Coping: An Application of Positive Psychological Constructs to Disability

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Affecting all individuals, stress and coping are ubiquitous in everyday life. The aim of the present chapter is to examine processes of coping from a positive psychology perspective, with special attention given to coping with disabilities. Historically, psychology research has emphasized obtaining a better understanding of dysfunction or deviant pathology with a focus on treating mental health deficits once they occur. As a result, efforts to understand human nature have centered around traumatic, non-normative events and the resulting required adjustment. However, a relatively recent approach in the field has shifted attention from an attempt to understand what's "wrong" to how we can foster healthy outcomes and enhance overall wellness among humans, or focus on what's "right" (Seligman & Csikszentmihalyi, 2000). The goal of this paradigm shift is to understand the processes, strengths, dispositions, and virtues that make one resilient and able to adapt positively to situations ranging from daily hassles to chronic stressors and traumatic events. Positive psychology refers to a complementary field of psychology that focuses on positive emotions, positive individual traits, and positive institutions as they relate to an individuals' capacity for resilience and happiness.

A positive psychology framework is adopted in the present chapter, which is organized into three parts. First, we describe what coping is and identify different theoretical paradigms used to investigate how people cope with chronic and acute stressors. Second, we define individual differences in psychological resilience, and review the literature on how trait resilient individuals cope with stress. In the final sections, we focus more specifically on coping with disabilities. We examine how certain coping styles, individual differences, and social support networks may facilitate or impair the lives of those living with disabilities.

Coping

Coping refers to the behavioral and cognitive efforts that one uses to manage the internal and external demands of stressful situations (Lazarus & Folkman, 1984). More specifically, Folkman and Lazarus (1980) defined coping as "the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them." In this way, coping is defined by a sequence of behavioral and cognitive actions or processes, forming a coping episode.

Problem-focused versus Emotion-focused. Coping can be classified as being either problem-focused or emotion-focused in nature. Problem-focused coping involves activities that focus on directly changing elements of the stressful situation. For example, if an individual loses a job, problem-focused coping might include making a plan of action, such as revamping one's resume and applying broadly to different jobs or obtaining additional training. In contrast, emotion-focused coping involves activities that focus more on modifying one's internal reactions or distress resulting from the stressful situation. Examples of emotion-focused coping might include soothing oneself (e.g., relaxation, listening to music); affective expression (e.g., crying); cognitive processes (e.g., rumination); or disengagement (e.g., denial; withdrawal). To assess problem-focused and emotion-focused coping, one of the most-widely used instruments is the Ways of Coping Checklist (Folkman & Lazarus, 1980), which asks respondents to indicate the extent to which they use specific coping strategies to manage or tolerate stressful situations.

Engaged versus Disengaged. Another distinction among coping strategies is made between engaged versus disengaged coping processes (Moos & Schaefer, 1993). Engaged coping involves approaching a stressor head-on. Engaged coping includes strategies such as acceptance, support-seeking, and cognitive reappraisal. In contrast, disengaged coping involves

avoiding one's distress. Disengaged strategies include processes such as denial and wishful thinking. Other forms of disengagement include using alcohol or drugs to cope, which at excessive levels can be physically and socially harmful.

Compared to engaged processes, disengagement is often considered a maladaptive form of coping. Although distancing oneself from a stressful situation can offer temporary relief to an individual, the threat remains. For example, if one goes to the movies to avoid feeling anxiety about their unpaid bills, the threat of a collection agency still exists after one returns from the movie. In fact, with long-term avoidance, there is less time available to manage the problem at hand. In turn, negative feelings can resurface in the form of intrusive thoughts, often producing a paradoxical increase in distress.

Proactive versus Reactive. The temporal dynamics of coping have also been modeled. Aspinwall and Taylor (1997) differentiate between proactive and reactive coping processes. Much of the literature focuses on reactive coping, which occurs after a stressful episode has unfolded. The aim of reactive coping is to compensate for loss or alleviate harm that has *already occurred*. In contrast, proactive coping strategies are future-oriented and are aimed at extinguishing a threat in *anticipation* of a stressful episode. Examples of proactive coping include making action plans and positive reappraisal (appraising a situation as a challenge, rather than a threat). Proactive coping involves building personal resources to thwart possible stressors and facilitate personal growth.

In summary, process models of coping demonstrate the trajectory of the stress and coping response. Indeed, as situations can fluctuate constantly over the course of one's life, it is important to investigate how people can navigate their changing environmental conditions. The

capacity to cope flexibly and successfully with episodes of adversity and stressful circumstances is described as psychological resilience.

Psychological Resilience

Psychological resilience has been characterized by (1) the ability to bounce back from negative emotional experiences and by (2) flexible adaptation to the changing demands of stressful experiences (Block & Block, 1980; Block & Kremen, 1996; Lazarus, 1993). More specifically, Block and Block (1980) defined psychological resilience as ‘‘Resourceful adaptation to changing circumstances and environmental contingencies, analysis of the ‘goodness of fit’ between situational demands and behavioral possibility, and flexible invocation of the available repertoire of problem-solving strategies (problem-solving being defined to include the social and personal domains as well as the cognitive).’’ This definition captures a psychological frame of mind that has been shown to be associated with a variety of behavioral and psychological outcomes.

