

Positive Activity Interventions to Enhance Well-Being:
Looking Through a Social Psychological Lens

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Abstract

Psychological scientists and laypeople alike have experimented with ways to boost well-being, ranging from changing life circumstances (e.g., buying a new home) to engaging in positive activities (e.g., performing kind acts). This chapter focuses on positive activity interventions (PAIs)—experiments designed to increase positive emotions, meaning, and engagement, as well as to decrease negative emotions—and proposes a taxonomy that organizes these interventions through a social lens. We classify most PAIs based on who is the actor and who is the target. Is the actor the self or another person? Is the target the self or another person? This approach generates four categories of PAIs that may affect the well-being of the participant (i.e., happiness seeker) in different ways, which we have classified into four quadrants: (1) Self-self quadrant, in which the participant is acting on her own behalf (e.g., treating herself); (2) self-other quadrant, in which the participant is acting prosocially toward another person (e.g., doing an act of kindness); (3) other-self quadrant, in which the participant is receiving a prosocial act (e.g., expressing gratitude for another’s kindness); and (4) other-other quadrant, in which the participant witnesses a prosocial act (e.g., feeling elevated upon observing benevolence). We present examples of PAIs from each quadrant and discuss the implications and questions raised by our new taxonomy. (216 words)

Positive Activity Interventions Through a Social Psychological Lens

The desire for happiness is widespread, from people's day-to-day strivings for money, fame, and fortune to fairy tales that end with the oft-quoted words, "and they lived happily ever after." Most people say they want to be happy (Diener, 2000), and most parents report that they want their children to be happy (Diener & Lucas, 2004). These findings are hardly surprising given the wildly flourishing self-improvement industry, which some estimates indicate is worth almost \$10 billion a year (Marketdata Enterprises, 2012). Despite this widespread focus on seeking happiness, actually attaining it is not guaranteed. According to the World Health Organization, an estimated 350 million people worldwide—almost 5% of the world's population—suffer from depression, and the burden of depression is increasing ("Depression," 2016).

Aside from obvious circumstantial impediments, such as dire economic factors, strife, and unsafe living conditions, one universal barrier to achieving durable happiness may be a phenomenon called *hedonic adaptation*—namely, when people become accustomed to changes in their circumstances, and no longer derive the same joy or misery from them. When good or bad events happen, such as winning the lottery or losing a loved one, people tend to react with strong positive or negative emotions. Hedonic adaptation occurs over time, when an individual adapts to the target event, and ceases to react with the same level of emotion (Frederick & Lowenstein, 1999; Kahneman 1999). Indeed, people may have a genetically influenced set range for happiness to which they return after experiencing tumultuous life events (Fritz, Walsh, & Lyubomirsky, in press; Lyubomirsky, Sheldon, & Schkade, 2005).

In light of these findings, is it possible for humans to maximize their happiness and, if yes, how? Evolutionary theory suggests that one path to lasting happiness may be regularly engaging in behaviors that would have universally led to increased fitness on the ancestral plain.

“On the positive side,” states David Buss (2000) in an article called “The Evolution of Happiness,” “people also possess evolved mechanisms that produce deep sources of happiness: those for mating bonds, deep friendship, close kinship, and cooperative coalitions.” The position is striking: Buss’ theorized sources of happiness are all based on the creation and maintenance of social bonds. Indeed, in the literature on hedonic adaptation, for certain people, social relationships are at least somewhat resistant to adaptation (Lucas, Clark, Georgellis, & Diener, 2003; Lyubomirsky, 2011). In addition, evidence from multiple fields suggests that humans have evolved to be social (Lovejoy, 2009). The biological signature of humans—our large brains and intelligence—likely evolved to help us navigate our complex social worlds (Hermann, Call, Hernandez-Lloreda, Hare, & Tomasello, 2007). Furthermore, one of the most complex features of our species, language, exists to communicate with others and aid bonding (Dunbar, 1993).

In the quest for well-being, individuals need to increase positive emotions and decrease negative emotions over time. It is worth noting that the majority of positive and negative emotions are inherently social—either in their antecedents or their consequences (Keltner & Haidt, 1999). For example, compassion may have emerged to enable humans to become better caregivers for their vulnerable offspring, cooperate with non-kin, and attract and form better mate pair bonds (Goetz, Keltner, & Simon-Thomas, 2010). From an emotion perspective, it seems that Buss is right; social bonds, when correctly tended to, are a potential source of positive emotions.

