**Marquette University**

**e-Publications@Marquette**

***Education Faculty Research and Publications/College of Education***

***This paper is NOT THE PUBLISHED VERSION*.**

Access the published version via the link in the citation below.

*Understanding the Expérience of Disability*, (2019): 90-106. [Publisher link](https://global.oup.com/academic/product/9780190848088). This article is © Oxford University Press and permission has been granted for this version to appear in [e-Publications@Marquette](http://epublications.marquette.edu/). Oxford University Press does not grant permission for this article to be further copied/distributed or hosted elsewhere without the express permission from Oxford University Press.

Social and Psychological Factors Affecting Coping with and Adjusting to Disability

Alexandra M. Kriofske Mainella and Susan Miller Smedema

# Abstract

This chapter provides an overview of the social and psychological factors contributing to coping with and adjusting to disability by summarizing models; clinical implications, evidence-based practice, and measurement issues; and empirical research related to the process of coping with and adjustment to disability. While the models are useful for understanding a portion of the experience of people with disabilities and their coping and adjustment process, these reactions are not universal and not always experienced in an orderly sequence. Both coping and adaptation are multidimensional, complex processes affected by many factors and influenced by the person with the disability, the stress related to the disability, and a myriad of contextual factors. The ultimate goals of all people with disabilities are good psychosocial outcomes and a high quality of life. Since coping can be a mediator, coping skills are important for professionals working with individuals with disabilities to understand, study, and communicate to clients and their families. Future studies, as well as clinical work, would do well to focus efforts on the many aspects of the interaction between the person and the environment that make up a person's life space and affect their coping with, adjustment to, and acceptance of disability.

Whether individuals are born with a disability or acquire one through illness, accident, or other means, they will inevitably go through a process of coping with and adapting to their new life circumstances. Not only must the individual cope and adapt, but also their family and other support systems must do so. *Coping* is defined as a set of complex and dynamic efforts to deal with external and internal demands, also known as stressors or stress (Lazarus & Folkman, 1984). *Adaptation* is defined as a dynamic process that leads the person experiencing it to a state of balance between self and environment, called adjustment (Livneh & Antonak, 1997). Coping and adaptation are multifaceted and complicated constructs that involve many factors, including those related to the individual, the individual's disability and environment, and the type of coping and adaptation mechanism the individual employ.

Among the first scholars to study coping and adaptation specific to individuals with disabilities was Beatrice Wright (1983), who described adaptation to disability as a process in which the individual recognizes the loss involved in disability but moves beyond this loss to place value on existing abilities and attribute while acknowledging new attributes that may have been gained as a result of the disability Since Wright's seminal work in *this* area, a vast amount of literature and research regarding coping and adapting to disability have emerged, with two central themes. Thefirst is that coping can serve to mediate or moderate the effect that stress has on anindividual's life satisfaction (Chronister & Chan. 2007). The second is that adaptation,when it leads co adjustment can allow a person to participate most actively in their social, vocational, and personal lives (Livneh & Antonak 1997). This chapter willprovide an overview of the social and psychological factors contributing to copingwith and adjusting to disability by summarizing (1) models; (2) clinical implicationsevidence-based practice, and measurement issues; and (3) empirical research relatedto the process of coping with an adjustment to disability.

# Models of Coping and Adjustment

How an individual copes with and adjust to disability is affected by the way that disability is acquired, whether at birth or by other mean. Individuals born with cerebralpalsy, for example would experience their disability from birth and would onlyunderstand the experience of not having a disability through comparison with others;their own experiences would be through the lens of disability from the day they were born. Rather than coping with a change adapting to disability, for theseindividuals, would be a process that is part of their everyday life. Coping, for individual with cerebral palsy, would involve the involuntary reaction of coping withthe effects of their condition, such as needing to learn how to navigate space in adifferent way than those without such a disability, and more voluntary reactions; suchas asking their parents questions about what make them different from their siblings or peers. Models describing such reaction go back as far as Sigmund Freud (1894) and are in development to this day.

## Early models: Freud and Lewin

Early models of coping and adaptation were rooted in voluntary or involuntary reactions to stimuli. Freud (1894) discussed the individual's unconscious "defense mechanism" according to Freud, the individual with cerebral palsy described earlier would experience defense mechanismssuch as denial (denying the disability at all) repression (pushing down thoughts of the disability), or displacement (taking unpleasant thoughts about the disability out on other things or people), to name a few.