For several years, developmental researchers and theorists had highlighted various protective factors (e.g., social support networks) that promote healthy outcomes among children exposed to large-scale sources of adversity that have sustained influences on one’s life, such as abuse or poverty (e.g., Rutter, 1987). Beyond adverse situations that can continually affect one’s daily life, resilience is also manifested in response to isolated traumatic events (Bonanno, 2005). A resilient response to the death of a loved one, for example, is characterized by flexibility: mild, short-lived disruptions, and a relatively stable, healthy trajectory of healthy functioning over time (Bonanno, 2004). As such, resilience may be more common than previously conceptualized (Bonanno, 2004; Masten, 2001). Indeed, Masten argues that resilience is ordinary, rather than extraordinary. In line with this idea, resilience may be something that all individuals have the

capacity to achieve.

Individual Differences in Trait Resilience

Trait resilience is described as the general tendency to modify one's responses effectively to changing situational demands and by having ability to recover effectively from stressful circumstances (Block and Block, 1980). Resilient individuals may expertly use positive emotions in the coping process, ‘‘intelligently’’ drawing on positive emotions in times of stress (Tugade & Fredrickson, 2002; 2004).

Research indicates that individual differences in trait resilience predict the ability to capitalize on positive emotions when coping with negative emotional experiences. For instance, trait resilient people frequently use humor as a coping strategy (e.g., Werner & Smith, 1992; Wolin & Wolin, 1993), which has been shown to help people cope effectively with stressful circumstances (e.g., Martin & Lefcourt, 1983; Nezu, Nezu, & Blissett, 1988). Likewise, trait resilient children under stress score high on humor generation, compared to less resilient children facing equally high levels of stress (Masten, Best, & Garmezy, 1990). Trait resilient individuals also use other coping strategies that elicit positive emotions to regulate negative emotional situations. For instance, during heightened levels of distress, they engage in relaxation (allowing time to interpret and assess problems), exploration (to consider behavioral alternatives), and hopeful, optimistic thinking (having faith to overcome adversity) as means of regulating negative emotional experiences (Werner & Smith, 1992). Together, these findings indicate that trait resilient people are able to marshal positive emotions to guide their coping behavior, allowing for the reduction of distress and restoration of perspective.

Trait resilient individuals have been shown to be physiologically resilient as well, and positive emotions appear useful in achieving this outcome (Tugade & Fredrickson, 2004).

Theoretical descriptions of psychological resilience indicate that resilient individuals are able to ‘‘bounce back’’ from distressing experiences quickly and efficiently (Carver, 1998; Lazarus, 1993). In line with this theoretical definition, Tugade and Fredrickson (2004) found that although both low and high resilient individuals experienced equal levels of cardiovascular arousal and subjective negative experience in response to a stressor, high trait resilient individuals exhibited faster cardiovascular recovery from negative emotional arousal. Additionally, ‘‘bouncing back’’ to cardiovascular baseline levels was partially mediated by resilient people's experiences of positive emotion in the midst of distress (Tugade & Fredrickson, 2004). These findings resonate with theoretical conceptions of resilient individuals, which include their abilities (1) to recognize the effects of stressful situations and (2) to experience positive outcomes despite sources of adversity (Masten, 2001). Further, these findings demonstrate that positive emotions contribute to the ability for resilient individuals to physiologically recover from negative emotional arousal, which can have important health implications. Although it is important to allow negative emotions unfold so as not to short-circuit the adaptive functions associated with negative emotional experiences, sustained experiences of negative emotional arousal can be associated with long-term cardiovascular illness and disease. In all, these findings linking positive emotions to beneficial coping outcomes indicate that trait resilient people effectively harness positive emotions to their advantage when coping, and they do so with a seeming intuitive sensibility (Tugade & Fredrickson, 2002).

Why are positive emotions important to resilience? According to the broaden-and-build theory (Fredrickson, 1998, 2001), positive emotions can momentarily broaden people's scopes of thought and allow for flexible attention, which in turn can improve one's well-being. Over time, and with repeated experiences of positive emotions, this broadened mindset might become

habitual. By consequence, recurrent experiences of positive emotion can increase one's personal resources, including coping resources. Importantly, the arsenal of personal resources produced by positive emotions can be drawn upon in times of need, which may have important value in the coping process (Fredrickson, 2000). Research suggests that the experience of positive emotions, in conjunction with effective coping strategies, may determine individual differences in resilience (Fredrickson, 2001). Given that such individual differences exist, it is necessary that we understand the intersection of resilience, positive emotions, and strategic coping strategies as they apply to a specific population of disabled individuals.

Coping with Disabilities

For our purposes, a working definition of disabled individuals includes children and adults who suffer from chronic illness or live with a physical disability on a daily basis. Chronic illness includes medically diagnosed conditions that affect an individual over the life span. Physical disability includes any malformation or disfigurement caused by injury, birth defect, or illness (Ontario Human Rights Commissions, 2000, as cited in Dahlbeck & Lightsey, 2008). In many cases, chronic illness may lead to restriction of performing the tasks of daily living known as functional disability, a state that is not only stressful and burdensome, but also associated with subjective well-being (Robb, Small, & Haley, 2008). These disabilities may include conditions such as cerebral palsy, deafness, amputation, cognitive deficits, autism, and wheelchair reliance.