In this chapter, we argue that social connections are central to achieving lasting happiness by offering emotional security, resources in times of stress, and a source of identity, as well as by providing an arena in which to demonstrate one’s competence and autonomy. First, we will describe the link between social relationships and well-being, and then we will present a

framework to discuss how existing interventions in well-being science inherently harness social ties to increase happiness.

Social Relationships and Well-Being

The desire to form and maintain strong social relationships is considered a fundamental part of the human psyche, and a lack of such relationships is associated with ill effects on health, adjustment, and well-being (Baumeister & Leary, 1995). Social ties are key to well-being (Diener & Oishi, 2005). In a classic study, for example, the happiest individuals all reported strongly positive interpersonal relationships (Diener & Seligman, 2002).

Both number and quality of social relationships matter. In one study of 4,775 adults, a simple count of social ties (e.g., marriage, contact with extended friends and family, church membership, and other formal and informal group affiliations) predicted reduced mortality (Berkman & Syme, 1979). Quality of relationships with family and friends, however, appears to be an even stronger predictor of life satisfaction than frequency of contact (O'Connor, 1995). A meta-analysis of 286 studies revealed that quality of social contacts was more strongly associated with subjective well-being than the quantity of such contacts (Pinquart & Sörensen, 2000).

One critical element of interpersonal relationships is perceived social support, defined as individuals' reports of the resources intended to aid them in coping with stress (via instrumental, informational, and emotional support; Cohen, 2004). According to the World Happiness Report, across over 150 countries, perceived social support correlates with positive life evaluation at 0.29, with positive affect at 0.43, and with negative affect at -0.35 , even after controlling for income, health, education, perceptions of freedom, perceptions of widespread business and government corruption, and divorce (Helliwell & Wang, 2012).

The perceived lack of social support can also be detrimental. Time-lapse analyses of the U.S. General Social Survey suggest that the decline in happiness over the last few decades in the

U.S. is predicted by declines in reported social support (Bartolini, Bilancini, & Pugno, 2013). Loneliness (a perceived lack of social support) is a unique risk factor for depression and mortality, even when controlling for a variety of other potentially causal factors, including demographics, marital status, actual social support, hostility, and perceived stress; current loneliness is also a predictor of future depression (Antonucci, Lansford, & Akiyama, 2001; Cacioppo, Hughes, Waite, Hawkley, & Thisted, 2006; Luo, Hawkley, Waite, & Cacioppo 2012).

Another pathway by which social relationships contribute to health is *social integration*, which is engagement in a wide range of social activities or relationships (Cohen, 2004). For example, sociometric status—a form of social status that is defined by the respect and admiration individuals obtain from their face-to-face groups (e.g., neighbors, coworkers, or classmates)—is also an important predictor of subjective well-being (Anderson, Kraus, Galinsky & Keltner, 2012). People's social identities contribute to health and well-being in multiple areas of their lives, including symptom appraisal, health behavior, coping, and mental health outcomes (Haslam, Jetten, Postmes, & Haslam, 2009). In the 2008 Survey of Midlife Development in Japan, the perception that one matters to close others significantly predicted the frequency of positive affect. Additionally, the relationship between friendship quality, and the frequency of positive affect was significantly mediated by perceptions of positive relations with others and partially mediated by self-acceptance (Taniguchi, 2015), which supports the idea that friendships shape both feelings of belonging and a positive self-image, which in turn leads to greater happiness.

Social Psychology Applied to Positive Activity Interventions

Durable long-term boosts in well-being can be difficult to obtain. Clues into how to successfully accomplish this are suggested by the idea that humans have evolved to experience positive emotions in response to adaptive behavior, specifically behavior that historically aided

in survival and reproduction. The modern environment in which humans live is drastically different from their environment of evolutionary adaptation of roughly about 200,000 years ago (Foley, 1995). Some mismatches between the modern and adaptive environment have led to dysfunction—for example, readily available high-sugar and high-fat foods in the modern environment now contribute to shorter lifespans rather than longer ones. However, social relationships have continued to remain rewarding despite drastic changes in the external environment throughout human history. Although the specifics of social interactions may change through the centuries, relationships with others still provide much positive affect, and are still relatively similar in form to relationships on the ancestral plain. Thus, not surprisingly, an important pathway to happiness suggested by evolutionary theorists is nurturing social relationships. Indeed, as described above, correlational evidence strongly supports the link between strong social relationships and greater well-being. With this background in mind, we review existing positive activity interventions (PAIs), which encompass a broad range of activities that increase personal well-being (for more comprehensive reviews, see Layous & Lyubomirsky, 2014; Lyubomirsky, 2008).