Less than half a century later, Kurt Lewin (1935, 1936), who is often called the “Founder of Social Psychology” (Adelman, 1993, p. 13), developed the notion of field theory. Field theory looks at human behavior as a function of the total life space, or interaction between the person and the environment. Algebraically, this is expressed as (Lewin, 1938). Individuals with cerebral palsy would adjust to their disability through their physical and psychological experience of self and the way the environment affects their disability, its effects on their physical and emotional life, and their ability to live as they desire.

While the unconscious and conscious coping mechanisms were the focus of early theory and the interaction between the person and environment was the focus of later theory, more modern models of coping and adjustment emerged from the cognitive revolution occurring in social psychology in the 1950s (Miller, 2003). During the cognitive revolution, behavior came to be seen as a science of the mind, with biological and neurological factors included in the experience of emotions and emphasis placed on the impact of the environment on individuals (Gardner, 1987). Understanding coping with and adaptation to disability became a more complex study, and theorists examined not only individuals and their disabilities but also factors linked to their cognition, personality, and environment.

The disability community often claims that to have a disability is to belong to a minority group that anyone could join at any time (Shapiro, 1993). Often those who acquire disabilities do so through illness or accident. Coping with and adjusting to a disability acquired later in life calls for a different set of coping and adaptation skills than those used by individuals with congenital disabilities. Contrary to the individual born with a disability, consider one born without a disability who has a car accident at age 20 and obtains a spinal cord injury (SCI). This individual will experience a major life change that will include stress, crisis, loss, grief, body image change, uncertainty, and unpredictability. If the individual can effectively cope with and adjust to this change in her life, the definitive outcome will be linked to her quality of life (QOL) (Livneh & Antonak, 2005). QOL is a psychosocial construct measuring the general well-being of individuals and is seen as an observation of life satisfaction (livneh, 2016). QOL is affected by disability and an individual’s acceptance of it.

## Somatopsychology and Disability Acceptance

Out of field theory, somatopsychology was born. Somatopsychology is the study of the psychological impact of a disease or disability and centers on the notion that how we feel about ourselves is affected by our interactions with others and the environment around us. From this idea, Beatrice Wright, along with her colleagues, wrote of the effects of physical disability on an individual's functioning, including the theory of disability acceptance (Dembo, Leviton, & Wright, 1956). Disability acceptance theory involves four major changes in an individual's value system – these changes work together to influence a person’s overall acceptance of disability. These value changes are enlargement of the scope of values, subordination of the physique, containment of the spread of the effect of disability, and transformation of comparative status values to asset values (Dembo et al., 1956: Wright, 1983). *Enlargement of the scope of values* is the recognition of values separate from the disability and acknowledgment of areas unaffected by the disability. An individual with an SCI may not be able to walk any longer but can still place value on her intelligence and sense of humor, for example. *Subordination of the physique* is the change of the importance placed on the physical self to other sources of self, such as personality. In this value change, an individual can recognize that though the use of a wheelchair is now the only way he can get around, he still is the person his best friend calls for advice. *The spread effect* refers to the (often negative) value placed on disability itself; containing or reducing the spread refers to using new and positive thoughts to reframe disability and not allowing the disability to permeate areas of one’s life unrelated to the functional limitation itself. Even with an SCI, thoughts can turn to the fact that a favorite restaurant is accessible and going there to eat with friends and family is still an option. Finally, *transformation of comparative to asset values* is the ceasing of comparison of oneself to others and focusing more on one’s own positive attributes (Wright, 1983). Assets such as the resilience and determination it takes to relearn how to navigate space with a newly acquired disability can be a focus here.

Beatrice Wright’s (1983) model of adjustment to disability has its basis in the people’s acceptance of the disability. According to this model, the individual with a newly acquired SCI eventually integrates her disability into her self-concept in a way that values her own positive attributes and the meaningful adaptation that occurred as a result. The value changes are a crucial part of disability adjustment. In our example of the individual with a newly acquired SCI, perhaps the use of a wheelchair is necessary, body changes must be accommodated, and navigating the environment is now viewed as a challenge, where before it was not. Through Wright’s values changes, the individual would embrace new values, such as the use of the mind rather than body to look for employment, or a positive emphasis on his own adaptation to the situation. The individual would broaden his self-worth to attributes beyond physical attractiveness and ability by considering such things as personality and strength. The *spread effect* would be contained as the individual recognizes that his disability is only one aspect of the self, thereby incorporating it into his overall self-concept. The final value change, as outlined by Wright, would be a shift away from social comparison with others by placing values on his own assets, such as gaining a new social community of disabled friends or recognizing a job or purpose that did not exist before the injury (Wright, 1983).

