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Disability Discourse: Overview and Critiques of the Medical and Social Models

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ABSTRACT
Over time, the meaning of disability has been understood in a variety of ways. The way in which disability is understood is important because the language people use to describe individuals with disabilities influences their expectations and interactions with them. For physical education teachers, philosophical orientation in regard to disability discourse can influence how they treat and interact with students with disabilities in their classes. Most recently, the medical and social models have been the two prominent models of disability discourse. The purpose of this article is to provide an overview of the medical and social models of disability discourse by comparing, contrasting, and critiquing the models. Further, we present practical examples using different hypothetical scenarios involving the same student with disabilities to depict how a teacher with a medical model orientation compared to a teacher with a social model orientation would interact and work with a student with a disability in physical education.

KEYWORDS
Adapted physical education; embodiment model; individuals with disabilities; medical model; physical education; social model; students with disabilities

Introduction

Historically, the meaning of disability has been understood in a variety of ways (Fitzgerald, 2006; LoBianco & Sheppard-Jones, 2008). Conceptualizations of disability are influenced by professional organizations and individuals who have the power or authority to establish definitions in society and are in command over the knowledge within a particular field (Brittain, 2004). These organizations and individuals can be referred to as the *cognitive authority* (Brittain, 2004). Throughout history, several disability models have undergone alterations or have been rejected due to perceptions of narrow-mindedness or prejudice (Donoghue, 2003). For example, the concept of disability was originally framed in religious discourses situated within the beliefs of Western Judeo–Christian society (Humpage, 2007). In this conceptualization, it was thought that disability was an act of a higher being and that disability presented itself as an opportunity for miracles to occur. The Judeo–Christian perspective on disability was displaced as medical and scientific knowledge expanded, and religious leaders were replaced by doctors and scientists as the "cognitive authority" in societal values and curing procedures (Humpage, 2007).

The way in which disability is defined is important because the language people use to describe individuals with disabilities influences their expectations and interactions with

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them (Barton, 2009). Over the past 50 years, the two prominent models of disability discourse have been the medical and social model (LoBianco & Sheppard-Jones, 2008). To those narratives, the purpose of this article is to provide an overview of the medical and social models of disability discourse by comparing, contrasting, and critiquing the models (Table 1). Further, we present practical examples using different hypothetical scenarios involving the same student with disabilities (Gabriela) to depict how a teacher with a medical model orientation compared to a teacher with a social model orientation would interact and work with Gabriela in physical education.

In this article, we describe characteristics of models of disability discourse that are prominent in society. It is not the intention of the authors to suggest that one model represents "good practice" while another represents "bad practice," or to suggest that only those situating themselves in one of the models are capable of teaching effectively. The overall picture of disability is not as simple as presenting a false dichotomy between two models (Mitra, 2006). Rather, it is the authors' intention to provide information and characteristics about each model and describe how those situating their perspectives toward disabilities within each of these models view and interact with individuals with disabilities.

The medical model

The medical model of disability discourse began when doctors and scientists replaced religious leaders as the *cognitive authority* in society (Humpage, 2007). Brittain (2004) suggested this role in society was gained through the medical field's ability to define illnesses and body parts as well as heal injuries and cure illnesses. The role of cognitive authority put the medical profession into the position to lead discourses with respect to many aspects of life that dealt with the body and mind, including disability (Brittain,

Table 1. Comparisons between the medical and social models of disability discourse.

Topic	Medical Model	Social Model
What is disability?	An individual or medical phenomenon that results from impairments in body functions or structures; a deficiency or abnormality	A social construct that is imposed on top of impairments by society; a difference
Access to treatment or services	Referral by diagnosis	Self-referral, experience driven
Targets of interventions	"Fixing" the disability to the greatest extent possible; "normalizing"	Social or political change in an effort to decrease environmental barriers and increase levels of understanding
Outcome of interventions	Normalized function; functioning member of existing society	Self-advocacy, changes in environment and understanding, social inclusion
The agent of remedy	The professional	Can be the individual, an advocate, or anyone who positively affects the arrangements between the individual and society
Effects on individuals who are typically functioning	Society remains the same	Society evolves to be more inclusive
Perceptions toward individuals with disabilities	The individual is faulty	The individual is unique
Cognitive authority	Scientists and doctors	Academics and advocates with disabilities
Perception of disability	Being disabled is negative	Being disabled, in itself, is neither positive nor negative

2004). Because members of the medical field work from a biological perspective, they conceptualize disability as a biological product (Brittain, 2004).

