

PART II

Positive Traits and States

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MINDFULNESS

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Eastern and Western Origins of Mindfulness

Eastern approaches to mindfulness, rooted in ancient Hindu and Buddhist philosophies, make three major assumptions about human nature. First, they posit a monism between body and mind, and maintain that there is only one unified substance in terms of which human experience can be explained. A second major assumption is that consciousness (or mind) is the core of our existence. According to this view, the experiences of pleasure and pain, of good and bad, of time and space, and of life and death have no truth or objective meanings apart from our awareness (e.g. thoughts) of them. Reality therefore is a product of our conscious experience, which is itself, the product of our ever-changing sequence of thoughts. Third, because mind and body are seen as integrated units of the person, the practice of meditation is emphasized in Hindu and Buddhist philosophy as a means by which one learns to control the mind as well as bring the physical body under the control of the mind (Burns, 2013; Rao, Paranjpe, & Dalal, 2008). The Eastern concept of mindfulness has undergone numerous transformations following its introduction into Western culture and contemporary psychology.

An Eastern-derived branch of mindfulness has borrowed meditative elements from the Eastern camp and applied them to Western settings. This Eastern-derived model is exemplified by the works of Herbert Benson and Jon Kabat-Zinn. According to Benson (2001), the mind and body are one system, with the experiences of the latter capable of being regulated by the qualities of the former. Benson's work on the relaxation response showed that people can counteract the toxic effects of chronic stress by engaging in deep abdominal breathing (and other relaxation-eliciting meditative exercises), which slows down breathing rate, relaxes muscles, and reduces blood pressure.

Kabat-Zinn's work on the clinical applications of mindfulness showed that cultivating mindfulness through the practice of meditation improves health (Kabat-Zinn, 2003; Ludwig & Kabat-Zinn, 2008). Similar to Benson, Kabat-Zinn's mindfulness-based stress reduction (MBSR) program involves relaxation techniques such as yoga and breathing exercises, and has proven effective in ameliorating symptoms related to pain, stress, anxiety, depression, and other chronic conditions.

A Western conception of mindfulness, spearheaded by Langer and colleagues' work on mindlessness and choice, stands in sharp contrast to Eastern and Eastern-derived approaches in its de-emphasis of meditative practices as tools for attaining a mindful state of well-being (Ie, Ngnoumen, & Langer, 2014). Instead, this view of "mindfulness without mediation" emphasizes the cognitive processes of noticing new things, attending to variability, and of actively drawing distinctions. While Eastern and Eastern-derived approaches of mindfulness emphasize meditative practices geared toward controlling the mind by regulating and disciplining the body (e.g. breath work; sitting meditations; adherence to ritualism), Western conceptions reinforce a more flexible process of attending to novelty and variability as an avenue for increasing control over one's internal and external environments. Langer and colleagues' work on mindfulness was conducted almost entirely within a Western scientific and social psychological perspective, without any reference to Eastern spiritual thought and practice.

Western Mindfulness (by Way of Mindlessness)

During the 1970s' cognitive revolution, when social psychologists became pre-occupied with understanding human thinking, Langer and colleagues observed that people were actually inattentive and disengaged (that is, *mindless*) most of the time. In one such study on mindless behavior, confederates approached unknowing participants in a printing store, asking to move ahead of them in line to make copies. Depending on the experimental condition, confederates made small (5 copies) or large (20 copies) printing requests. Furthermore, the requests were presented directly with no additional information (e.g. "*May I use the Xerox machine?*"), with nonsense information (e.g. "*May I use the Xerox machine, because I have to make copies?*"), or with real information (e.g. "*May I use the Xerox machine, because I'm in a rush?*"). They found that when the request was small (e.g. jump ahead to make fewer copies than the participant), unknowing participants defaulted to a mindless script of "a favor is being asked and a reason is given, therefore I will comply" and 93 percent of them complied when the nonsense information was given versus only 60 percent complied when no information was given. By contrast, when the request was large (e.g. jump ahead to make more copies than the participant), perhaps this more obvious cost for participants allowed them to attend to the reasons given by the confederates

in a manner that made them less swayed by nonsense information (Langer, Blank, & Chanowitz, 1978).