Coping Styles

Individuals cope with the aforementioned chronic conditions using a variety of methods. Coping can occur as not only a response (reactive) but also a proactive (anticipatory) approach to foreseen challenges (Schwarzer & Knoll, 2003). In this vein, the timing and certainty of the

event may impact the strategies employed given that coping is a dynamic process that requires constant re-appraisal for the duration of the stressful encounter. Depending on personal preferences, heuristics, and the nature of the stressful situation at hand, individuals adopt various coping strategies. It is important that individuals utilize appropriate coping strategies so as to minimize detrimental consequences and avoid ineffective methods of stress relief such as substance abuse and social isolation. As physical and mental demands of the disability may fluctuate over the course of the lifetime, adopted coping strategies may shift to better facilitate adjustment (Hudek-Knezevic, Kudum, & Maglica, 2005).

Folkman and Lazarus (1980) noted that coping efforts serve two main functions: management of the person-environment relationship and regulation of associated stressful emotions. These functions provide the basis for problem-focused and emotion-focused coping, respectively. As discussed earlier, problem-focused strategies are aimed at solving the problem or reducing the source of the stress, whereas emotion-focused strategies are designed to manage the emotional distress accompanying the given problem. Each category includes both productive and counterproductive coping methods. For example, substance abuse and planning are both problem-focused strategies; however the latter implies fewer long-term health concerns. Both denial and seeking instrumental social support are emotion-focused methods, however the former may require considerable effort and debilitate psychological resources over time (Suls & Fletcher, 1985).

Acceptance coping, which involves active cognitive and behavioral efforts to understand a given situation and resolve a stressor by seeking guidance, has been linked to beneficial long-term adaptation toward anxiety and improved physical symptoms in ill patients with diseases such as AIDS, diabetes, and heart failure (Dahlbeck & Lightsey, 2008). Conversely, avoidance

coping and emotion-oriented coping have been linked to diminished well-being. Avoidance coping involves escape behaviors to avoid thinking about a stressor or its consequences (Ebata & Moos, 1991). Examples of avoidance coping include denial and wishful thinking. However, in select cases research has shown that emotion-focused coping, which targets the emotional states accompanying a stressor rather than the stressor itself, has been found to lower pain tolerance among children and correlate with poorer adjustment (Piira, Taplin, Goodenough, & von Baeyer (2002).

Expanding upon the two main functions of coping posed by Lazarus and Folkman (1980), Livneh, Antonak, and Gerhardt (2000) identified a three-dimensional structure of coping as it relates to adults with disability-related stress. The dimensions assess the degree to which individuals harbor active versus passive, optimistic versus pessimistic, and external- versus internal-oriented coping along a continuum. The first dimension is designed to assess whether the individual is willing to accept the situation or resorts to disengagement. The second dimension aims to illuminate feelings of hope or shades of fatalism. The third dimension encompasses the degree to which individuals seek or accept social support when coping. Conclusions drawn from this study suggest that coping may be hierarchical in nature. Futhermore, findings from the research suggest that coping efforts among the disabled may not differ significantly from coping efforts adopted by the disabled. Therefore, further research to identify adaptive coping strategies will be beneficial and universally applicable.

Despite the relative utility of widely-accepted coping strategies, factors such as personality traits, comorbid medical conditions, temporal differences, and cognitive appraisal may impact adjustment and moderate the individuals' ability to cope and thrive with their disability (Oaksford, Frude, & Cuddihy, 2005). The following section will detail these

compelling intersections as well environments and support services that appear to facilitate positive adaptation (Tedeschi & Kilmer, 2005).

Positive Emotion Based Coping Strategies

Research has shown that using positive emotions to cope is an effective way to alleviate negative consequences from adverse emotional events (Tugade & Fredrickson, 2007). In the next section, we discuss different strategies that infuse positive emotional experiences to facilitate coping.

Benefit-Finding and Meaning-Making

One important coping strategy that has been found to be effective at facilitating resilience is the capacity to find positive meaning in negative circumstances (Folkman & Moskowitz, 2000). It has been proposed that finding positive meaning in negative circumstances can cultivate positive emotions and, in turn, prevent and treat problems related to anxiety and depression (Fredrickson, 2001). In the case of disability, a significant facet of successful coping involves finding the positive aspects of a situation and seeing the greater purpose or "meaning" behind it. Janoff-Bulman and Frantz (1997), for instance, suggest that successful adjustment in the face of adversity requires an individual to make sense of the traumatic event and subsequently find some benefit in the experience.

Important processes are associated with positive-meaning-making and benefit-finding, which can be especially useful for individuals coping with disabling experiences. Davis and Morgan (2008) propose that finding meaning and/or growing from an injury or disability typically requires an individual to follow a specific path to understanding. First, the individual perceives the experience of trauma or hardship as negatively affecting his or her life goals, identity, and/or worldview. Second, these negative feelings prompt a search for meaning, which

includes an effort to understand the trauma and why it has happened to him or her. Third, the practice of making sense of one's predicament leads directly or indirectly to the perception that one has grown (Davis & Morgan, 2008). In this way, an individual may cognitively minimize or mitigate the negative implications of the experience and positively reframe possible consequences on the self, others, and in a broader context, the world (deRoon-Cassini, de St. Aubin, Valvano, Hastings, & Horn, 2009). Making meaning, thus, may also help the individual determine which resources may be necessary for coping (Schwarzer & Knoll, 2003).