In the narrative of the medical model, disability is understood as an individual and/or a medical phenomenon that results in limited functioning that is seen as deficient (Bingham, Clarke, Michielsens, & Van De Meer, 2013; Fitzgerald, 2006; B. A. Marks, 2000; Mitra, 2006; Palmer & Harley, 2012). Disability is considered to be a result of impairment of body functions and structures, including the mind, and can be caused by disease, injury, or health conditions (Forhan, 2009). This view conflates impairment and disability with illness and the "sick role" (LoBianco & Sheppard-Jones, 2008; B. A. Marks, 2000; Mitra, 2006; Turnbull & Stowe, 2001). Similar to ill health, disability, including problems with the mind or body, is viewed as a problem that needs to be medically cured so individuals can function within society (Brandon & Pritchard, 2011; Forhan, 2009; B. A. Marks, 2000). This view is strongly normative, meaning people are considered disabled on the basis that they are unable to function as a so-called normal person does (Mitra, 2006; Roush & Sharby, 2011). In the medical model, the *disability* becomes the defining characteristic of individuals with disabilities, which shapes the beliefs that individuals who are typically functioning have toward them (Fitzgerald, 2006).

In the medical model, treatment for individuals with disabilities is geared toward eradicating the cause of or *fixing* the impairment (Bingham et al., 2013; Forhan, 2009). Fixing is thought to be the best path toward function and independence, and those who may not want to be fixed are considered noncompliant or unmotivated (Roush & Sharby, 2011). This is best achieved by placing individuals with disabilities under direct authority of the medical profession in rehabilitation programs or institutional care (Humpage, 2007). In an educational context, fixing most likely occurs in residential schools or segregated special education classrooms (Palmer & Harley, 2012).

Limitations associated with having a disability are viewed as the product of the impairment of the individual (Blustein, 2012; Brittain, 2004). This can include structural or functional deficiencies caused by physical, sensory, affective, or cognitive issues (Blustein, 2012). According to Blustein (2012), the medical model suggests that something is inherently disabling about impairments and that changes to the built environment or societal organization could not give individuals with disabilities the same opportunities as those who are typically functioning. The medical model suggests that problems faced by individuals with disabilities are independent of wider sociocultural, physical, or political environments (Brittain, 2004).

Some disabilities cannot be eliminated or ameliorated using medical advances. These people with disabilities are then viewed as being in need of help (Roush & Sharby, 2011). This portrayal is commonly linked to disability-related charity and fund-raising (Roush & Sharby, 2011). For individuals with disabilities, the medical model is exemplified by a heavy reliance on medical professionals as important gatekeepers who have access to resources and benefits (Humpage, 2007). This phenomenon is prevalent in education systems. For example, in school districts, educational placements for students with disabilities may be available in several types of settings including 12:1:1 (i.e., 12 students, one paraprofessional, and one teacher), 6:1:1, or inclusive education. It is common for parents to request the 6:1:1 setting for their child because of the close proximity to the teacher and low number of classmates. However, students must have a specific diagnosis (e.g., autism spectrum disorder [ASD]) to receive placement in those classes. In this model, it is the medical diagnosis (and not the individualized needs of the child) that determines the available placement for the child.

