korean sample (e.g., Layous, Lee et al., 2013). On the other hand, kindness interventions have been equally effective among Eastern (South Korean) and Western (U.S.) samples (Layous, Lee et al., 2013; Nelson et al., 2015), suggesting a universality not

characteristic of gratitude letters. Exploring what activities do or do not boost happiness among different cultures, and the psychological processes by which they do so, can promote theory development surrounding what leads to thriving in different cultures.

Lastly, intervening to improve happiness could develop theory in clinical psychology by pointing to the role of positive affect in the manifestation and treatment of mental illness. Currently, treatment for depression largely relies on drug therapy or cognitive-behavioral therapy, approaches that have been successful, but perhaps incomplete and not a fit for all patients. Researchers have speculated that drug therapy, cognitive-behavioral therapy, and happiness interventions act on different neural circuitry (Layous, Chancellor, Lyubomirsky, Wang, & Doraiswamy, 2011). A three-arm randomized trial comparing changes in brain functioning among depressed patients undergoing happiness interventions, cognitive-behavioral therapy, or drug therapy could reveal whether the theorized neural circuitry is supported. Future studies could also test the combination of one or more of these therapies to explore whether addressing multiple neural circuits at once has an additive effect on depression outcomes.

In addition, adding happiness interventions to existing therapeutic approaches could address limitations of current treatment. For example, it takes several weeks for patients to respond to drug therapy, but, on average, people respond to happiness interventions quickly, showing immediate boosts to mood (e.g., Seligman et al., 2005). Thus, happiness interventions may complement slower acting drug therapies. Similarly, happiness interventions help focus people's attention on the positive in their lives, so may be a good complement to cognitive-behavioral therapy's focus on reducing maladaptive thoughts (e.g., Beck, 2011). More research will further our understanding of the neural circuitry surrounding depression and the way that

happiness interventions could be incorporated into existing treatment plans or even act as an effective stand-alone treatment (e.g., Seligman et al., 2006).

### **Future Directions**

The late Chris Peterson, a prominent thought-leader in positive psychology, summarized positive psychology with three words: “other people matter” (Peterson, 2006). Although the happiness interventions reported in this chapter have leveraged the perception of positive relationships with others to increase personal happiness, very few have explored the effect of happiness interventions on relationships and functioning in closed networks like workplaces and schools (but see Chancellor, Margolis, Jacobs Bao, & Lyubomirsky, 2018 and Layous, Nelson, Oberle, Schonert-Reichl, & Lyubomirsky, 2012). Theoretically, improving perceptions of relationships within a closed network could trigger positive recursive processes that build upon each other quickly, reaping immediate relational and well-being benefits. Thus, a ripe area for future research is intervening to improve happiness among closed networks and exploring the cumulative effects on individual or group-level happiness, as well as other important outcomes like academic achievement or workplace productivity.

Another important future direction in happiness intervention research is for more studies to include longer follow-ups. So far, the literature as a whole has demonstrated promising short-term gains in well-being, even out to 6 months (Bolier et al., 2013), but longer periods are needed to truly claim stable changes. Similarly, more research needs to explore the process of long-term change to consider the role of recursive processes and continued practice in promoting durable changes in happiness, as well as the downstream consequences of these changes.

Happiness intervention researchers should also measure objective outcomes that may result either directly or indirectly from happiness interventions. Researchers of other wise

interventions (e.g., belonging and self-affirmation) have done an excellent job demonstrating their intervention's effect on important objective outcomes like grade point average whereas happiness interventions thus far have been more likely to focus on subjective changes (e.g., self-reports of happiness, but see Burton & King, 2004; King, 2001).

Lastly, given the importance of fit between the happiness seeker and the happiness-promoting activity (i.e., person-activity fit), I think the most promising direction of future happiness intervention research lies in the exploration of the types of activities that work for different types of people, as well as ways to predict best fitting practices to individualize interventions for maximum efficacy. A truly wise intervention would be one that hits the right lever for the right person at the right time, setting off a promising upward trajectory toward greater well-being.

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