We view these interventions through a social psychological lens, meaning that we consider the impact of the real, imagined, or implied presence of others on the efficacy of PAIs. Classic social psychological research asks the question of how individual behavior is changed by others—for example, how the real, imagined, or implied presence of others shifts how likely participants are to intervene in the case of an emergency, cause others harm, adopt various roles, and form opinions about the world around them (e.g., Darley & Latané, 1968; Milgram, 1963; Sherif, 1961; Asch, 1956). We apply this same question about the impact of the presence of others to yet another situation: positive activity interventions.

For each intervention, we ask: Who is the *actor* performing the action, who is the *target* receiving the action, and who is the person whose outcome we are focusing on? (See Table 1.) Every social interaction consists of different parties who each have different experiences of the situation. For example, an act of kindness potentially affects three possible figures—the actor, the target, or a non-involved witness. Although they share the same objective reality, the subjective experience of these three individuals can range widely. Many studies on positive activity interventions selectively report the effects of an intervention on a single party, without testing or acknowledging the effects on the other parties. We refer to the person whose outcome is measured as the “self.” Another way to conceptualize the self is as the participant in the study, or the one who provides a self-report about his or her subjective experience of being an actor, target, or witness.

To illustrate this distinction, consider the act of buying flowers. If a woman buys flowers for herself, and then reports how this affects her, she is the actor, target, and self. If she were instructed to buy flowers for herself as part of a positive activity intervention, such an intervention would be classified by self as actor (buyer) and self as target (receiver; see upper-left-hand quadrant of Table 1). Because both the person who performed the action and the person who is the target of the action is the same person, and that person is the one reporting on their subjective experience—i.e., is the self—this action fits into the self-self quadrant. In each of the quadrants, the person whose well-being outcomes are being tested is always the self; in this scenario, the self is both actor and target.

Now imagine instead that the woman was prompted to purchase the flowers for her romantic partner. In this case, three different research questions could be asked about this intervention. First, researchers could investigate the effects of the act of giving flowers on the well-being of the woman (the buyer) herself. The woman whose well-being is assessed is also

the actor, so this would be an example of self-as-actor, other-as-target (see lower-left-hand [self-other] quadrant of Table 1). Second, researchers could investigate the effects of receiving flowers on the recipient's well-being. Investigating this effect would be an example of other-as-actor, self-as-target, because the person whose well-being is assessed (the partner) was the target of another's kindness (see upper-right-hand [other-self] quadrant of Table 1). Finally, researchers could investigate the effects on the well-being of a friend at work who hears about or observes the gift of flowers. Because the friend reporting his reaction is the self, and is neither the actor nor the target, this would be an example of other-as-actor, other-as-target (see lower-right-hand [other-other] quadrant of Table 1).

Thus, the same interaction can be viewed in multiple ways, depending on whose well-being is being measured. In this way, our taxonomy is akin to observing an interaction in a store and asking, "In that transaction, was something being bought or sold?" The answer, of course, is "both," but the answer depends on whether the customer or the sales clerk is being asked. In the same way that the experiences of buying and selling are unique and carry their own benefits and costs, the experience of being an actor, a target, and an observer of a prosocial act can have different outcomes. We believe that it is helpful to consider this taxonomy when designing new interventions or measuring the effects of existing ones.

Table 1: *Examples of Interventions in Each of the Four Quadrants*

		<i>Actor</i>	
		Self	Other
Self	<u>Self-Self Quadrant</u> Testing the effect on a woman buying flowers for herself Another example: -Testing the effect on a person doing an act of kindness for himself	<u>Other-Self Quadrant</u> Testing the effect on a partner of receiving flowers from his significant other Another example: -Testing the effect on students who write about their gratitude to their	

		parents for a kind act
<i>Target</i>	<p><u>Self-Other Quadrant</u> Testing the effect on a woman of buying flowers for her partner Another example: -Testing the effect on a person who does three acts of kindness for someone else</p>	<p><u>Other-Other Quadrant</u> Testing the effect on a friend of hearing about a woman buying flowers for her partner Another example: -Testing the effect on a bystander watching kids helping a homeless man</p>

Rather than being an exhaustive review of all interventions that fit within the four-quadrant framework, this chapter instead presents several examples within each quadrant. We offer here an introduction to the theoretical implications of perceiving interventions through a social psychological lens—that is, the beginning of an examination of the impact of the real, imagined, or implied presence of others. Overall, we argue that the most effective interventions strengthen real or perceived social ties.