Critiques of the medical model

A major critique of the medical model is the influence that medical professionals and scientists have over the treatment of individuals with disabilities in society. Medical personnel act as important gatekeepers in society and use diagnoses and labeling to determine which individuals receive services (e.g., educational services), types of services, and benefits (Humpage, 2007). This process defines an individual's needs and how they receive those needs based on their impairment (Humpage, 2007). The issue with this process is that medical personnel may not take into consideration what individuals with disabilities value or want. Rather they create labels and categorizations based largely on the individual's bodily function. Labels and categories can then lead individuals with disabilities to feel as though they have limited options (Barton, 2009). For example, Barton (2009) described several individuals with disabilities who felt as though they had been forced into a limited range of options that were available for them based on categories of disability to which they were assigned. A common criticism within this topic is that while medical personnel have expertise in the area of diagnosing, treating, and curing illnesses, they should not have the power or authority over the lives or the social perception of individuals with disabilities in society (Humpage, 2007).

A second critique of the medical model is the persistence of negative perceptions of disability that are embedded within the model (Brittain, 2004). The medical model conflates individuals with disabilities with the *sick role* and discusses disability in a deficit model orientation (Mitra, 2006). This language can influence how all individuals within society interact with and talk about individuals with disabilities (Brittain, 2004). For example, in the sport context, one outcome of this model is that potential athletes with disabilities find that their dreams and aspirations are mocked or disregarded by those who are typically functioning (Brittain, 2004). Just the idea of someone with a disability succeeding in high-level athletics is at odds with the common perception of disability. Further, individuals who are typically functioning believe that recreational or competitive physical activity including sports, rather than rehabilitative movement, is not something of which individuals with disabilities are capable (Brittain, 2004). These conceptualizations of ability of individuals with disabilities can be routed back to the deficit-based definitions and perceptions provided by the medical model. Increasingly, scholars articulate social models of disability as more progressive and inclusive compared to the medical model in the human experience (Grenier, 2011).

The social model

The medical model is typically referred to as the old paradigm, which contrasts the social model of disability (Mitra, 2006). The social model for disability discourse has been popular for scholars in academia for a number of years, but it is not yet universally accepted, and language associated with the model is still being debated (Barney, 2012). According to Mitra (2006), there are nine different versions of the social model for disability discourse, including (a) the social model of the United Kingdom, (b) the oppressed minority model, (c) the social constructionist version of the United States, (d) the impairment version, (e) the independent living version, (f) the postmodern version, (g) the continuum version, (h) the human variation version, and (i) the discrimination

version. Each social model includes similarities in their discourse in relation to defining and discussing the concept of disabilities. For the purposes of this commentary, different versions of the social model will be discussed in general terms as the *social model*.

The social model contests that it is society that imposes disability on individuals with impairments (Bingham et al., 2013; Brandon & Pritchard, 2011; Coles, 2001; Indjov, 2007; Palmer & Harvey, 2012). In the context of the social model, the terms disability and impairment are separated. Impairment is perceived as an abnormality of the body, such as a restriction or malfunction of a limb (Forhan, 2009; Goodley, 2001). On the other hand, disability is considered the disadvantage or restriction of activity caused by a social organization that does not take into account people who have impairments and excludes them from community life (Goodley, 2001). This is an important distinction, because the social model suggests that it is not one's bodily function that limits his/her abilities, it is society (Barney, 2012; Roush & Sharby, 2011). In this context, there is nothing inherently disabling about having an impairment (Blustein, 2012). Rather, advocates of the social model argue that disability is imposed in addition to impairments by the way that individuals with impairments are isolated and excluded from full participation in their community (Bingham et al., 2013; Brandon & Pritchard, 2011). Isolation and exclusion can be a product of society's inability, unwillingness, or neglect to remove environmental barriers encountered by those with disabilities or the perceptions of individuals with impairments as being less able to participate with members of society (Forham, 2009; LoBianco & Sheppard-Jones, 2008; Palmer & Harley, 2012).