In addition to the value changes, Wright also introduced a framework for coping. In her *coping, hoping, and succumbing framework.* Wright believed that disability could be perceived as a challenge that an individual could strive to cope with, or as a tragedy to which one could succumb. The factors involved in her view of coping versus succumbing were the perceptual contrast experienced by an individual, the insider – outsider distinction, insecurity in new situations, secondary gains, the requirement of mourning, and cultural prescriptions (Wright, 1983).

*Perceptual contrast* is the concept that a person with a disability makes a variety of comparisons: comparisons of self before and after disability, comparisons between disabled and nondisabled individuals, and even comparisons between oneself and someone with a similar disability. The individual with a recent SCI might consider his life before disability or succumb to comparisons of self with others without a disability. *The insider – outsider position* recognizes that even individuals indirectly affected by disability must cope with it. Not only will the person with the acquired disability need to cope with his new circumstances, but also the individual’s parents, siblings, and friends will have different experiences of coping with his new situation. Insecurity in new situations is the idea that a person with a disability may have to learn to encounter situations differently because of his disability and therefore must get used to a new way of doings things in order to reduce insecurity. Learning o use a walker or wheelchair to navigate the environment is an example of this concept. *Secondary gains of disability* may be the relieving of duties a person experiences because of his disability; suddenly the individual no longer has to mow the lawn, an activity not doable while using a wheelchair. These can also be gains representing changes in values, newfound support systems, or newly acquired activities because of the disability. In addition, the requirement of mourning occurs when a person acquires a disability and perceives a need to go through a grief process, to mourn what is lost as a result of the disability. Even a person born with a disability may find that mourning is required as she enters new situations and finds that they are more challenging for her than her nondisabled family or friends. The requirement of mourning can also include the expectations of family members, friends, and even people outside her life in order for the individual to continue mourning her disability even after she begins displaying adjustment and contentment (Dunn, 2015). Finally, cultural prescription is the way the person with disability was taught to view disability – that is, in positive or negative terms, whether through her sociocultural surroundings, her family, or both.

Wright focused on the principles of rehabilitation of individuals with disabilities, stressing the emphasis on individual strengths (such as highlighting existing abilities or newfound ones), while dealing with the realities of the situation caused by the disability (such as asking questions about how the environment needs to be adapted for mobility or accessibility). She wrote about positivity and coping as a way of coating reality with hope,” thus demonstrating the “hoping” part of her framework (Wright 1983).

The stress and coping theorist, Richard Lazarus, was also influenced by the cognitive revolution and by the work of Beatrice Wright and her colleagues, and he developed the transactional model of coping (Folkman & Moskowitz, 2004). This model is a stress appraisal model in which the individual appraises the situation to evaluate threat, harm, and challenges found in the experience of disability. This model involves three major factors: primary and secondary appraisal, and the experience of coping itself, to make outcomes happen. During *primary appraisal*, the person must evaluate the significance of the stressor, asking such questions as, “What does this mean, and how does it affect me?” In *secondary appraisal*, the person must evaluate the controllability of the stressor, asking such questions as, “Can I do anything about this, and if so, what? If not, how can I deal with it?” and “What resources do I have?” The third element of this model is *coping*. Coping, in this model, is the set of strategies used to bring together the primary and secondary appraisals, ultimately creating suitable outcomes for the individual to pursue (Lazarus & Folkman, 1984). Examples of such coping strategies used by the individual with SCI, for example, might include obtaining different types of assistive technology to make challenging tasks easier and seeking social support from friends or coworkers.

## Stage Models

Rehabilitation psychologist Hanoch Livneh has done extensive work on adaptation and adjustment to disability. In his extensive literature review and clinical observations of stage models of disability adaptation (Livneh, 1986a, 1986b), he identified eight partially overlapping psychosocial reactions to disability included in the adaptation and coping process. While laid out in a linear fashion here, it is important to note that these stages do not always follow such a prescribed path. The stages can be grouped into three categories: earlier reactions to disability, intermediate reactions, and later reactions.