Self as Actor, Other as Target

The first quadrant involves how doing something to benefit another person affects the doer (actor). Of the grid's four quadrants, the effects of this category of (prosocial) acts on people's well-being are perhaps best supported in the positive activity literature, likely because the interventions represented by the self-other quadrant meet all three basic psychological needs proposed by self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000)—competence, autonomy, and connectedness.

The most prominent interventions represented by this quadrant are prosocial behaviors--actions intended to benefit one or more people other than oneself (Batson & Powell, 2003). Engaging in prosocial behavior has been shown to promote better mental health outcomes in multiple samples, including college students (Crocker, Canavello, Breines, & Flynn, 2010) and high school students (Yinon & Landeau, 1987). A classic real-world example of prosocial

behavior directed at others is volunteering, which has consistently been correlated with indicators of higher well-being (Wheeler, Gorey, & Greenblatt, 1998).

Acts of Kindness

Correlational studies suggesting benefits of prosocial behavior are inherently limited, as the results could be due to reverse causality (i.e., if those with higher well-being choose to volunteer more) or third variables (i.e., if those with more leisure time both volunteer more and have higher well-being). Fortunately, the effects of doing prosocial behavior on well-being and related outcomes have been tested experimentally. For example, in a growing number of tests of prosocial behavior interventions, participants are randomly assigned to complete acts of kindness for other people in their lives, and report on their emotional state before and after (e.g., Nelson, Della Porta, Jacobs Bao, Lee, Choi & Lyubomirsky, 2015; Sheldon, Boehm, & Lyubomirsky, 2012). Because the actor (or kindness doer) is the one whose well-being is assessed, acts of kindness interventions epitomize the self-as-actor quadrant. Doing kindness for others has been shown to yield benefits for the actor even when compared to active control activities that may be positive but not inherently prosocial, such as engaging in a novel act every day (Buchanan & Bardi, 2010) or keeping track of different locations visited (Layous, Lee, Choi, & Lyubomirsky, 2013). Additionally, engaging in prosocial behavior has recently been shown even to change gene expression in a way that decreases pro-inflammatory genetic markers in the bloodstream (Nelson-Coffey, Fritz, Lyubomirsky, & Cole, 2017). Taken together, these studies provide support that experimentally manipulated prosocial behavior can increase the well-being of the actor.

Prosocial Spending

Prosocial spending is another type of other-directed helping that benefits the self. Charitable behavior has long been linked to happiness in a bidirectional way, such that happiness

leads to increased giving behavior, and giving promotes happiness (Aknin, Dunn, & Norton, 2012). Spending on others activates reward systems in the brain (Harbaugh, Mayr, & Burghart, 2007) and increases happiness (Dunn, Aknin, & Norton, 2008). For example, in an oft-cited study, students were given an envelope with either \$5 or \$20, and instructed to spend the money either on themselves or on others. Students who spent money on others reported greater happiness at the end of the day than students who spent the same amount of money on themselves (Dunn et al., 2008). Overall, prosocial spending, like doing acts of kindness for others or volunteering, promotes increases in well-being.

Why Giving Support May Be Good

In sum, giving emotional, financial, or even imagined support to others has been shown to bring many emotional and physical health benefits. There are multiple possible pathways by which giving support may benefit the well-being of the giver (or actor). The most obvious pathway is that giving to others strengthens perceptions of one's social connectedness with friends and family. Because humans evolved to be social beings who live in communities and share resources for long periods of time, they may feel positive emotions because helping others aids in their survival (Trivers, 1971, 2005). Specifically, giving others support may be akin to putting money into a social bank account that can later be withdrawn in a time of need.

Acts of kindness may also serve to strengthen one's place in a social network. In one study, children who performed acts of kindness experienced larger increases in peer acceptance than children who performed an alternative positive activity (Layous, Nelson, Oberle, Schonert-Reichl, & Lyubomirsky, 2012). Furthermore, gratitude directed from self to other increases the perceived communal strength and willingness to sacrifice for the relationship (Lambert, Clark, Durtzchi, Fincham & Graham, 2010). Additionally, helping others—whether in person or anonymously—may also serve as a positive signal about one's own identity. A person who helps

others may feel that she is competent and autonomous, in addition to feeling good and sensing that she is in a position to help. Finally, giving to others may be valuable to individuals because it lessens self-focus. Self-focus has been shown to have adverse effects across a variety of domains (Ingram, 1990; Mor & Winquist, 2002; Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008; see also Leary, this volume). By contrast, helping others may distract people from their own problems and increase their focus on others.