The social model suggests that constructing solutions should not be directed at the individual but rather at society. Thus, improvement for individuals with impairments would require political action and social change rather than a change in their physical bodies (Bingham et al., 2013). Impairment is considered a form of diversity that offers a unique perspective that should be valued and celebrated (Roush & Sharby, 2011). The social model claims that in some realistically possible social arrangements, having an impairment would not substantially reduce a person's well-being (Blustein, 2012). In fact, many problems associated with disability may disappear if people's attitudes toward individuals with impairments change and there is public policy that focuses on the removal of environmental barriers (Brittain, 2004). Some scholars suggest that an adequate response from society could discontinue the existence of what the social model considers to be a disability (LoBianco & Sheppard-Jones, 2008). Social arrangements like this may be more just, unprejudiced, and ethically preferable than the existing arrangements for individuals with impairments (Blustein, 2012). These actions may move society from one that discriminates against individuals with impairments to one of social inclusion (Palmer & Harley, 2012).

Critiques of the social model

One critique of the social model is that it fails to address impairment as an observable attribute of an individual that is an essential aspect of their lived experience (Palmer & Harley, 2012). This issue is evident as the social model attempts to separate impairment from disability completely (Bingham et al., 2013). As Palmer and Harley (2012) explained, by separating impairment and disability, the model has not fully accounted for the lived experiences of individuals with disabilities. These critics have called for a more

comprehensive and inclusive disability model or social theory. This criticism of the social model has been met with a strong defense from social model advocates. They have rejected this criticism on the grounds that while the potential for impairment to limit activities is not denied, those restrictions do not constitute their conceptualization of disability (Palmer & Harley, 2012). Rather, these individuals point to inequalities between those with and without impairments and interpret those differences as the socially constructed disability (Palmer & Harley, 2012).

A second critique of the social model is that it does not account for differences between individuals with disabilities. It has been suggested that the social model ignores the intersectionality of different forms of oppressed states (Fitzgerald, 2006). In this context, intersectionality suggests that ableism does not act independently of other oppressive states, such as racism, sexism, and *homonegativism* (i.e., the pervasive negative attitudes toward individuals who do not identify as heterosexual; Ayvazo & Sutherland, 2009), and creates a system of oppression reflecting multiple forms of oppression (Flintoff, Fitzgerald, & Scraton, 2008). This critique would suggest that the social model cannot understand the experiences of an individual with a disability independently of other attributes of the individual, such as gender, race, or sexual orientation. Further, while the social model claims that society would have to change to accommodate individuals with disabilities, the concept of intersectionality would suggest that this may not be enough. Rather, society would need to also take into account other prejudices, such as racism, sexism, and/or homonegativism, as individuals with disabilities may also exude other attributes that typically are socially oppressed. In this way, the social model fails to account for differences in gender, race, or sexual orientation among individuals with disabilities (Fitzgerald, 2006).

A final critique of the social model is one that comes from the social creationist view. The social creationist view suggests that issues of sexism, racism, and disablism are real and that they are socially created by a racist, sexist, and disablist society (Oliver & Barnes, 2012). Unlike other perspectives (i.e., social construction), this perspective believes these issues are related to institutionalized discrimination rather than the collective views of people who compose a population. Proponents of the social model suggest that the problems associated with disability as being within the minds and attitudes of individuals who are able-bodied. Again, the social creationist view, however, suggests that problems may be located within the institutionalized practices of society, which leads to institutionalized discrimination (Oliver & Barnes, 2012). Oliver and Barnes (2012) suggested that negative assumptions and ideologies surrounding impairment are deeply embedded into the social consciousness and may even be considered *social facts*. The social creationist view and the social model of disability discourse may seem highly related, but the distinction would be the strength of the institutionalization of practices, which defines disability rather than contributing it to perceptions or attitudes.

Like the social model, the social creationist view does not deny issues of impairment nor the social barriers that create restrictiveness (Oliver, 1996). However, scholars suggest that those subscribing to these models may not have emphasized the importance of the relational element between impairments and social barriers (Reindal, 2009). In response to this need, scholars have suggested a social-relational model that stresses both the personal and social effects of impairment. Those subscribing to this model suggest that disability is something imposed on top of the restrictions that are caused by impairment (Reindal, 2008, 2009). Those interested in learning more about the social-relational model are encouraged to view works by Solveig Magnus Reindal (2008, 2009).

