

## A Critique of Disability/Impairment Simulations

Lydia Brown  
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### I. Introduction

As a student in a class that purports to critically examine both the biological processes of human aging and the cultural constructions of aging and public discourse about the elderly, I was encouraged that our professor assigned material that deconstructs and criticizes institutionalized ageism and popular rhetoric about aging. Unfortunately, I was disappointed that a class that covers ageism has not merely failed to address and critique ableism that frequently accompanies ageism but has also required students to participate in an exercise that is fundamentally problematic, potentially dangerous, and certainly counterproductive.

### II. Applicability of Disability Simulations Literature

While the body of literature on disability simulations generally does not address these activities within the context of learning about aging, the critiques offered in a number of papers addressing the ethical considerations and implications of disability simulations are applicable to similar activities targeting aging-related impairments that lead to disability. The types of simulations used for aging-related impairments and disability in general are often similar or the same—namely, those attempting to simulate motor impairment or certain physical disabilities, visual impairment or blindness, and hearing impairment or deafness. Nevertheless, while more general disability simulations are commonly used as part of service provider related education and disability “awareness” efforts, the use of aging-related impairment simulations that mirror the methods of general disability simulations does have an established history as part of coursework for students in undergraduate and graduate programs that may lead to work with the elderly.<sup>1</sup>

### III. Lack of Evidence of Long-Term Efficacy

The most common claim and purpose of simulations as espoused in literature that supports them is that they promote the development of positive attitudes toward the disabled or elderly, and that they reduce stigma against impairing conditions. For example, Robison and Rosher’s 2001 study of medical students’ participation in an aging-related impairment simulation demonstrated a change in the students’ scores on the Aging Semantic Differential Scale (ASD) that suggested improved attitudes toward the elderly.<sup>2</sup> Nevertheless, while the change from pre-test to post-test scores on the ASD was statistically significant, it was small—“[t]he mean pre-test score was 4.35 with a range of 68 to 174, indicating that students in general were more negative than positive in their attitudes toward aging. The mean on the post-test was 116.14 with a range of 66 to 163.”<sup>3</sup> Furthermore, of the four subscales, only one showed statistically significant improvement (instrumental—ineffective) while the other three showed no statistically significant improvement

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<sup>1</sup> For an example, see Marte, A.L. (1988). How does it feel to be old? Simulation game provides “into aging” experience. *Journal of Continuing Nursing Education*, 19(4), 166-168.

<sup>2</sup> Robison, S.B. & Rosher, R.B. (2001). Effect of the "half-full aging simulation experience" on medical students' attitudes. *Gerontology & Geriatrics Education*, 21(3), 3-12.

<sup>3</sup> Ibid.

(autonomous—dependent, personal acceptability—unacceptability, and integrity), suggesting little meaningful attitudinal changes as a result of the simulation.<sup>4</sup>

In another example, Henry *et al.* described an experiment in which 156 students from nutrition and diabetics, long-term care, and physical therapy courses participated in an in-class simulation known as the Aging Game.<sup>5</sup> The Aging Game, a form of aging-related impairment simulation, aims to change attitudes and improve empathy toward older adults by having students personally experience functional changes often associated with aging such as loss of hearing, vision, and mobility. While taking on the role of an older adult with disabilities, participants are asked to navigate various situations in simulated locations such as a grocery store, bus, and nursing facility.<sup>6</sup>

This paper acknowledged the lack of clear research demonstrating any clear connection between simulation exercises and significantly improved attitudes toward the elderly from younger adults. Furthermore, data from a comparison of pre-test to post-test scores on the Anxiety about Aging (AAS) measure after the Aging Game activity shows that 62% of students had scores indicating less positive attitudes and more anxiety about aging, with 7% receiving scores indicating no change.<sup>7</sup> The same comparison for ASD scores showed 54% of students receiving scores indicating less positive attitudes and more anxiety about aging, and the same 7% receiving scores indicating no change.<sup>8</sup>

Sally French's 1992 critique of disability simulation exercises analyzed several studies on attitudinal changes from disability simulations, noting a dearth of studies with any demonstrable and long-term changes in attitudes.<sup>9</sup> One study that French cites observed only some success and only under specific conditions; another found no attitudinal change among the participants in a simulation exercise.<sup>10</sup> The Wilson and Alcorn study found no attitudinal differences among participants who simulated being blind, deaf, or physically impaired.<sup>11</sup> In a more recent meta-analysis of disability simulation research published in 2007, Flower *et al.* examined data from 41 studies on disability simulation and used data from 10 in a meta-analysis that found a lack of effectiveness in creating positive change in the attitudes of non-disabled people toward disabled people.<sup>12</sup> The authors note that “25 of the 41 studies initially identified (61%) merely included discussion of how to implement various simulations without any data to support these practices,”

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<sup>4</sup> Ibid.