Others as Actor, Self as Target

The other-self quadrant involves activities in which another person is the prosocial actor and the person being assessed (the self) is the receiver or target. The other-self quadrant is relatively under-studied compared to the others.

Gratitude

Gratitude is the positive activity intervention that has received the most attention in the other-self quadrant. Gratitude has been defined as a state that requires an individual to endorse that (1) they have acquired a positive outcome, and (2) that positive outcome came from an external source (Emmons & McCullough, 2003). As such, expressing gratitude requires recognizing that another individual (the benefactor, or actor) has engaged in prosocial behavior towards the self (the target). Thus, interventions that prompt participants to express gratitude for others' kindness and support fall within the other-self quadrant. Another, less oft-studied way in which gratitude falls into the other-self quadrant involves individuals sharing their gratitude with their benefactor. When this occurs, the individual sharing his gratitude becomes the actor and the benefactor becomes the target.

Expressing gratitude. There are two primary positive activity interventions designed to increase gratitude in the expresser and, in turn, well-being. The first type of intervention involves participants "counting their blessings"—an example of general appreciation for one's own good

fortune, not necessarily coming from a specific other. The second type of intervention asks participants to write a gratitude letter directly to someone (e.g., a parent, teacher, or friend) who has done something to help them for which they are extremely grateful (Boehm, Lyubomirsky, & Sheldon, 2011; Layous et al., 2012; Layous & Lyubomirsky, 2014; Lyubomirsky et al., 2011). Because gratitude letters depend on an interpersonal context—being addressed directly to another person and deeply considering how that person has had an important impact on the participant’s life—such letters may provide relatively large boosts in social connectedness, and in turn well-being.

The benefits of expressing gratitude are numerous and well-documented. Expressing gratitude has been found to increase psychological well-being (Boehm et al., 2011; Kashdan, Uswatte & Julian, 2006; Lyubomirsky et al., 2011, Seligman, Steen, Park, & Peterson, 2005; Watkins, 2004) and physical well-being (Bono & McCullough, 2006; Emmons & McCullough, 2003; Wood, Joseph, Lloyd, & Atkins, 2009), and may strengthen social bonds in relationships and communities (Lambert et al., 2010; Fredrickson, 2004). Gratitude has also been linked with superior mental health (Nelson & Lyubomirsky, 2014), and associated with greater perceived social support and less stress and depression during a life transition (Wood et al., 2008). A recent meta-analysis found that expressing gratitude (e.g., via gratitude letters) had an effect size $d = .20$, outperforming measurement-only control conditions and alternative-activity conditions in enhancing well-being, and performing as well as other psychologically active conditions (Davis et al., 2016).

Receiving gratitude. Another way in which gratitude falls into the other-self quadrant involves individuals sharing their gratitude with their benefactor. Few studies, however, investigate the impact of receiving gratitude. One exception is a series of experiments showing that those who received small gratitude expressions (e.g., “Thank you so much! I am really

grateful.”) after helping someone were more likely to aid the same person, a different person, or an organization a second time; furthermore, perceptions of social worth, or feeling valued by the thanker, mediated these effects (Grant & Gino, 2010).

Other relevant studies on receiving gratitude have focused on romantic relationships. For example, when partners were assigned to express and receive gratitude to and from one another in a laboratory paradigm, perceived responsiveness (e.g., “my partner understood me,” “my partner expressed liking and encouragement of me”) was significantly associated with benefactors’ relationship satisfaction (Algoe, Fredrickson, & Gable, 2013). Expressing and receiving gratitude within romantic bonds has also been shown to promote relationship development (Algoe, Haidt, & Gable, 2008), maintenance (Gordon, Impett, Kogan, Oveis, & Keltner, 2012; Lambert & Fincham, 2011), and satisfaction (Algoe et al., 2013). However, many of these studies focus on the dynamic process in which two individuals in a couple express and receive expressions of gratitude—conflating expressing and receiving. A notable exception is a study that randomly assigned one member of a romantic couple to express gratitude during a video-recorded laboratory session, and found that when expressers used more other-praising behavior, gratitude recipients perceived them as more responsive and felt more general positive emotions and love toward the expresser (Algoe, Kurtz, & Hilaire, 2016; see Watkins & Scheibe, this volume, for a more detailed discussion of the research on gratitude and well-being).