Physical education teachers' attitudes toward disability

How teachers, including physical education teachers, perceive and interact with students with disabilities is critical to a successful educational experience (Block & Obrusnikova, 2007; Lytle & Collier, 2002). Research has thoroughly explored the attitudes of physical education teachers toward teaching students with disabilities (e.g., Combs, Elliott, & Whipple, 2010; Hodge, Ammah, Casebolt, LaMaster, & O'Sullivan, 2004; Qi & Ha, 2012). In summary, while teachers tend to demonstrate both positive and negative attitudes toward teaching children with disabilities in their physical education classes (Combs et al., 2010), it is clear that more support and training is necessary for teachers to effectively instruct (Hodge et al., 2004; Morley, Bailey, Tan, & Cook, 2005). Little research, though, has situated research in this area within medical or social model disability discourse. One such study adopted a social model framework to explore factors that informed general and adapted physical education teachers' co-teaching practices within an inclusive physical education program (Grenier, 2011). Grenier (2011) suggested that by utilizing the social model as a conceptual framework, discrimination, teacher attitudes, and practice needed to be viewed as social barriers. Further, when teachers view students with disabilities in ways that transcend their identified characteristics (medical model), they can gain insight about students' abilities beyond a medical profile and offer students more positive, engaging experiences (Grenier, 2011).

The way in which physical education teachers perceive students with disabilities can influence expectations and interactions with them (Barton, 2009). Furthermore, it can influence curricular, instructional, and assessment-based decisions that can affect the students' education. With this in mind, the following vignettes provide examples of how orientations in different models of disability discourse can influence decisions made by physical education teachers.

Practical examples

In the hypothetical scenarios to follow, Gabriela is a 12-year-old girl with retinitis pigmentosa, a disorder that affects the ability of the retina to sense light that is caused by a variety of inherited retinal defects. As a result of her retinitis pigmentosa, Gabriela has partial vision loss (e.g., decreased acuity and depth perception) in both eyes. She has a visual acuity of 20/240 vision in both eyes, and would be considered to have B2 vision according to the International Blind Sports Association's visual classification system because of her ability to recognize the shape of a hand from close range (United States Association of Blind Athletes, 2015).

Gabriela lives with her grandmother in a large Midwestern metropolitan area in a community that is economically disadvantaged. Gabriela's dietary habits are poor, and she is noticeably overweight. She is a friendly and an engaged learner but needs extra encouragement due to learned helplessness. Gabriela is able to walk independently using an assistive device (e.g., long cane) or by using a sighted guide. For exercise, she walks up and down the stairs every day before and after school, and on weekends, she goes for a walk down the sidewalk or goes grocery shopping with grandma. Grandma states that Gabriela fatigues easily. Nonetheless, Gabriela pushes the shopping cart while grandma guides it from the front.

While in middle school, Gabriela's family moved across town into a new neighborhood, resulting in her changing schools. The scenarios in this article describe her experiences with two middle school physical education teachers; Mrs. Crabtree, from Galloway Ridge Middle School, and Mr. Pezzoli, from Southside Middle School. While both teachers were welcoming toward Gabriela joining their physical education classes, the teachers provided very different experiences, which were influenced by their philosophical orientations toward individuals with disabilities.

Scenario 1: Mrs. Crabtree's physical education program

Mrs. Crabtree, a 20-year veteran physical education teacher, welcomes students with and without disabilities into her general physical education (GPE) program at Galloway Ridge Middle School. Over her teaching career, Mrs. Crabtree has developed a curricular sequence for each grade level that she believes provides an excellent education for her students. Because of this rigid sequence, students know exactly what unit or activity they will be learning each week of the year. Last year, Gabriela was integrated into Mrs. Crabtree's third-period, sixth-grade GPE class. Gabriela was one of 35 students in Mrs. Crabtree's third-period class.