Positive-meaning making and benefit-finding have been shown to be an effective strategy for coping with limb loss and amputation. The experience of limb amputation is often characterized by physical, emotional, and social challenges. These personal threats can take a profound toll on individuals, and can be associated with lower levels of self-esteem or increases in depressive symptoms. Given the strain often associated with amputation, it is important to examine ways to achieve healthy adjustment to such challenges.

In a study on men who had undergone amputation, three different coping styles were examined: finding positive meaning, dispositional optimism, and perceived control over one's disability. Participants were surveyed about their experience post-amputation, and asked, "Has anything positive or good happened to you as a result of your amputation (yes or no)?" If respondents answered affirmatively, they were asked to elaborate on their response. Results demonstrated that 77% of the 138 participants reported finding positive meaning in their amputation. Examining their open-ended descriptions revealed that 60% reported *finding side benefits* ("I changed to a different occupation …"); 35% reported *redefining the event/reappraising life* ("I think I've become a much better person."); 3% made social comparisons ("I have one leg. What about a person who has legs?"); 2% forgot negative aspects

of the event ("I found that I can still do about everything I did before-only it takes longer to do it."), and less than 1% imagined a worse situation ("I survived. I have a second chance at life."). Findings revealed that finding positive meaning, dispositional optimism and personal control were each independently associated with lower levels of depressive symptomatology (but not with levels of self-esteem) (Dunn, 1996). Together, these findings indicate that having a favorable outlook can have salutary effects for individuals who have had amputation experiences.

Gallagher and MacLachlan (2000) also reported that 48% of post-amputation individuals found positive meaning in their experience and thought something positive had happened as a result of the procedure. In particular, they reported independence gained with an artificial limb, viewing the experience as character building, changing one's attitude toward life, improved coping abilities, financial benefits, elimination of pain and using it as an opportunity to meet people. Having coped with a major challenge, individuals may commonly report an increased sense of survival and ability to prevail (Tedeschi & Kilmer, 2005).

One explanation for the importance of positive-meaning-making and benefit-finding in coping may be that it allows one to reestablish a sense of cognitive coherence about the world. The *Just World Theory* refers to the human need to believe that everything happens for a reason or that people usually get what they deserve (McParland & Knussen, 2010). Research indicates that individuals who more strongly endorse the just world theory are less susceptible to the negative consequences of disability and more prone to a range of positive outcomes such as improved mood and increased recovery rate from illness (McParland & Knussen, 2010). In a study on a chronic pain support group, McParland and Knussen (2010) found that stronger just

world belief decreased the ability of pain intensity and disability to predict psychological distress.

In this way, it is possible that the more strongly one believes that the world is just, the more one will endeavor to make sense of a negative happening, such as a disability. This motivated cognitive processing, aimed to reduce the inconsistency, undoubtedly facilitates the coping process by encouraging engagement in coping strategies. Further, with a stronger just world belief, it is possible that benefit-finding and meaning-making may have a stronger impact on restoring an individual's feelings of perceived control (the belief that one can influence potentially positive or negative outcomes) (Dunn, 1996).

Other researchers have taken an alternative perspective, stating that benefit-finding is an *indicator* of growth and change following a stressful circumstance, rather than being a coping strategy in and of itself. Oaksford, et al. (2005) examined their theoretical model of positive coping by measuring five categories of coping (positive escape/distancing; support seeking; humor; cognitive reappraisal; and practical/action-based coping). Participants with lower limb amputation participated in Semi-structured interviews, which were conducted over five years post-amputation. Supporting the positive coping theoretical model, Oaksford et al. (2005) found that reports of positive psychological change post-amputation reflected, rather than resulted from, growth in the aftermath of the traumatic experience. This perspective echoes the recent perspective suggesting that benefit-finding is an indicator of genuine positive adjustment rather than a coping mechanism to protect threatened beliefs.

In the past, benefit-finding has been conceptualized as both an appraisal and as a coping strategy. Park and Folkman (1997) presented a comprehensive theoretical evaluation of the role of meaning making in the coping process. Within this framework, they conceptualized benefit

finding as an integral part of the meaning making process and ultimately as a cognitive reappraisal coping strategy. In this way, in the context of an enduring chronic stressor, finding the positive aspects of one's circumstance may be viewed as both a coping mechanism as well as a product of positive adjustment (Park & Folkman, 1997).

Beyond positive meaning-making and benefit-finding, researchers have identified other strategies that can contribute to psychological well-being and adjustment. In the pages that follow, we will describe positive coping strategies that facilitate resilience in the midst of negative circumstances, such as disability experiences.

Optimism & Hope

Unsurprisingly, research indicates that individuals with higher dispositional optimism show more successful coping in reaction to health threats and significant life transitions. Optimistic outlooks can help feel better about themselves and to therefore cope better with stress (Dunn, 1996). Chronic optimism, or dispositional optimism as a personality factor, may also lead to a more adaptive appraisal process.

What mechanism might explain the relation between optimism and well-being? It is possible that optimism is associated with increased positive illusions, which are associated with enhanced well-being as well as positive health results in life-threatening illness. In one study, individuals with AIDS with more realistic appraisal of their level of control over their disease had decreased survival time as compared to those with positive illusions (Reed, Kemeny, Taylor, Wang, & Visscher, 1994). In this sense, higher levels of optimism may predict better post-stressor adjustment.