This original exploration into human mindlessness eventually inspired the development of a more Western conception of mindfulness that was concerned with reconnecting the mind to the body. According to this introduction of mind–body monism, wherever we put the mind, we also put the body. Moreover, if the mind is in a healthy place, so will be the body, and in this way we can alter physical health and well-being by altering the mind. Across a series of experiments that exploited this mind–body connection (Park, Francesco, Reece, Phillips, & Langer, 2016; Langer, Djikic, Pirson, Madenci, & Donohue, 2010; Langer, Hatem, Joss, & Howell, 1989), Langer and colleagues were able to uncover a wide range of untapped human capabilities—that is, a “psychology of possibility”—residing in the unified space between mind and body. This “psychology of possibility” has revealed that *knowing what is* (mindlessness) versus *knowing what could be* (mindfulness) lends to strikingly different outcomes in health and well-being, and was observed by Langer and colleagues long before the positive psychology movement and its focus on happiness and human strengths emerged in the late 1990s (Seligman & Csikszentmihalyi, 2000).

From Knowing What Is (Mindlessness) to Knowing What Could Be (Mindfulness)

Chanowitz and Langer (1981) discovered that information delivered mindlessly using absolute terms tended to be taken at face value, trapping listeners into a narrowed way of thinking and behaving that was bound to the context in which the information was learned. Moreover, mindful teaching, marked by the use of conditional statements (e.g. “A could be B” rather than “A is B” or “A is a model for B”), increased students’ creativity and attention, and improved memory. They concluded that the latter two presentations (e.g. “A is B” and “A is a model for B”) locked listeners into seeing novel information in only one particular way, whereas the former presentation (e.g. “A could be B”) allowed for more flexibility in thinking by opening the range of potential ways of interpreting the information. When conditional language was incorporated into instructions for assignments, for example, students demonstrated greater performance, as they were able to access their knowledge stores more flexibly as well as generate more creative responses.

In another experiment, students were given different versions of a typical examination; one version presented the information in deterministic and closed-ended terms and the other version presented the information as a set of stylized facts, whose statistical nature was apparent. They found that students who were presented with the stylized facts version were more open to criticism and generated more creative answers compared to those who were presented with the closed-ended version. Relatedly, Lieberman and Langer (1997) found

that presenting information from multiple perspectives increased students' creativity and produced a better writing performance. Altogether, these experiments became the basis of Langer's theory of mindlessness. According to this theory, we become mindless when we allow distinctions and categories drawn in the past to over-determine the present by not modifying them or by not testing them against present realities.

Mindless adherence to outdated information has serious implications for health and well-being. Mindlessness locks individuals within a self-imposed view of the world that is static. This view is *static* because all incoming information is adopted at face value without challenging original categories and without consideration of the original context. Static views of the world and of the world's labels can narrow experience such as by narrowing an individual's understanding of what constitutes health and illness, the understanding of what constitutes cure, as well as their awareness of alternative therapeutic solutions. Illustrating this point, Lai, Hong, and Chee (2001) found that people who were labeled "ill" experienced a more pronounced decline in their general functioning and self-esteem than those suffering from the same symptoms, who did not receive the label. More importantly, this view is *self-imposed* because it is a function of personal choice and of the fact that we have control over our attention and over the kinds of information we decide to focus on.

In an experiment involving hotel chambermaids, Crum and Langer (2007) discovered a decrease in weight, blood pressure, body fat, waist-to-hip ratio, and body mass index among female room attendants who were informed that their "work" also qualified as "exercise" according to the Surgeon General's recommendations. This was in comparison to a control group who were not given this information. These results suggest that rigid adherence to expectations, such as what does or does not constitute "exercise," can be of disservice to us in cases where expectations are narrow. Making the chambermaids more aware—that is, more mindful—of a broader definition of exercise allowed them to reap the health benefits of significant physical activity they had previously been engaging in mindlessly. That is, increasing perceived exercise (which involves a shift in attention and focus)—independent of actual exercise—resulted in physiological benefits.