One unit that Mrs. Crabtree is particularly proud of is a 3-week long basketball unit. Midway through her unit, she can be found instructing students how to appropriately utilize the "give and go" in game-like situations. Her instruction includes mostly visual demonstrations and she uses terms like "here" or "there" when describing the directions that students need to move. When integrating Gabriela into class, she gives her group the most brightly colored basketball in the class, thinking that it may be the most appropriate for her due to Gabriela's partial vision loss. However, most everything else in the class remains unchanged. When Gabriela struggles to be successful in basketball activities, such as practicing the give and go, Mrs. Crabtree believes that it is because of her visual impairment.

In this scenario, Mrs. Crabtree is influenced by the medical model of disability discourse. While she made some minor accommodations for Gabriela in her class (e.g., a brightly colored ball), she mostly expected Gabriela to just "fit in." When Gabriela is not successful in class, Mrs. Crabtree then assumes that it was because Gabriela's disability makes her body faulty, which limits her abilities. Mrs. Crabtree is unwilling to change the activities covered in class because they have worked for a number of years with many other students, and in her mindset, it would not be fair to Gabriela's classmates to change activities just for her.

Scenaro 2: Mr. Pezzoli's physical education program

After moving neighborhoods, Gabriela enrolled at Southside Middle School. The physical education teacher at Southside is Mr. Pezzoli, a 15-year veteran physical education teacher who also coaches the school's cheerleading squad. Like Mrs. Crabtree, he is very welcoming to individuals with and without disabilities in his classes and was excited to include Gabriela in his classes.

After enrolling at Southside, Gabriela was included into Mr. Pezzoli's seventh-grade GPE class. Again, she was one of 35 students in the class. Unlike Mrs. Crabtree, Mr. Pezzoli does not have a rigid sequence of units that he teaches throughout the year.

Rather, he prefers to get to know the students who will be in his class, and design his curricular units based on their abilities and needs.

The first unit that Mr. Pezzoli decided to instruct was a modified soccer unit. When instructing different skills, Mr. Pezzoli was sure to both verbally explain and visually demonstrate each of the movements that he expected from his students. He also had all groups within the class use rattle soccer balls, which includes small beads within the ball that made a noise when they rolled. This way, all students used the same implements. Finally, students played the game in pairs. He told the students that this was to build teamwork and communication skills, but an underlying reason for this modification was to assist Gabriela with navigating the room.

In this scenario, Mr. Pezzoli is influenced by the social model of disability discourse. Rather than being rigid in his curricular decisions, he attempts to make decisions about his content after meeting his students. He does not mind changing games/activities to accommodate individuals with unique needs and subscribes to the universal design for learning (UDL) model (Lieberman, Lytle, & Clarq, 2008). If Gabriela was not successful in class, he would assume that it was his fault for not modifying the activity correctly, and he would make further accommodations. He may even ask Gabriela for feedback on the activities to find out what modifications or accommodations work best for her.

Essential differences between models

These scenarios provide brief overviews of the medical and social models of disabilities. While comparing and contrasting the medical and social models, it is easy to find glaring distinctions between the two. This section elaborates on critical distinctions between the medical and social models. Please see Table 1 for several additional comparisons between the two models.

Central to each of the models is how they conceptualize disability. Advocates for the medical model view disability as a medical phenomenon that results in limited functioning that is seen as deficient (Fitzgerald, 2006; B. A. Marks, 2000; Mitra, 2006; Palmer & Harley, 2012). The limited functioning associated with an impairment is inherently disabling to the individual (Blustein, 2012; Roush & Sharby, 2011). On the other hand, the social model conceptualizes disability as a social construct (Roush & Sharby, 2011). The social model separates the terms impairment and disability, where impairment is perceived as an abnormality of the body and disability is considered the disadvantages caused by society (Forhan, 2009; Goodley, 2001). Therefore, the social model disagrees with the medical model's position that impairments are inherently disabling and suggests that it is society that disables individuals with impairments (Forhan, 2009). Where the medical model places the deficit within the individual, the social model states that problems reside in the environment that fails to accommodate people with impairments and that society has failed this population.