*Earlier reactions* include shock, anxiety, and denial. Schock can be the individual’s initial reaction to diagnosis or to sudden injury or illness. Anxiety is the reaction that encompasses a panic or realization of the impact of the disability on the person, which may include fear of how it will affect the rest of her life. Denial is often an early reaction, also described as defense mobilization, including ignoring the disability and its effects, displaying unrealistic expectations regarding recovery, or expressing indifference to the situation at hand (Livneh & Antonak 1997).

Intermediate reactions include depression, internalized anger, and externalized hostility. Depression is a highly researched reaction and is considered a normal response to loss, anticipated deterioration of mind or body, and/or impending death (Livneh & Antonak, 1997). Internalized anger can occur as self-blame, resentment, or guilt. These feelings can include blame of self for the occurrence of a disability as well as a wish to die to avoid the effects of it. Finally, externalized hostility is anger projected toward others, possibly toward a parent if the disability is congenital or toward another if it caused by injury or accident (Livneh & Antonak 1997).

Finally, a person with a disability may experience a set of *later reactions*, including acceptance or acknowledgment of and adjustment to the disability. Simply put, this is the stage of moving from a state of disablement to a state of enablement including psychosocial equilibrium, awareness of both assets and limitations, active participation in environment, and maintenance of positive self-esteem (Livneh & Antonak 1997).

While state models are a useful and empirically valuable way to examine the experience of disability, Wortman and Silver (1989) caution that even though stage models may help us to understand the process of loss or disability acceptance, these reactions do not always follow a linear pattern. Although depression may seem to be inevitable following a loss or a serious diagnosis, some individuals do not show intense distress, some show distress with more intensity and for longer periods than others, and some simply do not follow the pattern outlined in these models.

## Ecological Models

Though Livneh and Antonak (2005) found many stage models used to explain life crises and events, including disability, a variety of ecological models have also been proposed to explain the process of adjustment. Ecological models take into account the various differences in reactions, coping responses, and adjustment processed among individuals, even those with the same disability (Smedema et al., 2009). For example, Livneh and Antonak (1997) reviewed these models extensively and described four types of variables that contribute to the experience of adaptation to disability. These variables are those associated with the disability itself, variables associated with the affected individual’s sociodemographic characteristics, variables associated with the Individual’s personality, and those related to the physical and social environment. *Disability-related variables* are those directly related to the disability, including the cause, type, extent, chronicity, and visibility (to name a few possibilities). *Sociodemographic characteristics* are factors such as age, race, gender, socioeconomic status, and education level. Examples of *personality variables* include such characteristics as an individual’s attitudes, beliefs, self-concept, self-efficacy, and coping skills. The variables associated with the *environment* are the social and institutional supports available, such as disability-focused peer support and the accessibility of the person’s living, working, and leisure space, the physical settings in which the individual interacts with others, and the accessibility of the environment as a result of the disability (Livneh & Antonak 1997).

Another item of importance in ecological models is the set of outcome variables. These variables include the person’s functional status, *QOL*, and medical status. As explained by Livneh and Antonak (1997), *functional status* reflects the individual's ability to function in all aspects of his life (e.g., self-care, profession, housework). *QOL* is the degree of the individual’s assessed satisfaction with his life, the degree of acceptance of disability, and the level of emotional or psychological distress. *Medical status* is the presence of complaints such as pain and other symptoms, medical stability, and survival.

Another ecological model, one developed by Bishop (2005a, 2005b), is the disability centrality model. In this model, adaptation to disability is emphasized through its relationship to QOL. The four components of Bishop’s model are satisfaction, perceived control, the impact of the disability and its treatment, and the importance of each of these areas of life to the person experiencing a disability. Considering the earlier examples of the individual born with a disability and an individual acquiring one later in life, whether the disability is congenital or acquired is an important distinction in the process of coping and adaptation. Research suggests that individuals born with a disability will exhibit a self-identity and body image similar to their peers without disability, while those acquiring a disability both experience and require a dramatic shift in identity and self-esteem (Charmaz, 1983; Livneh & Antonak, 1997; Wright, 1983). The disability centrality model combines QOL with adaptation to disability, offering a holistic view of an individual’s life and how a disability may affect it. While considering the individual’s life and how a disability may affect it, while considering the individual’s control over and satisfaction with life. QOL is considered a subjective measure of satisfaction across multiple domains of life (Bishop, 2005a).