Likewise, hope refers to a positive motivational state "based on an interactively derived sense of successful (a) agency (goal-directed energy), and (b) pathways (planning to meet

goals)" (Snyder, Irving, & Anderson, 1991, as cited in Smedema, Catalano, & Ebener, 2010). High levels of hope have been linked to lower depression, fewer mental health symptoms, improved well-being, more positive thoughts and more positive therapeutic outcomes (Smedema et al., 2010).

Humor

Using humor to make something seem funny or amusing in times of stress seems to facilitate coping both directly and indirectly (Smedema et al., 2010). First of all, humor can be used to magnify and maintain positive emotions, resources vital to successful coping (Dunn & Brody, 2008). Secondly, literature suggests that humor may be a way of reframing uncontrollable or overwhelming distress into something less threatening and more manageable (Smedema et al., 2010). In this manner, making light of a situation may help an individual restore some feelings control (Rybarczyk, Nicholas, & Nyenhuis, 1997). In individuals with disabilities, a positive relationship has been found among humor, self-concept and vitality (Smedema et al., 2010).

Gratitude & Savoring

Like benefit finding, gratitude and savoring require an individual to acknowledge a positive entity in his or her life and appreciate it. Research suggests that recognizing and focusing on things to be grateful for enhances mood, promotes coping behaviors and leads to self-reported health benefits (Emmons & McCullough, 2003). Gratitude has further been shown to enhance social connections, extend positive emotions and slow habituation to good things (Dunn & Brody, 2008).

Savoring, learning to enjoy, even enhance an experience requires an individual to reflect on the nature of a particular pleasure. Empirical evidence suggests that increasing the incidence and reflection of pleasurable experiences reduces negative emotions (Dunn & Brody, 2008). Savoring can be considered a cognitive form of coping used to maintain and extend positive emotional experiences (Bryant, 1989). Savoring involves conscious awareness of, and deliberate attention to, one's pleasant experiences (Bryant, 1989). It is also defined as beneficially interpreting positive events by engaging in social behaviors, such as communicating the event to others or celebrating (termed ‘‘capitalizing’’ by Langston, 1994). A theoretical model of savoring proposes that positive emotions are maintained while savoring because one draws attention to feelings (a) in anticipation of upcoming positive events; (b) when appreciating current pleasant events; and (c) when reminiscing about past positive experiences (Bryant, 2003). Consider, for example, a relaxing summer vacation at the beach. Savoring can prolong the duration of positive emotional experiences when thinking about the impending arrival of your airplane to your summer destination (anticipation); when sharing pleasurable moments with friends or loved ones during your vacation (current pleasant events); and when relishing the memories after returning home (reminiscence) (Bryant, 1989). Contentment, an emotion relevant to savoring (Fredrickson, 1998, 2001), resonates with the reminiscence aspect of the savoring process.

Savoring has important implications for coping and well- being. Having a general tendency to savor experiences (measured via the Savoring Beliefs Inventory; Bryant, 2003) appears to benefit individuals across the lifespan. Correlational studies indicate that the tendency to savor predicts subjective well-being for grade school children, adolescents, college students, and the elderly (Bryant, 1989; Meehan, Durlak, & Bryant, 1993). As well, savoring is positively related

to favorable advantages in well-being, including self-reported optimism, internal locus of control, self-control behaviors, life satisfaction, and self-esteem; it is negatively correlated with hopelessness and depression (Bryant, 2003). Although studies that empirically test the causal relations between savoring and positive outcomes are needed, these correlational findings lend support to the idea that maintaining positive emotional experiences can have important outcomes for an individual's well-being.

A number of different interventions promote savoring. For example, relaxation therapies and guided meditation practices require participants to engage in thematic imagery exercises that can induce and extend the duration of pleasant experiences. Sessions might include instructions to bring to mind scenes of nature, childhood triumphs, or recent good experiences (Smith, 1990). These techniques can effectively prolong positive emotional experiences and can benefit physical and psychological health (Chesney et al., 2005). Indeed, meditative practices are associated with enhanced subjective quality of life (Shapiro, Astin, Bishop, & Cordova, 2005; Surawy, Roberts, & Silver, 2005); reductions in stress (Kabat- Zinn et al., 1992; Miller, Fletcher, & Kabat-Zinn, 1995; Shapiro, Schwartz, & Bonner, 1998); prevention of disease (Chesney et al., 2005); and improvements in coping and health for both clinical and nonclinical samples (for reviews see Grossman, Niemann, Schmidt, & Walach, 2004; Kabat-Zinn, 1990; Smith, 1990). Together, these studies suggest that regulatory behaviors that help people sustain and maintain positive emotional experiences can be beneficial to health and well-being.

Other Coping Strategies

Control

Locus of control is the tendency to appraise factors that are responsible for, as well as problematic, outcomes for an individual. Appraisals can either be internal (due to the self) or

external (due to the situation). With an internal locus of control, people believe that they are able to exercise effort to yield a specific outcome. Should the outcome be negative or disappointing, the individual is prepared to take responsibility for the result. In contrast, with an external locus of control, a person attributes outcomes to circumstances outside of one's personal responsibility (e.g., luck, fate, situation, another person) (Rotter, 1966).