We unfortunately still live in a culture that imbues the concept of "work" with negative associations, stress being a salient one. The majority of people perceive work as a necessarily stressful experience in a manner that serves as a self-fulfilling prophecy. Perceived work contributes to higher cortisol (stress hormone) levels that have been shown to cause weight gain by creating and trapping fat deposits in the body, particularly in the abdominal area (Moyer et al., 1994). The physiological improvements experienced by the chambermaids in Crum and Langer's (2007) study could be explained by their reframing of their "work" as "exercise" in a manner that decreased cortisol stress levels and allowed for weight loss in the absence of increased actual exercise.

Carson and Langer (2006) also compared the health and well-being of breast cancer survivors who were instructed to view their cancer as either “in remission” or as “cured.” Whereas “cured” primes an idea of health, “in remission” primes a notion of illness. Post-test assessments of general functioning confirmed this, revealing greater general health and emotional well-being among cancer survivors who considered themselves cured, compared to those who considered themselves in remission. These experiments show how mindful and mindless evaluations of information can directly inform happiness and well-being, as well as impact physiological functioning.

Benefits of Mindfulness on Health and Well-being

Over 35 years of research on the topic of mindfulness reveals that the simple processes of noticing and creating variability are literally and figuratively enlivening. Classic work by Langer and Rodin (1976) found that institutionalized elderly adults who were encouraged to become more mindful by taking on more personal responsibilities and making decisions about their living environments and their daily routines (e.g. arranging furniture in their living spaces; taking care of a plant) reported greater perceived control and became more alert, active, happy, and healthy compared to a control group whose care was entirely determined by nursing home staff. This experimental group also lived longer than the control group (Rodin & Langer, 1977). Langer and colleagues realized that choice-making prompts a more mindful state by increasing one’s awareness of variability and alternative results; by increasing opportunities for re-evaluation and engagement; and by creating the freedom to discover meaning in one’s actions. Whereas elderly residents in the control group remained dependent on staff to make decisions for them, those in the experimental group were prompted to view the ways in which their actions had direct consequences and to perceive themselves as agentic more generally. This boost in perceived control likely became part of a larger thought pattern associated with optimism (Klein & Helweg-Larsen, 2002).

In another experiment, Langer et al. (1990) took elderly men to a retreat retrofitted 20 years earlier and instructed them to live for a week as if it were 20 years earlier. Participants in the experimental group were instructed to be psychologically where they were 20 years prior and to hold all their discussions about the past in the present tense. By comparison, control group participants were instructed to merely reminisce about the past 20 years without actively re-living them. This control group was instructed to hold all discussions about the past in the past tense. At the end of one week, the experimental group demonstrated greater dexterity, grip strength, flexibility, hearing, vision, and memory and cognition compared to controls. This experiment showed that humans have the capacity to shift discontinuously to a different—that is, earlier—context, and that such a mindset shift, or cognitive reappraisal, can also shift physical

and cognitive functioning. It was the change in mindset, much the same way a placebo works, that accounted for the difference between the two groups. By priming a time when they were vital, their previously established mindsets of old age as a time of debilitation and decline became irrelevant.

Other studies have demonstrated that cognitive reappraisals provide relief from the pains of major surgery. Langer, Janis, and Wolfer (1975) instructed a group of patients undergoing surgery to replace their worries about surgery with thoughts about the positive aspects of the hospital experience and to rehearse these positive thoughts. Patients in the experimental group involving the cognitive reappraisal intervention demonstrated better post-surgery adjustment, less post-operative anxiety, less pain, and less pain medication usage compared to matched placebo control and information groups.

Since Langer et al.'s seminal finding, research continues to demonstrate that people can achieve better health by shifting their mindsets and by reorienting their attitudes toward themselves and their environments. Studies show that mindful traits such as active engagement, choice-making, orientation in the present, and cognitive reappraisal reduce negative affect and stress, cultivate creativity, heighten competence, improve psychological well-being and quality of life, and reduce burnout (Creswell, Way, Eisenberger, & Lieberman, 2007; Idler & Kasl, 1991; Kaplan & Camacho, 1983; Levy, Slade, Kunkel, & Kasl, 2002).