Receiving Acts of Kindness

Much of the research on performing acts of kindness has focused on givers (i.e., actors) more than receivers (i.e., targets). This may be because performing prosocial acts benefits the actor more than the target (Schwartz, Meisenhelder, Ma, & Reed, 2003). Yet research has demonstrated that the targets of kindness can benefit emotionally, as well as tangibly, from the receipt of a kind act (e.g., receiving some much-needed help from a co-worker). In a study

conducted in Spain, Coca-Cola employees were randomly assigned to be givers, receivers, or observers of kind acts; with givers practicing acts of kindness for a personalized list of receivers (unbeknownst to those on the list) over 4 weeks. Receivers performed more prosocial acts and experienced increases in happiness, autonomy, intrinsic motivation, and flow, but surprisingly not stronger feelings of connectedness (Chancellor, Bao, & Lyubomirsky, 2014).

In another study tracking both givers and receivers of kindness, receivers of kindness smiled more than controls (Pressman, Kraft, & Cross, 2015). On a subsequent follow-up survey, receivers also reported that they had either already paid it forward or were highly likely to do so in the future. Altogether, the research suggests that receiving kindness can benefit the recipients.

Self as Actor, Self as Target

A third quadrant of the grid falls at the intersection where the self is both actor and target. This quadrant involves positive activities in which individuals act upon themselves to increase their own well-being (e.g., a woman buys flowers for herself; see Table 1). Although many positive activity interventions presumably involve the self acting on the self (e.g., savoring, positive reminiscence, visualizing best possible selves), we focus specifically on studies of PAIs that ask the participant to act kindly toward herself. Examples of positive activities that fall within this quadrant include self-directed kindness, self-spending, and self-compassion. The effects of these interventions on well-being are mixed, with some self-oriented exercises failing to produce well-being benefits when compared to prosocial or other-oriented activities. This may be because human beings are innately social creatures, and the critical mechanism underlying the success of many positive activities appears to be connecting with others.

Self-Directed Kindness

Prosocial behavior typically refers to actions intended to benefit others. But can prosocial behavior be effectively directed at the self to increase well-being? Such intrapersonal prosocial

behavior (or self-directed kindness) may seem like an oxymoron, yet common cultural wisdom in the secular West suggests that individuals need to put themselves before others. However, the doctrine of “treat yourself” is not substantiated by science, especially when compared to more powerful prosocial interventions.

The two juxtaposing paths to happiness—“treat yourself” and “do unto others” with kindness—fundamentally conflict. Materialist culture whispers “treat yourself,” while a wealth of empirical literature suggests that one becomes happier by engaging in other-focused prosocial behavior (Chancellor, Margolis, Bao, & Lyubomirsky, in press; Pressman et al., 2014; Aknin, Hamlin, & Dunn, 2012; see Dittmar & Hurst, this volume, for a detailed discussion of the negative effects of materialism on well-being). A recent study (Nelson et al., 2016) investigated these contrasting pathways in a 6-week longitudinal experiment that instructed participants to perform (1) acts of kindness for others (e.g., buying a cup of coffee for a co-worker or helping a friend move); (2) acts of kindness for the world (e.g., picking up litter on a beach or donating money to cancer research); and (3) acts of kindness for the self (e.g., enjoying a favorite meal or getting a massage). Relative to a neutral activity control condition, acts of kindness to the self were not associated with shifts in positive or negative emotions, and led to a slight decline in psychological flourishing, followed by a return to baseline levels (Nelson, et al., 2016).

Self-Directed Spending

People looking to buy happiness by procuring the things that they desire most are also likely to be disappointed, possibly because such behavior undermines well-being via reductions in social connectedness. Although people often forecast that spending money on themselves will make them happier than spending money on other people (Dunn et al., 2008), research suggests that prosocial spending is much more beneficial than spending on oneself. In one study, participants assigned to recall spending money on themselves were significantly less happy than

those assigned to recall spending money on another person, and this effect was stable across smaller (\$20) and larger (\$100) purchases (Aknin et al., 2012). In another study, undergraduate students who gave less (versus more) money away to an anonymous partner (up to \$10) reported lower levels of positive affect, higher levels of negative affect, and more shame (Dunn, Ashton-James, Hanson, & Aknin, 2010). Finally, spending less of one's income on gifts for others and donations to charity predicted less happiness in a U.S. nationally representative survey, and undergraduate students randomly assigned to spend more money on themselves were less happy than those assigned to spend money on others (Dunn et al., 2008).