Having an internal locus of control has been linked to successful outcomes. Results from a study by Oaksford, et al. (2005), for instance, point to an internal locus of control as a contributing factor for effective coping. In their study, participants were interviewed about the coping strategies they adopted after lower limb amputation. Over half of the participants attributed their adjustment following an amputation to their appraisal of the event as controllable. Instead of viewing their disability as a catastrophe, these individuals were able to appraise the situation as controllable. Importantly, locus of control has consistently been shown to be associated with adaptation (Bandura, 1977; Carver & Scheier, 2002; Masten, 1999)

Social Comparisons

Social comparison theory (Festinger, 1954) argues that people make comparisons to similar others as a way of evaluating themselves against their social environments. Two types of social comparison exist. With upward social comparison, people evaluate themselves against similar others who are superior to them on a particular dimension (e.g., comparing oneself to an Olympic athlete). With downward social comparison, people evaluate themselves against similar others who are inferior to them on a particular dimension (e.g., comparing oneself to those less fortunate). People who are ill or have a chronic illness or disability often gain valuable information by using social comparisons: What is the nature of the illness or disability?; How effective are treatments?; and How are others coping with the illness or disease? In this way,

downward social comparisons may help to reduce negative emotions, thereby helping individuals gain momentary relief. Upward social comparisons, in contrast, can be most effective in the information-gathering stage or problem-solving stage of coping.

Research shows that people with chronic illness or disability have a tendency to use downward social comparison (Collins, 1996). Conceptualizing oneself in comparison to someone who is worse off on some relevant dimension, such as a disability, often enhances self-esteem and endorses well-being (Dunn & Brody, 2008). It is possible that viewing how one's circumstance could be worse may lead to seeing the positive aspects of the situation or feeling gratitude for what one has. This favorable comparison may not be the most socially constructive coping mechanism, but it nonetheless seems effective in the short-term and may be an unavoidable human inclination (Dunn, 1996; Dunn & Brody, 2008).

Goal Striving

In the face of disability, many activities that were previously available or easy for an individual may become difficult or impossible. In such cases, maintaining goal striving, either by continuing to pursue an activity or goal or selection of alternative goals, seems to play a significant role in coping with disability.

Research suggests that greater goal engagement was significantly associated with positive but not negative affect (Mackay, Charles, Kemp & Heckhausen, 2011). Further research has demonstrated the link between greater goal striving and social integration, more autonomy, and better overall productivity in life (Kemp & Vash, 1971).

The Importance of Social Support

Previous research indicates that social relationships and social environment play significant roles in shaping an individual's coping strategies and ability. Various measures of

social support have been connected with positive results (e.g. decreased mortality, depression, anxiety, pain, increased self-care) in individuals with disabilities and chronic illnesses (Franks, Cronan, & Oliver, 2004). *Social support* broadly refers to the resources available to an individual from other individuals or from social networks (López-Martínez, Esteve-Zarazaga & Ramírez-Maestre, 2008). For individuals with disabilities, this support may come from family, spouses, teachers, online groups, and various community outreach programs, among other sources.

In studying the effects of social support on coping, researchers distinguish between the functional aspects of support (the type of received support), the structural aspects of support (the quantity of available support), and the adequacy of support (perceived accessibility and satisfaction with support) (Neugebauer & Katz, 2004; Obst & Stafurik, 2010; Penninx, Van Tilburg, Deeg & Kriegsman, 1997). Functional social support has further been classified into emotional support (e.g. intimacy, encouragement, attachment), tangible support (e.g. financial help, material goods, services), and informational support (e.g. information, advice, feedback) (Cobb, 1976; Dean & Lin, 1977; Norbeck, Lindsey, & Carrieri, 1981; Franks et al., 2004). Structural support measures, on the other hand, usually enumerate social ties, frequency of contact as well as an individual's level of social integration, the degree to which an individual is embedded within a social network or perceives a stable placement within a community (Mock, Fraser, Knutson & Prier, 2010; Neugebauer & Katz, 2004).

While the positive effects of social support on coping and well-being have been documented extensively, the mechanism of these effects remains unclear. Researchers have suggested two means by which social support may influence the coping process. The *direct-effect hypothesis* proposes that social support has a direct, positive effect on psychological health and well-being (Penninx et al., 1998). In this way, social support may provide regular positive

experiences and bolster positive affect by providing a set of stable, socially rewarded roles in society (Cohen & Wills, 1985; Franks et al., 2004). In other words, being social may be a coping mechanism in and of itself. The *buffering hypothesis,* on the other hand, proposes that social support mitigates the negative effects of stress by affecting an individual's coping strategies and facility. As follows, social support may augment an individual's personal coping resources (e.g. feelings of mastery, self-efficacy, self-esteem) that facilitate the necessary strength and confidence to successfully manage stress (Franks et al., 2004; Penninx et al., 1997). Alternatively, social support may influence an individual's choice of coping strategies between active (e.g. positive reframing) and passive (e.g. self-blame) coping, which may subsequently influence their emotional well-being (Kim, Han, Shaw, McTavish & Gustafson, 2010). Finally, supportive others may alleviate the impact of stress assessment by providing solutions to problems, by reducing the perceived magnitude of stressors or by facilitating healthful behaviors (Cohen & Wills, 1985).