Mindfulness challenges assumptions and prior beliefs by generating positive potential outcomes of meaning in a manner that may be more advantageous. The mindful processes of orienting toward the present, being open to novelty, noticing distinctions, attending to differences in contexts, and managing multiple perspectives all serve to test outdated assumptions against novel circumstances. This kind of reality-testing affords individuals a chance to refine previously established expectations in a way that aligns them better within current contexts. Mindfulness also offers individuals the chance to extend beyond their perceived cognitive and physical limitations toward greater creativity and more optimal functioning.

Mindful and Mindless Evaluation

Life is the product of ongoing evaluation. The majority of our day-to-day experiences are either reactions or responses to our evaluations of events, our evaluations of other people, and our evaluations of ourselves. These unique experiences also interact with the incoming evaluations of the people around us, which are either directly or indirectly obtained during communications and the usage of labels. Events therefore are never observed as they really are; rather, they emerge already situated within our own unique viewpoints, motives, past experiences, expectations, as well as within the labels provided to us by others. All of these factors inform our subsequent observations in a manner

that automatically transforms objective events into subjective experiences. The actual objects of our observations are not inherently good or bad; rather, we evaluate objects of our observations positively or negatively. Moreover, each of these evaluations occurs mindlessly (e.g. via passive acceptance and reactance) or mindfully (e.g. via active choice and active decision-making), and the documented consequences of being in either state are enormous.

While evaluations are certainly adaptive in guiding us through unpredictability, over-reliance on the evaluations, themselves, can trap us in a subjective state residing far from any objective relevance. Mindfulness involves recognizing that we are responsible for our evaluations and that evaluations do not objectively exist out in the world beyond our control. Mindfulness also helps us understand that seeming facts are merely viewpoints. When we are mindful, we become sensitive to the contexts and perspectives that outline viewpoints. This more conditional stance toward our own and others' thoughts situates us in the present, and allows us to stay responsive in our environments—by exercising choice and by choosing among alternative evaluations—in a manner that allows greater control over our environments. Increased personal control, in turn, boosts positive affect and contributes to happiness and well-being.

By contrast, mindlessness involves rigid fixation on our initial evaluations in a manner that makes us reactive to and controlled by them. When we are mindless, we are trapped in our evaluations and become prejudiced (e.g. our viewpoints become facts that are resilient to new information); are oblivious to context or perspective; are unaware that we can choose among alternative evaluations and solutions; and are consequently robbed of personal control over our environments. Decreased perceived control, in turn, increases perceived helplessness, dampens mood, and triggers unhappiness (Hiroto & Seligman, 1975).

Variability, Uncertainty, and Fear

Variability spans the terrain of life. Natural climate variability causes some days to be warmer or drier than others while genetic variation promotes a diversity of species. Within-species human variation creates individuals of differing physiques, skin tones, temperaments, and behavioral predispositions. As humans, we navigate these physical, social, and psychological variabilities by imbuing them with meaning and value; assigning positive and negative values to different things allows us to make predictions about the future and informs our future behavior. Assigning value to objects in the world allows us to know which environments, objects and people to approach (“the good”) and which ones to avoid (“the bad”) in the future.

Mindful and mindless evaluations of the natural variabilities found in the world can either bolster or hinder the quality of life experiences, respectively. The clearest example of this is in the phenomenon of uncertainty. For some people, uncertainty prompts anxiety and leaves them paralyzed and reliant

on routine and familiarity. This form of anxiety is a product of ongoing apprehensions about not being able to predict the future, and of strongly held expectations that one *should* be able to predict the future. For other people, uncertainty prompts excitement and orients their focus toward future challenges and growth experiences. Anxiety and excitement are both rooted in fear. So how is it that two fear-based responses to uncertainty could lead to such different outcomes?