Even if an individual is able to boost his happiness by spending money on himself, the lift is likely to be temporary. Human beings are remarkably adept at adapting to positive changes in their lives (Lyubomirsky, 2011), and the hedonic adaptation is much more rapid for changes in circumstances (e.g., a material gain) than changes in activities (e.g., helping others) (Sheldon & Lyubomirsky, 2006). For example, the joy that may follow even a large personal purchase, like treating oneself to a new car, usually fades with time. A new BMW Series 3 may make one happier in the beginning, but adaptation occurs as the new owner enjoys fewer and fewer positive experiences (e.g., receiving compliments from friends, driving the car to new places) and positive emotions (e.g., appreciation, pride, and joy) from the new car over time, and her aspirations rise (Sheldon & Lyubomirsky, 2012).

Fortunately, research on how to stave off hedonic adaptation suggests a number of strategies that people can use to boost the well-benefits of self-spending. For example, one way that spending on the self may improve happiness is when people invest in their experiences. Anticipating experiential purchases (e.g., a vacation in California) is associated with higher levels of happiness, pleasure, and excitement than is waiting for material objects (e.g., a bigger flat screen TV) (e.g., Kumar, Killingsworth, & Gilovich, 2014). The reasons for this finding are

that consumers adapt to experiential purchases at a slower rate than they do to material purchases (Nicolao, Irwin & Goodman, 2009), and experiential purchases are more open to positive reinterpretation with the passage of time, are a more meaningful part of an individual's identity, and facilitate fulfilling social relationships (Van Boven & Gilovich, 2003).

Because hedonic adaptation occurs in the context of repeating or static events, another approach to thwarting it involves fostering variety (Fritz, Walsh & Lyubomirsky, in press). Studies suggest that when individuals spend money on themselves, they will obtain more happiness by investing in a variety of frequent, small pleasures rather than fewer, larger purchases (Dunn, Gilbert & Wilson, 2010).

Self-Compassion

Notably, many of the self-self-quadrant positive activities that reliably and lastingly boost happiness via self-oriented action are those that instruct an individual to treat herself as she might treat an "other." One example of such activities is self-compassion. Self-compassion has been defined as the experience of being kind toward oneself when one is in pain or after having failed at something; when one is construing one's experiences as part of a larger human whole; and when one's awareness of aversive feelings and negative thoughts are in balance (Neff, Rude & Kirkpatrick, 2007). Self-compassion is positively and strongly correlated with life satisfaction, happiness, optimism, and positive affect, and negatively correlated with negative affect (Neff, 2003; Neff et al., 2007).

In one study, female undergraduates were assigned for 3 weeks to either a self-compassion intervention (e.g., keeping a "self-compassion journal" and considering one's behavior from the perspective of an unconditionally accepting friend) or a time management control group (e.g., writing down a detailed overview of their daily activities of the past week; Smeets, Neff, Alberts & Peters, 2014). Compared to the time management control group, the

self-compassion intervention group experienced significantly greater gains in self-compassion and optimism, as well as reductions in rumination (Smeets et al., 2014).

Other studies also provide evidence that self-compassion—an activity that falls within the self-self-quadrant—can enhance well-being (e.g., Breines & Chen, 2012; Leary, Tate, Adams, Allen, & Hancock, 2007). Although self-compassion interventions direct the self to act upon the self, they are doing so through the borrowed perspective of an “other”—that is, instead of simply directing kindness toward oneself, individuals picture another’s kindness first, and then direct this same kindness at themselves. Thus, the self-kindness in self-compassion actually has a prosocial quality to it. For example, Leary and colleagues (2007) directed participants to write a paragraph expressing understanding, kindness, and concern for themselves in the same way that they might express concern for a friend, and found that self-compassion buffered negative reactions to negative and ambivalent self-relevant events (Leary et al., 2007). Smeets and colleagues (2014) directed participants to write a self-compassionate letter from the perspective of an unconditionally kind, accepting, and compassionate imaginary friend (Smeets et al., 2014). In order to produce effects on well-being, self-compassion exercises often borrow the perspective of “a friend” or direct participants to view themselves within the scope of a greater, shared humanity. In other words, connectedness and an imagined other are still present, and this may be one important key to the efficacy of self-compassion interventions.