The way in which disability discourse treats individuals with disabilities can have an influence on strategies used by physical educators when teaching students with disabilities. Traditionally, such physical educators as Mrs. Crabtree have integrated students with disabilities in their classes by making small modifications or adaptations to the equipment, rules, or playing area (Haegele & Mescall, 2013) of sports or activities that are in their typical curriculum to attempt to level the playing field. In this way, physical educators are

subscribing to the medical model, and those modifications or adaptations to pre-determined activities are attempts to decrease limitations of individual's disabilities. On the other hand, physical educators that align with the social model of disability discourse, like Mr. Pezzoli, may also subscribe to the UDL.

The UDL is an educational strategy that centers on eliminating barriers to participation by accommodating all people to the greatest extent possible through proactive design of activities (Hodge, Lieberman, & Murata, 2012). This strategy emerged from the field of architectural design when federal legislation (i.e., the Americans with Disabilities Act) required access to buildings for those with disabilities, and architects began to design buildings with accessibility in mind during early planning phases rather than retrofitting standard structures (Lieberman, Lytle, & Clarcq, 2008). By designing instruction, assessments, and curricula utilizing this principle, educators can create and implement course content that meets the needs of all learners from the start (Sherlock-Shangraw, 2013). This means that rather than modifying or adapting pre-prescribed activities, individuals subscribing to the UDL would choose activities for their classes that are suitable for everyone involved. Benefits of the UDL can include (a) all students being included in all activities, (b) decreased teacher time used for class management, (c) increased learning, (d) all students having full access to all content, and (e) reduced frustration for students and teachers (Lieberman et al., 2008). Furthermore, utilizing UDL principles can eliminate many negative effects of a student having an impairment by increasing access for all individuals regardless of ability or impairment (Roush & Sharby, 2011).

The medical and social model can also be compared in regard to the goals of treatments or interventions. In the medical model, treatment is focused on "fixing" the disability or normalizing the individual to the greatest extent possible (Roush & Sharby, 2011). Because the medical model is normative, the objective of fixing disability is to rehabilitate individuals with disabilities to the point where they can function at the same level as a "normal" person (Mitra, 2006). In the medical model, treatment can take place in rehabilitation centers, institutions, or special education classrooms (Humpage, 2007; Palmer & Harley, 2012). In contrast, the social model does not believe in fixing individuals but rather changing society. The social model contests that it would be possible through social arrangements, such as accommodations in the environment and increasing levels of understanding for those are typically functioning, for impairments not to substantially effect one's well-being (Blustein, 2012; Brittain, 2004).

Another difference between the social and medical model is the act of labeling and categorizing individuals. Barton (2009) postulated that the social model raises serious questions about the nature of the society in which we live in terms of labels and categories. He suggested that the mechanisms used in society to exclude particular individuals and groups involve a process of categorization in which the less valued or unacceptable aspects of people are highlighted and criticized (Barton, 2009). This process of labeling and categorizing is significant in the medical model, where deficit-based labels are common. Where the medical model tends to use labels to emphasize deficits and incompetence, the social model tends not to use those labels (Coles, 2001). The social model, rather, considers disability as diversity. This perspective allows individuals to accept difference and diversity that may not be familiar or understandable to those who are typically functioning.

A last comparison between the two models is in regards to who is considered the *cognitive authority*. In the medical model, the cognitive authority for disability discourse is represented by doctors and scientists who have the ability to define and cure injuries and illnesses (Brittain, 2004). In this discourse, individuals who have disabilities are strongly encouraged to accept a discourse that may not be in their best interest (Brittain, 2004), even though they may have the most legitimate claim to define and determine discourse in the area. In contrast, the social model has been described as an emancipatory force for individuals with disabilities (Fitzgerald, 2006). This model speaks from the standpoint of academics and advocates with disabilities, where they can act as the cognitive authority on discourse directly related to the lives of individuals with similar impairments (Fitzgerald, 2006).

The medical and social models are considered by many scholars to be contrasting models of disability (Mitra, 2006). As discussed, several elements of each model that provide contrasting views include the way they conceptualize and label disability, common treatment procedures and objectives, and the cognitive authority on the discourses. Other comparisons are provided in Table 1. There is no universally accepted conceptualization of disability (Palmer & Harley, 2012) and while there are differences between the two models, it is suggested that both can contribute to the understanding of disability (Mitra, 2006).

A third perspective: Embodiment

Since the conceptions of the medical and social models, both have received critiques and criticisms. Many criticisms come from scholars who are defending the contrasting model or are developing a separate model as an extension of or independent to these models. A criticism that targets both the medical and social model was presented by D. Marks (1999) and Fitzgerald (2006) and comes from an embodiment perspective. The focus of this criticism is that both models largely ignore the personal experience of the individual within the analysis of disability (D. Marks, 1999). In the medical model, subjective experiences of patients are often unconsidered when diagnoses are underway, where doctors typically look to address quantifiable measures. The social model tends to ignore individual persons account as well, focusing rather on the social environment and social inclusion (D. Marks, 1999). This criticism argued that the social model does not contrast enough from the medical model of disability and, rather, contributes to its maintenance (D. Marks, 1999). D. Marks asserted that both models are necessary for the other's survival and that they can be considered "two sides of the same coin" (p. 611).

Fitzgerald (2006) suggested a need to move beyond the knowledge available within the two models and that the experiences of individuals with disabilities must be understood from an embodied perspective. The embodied perspective suggests breaking free of what traditional mindsets are of what we know and understand about the world and consider what it would be like to experience the world from another's perspective (Block & Weatherford, 2013). To begin the conversation about embodiment as a discourse for disability, D. Marks (1999) provided a third definition of disability as "the complex relationship between the environment, body and psyche, which serves to exclude certain people from becoming full participants in interpersonal, social, cultural, economic and political affairs" (p. 611). This definition suggested that disability does

not reside either in the body or society but rather in an embodied relationship (D. Marks, 1999).

In the case of a child such as Gabriela, the child's lived perspectives on what it is like to experience physical education with an impairment must be valued. Neither Mrs. Crabtree's (medical model) nor Mr. Pezzoli's (social model) actions truly take Gabriela's lived experience into consideration. Rather, they both make modifications and accommodations based on what they believe would be best for someone like Gabriela. Utilizing the embodiment model, though, Gabriela's personal experience must be taken into consideration when planning, implementing, and assessing the physical education program. To do so effectively, a physical education teacher who subscribes to the embodiment model would include Gabriela in the planning phase of the physical education curriculum and allow her to have input into what accommodations or modifications work best for her. This may also include allowing Gabriela to have final say on the instructional placement (e.g., inclusion, individualized) she receives for physical education services. Furthermore, the teacher would allow Gabriela to provide continuous feedback throughout the year on how instructions and assessments are working for her and to reasonably modify those actions based on Gabriela's recommendations.

Conclusion

In this article, we provide an overview of two models of disability discourse with practical examples. However, the overall picture of disability is not as simple as presenting a dichotomy between two models (Mitra, 2006). While typically described as opposing, a number of scholars claim that the medical and social models each have something important to contribute in understanding disability (Blustein, 2012). Further, additional models can be developed in reaction to, as an extension from, or independently of these two models (Mitra, 2006). Regardless, it is important for those who interact with individuals with disabilities to think critically about the way in which they define and discuss disability. As evident in the provided examples, the experiences that children with disabilities have in physical education classes can be greatly influenced by the orientation of their teachers, such as Mrs. Crabtree and Mr. Pezzoli. Furthermore, teachers views toward the student (e.g., the way students are treated in class) may shape the way the student themselves perceive their own ability and disability. As per Barton (2009), the language people use to describe individuals with disabilities influences their expectations and interactions with them.

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