Uncertainty reflects either mindful or mindless evaluation of variability. From a young age, we are taught to value control because control holds things still and creates a sense of stability (Langer, 2009). At an implicit level, this cultural value of control suggests that natural variability is not to be accepted and tolerated. We are taught that we *should* minimize uncertainty by implementing structure and via rigid adherence to routine. When such cultural beliefs and values are adopted mindlessly (that is, at face value and as expectations), future experiences of variability trigger feelings of apprehension and anxiety. When people are mindless, moment-to-moment observations of variability in the world and in themselves (e.g. isolated reports of crime; isolated experiences of low moods) are processed unconditionally, leading to a vague and indivisible image in the mind (e.g. *crimes are happening all the time therefore the world is unsafe; I experience low moods all the time therefore I am depressed*). Uncertainty that leaves us anxious, paralyzed, and reliant on routine and familiarity reflects a mindless evaluation of variability.

By contrast, uncertainty that leaves us excited, energized, and curious about novelty reflects a mindful evaluation of variability. An examination of interviews conducted with many of the world's most successful entrepreneurs reveals a common factor: the majority are optimistic, particularly about uncertainty (Ucbasaran, Westhead, Wright, & Flores, 2010). For these individuals, uncertainty is necessary for opportunity. In some cases the two concepts are even synonymous. The business world is highly unstable and unpredictable, but a fundamentally different orientation toward variability among these individuals increases their flexibility and alertness to their environment, and enables them to extract opportunities from it. This approach to uncertainty is energy-begetting, opens up the future, and reflects a mindful evaluation of variability.

Anxiety-based and excitement-based uncertainty, therefore, reflect mindless and mindful evaluations of variability, respectively. Fear, which is the basis of both anxiety and excitement, is itself merely the body's natural way of signaling change or novelty in the environment (Öhman, 2000). However, mindlessness interprets fear as fact and as an indication that one should avoid potential unknowns by restraining future behavior. Mindfulness, on the other hand, exploits fear by allowing the individual to orient his or her attentional resources toward the changes in the environment that the body has identified, which allows for greater engagement, learning, and growth.

Applying Mindfulness

When we are mindless, we lock ourselves into a single understanding of information learned either over time or upon single exposure. Mindfulness loosens the grips of these preconceptions and expectations in a manner that exploits uncertainty and allows us to learn what things could become, rather than merely know what things are. We come to see that context and perspective matter, and by actively exercising choice to select among alternative interpretations, both actual and perceived control are increased, triggering a cascade of positive effects on health and well-being. There are many ways in which mindful evaluation can be applied in everyday scenarios to unlock potentials and promote well-being. Some of these strategies are discussed next, and they can be applied to the experience of the individual or used to frame future positive psychological research on mindfulness.

Questioning Labels

Our experience of everything is formed by the words and ideas we attach to them. Langer and Abelson (1974) had therapists evaluate the video of a person being interviewed. The same person was referred to as “patient” in a video shown to half a group of participating clinicians and was referred to as “job applicant” to the other half. Despite the fact that these were highly educated clinicians trained to be careful observers of behavior, the labels “patient” and “job applicant” primed their overall impressions of the actors. The group of clinicians presented with the “patient” judged him as needing therapy, whereas the other group of clinicians presented with the “job applicant” viewed him as well-adjusted. This research reveals the power that labels and their associated expectations have in narrowing our judgments of others’ well-being. These results, alongside Carson and Langer’s (2006) finding of differences in functioning among breast cancer survivors who received the labels of “cured” or “in remission,” also suggest a powerful role of labels in dictating one’s own experience.

Negative societal expectations about the aging process are reflected in labels and common expressions, including “senior moments,” which semantically links age and forgetfulness (Bonnesen & Burgess, 2004) and “over the hill,” a phrase which indicates that once a person reaches a certain (peak) age, he or she will begin to decline. These kinds of societal stereotypes of old age, driven by language and labels, have been shown to contribute to decreased perceived control and decreased sense of self-efficacy among older adults.

The more we adhere to labels and categories, the more narrowed our experiences of ourselves and of others become, and the less open we are to possibility. The use of labels should therefore be questioned and, in some cases,

completely revised, particularly if the use of an alternative label could prove to be empowering and promote greater functioning and well-being.