According to Bishop (2005a), satisfaction is the overall sense of well-being or QOL, which is central to the individual’s experience. Perceived control is the individual’s ability, or presumed ability, to control aspects of the disabling condition and its effects. This includes schedules of treatments, functional limitations and abilities, mood alterations, medication administration, and any other interventions that the individual can control. The *impact of the disability and its treatment* on different aspects of the individual’s life is also an important consideration in the disability centrality model. Finally, the actual *importance* of different aspects of the life of a person with disability will affect how much they will influence the overall QOL. Together, these may contribute to three outcomes: a change in the importance of certain areas of life, a change in control over the disability and its effects, or no change at all, with a person experiencing similar QOL as before the onset of disability (Bishop, 2005a). For instance, a man acquiring a traumatic brain injury through an accident, after successful rehabilitation and coping, may find that he is as happy with his life as he was before. He may experience perceived control over his life that mirrors his life before his accident, such as going to work, having relationships, and enjoying movies on the weekend. He may have been able, with accommodations and rehabilitation, to minimize the impact of his injury, allowing him to fully participate in his life as he did before, And, finally, he may not place great importance on the fact that he now requires accommodations such as digital reminders and an adapted driving system in his car. These factors contribute to his QOL being much as it was before.

While there are many models that have been developed to more fully understand the dynamic and multifaceted process of coping with and adjusting to disability, it is important to recognize the complexity of this process, including acknowledging that not everyone reaches a final or optimal state of adjustment or coping with disability (Wright, 1983; Smedema et al., 2009). Disability is a life occurrence that is intricately and differently experienced by each person, even when two people receive similar disabilities, diagnose, or treatments. These models provide a framework for understanding, studying, and better serving individuals with disabilities, with a goal of a successful and favorable QOL for all.

# Clinical Implications, Evidence-based Practice, and Measurement

The philosophy of evidence-based practice (EBP) isthat clients and consumers of any healthcare system should receive the best care available to them, based in scientific research (Chronister, Chan, Cardoso, Lynch, & Rosenthal, 2008). In the fields concerned with service to people with disabilities. EBP is important so that people with disabilities receive the best interventions possible and so that they can make self-determined and informed choice. These reasons are supported by the principles of non-malfeasance justice, and autonomy, which underpin rehabilitation services in the United States (Chan Cardoso, & Chronister, 2009).

There are many EBP clinical interventions that have been successfully used to support individuals with disabilities, which are theoretically based in somatopsychology, stage models, andecological models. For example, Wright suggested that counselors preparing individuals with disabilities to cope with the particular challenges affecting them should emphasize positives such as what a person *can* do, areas in life in which they *can* participate, and that the individual can not only lead a meaningful and productive life but also have a role in shaping it. Counselors can implement such interventions as role-play, exploration of values and value changes, and real-life experiences with another person with a similar disability who may serve as a peer (Wright, 1983).

Stage-basedinterventions include treating depression, anger, hostility, and frustration. People with disabilities have higher occurrence of depression than those without disabilities (Egede, 2007) and research has shown support for the EBP of cognitive behavioral therapy (CBT ) in addressing depression (Hoffman, 2012). CBT interventions such as assisting individuals to reflect on their depressive symptoms, alter their mood through changing thought patterns, and reframing disability more positively, are useful in facilitating successful coping and adaptation and have been linked to reducing depression and increasing QOL (Gandy, Karin, Fogliati, McDonald, Tivov, & Dear, 2016). Anger, hostility, and frustration can be addressed through the interruption and challenge of irrational beliefs (e.g.,a counselor working with the individual to work through thoughts such as, “I can no longer work." when working would be possible with accommodations), training directed at managing such beliefs, role-playing, and behavioral modification (Livneh & Antonak, 1997).

Livneh and Antonak (2005) also suggest interventions such as exploring feeling about and psychoeducation regarding the individual's disability as well as organizing both peer and family support for the individual. Peer support, or the notion of peoplewith disabilities, providing support to individuals with similar disabilities, has been found to be an EBP (Brock & Huber, 2017) and can aid in teaching adaptive skills for successful community integration to overcome the harmful effects of thedisability on self-esteem (Livneh & Antonak, 2005).

Vocational rehabilitation is, historically, a primary focus of clinical work with people with disabilities and is effective because of the centrality of work to the physical and mental health of all individuals including those with disabilities (Strauser, Tansey, & O'Sullivan, 2015). Assisting individuals to learn vocational skills through the EBP of motivational interviewing and establishing a working alliance can facilitate the understanding of how the disability, accommodations and work readiness affect employability (Strauser et al., 2015).