Others as Actor, Others as Target

There are very few interventions in which a person observes another person acting on behalf of someone else. The most relevant research is that focusing on a distinct emotional experience referred to as *elevation*, which stems from observing another person coming to the aid of someone else.

Elevation and Related Interventions

Elevation is the most frequently empirically studied reaction to watching someone help another person. Along with gratitude and admiration, elevation is one of three “other-praising” emotions. Although all three involve recognizing someone else for a particular behavior, elevation is the result of witnessing moral beauty or “morally virtuous” actions (Algoe & Haidt, 2009; Haidt, 2003). Elevation is the positive emotion of being moved by witnessing someone else doing “an act of charity, gratitude, fidelity, generosity, or any other strong display of virtue” (Algoe & Haidt, 2009). Therefore, elevation is a positive reaction to acts that are prosocial (i.e., not mere admiration), and directed at another (i.e., not gratitude).

Elevation is associated with many positive feelings, such as awe, admiration, warmth (Algoe & Haidt, 2009), inspiration, and optimism about humanity (Aquino et al., 2011). Additionally, elevation is a prosocial emotion; it drives individuals to feel and behave more prosocially (Thomson & Siegel, 2013; Vianello, Galliani, & Haidt, 2010). Elevated participants are more likely to volunteer for an unpaid study and to give more help to an experimenter (Schnall, Roper, & Fessler, 2010). Additionally, people are more likely to donate to a moral charity after recalling an elevating act than after recalling a gratitude-inducing generous act (Siegel et al., 2014).

Other-to-other prosocial acts have mainly been documented within the elevation literature. However, a great deal more exploration of such effects is needed to fully establish in which situations witnessing others’ generosity is most likely to boost well-being.

Summary

Our review suggests that social interactions are a critical mechanism underlying the well-being boosting effects of positive activity interventions. Prosocial behavior from the self to other people, embodied in the first quadrant, seems to be the most effective in enhancing well-being, because it fulfills the three basic human psychological needs of competence, autonomy, and

connectedness proposed by self-determination theory (Deci & Ryan, 1985). Additionally, in a reciprocal relationship, the belief that “people will help me in a time of need” is important to well-being. For this reason, doing kindness for others may indicate that the recipients of kind acts will be indebted and likely to help the kindness provider in the future. Second, interventions that mainly involve another person acting prosocially toward the self can increase perceptions of connectedness and positive affect by deepening social ties, in part because receiving kindnesses from others signals that the benefactors are likely to help again. Third, many of the positive effects of self-self interventions seem to involve an imagined prosocial component (such as when cultivating self-compassion by imagining a sympathetic friend sending kind thoughts one’s way). Finally, the other-as-actor, other-as-target quadrant describes situations (i.e., moral virtue) that have been shown to induce elevation, which can have many benefits.

The review of research presented here is not exhaustive, but is meant to illustrate the importance of other people in positive activity interventions that enhance well-being. Our proposed four-quadrant framework can be used to design future studies that ask questions in novel and important ways. For example, within quadrants, which interventions have the most durable impact on well-being? Another question, which applies to the prosocial interpersonal quadrants, is the extent to which the benefits (or costs) to well-being may differ when one is helping or being helped by a stranger versus a friend versus a family member.

Our four-quadrant framework also raises a question about which individual difference characteristics might moderate the effectiveness of different quadrants for different people. That is, do activities in different quadrants represent a better “person-activity fit” for particular individuals (Lyubomirsky, 2008; Lyubomirsky, Sheldon et al., 2005, Parks, Della Porta, Pierce, Zilca, & Lyubomirsky, 2012; Sin, Della Porta, & Lyubomirsky, 2011) and thus might be associated with greater benefit for those individuals? For example, someone with a low sense of

autonomy may benefit more than someone with high autonomy from engaging in behaviors characterized by self as actor, whereas someone low in connectedness may benefit more than someone high in connectedness from activities within both interpersonal quadrants.

Conclusion

Humans exist almost exclusively in social settings, and it is nearly impossible to divorce the study of humans from the study of the social relationships and cultures that encompass them. Unlike many other species, humans are born into cultures, and willfully stay near others of the same species for almost their entire lives. In this review of interventions, we focus on this critical medium and highlight the importance of human interaction to well-being as a moderator that deserves a great deal more empirical attention.

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