Quality vs. Quantity

As stated, a distinction lies between the quality of one's social support and the quantity of one's social support. Franks, Cronan, and Oliver (2004) aimed to address whether the number of people in an individual's social network, the satisfaction of perceived social support, or the type of received social support predicted individual well-being in a sample of women suffering from Fibromyalgia Syndrome (a chronic, painful, arthritis-related condition) (Franks et al., 2004). Results indicated that larger social support networks correlated with greater levels of self-efficacy for symptom management. However, higher perceived *quality* of social support correlated with lower levels of depression, helplessness and mood disturbance as well as higher levels of self-efficacy for symptom management and overall psychological well-being (Franks et

al., 2004). Therefore, the study suggests that quality of social support plays a more significant role in coping than quantity of social support, though both aspects appear to be beneficial. Another study reiterated these findings and found that marital closeness moderated the negative psychological effects of functional disability on depression, anxiety and self-esteem (Mancini & Bonanno, 2006).

Cohen & Wills (1985) suggest that quantity of support may play a more significant role in coping with ordinary levels of stress than in the face of a substantial stressor. Under ordinary levels of stress, social integration may enhance an individual's perception of available external resources. In this way, the perception of increased resources may alleviate stress by reducing perceived threat of a potential, challenging situation (Mock et al., 2010). However, in the presence of a more significant stressor, such as a chronic illness or a disability, the functional aspects of an individual's relationships, such as intimacy and encouragement, may play a more pivotal role in coping (Cohen and Wills, 1985). In other words, stress and support may interact to produce their outcome on individual coping.

Another study comparing individuals with severe arthritis and those without arthritis indicated that the presence of a partner and having many close relationships (family and household members) had direct, positive effects on depressive symptoms irrespective of arthritis status. Conversely, having many diffuse relationships (friends, neighbors, and acquaintances) and receiving emotional support interacted with arthritis status. These variables had more significant positive effects on individuals with severe arthritis than those without the disease (Penninx et al., 1997; Penninx et al., 1998). The study reinforces both direct and buffering effects of social support on well-being and suggests that the two mechanisms may work concurrently, depending on the form of support measure and significance of the stressor. Cohen and Wills

(1985) suggest that using structural support measures typically reveal direct effects while functional measures typically reveal buffer effects (Penninx et al., 1998).

Additional studies support the utility of spouses as a beneficial caretaker for individuals with disabilities. In both case and healthy populations, social support has been shown to have a direct effect on the relationship between stress and depression (Robb, Small & Haley, 2008). In an effort to identify enduring vulnerabilities that may put an individual at risk for depression when dealing with a disabled spouse, Robb, Small, and Haley (2008) examined these effects in conjunction with individual differences (i.e., gender and personality traits including neuroticism and extraversion) among older adult couples. Findings revealed that neuroticism both directly affected and moderated the association of physical disability and subjective well-being, regardless of gender. A similar effect was found concerning extraversion among men but not women. Taken together, the study identified social resources as a potentially critical resource in enhancing well-being among husbands caring for a disabled spouse.

Instrumental Support

A number of studies indicate that instrumental support, actual hands-on assistance by another person, may have more mixed consequences than other forms of social support (Penninx et al., 1998). In a comparative study on the effects of social support on individuals with an assortment of chronic diseases, Penninx et al. (1998) found that instrumental support was consistently associated with more depressive symptoms than other forms of social support (Penninx et al., 1998). One potential explanation for this correlation may be that depressed individuals arouse more sympathy from others and therefore receive more instrumental support. Alternatively, it is feasible that extensive instrumental support may arouse feelings of helplessness or dependency, both of which may prompt depression (Penninx et al., 1998).

Though instrumental support may sometimes lead to feelings detrimental to the coping process, it seems that this may depend on the condition of the individual receiving help. Penninx et al. (1997) found that unfavorable effects of instrumental support were nearly absent in individuals with mild or severe arthritis. In another study on individuals with severe arthritis, individuals consistently reported that sufficient help on daily tasks resulted in *less* disability in valued activities (Neugebauer & Katz, 2004). It is possible that the less physically capable an individual is, the more beneficial instrumental support may be. Perhaps rather than diminishing feelings of fitness, in cases of severe physical impairment, instrumental support moderates impending lifestyle change.

Factors Contributing to Improved Child Support

Due to their developmental maturity, limited understanding, and capacity for resilience, children with disabilities may face unique challenges when seeking support from family and friends. Research shows that the presence of an influential person who believed in them is one of the key factors for promoting resilience among children suffering from a disability (Alvord & Grados, 2005). In a similar vein, children with at least one warm parent is likely to be more resilient. Expression of positive emotions on behalf of the child's mother is also related to a child's adjustment.

Group therapy is also an available resource for children. Cognitive behavioral therapy (CBT) groups have been designed for children with the sole intention of destigmatizing the notion of disability. Given that these groups are founded in positive psychology, children may acquire qualities and positive beliefs that allow them to embrace their disability and adapt to their circumstances with a positive outlook. In an attempt to foster resilience, a program through

Seligman's center at the University of Pennsylvania teaches children to become aware of their thoughts and think positively/rationally about negative events.

Internet-Based Social Support

Given the significance of social support in coping, it is imperative for all individuals to have access to relationships and community. In the case of individuals with low mobility, physical barriers can preclude social networking and interaction, which may result in feelings of loneliness and isolation as well as a lack of access to support information and services (Matt & Butterfield, 2006). Despite the controversy over the positive and negative effects of internet use in general, it seems that in the case of disabilities, the pros outweigh the cons. Research into internet-based support sites reveals that individuals can develop social support and a sense of connectivity through computer mediated communication channels that are easily accessible (Obst & Stafurik, 2010).

