

Female Students with acquired Brain Injury: The post-secondary experience

**Kendra Gottschall, David C. Young,
St. Francis Xavier University**

Author's Contact Information

*Kendra Gottschall, Doctoral Candidate
St. Francis Xavier University
P.O. Box 5000, Antigonish, Nova Scotia B2G 2W5
Phone: 902-870-9030
Email: kgottsc@stfx.ca*

*David C. Young, Associate Professor
Faculty of Education, St. Francis Xavier University
P.O. Box 5000, Antigonish, Nova Scotia B2G 2W5
Phone: 902-867-2215
Email: dyoung@stfx.ca*

Abstract:

Over the past decade brain injury has become a more talked about issue in the media as well as society in general; however, research on experiences of university students have been limited and few are specific to female students. This article, based on previous research, provides answers to the question, "How has having an acquired brain injury impacted the experience of female students within post-secondary education?" Both narrative and autoethnographic methodologies were employed in the original study, although this article discusses the narrative results. Semi-structured interviews with five participants were conducted, and text boxes were woven throughout the presentation of the study to highlight the primary researcher's voice as a student with a brain injury. This article focuses on the interview results. Findings indicate brain injury has diverse implications depending on severity and other factors. Some participants spoke of accessing (dis)Ability resource centres on their university campus, while others did not utilize formal accommodations. Students experienced difficulties in the formal classroom and strategies to accommodate these difficulties are discussed. Barriers encountered due to strategies implemented by professors and how these barriers are overcome is also addressed.

Key Words:

brain injury, (dis)Ability resource centre, post-secondary education, narrative, qualitative.

Introduction

The foundations of this research began in May 2004, when I (Gottschall) was nearing the end of my grade 11 education in high school. I was involved in a motor vehicle accident that led to me acquiring a traumatic brain injury. Against medical advice, I returned to high school just three weeks after leaving a medical rehabilitation centre where I had relearned the skills of walking and talking. My rehabilitation continued while I completed my high school diploma and graduated on time with my peers. My education has continued to include two undergraduate degrees, a Master's degree and doctoral work that is currently in progress. In my academic writing, I utilize my own experiences of living with a brain injury, specifically drawing on my experiences of pursuing academic qualifications through post-secondary education. In a (dis)Ability elective class, I learned a new way of spelling "disability" that addressed concerns I had with the term that could be considered oppressive. By placing "dis" in brackets, the focus is taken off the things that a person cannot do and capitalizing the first letter of "ability" highlights the importance of the things that one is able to do (MacDonald & Friars, 2010). In preparation for conducting this research, I recounted my days in rehabilitation following my accident, I re-read the journal I had written during those initial days, and I recounted how I was able to begin my studies again in spite of all the barriers. This preparatory work was important to do before beginning to write about my personal experiences with brain injury and also interviewing five others. In the original data collection for this research, my experiences are chronicled in sections entitled, "Researcher's Reflections". This article focuses solely on the interview results in order to narrow the scope. I realized the experiences of others with brain injury have also been silenced and I believed these were valuable and important to unearth. Therefore, the research question was developed: How has having an acquired brain injury impacted the experience of female students within post-secondary education? I hope that in telling their stories, participants felt a sense of liberation and support in revealing their struggles. The ultimate goal of completing this research was to expose the barriers faced by university students who have brain injury and to identify strategies for addressing their educational needs.

First, a literature review focused upon the experiences of students with acquired brain injuries (ABI) will be provided. Next, the methodology utilized in conducting this study will be discussed. Qualitative research, in the form of narrative methodology, was employed in eliciting the experiences of female students with an acquired brain injury within post-secondary education.

An analysis of participants' narratives is presented and this involves five key themes: ways of incorporating the experience of acquiring a brain injury into one's life, the overall experience of being a student with brain injury at university, experiences with particular professors, specific strategies for dealing with the implications of brain injury at university, and the issue of bringing awareness to brain injury, on both micro and macro scales.

Because the researchers listened and heard the participants' stories and concerns, we gained knowledge about participant's stories. Furthermore, this study highlights gaps in existing policies and areas where more research is needed to provide optimal services to people with acquired brain injury. If people with brain injury have access to

services that address issues of concern for them, increased access to post-secondary education would result and truly accessible education could be attained.

Literature Review

The terms acquired brain injury (ABI) and traumatic brain injury (TBI) are used throughout existing literature in discussing brain injuries; they are also utilized interchangeably throughout this document (Gottschall, 2013, p. 7). ABI is used to describe a broad range of conditions that can affect the brain such as stroke, infections, and TBI (Mantell, 2010). TBI describes physical trauma to the brain, due to the impact of an outside force. Students with ABI have been interviewed and these include people who have TBI.

The shift from viewing (dis)Ability as an illness to focusing on the management of symptoms marked a significant period in the history of the concept of (dis)Ability. In the 20th century, medical professionals shifted from emphasizing the curing of illnesses to managing chronic conditions and because of this, life expectancies rose (Lornez, 2010). Since people historically did not survive brain injury, few discussions regarding the repercussions of acquiring this injury exist. Additionally, despite some general knowledge about the effects of brain injury and rehabilitation, each person experiences brain injury in a unique manner and therefore require different supports (Degeneffe, 2001).

The structure of classrooms has been a matter of debate for (dis)Ability rights activists and variance in the appearance of Canadian classrooms reflects this dispute. The concept of inclusive education is viewed from a number of different perspectives and this must be explored before considering the provision of educational services for students with brain injury. Some feel this term refers to the provision of specialized, individualized instruction to a certain population (Gottschall, 2013). Others conceive of inclusive education as integrating students who have (dis)Abilities into standard classrooms to be taught in the same manner as non-disabled students (Gottschall, 2013). Integration within society needs to be the task of families and communities but should not occur at the expense of appropriate education. Policy development should include the perspectives of people with (dis)Abilities and the power of language should be considered when exploring the impact of policies (Corker, 2000). Policies that are designed to meet the needs of one specific population come to be seen as “inclusive” even though they do not address the needs of all students with (dis)Abilities and this can result in harmful experiences (Gottschall, 2013). One possible result is delegating people into categories that do not speak to their abilities and this can be damaging and create barriers rather than inclusion (Nes & Stromstad, 2006).

Within Canada, the types of classrooms for P-12 public educational institutions fluctuate from province to province, with specialized classrooms being offered in some areas, while integration into mainstream academic classes occurs in other areas (Gottschall 2013; Statistics Canada, 2009). In post-secondary educational institutions, diversity in terms of the abilities and (dis)Abilities of students in standard classrooms is also inevitable (Kraglund-Gauthier, Young, & Kell, 2014). Higher education for people with (dis)Abilities was not possible in the past as few accommodations or resources were provided; however, things have changed in recent years (Barnes, 2007). While

more resources are offered for students with special educational needs, policies still reflect the concerns of nondisabled people who hold power (Gottschall, 2009; Gottschall, 2013).

(dis)Ability services in higher educational institutions have grown over the past twenty-five years from a minute offering to an established professional service offered to all students (Madaus, 2011). Statistics show that 4-5% of university students have some sort of (dis)Ability; however, this number could be much higher due to the under-reporting of (dis)Abilities such as mild traumatic brain injury, which often results in impairment that is seen as minor and not worthy of being reported (Borland & James, 1990; Laforce & Martin-MacLeod, 2001; Marschark et al., 2000, as cited in Lin Haag, 2009; Gottschall, 2013). Services and supports for people with (dis)Abilities within post-secondary educational institutions do exist (Carter, Hanes and MacDonald, 2012; Dunn, Hanes, Hardie and MacDonald, 2006; Dunn, Hanes, Hardie, Leslie and MacDonald, 2008). King (2010) discusses the difficulties encountered by doctoral students with (dis)Abilities as little support is offered by educational institutions. For some people, the differences between undergraduate education and, for instance, doctoral work, could highlight an increased need for supports (Gottschall, 2013).

Theoretical models affect how services are provided and academics strive to convey (dis)Ability accurately, in a way that best describes how (dis)Able people experience the world and how their experiences relate to those of people who do not identify as (dis)Able (Corker 1999). Two dominant models exist within (dis)Ability theory: the medical model and social model (Oliver, 1990). The medical model of (dis)Ability focuses on notions of normalcy and treatment of the ailments of people with (dis)Abilities to cajole them into a lifestyle that is seen as “normal” (Oliver, 1990). The social model views (dis)Ability as a societal issue and focuses on the alienation of people with (dis)Ability from participation in societal events (Oliver, 1990). These theoretical perspectives are relevant to service provision models that affect students with (dis)Abilities in post-secondary educational institutions. An example of this is requesting documentation of diagnosis in order for students with learning (dis)Abilities to receive services. With the issues of these models in mind, standpoint feminism is the perspective from which (dis)Ability is viewed. From this view, every person’s experience is a starting place of inquiry (Gottschall, 2013).

The difference between educational equality and educational equity is important to consider. A common misconception is that (dis)Abilities with the same label or same name result in “the same” or similar outcomes for students who in turn have similar educational requirements. For students who all have different experiences with brain injury, and different needs because of this, this notion is refuted (Gottschall, 2013). According to Dunn et al. (2008), “...to treat persons with (dis)Abilities equally results in their continued discrimination and oppression as it ignores their differences and their need for accommodation” (p.2). This notion highlights the difference between educational equality, with every student having the same supports, and educational equity, with students having access to the accommodations they need, to be on a level playing field with their peers.

Brain injury can impact social relationships, which play an important role in educational atmospheres. The ambiguous nature of brain injury can impact social

relationships. Slowed cognitive processing, memory deficits and communication difficulties can impact friendships established prior to injury (Mukherjee et al., 2003). The invisible nature of brain injury can lead to students with brain injury being excluded from (dis)Ability networks as well (Mukherjee et al., 2003). It is vital that those who have acquired brain injuries are vocal about their experiences and reach out to support others who have similar experiences (Gottschall, 2013). Professionals can encourage existing supports and work to establish networks of students within classrooms where the experience of brain injury is shared between two or more students. Professionals can also navigate support services within the school to determine existing support services and encourage students to explore these services.

Gender is an important variable to consider in relation to the experience of brain injury for post-secondary students. Women with (dis)Abilities have reduced accessibility to educational and employment opportunities (Nosek, Hughes, Taylor & Taylor, 2006). Social roles have also been found to impact the experience of (dis)Ability for women, particularly in relation to workforce participation. McDonough (1997) considered a Statistics Canada health survey and noted that women who were younger, married and had higher levels of responsibilities in the home were less likely to report work-related (dis)Ability than women without these roles

The voices of students with brain injuries are often silenced by dominating others. Iaquina (2007), conducting doctoral research on career decision making for women with brain injuries, found that the implications of brain injury affected participants in significant ways. One example is that when women with brain injuries assert autonomy in career decision-making, they were labeled as “non-compliant”. This finding highlights the societal push for students with brain injury to be compliant and obedient and not strive for excellence.

What is missing from existing literature is the human need for challenge, that does not diminish based on the obstacles a student may face in their academic career. Brain injury is one of the (dis)Abilities that is seen as impacting a person in severe ways over a long-term period and this contributes to presumptions that they are unable to partake in higher education in any way, much less excel at it. The idea of simply obtaining a degree and how this is “good enough” is reflective of this idea and we believe little consideration is paid to how education impacts the individual and drives their future opportunities. More importance should be given to the expertise of people who have experienced living with a brain injury, rather than viewing professionals’ perspectives as more valuable (Lin Haag, 2009). Our research will not be used as a means to exclude the voices of people but rather as a vehicle for personal stories to be shared. In the works of Lorenz (2010), who focuses on how brain injury impacts identity, and Lin Haag (2009), who focuses on experiences of university students who have brain injuries in Ontario, first voice accounts have emerged. This needs to continue to address the gap in existing literature.

The Choice of Standpoint Feminism as the Research Methodology

Standpoint feminism was chosen as the methodology for this study due to the lack of existing research specifically related to the experience of post-secondary students with brain injury. As noted by Degeneffe (2001), the experiences of brain injury vary for each

individual, so these unique experiences should be considered, as they may not be represented in the literature that already exists. These individual voices have been missing from existing conversations about the experiences of post-secondary students with brain injury. The experiences of female students with brain injury in particular are vital to consider due to the reduced access to employment and educational opportunities experienced by them. Standpoint feminism methodology involves investigating discrepancies between socially constructed knowledge and experiences of individuals within a socially constructed world (Gottschall, 2013). We think this perspective is useful in considering the experiences of students with brain injury, especially in light of the experiences that contradict traditional conceptions related to people with brain injury.

Narrative

A narrative method in interviews was employed as this best suits the research aims and framework. "Narrative analysis of research involves approaches that search for and analyze the stories that people tell to understand the lives of others and their world" (Gottschall, 2013, p. 24; Bryman, Teevan & Bell, 2009). Through this approach, value is given to links between events throughout a person's life, stories about these events, the context they are told within, and the various role people play and perceive they play, in these stories (Bryman et al., 2009). In the present research, general questions were asked, then pieced together to tell the stories of participants. This produced a comprehensive sketch of each participant's experience of pursuing post-secondary education as a student with a brain injury. In keeping with the narrative tradition, the focus was on the implications for peoples' lives and how they describe the implications, rather than on injuries specifically or particular diagnosis information.

Recruitment and Sampling

This study focused solely on women for reasons outlined above. (dis)Ability resource centres were contacted at universities and asked to display a poster at their centre and send it out electronically to people who were registered with the centre via an e-mail listserv. One participant was recruited via this method. The provincial Brain Injury Association of Nova Scotia organization also sent a notice about the study on their listserv. No participants were recruited via this method, so in addition to this recruitment technique, a snowball sampling technique was employed by recruiting participants through existing social connections.

Semi-structured interviews were employed in this study with five participants who have brain injuries. With this type of sampling, cases are chosen because they are representative of a population or may represent extreme cases (Sandelowski, 2000). For inclusion in this study, participants had to meet three criteria: they had to identify as female, be a student enrolled in post-secondary education and have acquired their brain injury over a year ago. The last criterion involved due diligence to ensure participants were not harmed by partaking in the study due to inadequate time to cope with the implications of their injury. The mean age of participants was 24 with ages ranging from 20 to 26 years old.

Name	Approximate Time Elapsed Since Acquiring Brain Injury	Post-Secondary Study
Jolene	1 year	Graduate-attempted, on leave due to injuries
Francine	8 years	Undergraduate-completed and enrolled in another program now
Lisa	6 years	Undergraduate
Adele	3 years	Graduate
Louise	7 years	Undergraduate-completed and enrolled in another program now

Figure 1. Study participants.

Data Collection

Research Ethic Board approval was obtained prior to conducting this research. The voices of five participants were included in this study. Before conducting interviews, participants were provided with a storyboard that highlighted some of the information the study was seeking to glean. Pre-participation interviews were conducted to discern participant suitability for this study, as well as to provide more information about the research and allow participants time for consideration of their involvement and opportunity to ask any questions that could have been relevant for them in deciding their ability to participate. All interviews were conducted in the spring of 2012 at a location of the participant's choosing. The interviews sought thick description of individual experiences so 2.5 hours were allotted for the process to occur, although no interview lasted that long (Gottschall, 2013, p. 36).

Participant	Length of Interview
Lisa	1 hour, 4 minutes, 11 seconds
Francine	37 minutes, 1 second
Louise	35 minutes, 5 seconds
Jolene	1 hour, 34 minutes, 21 seconds
Adele	1 hour, 16 seconds
Total Interview Time	4 hours, 46 minutes, 54 seconds
Mean Interview Time	57 minutes, 24 seconds

Figure 2. Interview specifics.

A digital audio recording device was used to record the interviews and hand written notes also accompanied the audio recording.

Transcription

Transcripts in this study were closely and repeatedly read to become intimately familiar with the content. Data were transcribed personally by the primary researcher, which is a practice that upholds the narrative tradition of research. Transcript verification was also employed, whereby participants reviewed written accounts of the interviews. Researcher involvement at all levels of inquiry was vital in upholding the narrative tradition. According to Atkinson (1998), “both the interviewer and the person telling their own story are involved in meaning-making work, which turns the interview into an active process that is unavoidably collaborative” (p. 40) (Gottschall, 2013, p. 39).

Narrative Analysis

The process of analysis involved revisiting transcripts and formulating comprehensive categories of thought in relation to the data. This was an ongoing process throughout the study. Color-coding was used to categorize themes for discussion. When common themes or stark disparities in experiences were noted, transcripts were re-considered to formulate analysis of this content (Gottschall, 2013, p. 40). Transcript verification was used to formalize participant analysis of their own words and was vital in ensuring no misunderstandings arose from the interpretation of participant stories (Beverley, 2000; Tierney, 2000).

Limitations

The study did not explore the intersection of (dis)Ability with other social constructs such as race, age, sexual orientation, or class (Stienstra, 2012) and this could be seen as a limitation. The intersection of other social constructs might lead to different results as well and is a drawback of this research. Another limitation of this research is that given the narrative tradition, only matters that were meaningful for participants, presumably, were discussed. This could leave many areas unexplored. Pushing participants to expand on their stories beyond their comfort level would have created an ethical dilemma and may have resulted in harm to participants (Gottschall, 2013, p. 43). Another limitation of this research is unveiled in consideration of the method of recruiting participants. Those people who are not registered with the (dis)Ability resource centre at their university, do not consider their injury to have resulted in (dis)Ability or do not associate with the label of brain injury, are excluded from the study.

A common critique of the narrative process is its lack of generalizability. Findings presented in a narrative format are said to be case studies and while they cannot be generalized, they can provide knowledge that may be useful to other people dealing with similar issues or aspects of issues in the personal narrative (Gottschall, 2013, p. 43; Faulkner & Faulkner, 2009). When stories are considered in terms of the elements that comprise them, however, similarities and relatable situations emerge that can indeed be helpful for a wide range of people dealing with the implications of acquired brain injury (Gottschall, 2013, p. 44).

One critique of the narrative method is that the stories told can become taken as absolute truth. As Brown (2007, p. 178) notes, “suppressed... or subjugated stories are not inherently more true than those that reflect dominant knowledge.” With this in mind,

remaining reflexive throughout the research process was vital. Constant questioning, to clarify participant's stances, was therefore an important process in conducting this research.

Analysis

Participants spoke about a variety of supports they experienced in their post-secondary educational careers. Lisa, for example, highlights her enhanced ability to remain optimistic and think critically, as resulting from her acquisition of a brain injury. For Adele, physical fitness as an athlete contributed to the rehabilitative process and the support of family and friends was also crucial for Adele's recovery from brain injury. Lisa emphasized the support of her mother throughout her experiences, while her father was unsupportive. Adele notes her mother was there for her at all hours, including checking in on her throughout the night, immediately following her injury. Francine noted the support of professors in accommodating her needs by providing extensions for assignments and exams was helpful. Varying amounts of use of supportive services was noted by participants. Adele states she did not utilize formal supportive services at all, while Lisa utilized academic supports beginning in her high school career and all throughout her post-secondary career, feeling that these services were very important and necessary for her academic success. Lisa highlights a "perk" afforded to her as a student registered with her university's (dis)Ability resource centre: getting to meet personally with professors to discuss her needs. For three of the five participants, (dis)Ability resource centres on campus were very useful. These participants noted an understanding atmosphere, separate rooms to write exams in and additional time allotted for exam completion, were helpful. Adele says that having the opportunity to speak with a professional in a position of authority, such as a doctor, was helpful for her following her injury, as this person helped her "make sense" of the injury. Existing policies and procedures were supportive for some participants insofar as additional academic funding in the form of government grants was now available.

Participants discussed specific learning difficulties, and strategies that helped them to be academically successful were also conveyed. Lisa said she found comparing definitions and fill-in-the-blank questions difficult. She used flash cards to help her study and said this was a helpful strategy. For Francine, writing papers following her brain injury was difficult. To account for this, Francine asked for extensions on submitting assignments and on the time allotted to write exams. While Francine found that the recommendations of some medical professionals were unhelpful, Adele stated that talking to her doctor helped her to "make sense" of her injury. For Adele, who acquired her brain injury while playing rugby, being unable to play sports following her injury left her disconnected from her main social group and resulted in unmet social needs. Adele uses cellphone technology, asking others to remind her, saying things she wants to remember out loud and color-coding by using highlighters. Louise indicated repetition aided her recovery, such as re-taking classes she had already completed.

While the difficulties discussed above were met by changing learning strategies and developing new coping strategies, other barriers encountered by students proved to leave a lasting impact that could not be accommodated. Jolene described the experience of learning new information after acquiring her brain injury saying,

... a train of thought for me is like a ball... this is the train of thought or concept that I want to talk about and then I read another post and suddenly there's three other balls in my hands here and I have to remember which one of them was the first one that I wanted to talk about... there's like another three or four or five balls there and then suddenly I have an entire room of balls and I'm trying to find that one and I can't.

For Jolene, the expectation that she will be able to find that one ball in a ball pit of similar balls was frustrating" (Gottschall, 2013, pp. 68-69). Jolene states that others' perceptions of her abilities have not changed, although those abilities *have* changed. Jolene talked about how professors seemed to hold assumptions about how long she would take to recover from her injuries. Jolene notes that professors were accommodating for her initially, but with time, when her condition did not improve, she notes that they told her to "take as much time as [she] need[ed]...but I don't think anyone realized how much time that was going to be" (Gottschall, 2013, p. 73). Louise also spoke about a professor who seemed to think that because she had acquired a brain injury, Louise was incapable of being "on par" with her classmates. Lisa spoke about a professor who used many "double negatives" and she found it difficult to comprehend what was being asked of her. Lisa says a different professor used "pop quizzes" to test students and these consisted of PowerPoint slides presented on a screen that was controlled by the professor who decided how long it would take students to look at the slide and answer the question. This was something that was challenging for Lisa, as she found she took longer than her classmates to comprehend the image on the screen and then answer the question being asked. According to Lisa, some friends also believed she was "faking" her injury and receiving unfair advantages.

Participants also spoke about services that were unhelpful. Participants varied in their use of (dis)Ability resource centres. Jolene states the (dis)Ability resource centre at her university did not seem to provide supports tailored to her specific (dis)Ability. Lisa says that it is difficult for a student to think of what services they need, so if a list of services offered was provided, this would be helpful. Adele, who had years of post-secondary education experience already, did not feel the need to use the (dis)Ability resource centre at her university. As mentioned above, for Lisa, who endured the cumulative effects of somewhere between seven and nine concussions prior to beginning post-secondary education, accommodation services were utilized from the beginning and were important to her success as a university student. Difficulties with provincial student loan providers, related to altered full-time status mid-semester, were highlighted. Louise notes she sought the assistance of occupational therapists, but no appropriate assistance was provided. Jolene had a similar experience, as she regards occupational therapy work saying, "You work for the people you work for, but for the people you don't work for, you're useless". (Gottschall, 2013, p. 56). Jolene thus indicated that she believes Occupational Therapists provide helpful strategies for some people whose needs are familiar to them, but she believes that her needs were unique and this is why Occupational Therapy was not helpful for her. Students encountered medical professionals who offered advice that was not practical for the student's life and did not speak to the complex variables in their life. For example, Francine, who had a pre-existing anxiety disorder, was advised by a medical professional to "sit in a dark

room” to alleviate symptoms of concussion. For Francine, following this advice had negative implications, as it worsened her pre-existing anxiety.

Barriers related to sociopolitical beliefs about (dis)Ability and discourses around asking for help were also identified by participants. People who have experienced brain injury often struggle with being seen as “tragic victims” (Sherry, as cited in Lorenz, 2010). Jolene spoke about the challenge of professors not recognizing her strengths in the classroom. She said, “one of the big things was...just seeing how... entrenched we are in the academia of it all...I can’t really write papers... I can do other stuff but I can’t really write papers...” (Gottschall, 2013, p. 116). Lisa often stressed how she did not want to be seen as “complaining”. Francine understands the negative implications of her brain injury as stemming from “pushing” herself, and believes she “got what she deserved” because of this pushing. Adele spoke about the same perseverance through medical instability. She says she initially did not think anything was wrong, after she acquired her brain injury, and it took the convincing of others for her to realize that she needed to seek medical attention.

The effects of acquiring a brain injury upon one’s identity is also important to consider. For Louise, her identity as a strong person was challenged when she acquired a brain injury, as she states that requiring accommodations led to her feeling “weak”. For Lisa and Adele, acquiring a brain injury impacted their identity as athletes. Lisa says her goals associated with competition had to be altered and she devised new goals. Adele says her focus shifted from sport participation to coaching. Adele also spoke about how her brain injury affected friendships, stating that she felt unable to share her feelings with the friends that remained after her disconnection from playing rugby. For Jolene, feelings of pride and self-worth that were tied to academic success were virtually eliminated and this had a negative emotional effect on her.

To summarize the findings of this study, participants were able to point out a variety of supportive people and strategies they implemented to help accommodate the challenges they experienced after acquiring a brain injury. Specific strategies implemented to help with the learning process were valuable to consider, as this speaks to the potential that students with brain injury have and the hope that can remain even after the acquisition of a brain injury. Even professionals such as instructors and services intended to be supportive can remain unhelpful based upon misinformation or lack of knowledge of individual cases. Sociopolitical beliefs of individuals and personal senses of identity can also play a role in the experience of brain injury. Jolene seems to encapsulate the overall concern of students best, stating that adherence to high academic standards sometimes comes at the expense of appropriate accommodations, and service providers need to be creative and willing to advocate for accommodations that best meet the needs of students, while operating within existing policies.

Implications

Implications of this research for students involve bringing awareness to the varied experience of students. Participants in this study spoke about feeling “undeserving” of accommodations and also experiencing a changed sense of identity after acquiring a brain injury. “Sensitivity to the inner struggles that students with brain injury endure is vital” (Gottschall, 2013, p. 126). Participants also identified social implications of brain

injury, such as friends believing the survivor is “faking” their injury, as having negative emotional effects on them.

This research is also significant for teachers. Participants note that instructors within post-secondary institutions should pay attention to difference in learning styles that have resulted from brain injury (Gottschall, 2013). The elimination of assumptions about student’s ability would also be beneficial, as is evident from considering this research.

This research would be valuable for service providers to consider as well. