# A Therapeutic Approach for Treating Chronic Illness and Disability Among College Students



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Research in chronic illness and disability (CID) in college students has demonstrated that students with disabilities encounter more difficulties psychosocially than their nondisabled counterparts. Subsequently, these difficulties impact the ability of these students to successfully adapt. Using the illness intrusiveness model in combination with cognitive behavioral therapy (CBT), the authors propose therapeutic interventions that could be taken with these students to enhance their overall well-being, adaptation and academic success. The authors also provide final thoughts with directions for future research and application.

Keywords: chronic illness, disability, illness intrusiveness model, cognitive behavioral therapy, college students with disabilities

Chronic illness and disability (CID) impact more than 35 million Americans, often interfering with their everyday life (Livneh & Antonak, 1997). The condition is typically accompanied by a prolonged course of treatment, an often uncertain prognosis, constant and intense psychosocial stress, increasing interference with the performance of daily activities and life roles, and conflict with family and friends (Livneh & Antonak, 1997). Approximately 11% of undergraduate students reported having a disability in 2008 (National Center for Education Statistics, 2011) and 88% of colleges are continuing to enroll students with disabilities (The Princeton Review, 2011). In addition to adjusting to the presence of a disability, adjustment to independent living and beginning academic courses at an undergraduate institution can be challenging for someone with a chronic illness or disability.

The severity of the disability and its functional limitations do not always correlate in a uniform pattern with coping and adjustment (Lustig, Rosenthal, Strauser, & Haynes, 2000). Similarly, disability may include permanent and significant changes in an individual's body appearance, functional capacities, body image and self-concept (Lustig et al., 2000). This variable, typically referred to as psychosocial adaptation, becomes compounded among college students and deserves further investigation. In order to better understand the adaptation process, conceptualize cases, and provide the most effective services to college students with disabilities, it is important for researchers to test comprehensive models specifically designed to aid in the interpretation of illness-induced interference. Similarly, counselors need to understand and implement empirically supported interventions, techniques and related strategies to assist individuals with disabilities in the transition to higher education.

Currently, there is a dearth of information pertaining to the adjustment of young people that can be applied to college students with chronic illness and disabilities. Additionally, theories within the rehabilitation, quality of life, and counseling literature are used to translate theory into practice. After describing the nature of

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transitions individuals face upon entering college, discussing current legislative policies, and examining identity formation, this article provides an overview of the illness intrusiveness model and theoretical framework for CBT. Next, the article offers strategies for implementing an integrated model, including elements of illness intrusiveness and CBT, with the college population. Treatment strategies and intervention techniques are also described. Finally, accommodations, the importance of social support, and future directions are addressed.

## **Identity Formation and College Transition**

Identity formation typically continues during the late teens and early 20s (Luyckx, Schwartz, Soenens, Vansteenkiste, & Goossens, 2010), which also is the time when youth attend or transition to higher education. During this time, the individual is still a child on one hand, yet an adult on the other hand. According to Wright (1983), this creates an overlapping situation in which the adolescent with the disability is not only struggling with the problematic overlap of "child" and "adult," but also that of "normal" and "disabled." This is a complex time filled with instability and uncertainty regarding the years ahead. A synthesized sense of identity can provide beneficial effects on an individual's adjustment (Luyckx et al., 2010), and a comprehensive sense of self can be facilitated through psychotherapeutic interventions. Also, the process of adaptation is multidimensional, complex and subjective (Smart, 2001). Consequently, a comprehensive framework for assessing and intervening is critical for fostering positive counseling outcomes.

Preparing someone for a career is a task that should not be taken lightly, but given the utmost attention. *Career* can be defined as the "time extended working out of a purposeful life pattern through work undertaken by the person" (Sampson, Reardon, Peterson, & Lenz, 2004, p. 6). This definition helps clarify the idea that a career is an activity people engage in regularly through a lifetime. Employment opportunities for this population are already limited by job choice (variability), available hours, and reduced salary (Schmidt & Smith, 2007). Also, enhancing potential job opportunities for individuals with disabilities is beneficial, as research has shown that the onset of a disability can negatively influence one's vocational identity—potentially leading to poor adjustment, limited self-direction and goal setting, and lower career development (Enright, Conyers, & Szymanski, 1996; Skorikov & Vondracek, 2007; Yanchak, Lease, & Strauser, 2005).

According to Kirsh et al. (2009), with the economy becoming increasingly knowledge-based, and as the forces of globalization transform to eliminate entry-level positions, people with limitations in cognitive function may become increasingly marginalized. This is not to say that this population can maintain only entry-level positions, but to reiterate that as there is an increase in students with disabilities attending universities, there is an increase in job requirements, qualifications and performance levels required by all populations. Enhancing education and overall college experience with counseling will assist these students as they acquire new skills to use for the rest of their lives.

# **Need for Psychotherapeutic Interventions**

In the past 20 years, there has been a trend of more persons with disabilities pursing higher education. Based on the National Organization on Disability *Harris Survey of Americans with Disabilities* conducted in 2000, there was a marked increase in persons with disabilities having graduated from high school (77%) compared to those in 1986 (61%). Based on several legislative and social policies implemented in the 1980s (Canadian Human Rights Act, 1985) and 1990s (Individuals with Disabilities Education Act, 1997 [IDEA]), an estimated 8–18% of students in higher education are students with disabilities (Sachs & Schreuer, 2011). Furthermore, persons with disabilities entering postsecondary education are making significant progress toward successful completion of their program of studies (Stodden & Whelley, 2004). This is why educators, administrators, and policymakers are working to improve services while also providing accommodations, interventions, and

support services in postsecondary settings (Barazandeh, 2005; Brinckerhoff, Shaw, & McGuire, 1992; Dowrick, Anderson, Heyer, & Acosta, 2005; Dutta, Kundu, & Schiro-Geist, 2009; Johnson, 2006; Swanson & Hoskyn, 1998; West et al., 1993). Examples of such accommodations include transportation, separate locations for test taking, access to private study rooms, and extended time on exams.

With the reauthorization of the IDEA in 1997 (PL 94-142), there was an increase of higher expectations upon quality preparation to postsecondary education and employment for persons with intellectual disabilities. The Americans with Disabilities Act (ADA) sought to provide reasonable accommodations to ensure equal access to learning and work environments (Jacob & Hartshorne, 2007). The vocational rehabilitation system exists to provide assistance to individuals with disabilities seeking employment. This can be a good support system for those interested in higher education, but only supports eligible consumers (Gilmore & Bose, 2005). While these recent pieces of legislation have been incredibly beneficial and have encouraged individuals and professionals alike to actively engage in advocacy, they do not specifically address the access or right to counseling as an appropriate accommodation.

As students transition to postsecondary education, fear of the unknown affects not only those transitioning, but the people around them (e.g., professors, administrators or counselors) as they experience a change in roles. Parents, for instance, may want to protect their child from the risks of the larger world, and limit them by choosing self-contained and protected programs (Stodden & Whelley, 2004). This approach may deprive students of the opportunity for further education. With optional counseling specifically designed for those individuals with disabilities transitioning into the next phase of life, this may be reassuring not only for the student, but also for the student's primary support system. One counseling model to implement in such situations is the illness intrusiveness model.

#### Illness Intrusiveness Model: Theoretical Framework

The illness intrusiveness model was developed based on the idea that illness-induced interference, in addition to interests and valued activities, compromises one's psychological well-being—ultimately contributing to emotional distress. It is derived from a variety of sources such as functional losses, treatment side effects, disease and treatment-related lifestyle disruptions, and disease-related anatomical changes (Devins, 2010). The model postulates that when there is a decrease in positively reinforcing outcomes from valued activities and limited personal control (e.g., mood level) to obtain positive outcomes and avoid negative ones, significant adaptive changes and coping demands occur (Devins, 2010).

By examining the five factors of disease—that is (1) treatment requirements, (2) personal control, (3) nature of life outcomes, (4) psychological factors, and (5) social factors—one can inspect the level of participation in valued activities, also known as illness intrusiveness. Illness intrusiveness may serve or act as a mediating variable by which unbiased circumstances of disease and treatment influence psychosocial well-being and emotional distress. Specifically, illness intrusiveness is based not only on the experience of the person, but also the psychological characteristics based on objective and subjective concepts (Roessler, 2004).

This model posits that social and psychological factors have a direct effect on life outcomes. Time spent transitioning into college is heavily influenced by social factors, which can create positive or negative experiences in the individual. If the social factors weigh heavily on the individual's psychological factors in a maladaptive way, the person's coping abilities and adaptation skills may be compromised and lead to undesirable outcomes. The model also encompasses the idea of locus of control, presented as personal control of self-efficacy (similar to what was described earlier in this article), the idea being that low levels of personal control result in learned helplessness (Roessler, 2004). Furthermore, the theoretical framework hypothesizes

that intrusiveness mediates the psychosocial effect of chronic conditions. Indirectly through the effects on intrusiveness, illness and treatment variables are believed to impact subjective well-being (Bettazzonie, Zipursky, Friedland, & Devins, 2008). Incorporation of the illness intrusiveness model can assist professional counselors and clients alike in laying out a clear path of focus (i.e., the five factors of disease; Roessler, 2004) while simultaneously increasing one's coping and adaptation skills, as well as external allocation of self-efficacy. After describing an assessment tool and following a review of ways in which the illness intrusiveness model has been applied to specific illnesses and populations, the authors provide a rationale for implementing this model among college students with disabilities.

## **Application of the Illness Intrusiveness Model**

Previous research suggests that applying various components of the illness intrusiveness model (e.g., examination of domains) in end-of-stage renal disease clients is effective in objectively measuring varying modes of treatment (e.g., transplantation, dialysis; Devins, et al., 1983). Furthermore, the levels of illness intrusiveness directly affected the psychosocial impact of the condition. Additionally, it was noted that severity levels of hyperhidrosis shared a significant positive correlation with scores on the Illness Intrusiveness Rating Scale (IIRS) (Devins et al., 1983). Intrusiveness scores were weakly related to efforts to control the condition (i.e., medications and ointments), which is indicative of the value of knowledge of self-care techniques and action-based knowledge (Roessler, 2004). Empirical support also has pointed to illness intrusiveness as a precipitant for depression and for feeling a loss of control. This has been observed in persons with arthritis, cancer, diabetes and multiple sclerosis (Roessler, 2004). Furthermore, Devins (2010) notes that levels of illness intrusiveness vary according to illness severity, and weigh in differently for valued activities. This is of particular importance when collaborating therapeutically with college students with disabilities, since there are a wide range of disabilities (e.g., learning disabilities, physical disabilities, mental illness) and they vary in severity (e.g., psychiatric symptoms, functional ability). Subsequently, even among college students with disabilities, there is a wide array of differences; one would expect a shift in valued activities based on transitioning (e.g., social support, school involvement) and disability interference.

The illness intrusiveness model is ideal for working with college students with disabilities because it focuses on improving psychosocial adaptation outcomes. Specifically, it stresses the effect of psychological, social and environmental variables on the interpretation of the disease (Roessler, 2004). This is essential knowledge for implementing effective therapeutic interventions for this population, because often the transition into the college atmosphere impacts the interpretation of the individual and the disability. Additionally, the theoretical framework helps to estimate the effect of disease interpretation and the intrusiveness of treatment factors (Roessler, 2004).

As mentioned previously, the college student population typically struggles to form self-identity in terms of a developmental framework, and intrusiveness is presented in this model as both an objective and subjective concept. This is noteworthy since these individuals are still processing their identity, their life goals, and their viewpoints. With a helping professional, they can work collaboratively to change perspectives that may be distorted or need reframing. Finally, the illness intrusiveness model implies that intrusiveness has a direct effect on both personal control and life outcomes (Roessler, 2004). Through prevention or early intervention, college students with disabilities will realize and begin to feel empowered as they recognize their ability to take control of their lives. This can further be reinforced by seeing positive outcomes almost immediately when collaborating with the practitioner. Before discussing how the illness intrusiveness model can be integrated with other treatment approaches and how it can be applied to college students with disabilities, it is useful to provide a brief history of general psychotherapy with disabled persons and core principles of CBT with this population.

## **History of Counseling with Persons with Disabilities**

Over the past several decades, four basic approaches to adjustment services (e.g., work acclimation) have emerged in disability literature. While the approaches are not mutually exclusive, each offers a new viewpoint on adjustment for persons with disabilities and sheds perspective on both the client and practitioner.

The work acclimation approach utilizes the psychological principle that the greater degree to which a current environment resembles a future environment, the more likely an individual would behave in the same manner in the future environmental setting. Programs utilized almost exclusively in work centers were pay incentives, peer and supervisory work pressure, production rate feedback, lead workers, and status-promotion incentives.

The problem-solving approach to adjustment services represents the second model. It begins by obtaining baseline measures of the problem and delineates adjustment services to any treatment and training modalities necessary to ameliorate the problem, thus allowing the student to succeed academically and vocationally. It is within this model that the approach employs behavioral counseling and behavioral modification techniques that can be applied in multiple settings or situations (Couch, 1984). For example, in a university setting, students with disabilities can be seen for brief or extended psychological services, in which baseline and outcome data are used to encourage behavioral modification and monitor intrusiveness.

In the developmental approach, clients are viewed as capable, problem-solving individuals, fully qualified to accept responsibility for life and determine personal direction. They are taught self-responsibility and self-potency, as well as beliefs, values, and skills, all of which will enable them to solve problems, maintain a sense of self-worth, and enhance personal identity.

Finally, the education approach takes on a different perspective and focuses on skill deficits. This helps the client to engage in remedial education, learn about available resources, and conquer tasks. Examples of such tasks include acquiring a driver's license or earning a college degree (Couch, 1984). A focus on skill deficits blends well with the theoretical origins of CBT. The following section briefly describes the framework of CBT.

#### Theoretical Framework for CBT

Three main goals set forth in the field of rehabilitation counseling pertain to affective goals, cognitive goals, and behavioral goals (Parker, Szymanski, & Patterson, 2005). This is similar to taking a holistic or ecological approach in the field of counseling. It is important to treat not just specific aspects of individuals, but to treat the individuals as humans in their entirety. Thus, when addressing college students with disabilities, it could be important to integrate the illness intrusiveness model with that of CBT. The model itself enables the counselor to apply cognitive and behavioral interventions in order to reduce illness intrusiveness strategically, which could encourage the client to participate in valued activities, redefine personal goals, and restructure irrational beliefs related to intrusiveness (Roessler, 2004).

Furthermore, the counselor is able to provide knowledge of self-management and self-care skills, which is facilitated by task-focused coping and problem-solving skills, both of which are central constructs from CBT and can lead to a positive impact on illness intrusiveness. Finally, by including personal control or self-efficacy as critical variables in the illness intrusiveness model, and as a way to better understand life outcomes, individuals are supported in impacting their perceived self-control on life outcomes related to educational achievement and overall well-being (Roessler, 2004).

#### **Integrating the Illness Intrusiveness Model and CBT**

Prior to discussing techniques and skills that can be utilized within this framework and among this population, the present article discusses the importance of incorporating specific concepts or tasks within the realm of a client's goals. Examining client outcomes of counseling interventions is necessary in the field of mental health and other related fields to acquire knowledge on effective treatments, obtain financial funds, establish accountability, and achieve long-term positive results. In addition to cognitive behavioral techniques, client variables with this population may impact the outcome of therapy. For example, Ju (1982) discovered that clients having 12 years of education do not seem to benefit from receiving information and exploring feelings. Rather, they tend to benefit from counselors who predominantly listen attentively and focus on the facilitation of client expression and concern. Additionally, clients with more than 12 years of education tend to reap the most benefits from counselors who not only emphasize the processing of information, but also share personal values, opinions and experiences with the client. This has potential treatment implications from the start of counseling, because to be a viable candidate for collegiate studies, the individual has to successfully complete 12 years of prior education (either formally or in an alternative manner). As students attending school will always vary widely in age, this factor should be kept in the forefront of the counselor's mind.

Rehabilitation counseling has a history of being goal directed and behaviorally oriented as opposed to a psychodynamically oriented treatment (Ju, 1982). Similarly, a defining characteristic of CBT is the proposal that symptoms and dysfunctional behaviors are often cognitively mediated; thus, modifying dysfunctional thinking and beliefs can lead to improvement (Butler, Chapman, Forman, & Beck, 2006). By following a psychoeducational model, emphasizing therapy as a learning process that includes acquiring and practicing new skills, learning new ways of thinking, and obtaining more effective ways of coping (Corey, 2005), students with disabilities can benefit from improved adjustment to the college atmosphere.

A central role in CBT is the treatment rationale, which provides clients and counselors with a model of etiology and treatment (Addis & Carpenter, 2000). It is within this framework that the counselor teaches the client to identify, evaluate and change dysfunctional thinking patterns so therapeutic changes in mood and behavior can occur (Padesky & Greenberger, 1995). Additionally, it is imperative to address an individual's metacognitions, or understanding of self-knowledge, in order to grasp the process of cognition and its outcomes (Hresko & Reid, 1988).

Thomas and Parker (1984) remark on the need for effective counseling with persons with disabilities, identifying the following two main focuses: career and psychosocial issues. This only reiterates the need for therapeutic intervention for this specific population who is trying to further education in order to obtain chosen careers while simultaneously adapting to a new lifestyle and appropriately managing the disabilities. It is by weaving together the major tenets presented in CBT (e.g., thoughts, moods, behaviors, biology, and environment; Padesky & Greenberger, 1995), with the five factors of disease (Roessler, 2004) in the illness intrusiveness model that practitioners will be better able to serve this population. This is not to say that all ten areas will need to be remedied or addressed for each individual seeking treatment. Rather, counselors need to be aware that each individual will have different needs to meet or areas to improve.

Akridge (1981) stated that psychological adjustment is an ongoing process of evaluating the self-in-situation to adaptation. A comprehensive self-assessment in the psychosocial domain is the process of summarizing one's satisfactions and dissatisfactions within the self and the personally relevant aspects of one's situation. This could be undertaken within the realm of the therapeutic alliance as the client and counselor are working collaboratively toward agreed-upon goals and a focus on improvement. One could suggest the completion of a prescribed homework assignment addressing the area needing further investigation. The client could

then experience an increase in self-confidence through exploring each domain, thus decreasing the impact of intrusiveness.

To begin treatment successfully, the counselor and client need to establish a positive, collaborative working relationship. Aaron Beck emphasized the quality of the therapeutic relationship as basic to the application of cognitive therapy (Corey, 2005). The core therapeutic conditions described by Carl Rogers in his personcentered approach are viewed by cognitive therapists as being necessary, but not sufficient, in producing optimal therapeutic effects (Corey, 2005).

The collaborative relationship is essential because it conveys to clients that they possess important information that must be shared to solve problems. Counselors employ general strategies and treatment models while clients are keepers of all the information about unique experiences—only clients can describe thoughts and moods (Padesky & Greenberger, 1995). This again enables clients to build self-esteem and feelings of self-worth so they begin to feel confident in skills and abilities in areas they may doubt. This in turn impacts the domains of career choice, personal control, life outcomes, and psychological and social factors.

In order to be successful at the collegiate level, one must possess sufficient organizational skills. When working with students with disabilities, it is important to address this topic and readdress it throughout the psychotherapeutic process. This approach is key to assist clients in learning to control the things they can in regards to homework assignments, readings, and note-taking, so that if something unexpected or overwhelming becomes more pertinent in unpreventable circumstances, clients will be able to recognize that they have done what they can to contain circumstances within their personal control.

This also relates back to the topic of increasing awareness of metacognition and the cognitive processes. For example, a student may begin to recognize trouble learning a particular topic or realize that there is a need to double-check written work. Similarly, a student may know to review all potential answers before choosing one as the correct option and understand the need to write a task down in order to remember it—essentially working to improve study skills (Hresko & Reid, 1988). Another concept or task that needs to be addressed with this population is that of appropriate accommodations within the university.

#### Accommodations

The Americans with Disabilities Act states that a disability is "a physical or mental impairment that substantially limits the individual in one or more major life activities" (Jacob & Hartshorne, 2007, p. 209). In such instances, in order for the students to receive and begin using the resources available within the setting and circumstances of the disability, they most likely will need to provide appropriate documentation. This may be an instance in which the therapist needs to take on a more pragmatic role and point the students to the designated resources so they can begin partaking in services. In addition, this simple task models advocacy for the individual. Once the client has taken the required steps to establish services, the practitioner will need to discuss with the client what kinds of services or accommodations may be needed, not only in the classroom, but also for transportation, living, studying, or choosing a career path. A client may need extra time taking tests, to meet with a class note-taker, or require special transportation or access within living space. Addressing organizational skills, as stated previously, may be a way to lead into the topic of study habits or assistance required in completing homework. Clients with mobility limitations or attention deficits may need instruction in specialized computer programs when required to write their thoughts on paper.

## **Altering Social Factors**

Another task or concept that could be discussed within the counseling sessions is social support outside of the therapeutic alliance. Counselors should discuss with the client what types of support have been used in the past, what has worked, what did not work, and what could be modified. In some cases, clients may rely solely on their family for social support while others may rely on both family and friends. It would be beneficial to discuss the client's preferred approach, to lay out the necessary steps, and to discuss the practicality of accomplishing the support. Some students may find it helpful to join various clubs or organizations, while others may wish to take part in a support group for persons with disabilities who are experiencing similar struggles. One option may be attending a counseling group offered at a university counseling center in which aspects of CBT and illness intrusiveness are addressed. Regardless of the outlet clients require to reach the most beneficial level of social support, they need a realistic understanding of the work required to reach the goal, a picture of what that process looks like, and a comprehensive understanding of why a good support system is necessary. This process will most likely be an ongoing learning experience for both the counselor and client as appropriate adjustments are made and learning and growth are facilitated.

Corey (2005) stated that the goal of CBT is to challenge the client to confront faulty beliefs with contradictory evidence that is gathered and can be evaluated (e.g., thought record). Another important aspect of CBT is goal setting. Padesky and Greenberger (1995) identified five key points about the importance of goal setting. First, setting goals helps identify what clients want to change, and provides guideposts to track progress. Charting such changes within the realm of the illness intrusiveness model can be done by utilizing the IIRS. This method helps the counselor gather baseline data at the onset of therapy, as well as monitor progress and present problems and symptoms.

Second, breaking general goals into specific goals simplifies the process into step-by-step plans for achieving general goals. Third, prioritizing goals helps the client and practitioner to decide which goals should be addressed first to provide the most beneficial outcome from therapy. Fourth, charting emotional changes helps monitor progress toward reaching goals. One can track changes based on emotional intensity and frequency, as well as specific mood-related symptoms. Finally, if the client is not making progress toward the goals, the counselor should consider breaking goals into even smaller steps, thus addressing the impediment to progress and considering changes in the treatment plan (Padesky & Greenberger, 1995).

One of the many reasons that agreement and clarity in goal setting is important is that regardless of individual differences, therapeutic outcomes are more apt to be positive when the counselor and client move toward the same goals (Ju, 1982). It is important that, when a client with specific disabilities makes progress toward and ultimately accomplishes each goal, reinforcement is applied by the practitioner. Reinforcement should be put into practice with intentionality and only when it promotes the attainment of skills and behaviors that the client needs to meet objectives. This skill needs to be used systematically rather than randomly (Thomas & Parker, 1984).

Other techniques that can be employed during the therapeutic process are that of Socratic questioning and activity scheduling. The first occurs by having the practitioner facilitate the telling and retelling of the story until opportunities for new meaning and story content develop (Corey, 2005). The use of Socratic questioning with students with disabilities enables these clients to realize they possess an understanding of their problems and preconceived notions, thoughts, or beliefs, and can alter them by elaborating and discussing matters further. In sum, the use of one simple technique could have a profound impact on illness intrusiveness factors such as personal control, social and psychological factors, and life outcomes.

Activity scheduling is not only another important aspect of CBT, but also an effective tool for decreasing illness intrusiveness. By engaging the client in planned activities, the client is encouraged to take an active role in life, as well as rediscover activities that may have previously been enjoyed. By discerning likes and dislikes, the client is able to increase personal insight and lower levels of depression. Activity scheduling also enables clients to see that they are capable of not just choosing the level and type of daily activities, but also seeing the big picture in choosing the direction of life outcomes. By realizing that they are able to control these tasks, the clients will also begin to reframe their locus of control from external to internal.

Finally, cognitive behavioral counselors aim to teach clients how to be their own therapist (Corey, 2005). As with any case, the hope is that the client can walk away from counseling and make use of skills acquired throughout the therapy process, applying them in daily living without therapeutic assistance. Whether treatment is permanently terminated or titrated down, the outcome will directly impact illness intrusiveness through treatment factors, feelings of personal control, life outcomes, and psychological and social factors.

While research within this specific population is lacking, the application of CBT among persons with intellectual disabilities has shown varied results. For example, Gustafsson et al. (2009) found weak correlations between behavioral therapy, CBT, and other forms of integrated support, while others (Oathamshaw & Haddock, 2006) showed that persons with intellectual disabilities and psychosis could link events and emotions, and differentiate feelings from behaviors—all skills necessary to engage in CBT. While effectiveness among those with intellectual disabilities may or may not be applicable to other types of disabilities, it is worthy to note that evidence exists. It would be beneficial to add to this evidence by supporting the use of CBT in combination with the illness intrusiveness model among students with disabilities transitioning into postsecondary education. Furthermore, by implementing this treatment modality among all college students with disabilities, researchers and counselors would be able to establish whether this model is effective with specific disabilities, cases in which it may not be as useful, and ways treatment can be modified or enhanced. Utilizing the authors' presented model, future research could aim to investigate treatment of different types of college students with disabilities (e.g., learning disabilities, psychiatric disabilities, attention deficit hyperactivity disorder [ADHD]) and examine the effectiveness, similarities, differences, or any future directions. Treatment may be implemented in both the individual and group setting, and individual changes should be monitored by means of the IIRS.

## Summary

The use of CBT among college students with disabilities transitioning into the college atmosphere could have a vast impact on illness intrusiveness. While, to the current authors' knowledge, no recent studies have looked at implementing this model and mode of treatment, it would be an area worth investigating. The convergence of an empirically supported model such as the illness intrusiveness model, as well as a theory having a preponderance of empirical evidence such as CBT, would be a solid foundation to begin implementation of therapeutic intervention.

The college student population will have to face many potentially problematic situations when transitioning into the world of continued education. Some struggles that may be encountered when assisting college students in transition who also have disabilities may relate to homework completion, organizational stills, appropriate accommodations (e.g., extended test taking time, use of a note-taker, use of assistive computer technology), transportation and living accommodations, and reliable social support systems. By addressing the above areas of concern, an efficacious treatment could be set into practice in order to adhere to professional and personal standards.

Kirsh et al. (2009) found that "disabled adults are twice as likely to be in a household with lower incomes, and disabled people of working age are more than twice as likely as nondisabled people to have no employment-related qualifications" (p. 392). This is an essential point when discussing the importance of secondary schooling and continued education for persons with disabilities. If the statistics show that disabled persons are twice as likely as those without disabilities to have no employment-related qualifications, then accommodating them in the transition to the college environment seems appropriate. It makes sense to aid others in engaging and succeeding at their endeavors rather than waiting for them to fail or not assisting in the process at all. Counseling intervention and prevention could benefit those who may be struggling to persevere on their own, and implementation of the illness intrusiveness model in combination with CBT may provide to incoming college students with disabilities the appropriate coping skills to transition adaptively to the next phase of their life.

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