One study found that membership of disability-specific websites led individuals to feel a sense of community and belonging that was positively correlated with well-being (Obst & Stafurik, 2010). Though amount of time spent in disability-specific Internet forums was related to levels of reported online sense of community, the time participants spent online was not associated with their perceived offline social support. In this way, it seems that it was not a lack of off-line support that prompted individuals to spend more time online but that this time online was an additional coping resource.

Other research has also demonstrated the beneficial effects of exposure to similar others through Internet use (Guo, Bricout, & Huang, 2005). By establishing a social network online with similar others, it is possible that individuals with disabilities may feel a sense of belonging

and connection unobtainable in the tangible world. This network may offer unique moral support and personal advice as well as promote self-reflection and positive change (Obst & Stafurik, 2010).

Self-Esteem

Diener, Suh, Lucas, and Smith (1999) found that satisfaction with life is of great importance for one's well-being, self-esteem, and establishment of productive coping skills. High self-esteem or avoidance of low self-esteem has been able to found to positively influence health and well-being. Adolescents who actively use more problem-focused coping and less emotion-focused coping have been shown to demonstrate higher self-esteem, a crucial factor for determining psychological adjustment (Dahlbeck & Lightsey, 2008). Results revealed that higher self-esteem and lower emotional-reaction coping directly predicted higher life satisfaction and lower anxiety. Higher self-esteem also predicted more use of acceptance-oriented coping. Alternatively, lower self-esteem has been linked to increased severity of impairment. Therefore, it is important to remember that building positive self-esteem is a crucial component of managing a disability for both children and adults. Therapy focused on teaching coping skills and reducing self-blame may be beneficial for providing disabled individuals with an outlook for life improvement.

As mentioned earlier, an internal locus of control (along with self-control) may allow individuals to adopt more adaptive coping skills such as positive reframing in lieu of avoidance and denial-based strategies. Individuals with higher self-esteem were more likely to perceive greater control and report using active coping strategies (Major, Richards, Cooper, Cozzarelli, &

Zubek, 1998). This sense of control may also facilitate more accurate cognitive appraisals of the situation; a initial appraisal of the situation as less-stressful may also facilitate better adjustment.

Conclusions and Future Directions

This chapter reviewed studies in the literature on coping with illness and disabilities from a positive psychology perspective. Our review demonstrates that coping efforts encompass a wide range of cognitive, emotional, and behavioral strategies directed at both external (i.e., environmental) stressors and internal demands and needs. Although some researchers view coping as a global personality trait or dispositional quality, it is by no means an inflexible psychological construct. In fact, coping efforts and behaviors are very much influenced by one's situational context, including the nature, type, duration, prognosis, perception, and severity of the encountered crisis, trauma, or loss. Taken together, the review of the literature indicates that coping can be considered a dynamic process that involves different factors including the nature, intensity, and extent of the stimulus itself, individual differences, and external resources such as one's socioeconomic status or social support levels. Additionally, various coping styles have been identified.

Based on the research findings, a number of conclusions and suggestions for future directions can be offered. One possible area of further research might be on the topic of coping flexibility. Coping strategies may be viewed as mostly flexible, integrated, and environmentally-attuned efforts that are concerned with both internal and external demands and available resources. Coping flexibility is conceptualized as a good fit between the characteristics of coping strategies and the nature of stressful events (Aldwin, 1994; Linville & Clark, 1989). For effective coping to take place, coping needs to be fine-tuned to meet the specific demands of different stressful situations. Such fine-tuning requires some cognitive ability (Neufeld, 1999). The

transactional theory of coping (Lazarus & Folkman, 1984) proposes that cognitive processes "intervene between the encounter [i.e., the stressful situation] and the reaction [i.e., coping responses]" (Lazarus & Folkman, 1984, pp. 22–23). Interestingly, there are individual differences in the capacity to cope flexibly. The cognitive individual-difference variable of discriminative facility (Mischel, 1984; Mischel & Shoda, 1995) may explain the process underlying how individuals deploy situation-appropriate or -inappropriate coping strategies when encountering stressful events. Discriminative facility refers to individuals' active appraisal of situational characteristics, and their choice among alternative behaviors in response to changing contingencies (Cheng, Chiu, Hong, & Cheung, 2001; Chiu, Hong, Mischel, & Shoda, 1995; Roussi, Miller, & Shoda, 2000; Shoda, 1996). Given the changing situational demands that often accompany experiences of disability, a greater emphasis on the study of coping flexibility could be especially fruitful.

The study of coping with disabilities points to the need to expand the research on positive emotions and coping. The research reviewed in this chapter demonstrated that positive emotions help to facilitate effective coping and resilience for individuals faced with adversity. However, coping with chronic illness or disabilities poses unique challenges. As such, it is important to investigate the factors that might modify the ability or motivation to recruit positive emotions in times of stress. Indeed, additional questions still remain. For whom are positive coping strategies most beneficial? In what contexts might they facilitate or hinder effective coping outcomes? Future research would benefit from further examination of possible individual differences, cultural norms, or situational constraints that may modify the outcomes of using positive emotions in the coping process.

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