<sup>5</sup> Henry, B., Douglass, C., & Kostiwa, I. (2007, October). Effects of participation in an aging game simulation activity on the attitudes of allied health students toward older adults. *The Internet Journal of Allied Health Sciences and Practice*, 5(4), 1-9.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> French, S. (1992). Simulation exercises in disability awareness training: A critique. *Disability, Handicap & Society*, 7(3), 257-266.

<sup>10</sup> French. *Citing* Wilson, E.D. & Alcorn, D. (1969). Disability simulation and the development of attitudes towards the exceptional. *Journal of Special Education*, 3, 303-307. *and also* Semple, J.E., Vargo, J.W., & Vargo, F.A. (1980). Disability simulation and its effect on changing the attitudes of physical therapy students towards disabled persons: some preliminary experimental results. *New Zealand Journal of Physiotherapy*, 8(2), 6-8.

<sup>11</sup> Wilson & Alcorn.

<sup>12</sup> Flower, A., Burns, M.K., & Bottsford-Miller, N.A. (2007, March/April). Meta-analysis of disability simulation research. *Remedial and Special Education*, 28(2), 72-79.

and thus, “the criticism regarding the lack of empirical data seems warranted.”<sup>13</sup> Given the lack of any research supporting a clear link between disability/impairment simulation activities and the development of positive attitudes toward the disabled, the use of these activities seems questionable at best and counterproductive at worst.

#### IV. Broader Social Implications

Other than the recurring theme of emphasizing the lack of clear evidence in support of simulations causing significant attitude improvements, French’s two other critiques of simulations are that they do not simulate the experience of disability and that they individualize disability.<sup>14</sup> Disability simulations have a tendency to reinforce stereotypes about people with disabilities and their experiences as well as support the medicalized model of disability that sees disability as primarily or exclusively a biological problem embedded in the individual rather than a social construct that cannot exist outside societal context. For instance, Grayson and Marini found that non-disabled students were more likely to believe that physically disabled people are more frustrated because of their disabilities.<sup>15</sup> They also noted that “examples of participant's comments were, 'I would kill myself if I really had to stay in a wheelchair', and 'This is awful!’” which are ideations consistent with the ableist notion that to be disabled is worse than to be dead due to the impairments associated with disability, and are certainly not productive.<sup>16</sup> Furthermore, French argues, “disabled people...have for many years fought strenuously to re-define disability in terms of social oppression, where disability is viewed, not as the property of people with impairments, but rather as a product of an oppressive physical and social system, where the needs and rights of people with impairments ... are not taken into account.”<sup>17</sup>

If it is part of this course to examine the societal and cultural aspects of aging and ageism and not merely the medicalized view of old age, then it should be important to have conversations that allow students to examine and question the social constructions of disability that applies quite readily to those experiencing age-related impairments that lead to disability. I do not believe that this is possible to do in a disability simulation, which emphasizes temporarily experiencing a physical “loss” or deficiency. It is also difficult for me to accept that discussion accompanying this event can mitigate the potentially harmful aspects of it. I do not think that one needs to simulate disability in order to empathize with the experiences of disabled people, or that it is even possible to appreciate fully the full breadth of the barriers that do face people with disabilities through such a simulation. As French states, “the accurate simulation of an impairment is impossible to achieve; the physically able person who sits in a wheelchair knows nothing of the real experience of paralysis, lack of balance, sensory loss and bladder dysfunction which the paraplegic person experiences.”<sup>18</sup> Tobin Siebers further posits that disability simulations

fail to give the student pretenders a sense of the embodied knowledge contained in disabled identities. Disability simulations of this kind fail

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<sup>13</sup> Ibid.

<sup>14</sup> French.

<sup>15</sup> Grayson, E. & Marini, I. (1996). Simulated disability exercises and their impact on attitudes toward persons with disabilities. *International Journal of Rehabilitation Research*, 19, 123-131.

<sup>16</sup> Ibid.

<sup>17</sup> French.

<sup>18</sup> Ibid..

because they place students in a time-one position of disability, before knowledge about disability is acquired, usually resulting in emotions of loss, shock, and pity at how dreadful it is to be disabled. Students experience their body relative to their usual embodiment, and they become so preoccupied with sensations of bodily inadequacy that they cannot perceive the extent to which their “disability” results from social rather than physical causes.<sup>19</sup>

The idea that a brief simulation, whether of a few minutes, a few hours, or a few days, will offer genuine insight into the lived experiences of disabled people has been roundly criticized in the literature as well. Gary Kiger notes that “disability simulations do not reflect real-world experiences. ...Going on a ‘blind walk’ for an hour does not give a participant the ‘feel’ for experiences of discrimination, rejection, or pity that might be directed toward someone who is visually impaired.”<sup>20</sup> He also observes that spending a brief amount of time using a wheelchair does not begin to approach the lived experience of being a wheelchair-user.<sup>21</sup> Yet this rather practical critique alone is not enough to fully understand the problematic nature of disability simulations.

The idea of aging as both a biological reality and a culturally realized phenomenon is embedded into the coursework for this class; however, it is very difficult to reconcile this joint examination of aging with a disability simulation. Disability simulations emphasize the experience of disability as primarily or exclusively a loss or a deficiency, and whether intended to or not, may offer a kind of voyeuristic approach to disability. Even in a paper otherwise supportive of disability simulations, James T. Herbert acknowledges the myriad criticisms of the language used by simulation participants during debriefings as expressing major themes of “frustration, isolation, humiliation, insecurity, and apprehension.”<sup>22</sup> Herbert cites David Pfeiffer’s 1989 study of a simulation on wheelchair-use, in which participants reported feeling “demeaned” during the exercise, which suggests reinforcement of the already prevalent attitude that to be physically impaired is in itself a demeaning condition.<sup>23</sup> In another telling study, Wurst and Wolford found that several participants in a simulation exercise expressed that they were “fortunate” not to be disabled, which further undergirds a systemic ableism that posits disability as a lesser state and the precursor to a life less worth living.<sup>24</sup> The feelings of “inferiority, lack of confidence, and helplessness” experienced by simulation participants in Wright’s study that were then projected onto the presumed experiences of actually disabled people are further evidence of the potential for disability simulations to subvert their intentions by reinforcing stereotypes.<sup>25</sup>

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<sup>19</sup> Siebers, T. (2008). *Disability theory*. Ann Arbor: University of Michigan Press, 28.

<sup>20</sup> Kiger, G. (1992). Disability simulations: Logical, methodological and ethical issues. *Disability, Handicap & Society*, 7(1), 71-78.

<sup>21</sup> Ibid.

<sup>22</sup> Herbert, J.T. (2000, June). Simulation as a learning method to facilitate disability awareness. *The Journal of Experiential Education*, 23(1), 5-11.

<sup>23</sup> Pfeiffer, D. (1989). Disability simulation using a wheelchair exercise. *Journal of Postsecondary Education and Disability*, 7(2), 53-60.

<sup>24</sup> Wurst, S.A. & Wolford, K. (1994). Integrating disability into psychology courses: Applications in abnormal psychology and perception. *Teaching of Psychology*, 21, 233-235.

<sup>25</sup> Wright, B.A. (1978). The coping framework and attitude change: A guide to constructive role playing. *Rehabilitation Psychology*, 25, 177-183.

Disabled activist Valerie Brew-Parrish further identifies three particular problematic ideas that may emerge from participation in disability simulations: the belief that life is a tragedy for disabled people, the belief that they (as non-disabled participants) are lucky not to be disabled, and the belief that disabled people are especially inspiring or courageous for living their ordinary lives.<sup>26</sup> She notes further that these simulations are usually organized and implemented by non-disabled professionals without the input of actually disabled people, which begs the question of whether or not it is ethical to engage in such activities.<sup>27</sup> When considering the question of ethical implications, it is imperative to understand that when students are invited to engage in critical dialogue around class, gender identity, or religion, it is never considered appropriate or necessary to ask participants to simulate belonging to a class, gender, or religion to which they do not belong. Thus, it is *also* appropriate and simplistic to approximate the experience of disability through simulation.

## V. Conclusion

These types of exercises do not serve their stated purpose of improving attitudes toward people who experience impairment or disability, and in fact, frequently promote ideas and ways of thinking that are counterproductive to progressive visions of accessible and inclusive communities. There is a lack of research demonstrating any significant or long-term efficacy in impacting the attitudes of non-disabled participants in simulations, in addition to the myriad ethical concerns raised by the types of thought processes to which they are conducive. Given the intricately intertwined relationship between aging and impairment, and thus, between ageism and ableism, it would seem inappropriate at best and egregious at worst to promote a simulation exercise as a meaningful way of developing empathy for those who are cast as an other outside the normativized body.

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<sup>26</sup> Brew-Parrish, V. (2004, August 9). The wrong message—still. Retrieved from <http://www.raggededgemagazine.com/focus/wrongmessage04.html>

<sup>27</sup> Ibid.