As there have been numerous EBP interventions for coping and adapting to disability there have also been numerous measurement instruments created to measure adaptationto an coping with disability (Livneh & Antonak, 2005). Measurement of adaptation and coping is useful for practitioners and researchers alike, as well as in EBP,to understand the processes that individuals go through when experiencing a disability and to best serve clients with disabilities. The psychometric soundness of instruments is necessary to facilitate high-quality research (Livneh & Antonak, 2005).This chapter will not describe specific measurement instruments in detail, but for descriptions of instrument designed to measure coping and adaptation for Use in research and EBP, see Folkman and Moskowitz (2004), Livneh and Antonak (2005), and Chan, Cardoso, and Chronister (2009). Many instruments measuring coping and adaptation are used in research, such as the research described in the next section.

# Research Related to Coping and Adaptation

## Somatopsychology

Research has found that many personal and environmental factors are important to the process of acceptance of disability. Li and Moore (1998) found thevariables of age marital status, and income to be positively correlated, with acceptance of disability. Further, they found that people with congenital disabilitieswere much more accepting than those who had acquired disabilities later in life. They also found that individuals who experience pain were less accepting of theirdisability, while individuals with higher levels of self-esteem and emotional support were more accepting of their disability. Leandro and Castillo (2010) studied the relationship between coping style and personality, anxiety and depression and discovered that coping was an interaction of the circumstances of the situation, personality traits, and coping styles employed. The result supported the notion that the person- environment interaction is an important part of coping and adjustment to disability.

In a 2013 study by Nario-Redmond, Noel, and Fern, individuals with disabilities who identified as being a person with a disability were more likely to experience pride value their experience as a person with a disability and work for positive social change than those who did not incorporate their disability into their identity. Further, individuals who identified as being a person with a disability were also less likely to minimize or deny the stressful effect related to their disability. Appraisals of the meaning of disability, in this study, were dependent on the appreciation and positivity that individuals placed on their own experiences.

## Stage Models

Limited empirical evidence supports stage models (Smedema et al., 2009) and evidence from studies conducted using them has been mixed. Livneh and Antonak (1991), in a study on psychosocial adaptation to physical disability, found limited evidence indicating that adaptation is a continual process with gradual change. Acknowledgment of disability was the factor found to be most related to adjustment to disability, pointing more to disability acceptance theory than any stage theory. Martz (2004) studied stage models as they relate to the future-time orientation of individuals with SCI. When faced with the trauma of a disabling experience, people often experience a lack of future time orientation, thinking perhaps their lives are shortened because of onset of a disability or simply having an inability to think in future terms. In Martz's study, the question was whether the eight reactions in Livneh's (1986a) stage model predicted variance in future-time orientation. Shock, depression, and acknowledgement of disability most significantly predicted the lack of future-time orientation. These results, in general, supported the stage model especially with regard to future-time orientation.

## Ecological Models

Empirical study of ecological models often explains the difference in reaction and coping and adjustment processes experienced by people with similar disabilities (Livneh & Antonak 1997). The empirical evidence covered here is focused on life satisfaction and adjustment to disability and therefore centers around the disability centrality model. Bishop (2005b) studied college students with disabilities and their adjustment and found support for his model, with a positive correlation between individuals' adaptation and their QOL. The more adapted students were to their disabilitythe higher they rated their QOL.

A study conducted by Mackenzie and colleagues (2015) examined the disability centrality model and QOL and adaptation for people with traumatic brain injury (TBI) and found that life satisfaction and the amount of perceived control individuals experienced mediated the effect of the TBI on the participants' QOL. The implications of the study were that serving individuals with disabilities requiresperson-centered approach. Providing person-centered services means that clinicians have an understanding that, though they may have two clients with the same disability such as TBI, these two clients may be affected by their TBI in very different ways. The TBI and what it means to these individuals, its impact on their lives, and their perceived QOL may vary significantly (Mackenzie, Alfred, Fountain, Combs 2015).

In a longitudinal study using participants with SCI by Krause (1992a, 1992b), Krause & Crewe (1991), and Krause and Dawis (1992), adaptation to disability was found to be a multidimensional construct involving measures of survival and medical stability, work activity and economic satisfaction, and general self-reported life satisfaction. Some important findings in this study were that employed individuals showed not only higher life satisfaction but also better health and that level of adjustment continued to improve over time and reflected gains in work. finances, and life satisfaction as well as decreased use of medical services (Livneh & Antonak 1997).

The research base is growing in the fields of social psychology, rehabilitation psychology, and related fields that serve individuals with disabilities. This research is vital to the provision of quality, ethical, and individualized services to people with disabilities, leading to better well-being outcomes, including QOL and life satisfaction.

# Conclusions

This chapter has discussed many complex constructs relating to coping with and adjustment to disability. While the models outlined in the chapter are useful for understanding a portion of the experience of people with disabilities and their coping and adjustment process, these reactions are not universal and not always experienced in an orderly sequence (Livneh 1986a; Livneh & Antonak 1997). Both coping and adaptation are multidimensional, complex processes affected by many factors and influenced by the person with the disability, the stress related to the disability, and a myriad of contextual factors. The ultimate goals of all people with disabilities are good psychosocial outcomes and a high QOL. Since coping can be a mediator between the nature, progression, and duration of disability and successful outcomes, coping skills are important for professionals working with individuals with disabilities to understand, study, and communicate to clients and their families. Future studies, as well as clinical work, would do well to focus efforts on the many aspects of the interaction between the person and the environment that make up a person's life space and affect their coping with, adjustment to, and acceptance of disability.

# References

Adelman, C. (1993). Kurt Lewin and the origins of action research. *Educational Action Research*, I,7-24.

Bishop, M. (2005a). Quality of life and psychosocial adaptation to chronic illness and acquired disability: A conceptual and theoretical synthesis. *Journal of Rehabilitation*, 71(2), 5-13.

Bishop, M. (2005b). Quality of life and psychosocial adaptation to chronic illness and acquired disability: Preliminary analysis of a conceptual and theoretical syntheses. *Rehabilitation Counseling Bulletin*, 48, 219-231.

Brock, M., & Huber, H. (2017). Are peer support arrangements an evidence-based practice? A systematic review. *Journal of Special Education*, 51(3), 150-163. 002246691770818.

Charmaz, K. (1983). Loss of self: A fundamental form of suffering in the chronically ill. *Sociology of Health and Illness*, 5, 168-195.

Chronister, J., & Chan, F. (2007). Hierarchical coping: A conceptual framework for understanding coping within the context of illness and disability. In E. Martz & H. Livneh (Eds.), *Coping with chronic illness and disability: Theoretical, empirical, and clinical aspects* (pp. 49-71). New York, NY: Springer Science & Business Media.

Chronister, J.A., Chan, F., Cardoso, E., Lynch, R., & Rosenthal, D.A. (2008). Evidence-based practice movement in health care: Implications for rehabilitation. *Journal of Rehabilitation*, 74(2), 6-16.

Dembo, T., Leviton, G.L., & Wright, B.A. (1956). Adjustment to misfortune: A problem of social-psychological rehabilitation. *Artificial Limbs*, 3, 4-62.

Dunn, D. (2015). *The Social psychology of disability*. New York, NY: Oxford University Press.

Egede, L.E. (2007). Major depression in individuals with chronic medical disorders: Prevalence, correlates and association with health resource utilization, lost productivity and functional disability. *General Hospital Psychiatry*, 29, 409-416.

Folkman, S., & Moskowitz, J.T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 75, 745-774.

Freud, S, (1894). The neuro-psychoses of defense. In: *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 3. Pp. 45-61). London, UK: Hogarth Press, 1964.

Gandy, M., Karin, E., Fogliati, V.J., McDonald, S., Titov, N., & Dear, B. L. (2016). A feasibility trial of an Internet-delivered and transdiagnostic cognitive behavioral therapy treatment program for anxiety, depression, and disability among adults with epilepsy. *Epilepsia*, 57, 1887-1896. doi: 10.1111/epi.13569

Gardner, H. (1987). *The mind’s new science: a history of the cognitive revolution*. New York, NY: Basic Books.

Hoffman, S. (2012). The efficacy of cognitive behavioral therapy: a review of meta-analyses. *Cognitive therapy and research*, 36, 427-440.

Krause, J. S. (1992a). Adjustment to life after spinal cord injury: A comparison among three participant groups based on employment status. *Rehabilitation Counseling Bulletin*, 35, 218-229.

Krause, J. S. (1992b). Longitudinal changes in adjustment after spinal cord injury: A fifteen-year study. *Archives of Physical Medicine and Rehabilitation*, 73, 564-568.

Krause, J. S., & Crewe, N. M. (1991). Chronological age, time since injury, and time of measurement: Effect on adjustment after spinal cord injury. A comparison among three participant groups based on employment status. *Rehabilitation Counseling Bulletin*, 72, 91-100.

Krause, J. S., & Dawis, R. B. (1991). Prediction of life satisfaction after spinal cord injury: A four-year longitudinal approach. *Rehabilitation psychology*, 37, 49-59.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York, NY: Springer Publishing Company.

Leandro, P. G., & Castillo, M. D. (2010). Coping with stress and its relationship with personality dimensions, anxiety and depression. *Social and Behavioral Sciences*, 5, 1562-1573.

Lewin, K. (1935). *A dynamic theory of personality*. New York, NY: McGraw-Hill.

Lewin, K. (1936). *Principles of topological psychology*. New York, NY: McGraw-Hill.

Lewin, K. (1938). *The conceptual representation and the measurement of psychological forces*. Durham, NC: Duke University Press.

Li, A., & Moore, D. (1998). Acceptance of disability and its correlates. *Journal of Social Psychology*. 138, 13-26.

Livneh, H. (1986a). A unified approach to existing models of adaptation to disability. Part 1: A model of adaptation. *Journal of Applied Rehabilitation Counseling*, 17(1), 5-16.

Livneh, H. (1986b). A unified approach to existing models of adaptation to disability. Part 2: Intervention strategies. *Journal of Applied Rehabilitation Counseling*, 17(2), 6-10.

Livneh, H. (2016). Quality of life and coping with chronic illness and disability: A temporal perspective. *Rehabilitation Counselling Bulletin*, 59, 67-83. doi: 10.1177/0034355215575180

Livneh, H., & Antonak, R. F. (1991). Temporal structure of adaptation to disability. *Rehabilitation Counseling Bulletin*, 34(4), 198-320.

Livneh, H., & Antonak, R. F. (1997). *Psychosocial adaptation to chronic illness and disability* (1st ed.). Gaithersbury, MD: Aspen Publisher.

Livneh, H., & Antonak, R. F. (2005). Psychosocial adaptation to chronic illness and disability: A primer for counselors. *Journal of Counseling and Development*, 83, 12-20.

Mackenzie, A., Alfred, D., Fountain, r., & Combs, D. (2015). Quality of life and adaptation for traumatic brain injury survivors: Assessment of the disability centrality model. *Journal of Rehabilitation*, 81, 9-20.

Martz, E. (2004). Do reactions of adaptation to disability influence the fluctuation of future time orientation among individuals with spinal cord injuries? *Rehabilitation Counseling Bulletin*. 47, 86-95.

Miller, G. (2003). The cognitive revolution: A historical perspective. *Trends in Cognitive Sciences*, 7, 141-144.

Nario-Redmond, M. R., Noel, J. G., & Fern, E. (2013). Redefining disability, re-imagining the self: Disability identification predicts self-esteem and strategic responses to stigma. *Self and Identity*, 12, 468-488. doi: 10.1080/15298868.621118

Shapiro, J. P. (1993). *No pity: People with disabilities forging a new civil rights movement*. New York, NY: Three Rivers Press.

Smedema, S. M., Bakken-Gillen, S. K., and Dalton, J. (2009) Psychosocial adaptation to chronic illness and disability: Models and measurement. In: F. Chan, E. Da Silva Cardoso, & J. A. Chronister (Eds.). *Understanding psychosocial adjustment to chronic illness and disability: A handbook for evidence-based practitioners in rehabilitation* (pp. 51-68). New York, NY: Springer.

Strause, D. R., Tansey, T., & O’Sullivan, D. (2015). Career and vocational counseling. In: F. Chan, N. L., Berven, & K. R. Thomas (Eds.). *Counseling theories and techniques for rehabilitation and mental health professionals* (2nd ed., pp. 335-354). New York, NY: Springer.

Wortman, C. B., and Silver, R. C. (1989). The myths of coping with loss. *Journal of Counseling and Clinical Psychology*, 57, 349-357.

Wright, B. A. (1983). *Physical disability: A psychological approach* (2nd ed.). New York, NY: Harper & Row.