Reevaluating Work as Play

Experiences aren't monolithic. This is to say, for example, that there isn't only one way to characterize "work" and only one way to characterize "play." Both work and play involve active engagement with the environment and determination to master a task at hand. In some cases both work and play are fiscally rewarded. In other cases, neither involve financial rewards. By simply questioning our preconceptions of what constitutes work and play, and by outlining the ways in which they are similar and different, it becomes easier to see the ways in which they are similar.

"Work" and "play" aren't necessarily orthogonal, despite the mutual exclusivity implied by their conceptions. Crum and Langer's (2007) chambermaid study once again speaks directly to this and suggests that more of our work experiences be understood more broadly (e.g. as exercise and/or as play). Not only would this allow a person to find joy in activities once experienced as drudgery, but it could also allow him to reap the positive psychological and physiological effects associated with "exercise" and/or "play" as opposed to experiencing the negative effects associated with "work."

Procrastination at work is often the result of expectations (rooted in fear) that upcoming tasks will be difficult or unpleasant. Here, too, is a case where mindful re-evaluation of work and play could be useful. Consider a high school or college basketball athlete who needs to prepare for a mathematics exam, but feels overwhelmed by cultural "dumb jock" stereotypes of student athletes being superior in athletics but scholastically inferior. The mindless adoption of such stereotypes could self-fulfill, increasing his anxiety about the test, and could reinforce his expectation that studying for the exam would involve an insurmountable amount of work or requires a "natural intelligence" that he doesn't have. Here, mindful re-evaluation of work as play could be applied to stereotype threat (Steele & Aronson, 1995) by demonstrating to the student athlete ways in which the myriad of skill sets and executive functions involved in the playing of basketball (which he *does* possess) are also involved in solving mathematics problems (e.g. working memory; cognitive flexibility; task switching; set shifting; inhibitory control). Elaborating upon the ways in which the game of basketball resembles solving mathematics, at a more underlying level, might allow him to approach the task more favorably and confidently in a manner that would improve his performance.

Reevaluating work as play also increases mindfulness by maintaining curiosity and active engagement with the environment. Continual active engagement, in turn, promotes accuracy, creativity, and productivity in work

performance by keeping the individual attentive to detail, alert to novelty, mentally flexible, and optimistic (Russ & Wallace, 2013).

Letting Go of All Expectations Except Growth and Change

Expectations are anchor points. Initially, they form the basis of our experiences and provide a foundation from which to understand subsequent events. Left untested over time, however, they can trap us in the same place: the past. Some of us remain unsatisfied in relationships by continually trying to find happiness in the same places where we lost it instead of looking beyond the given context. Despite a significant inverse relationship between economic growth and levels of life satisfaction over the last 25 years (Diener & Biswas-Diener, 2002; Diener, Sandvik, Seidlitz, & Diener, 1993), many continue to believe that wealth brings happiness; we continue to collect material affluence and to chase after the jobs promising the highest salaries. Others of us become chronically unsatisfied at work and assume linearity in life. In reality, however, life is marked by change and curvilinearity, and the more our attitudes can shift to incorporate all data points (e.g. life does not necessarily have to proceed from school to work to family to retirement; sometimes people go through two or multiple stages at once or skip certain stages altogether or repeat stages), the better we'll become at adapting to future turns of events.

Attending to Variability

Alongside learning to accept growth and change comes learning to attend to variability in life. Mindfulness-based research shows that stress is the byproduct of outdated or untested (e.g. mindless) assumptions regarding the stability of illness and aging. Little attention is paid to the daily variability of our experiences. People with chronic illness assume that their illness and its associated symptoms are present all of the time. The label “chronic” in chronic illness is largely to blame for this assumption of the stability and longevity of illness. As noted earlier, people diagnosed with depression or anxiety assume they are depressed or anxious all of the time. Similarly, people who have had and have conquered cancer, and are nevertheless told they are “in remission,” might assume they have an inactive form of cancer that is lurking inside them and waiting to re-emerge. We even see this in cases where, after turning a certain age deemed “older” by society, a person begins to interpret normal instances of forgetfulness or of body aches as reflecting a more ongoing process of decline. In reality, however, people diagnosed with depression and anxiety are not depressed and anxious all of the time. They also experience moments of positive mood and relaxed states that get overlooked under the hoods of their diagnoses. In a related manner, both younger and older adults experience moments of forgetfulness and pain, therefore the presence of these states among older adults should not be interpreted as necessarily reflecting a process of decline. Attention should also be placed on the absence of forgetfulness and pain.

Not attending to variability can rob “happy” people of their positive experiences. Just as depressed people are expected to be depressed all the time, happy people are expected to be happy all the time. Similar to how depression and pain are perceived, happiness is perceived as an ongoing personal quality (e.g. a trait) as opposed to discontinuous positive experiences (e.g. states). There is an expectation that happiness must occur continually in order for its experience to be valid. This expectation of happiness can mindlessly exclude and isolate someone as incapable of experiencing true happiness if he is not continuously happy. Over time, such systematic discounting of states of joy can lead to ongoing unhappiness.

Attending to the variability of our emotional states can allow us to notice, but not adopt, depressed or anxious states. By attending to variability both internally (e.g. paying attention to fluctuations in one’s moods) and externally (e.g. paying attention to fluctuations in *other* people’s moods) people become aware of alternative states and of the fact that they can make choices among alternatives in a manner that can significantly alter future experiences. For example, choosing to focus on positive mood states, instead of negative mood states, may yield a more positive self-evaluation of functioning overall (e.g. a person may come to think, *By focusing on my positive mood states as opposed to just my negative mood states, I realize I’m not an unhappy person after all, I’ve just had some bad days*). Focus on positive mood states can, in turn, self-fulfill by motivating the individual to alter his or her behavior toward being more approach-oriented (e.g. seeking out friends) as opposed to avoidant (e.g. socially withdrawing). Closer attention to the variations in our emotional experiences can also allow us to notice and fully experience happiness when it emerges in a manner that common sense expectations would not predict.

Mindful attention to sensation variability has been shown to improve expecting mothers’ well-being as well as improve neonatal outcomes. Zilcha-Mano and Langer (2016) instructed a group of expecting mothers (at weeks 25–30 of pregnancy) to attend to the variability of their negative and positive physical sensations during pregnancy. The well-being of these mothers, as well as the health outcomes of their infants following delivery, were compared to a control group of expecting mothers who did not receive the mindfulness attention to variability intervention. Zilcha-Mano and Langer found that mindfully attending to sensation variability during pregnancy predicted mothers’ mental health, positive and negative affect, self-esteem, and life satisfaction up to at least one month after delivery. Training can help people be more attentive to variability in their lives in ways that can promote well-being.

Embracing Mistakes and Uncertainty: On Being Versus Becoming

In a discussion on mistakes, Schwartz (2011) suggests that commonly observed anxieties about making mistakes and being uncertain are rooted in old

philosophical theories about *being* versus *becoming*. Individuals espousing a *being* (and arguably mindless) mentality see themselves and the world as fixed, static, and predictable. In contrast, individuals holding a *becoming* (i.e. mindful) mentality see themselves and the world as flowing and changing and necessarily unpredictable. Whereas the former worldview suggests that there is only one ideal endpoint, the latter worldview suggests a perpetual process of unfolding not marked by an endpoint. By implying the existence of an ideal end state (e.g. perfection), the *being* perspective roots people in the fear of making mistakes. The *becoming* perspective, on the other hand, exploits mistakes and uncertainty and considers them important turning points that drive continual rediscovery, redevelopment, and redefinition of the self.

The only mistake people make is to assume that mistakes are bad and to be avoided. People mistakenly assume that challenges and work are necessarily stressful and exhausting. The overthinking and worrying involved in maintaining these assumptions—rather than actual engagement in the activities, themselves—is perhaps the only part that's actually draining.

Mindful re-evaluation of mistakes involves understanding that a mistake is merely a misalignment between expectation and outcome. The wider the gap between the two, the greater the opportunity to exercise choice. Up until the mistake occurred, the path the individual was on was just a decision. This path/decision can be changed at any moment by selecting among other alternatives that may provide more desirable outcomes. Mistakes are turning points in a larger process of becoming, not fixed endpoints of being. Furthermore, uncertainty should always breed positive emotions because what we already know is fascinating, however what we don't know is even more so.

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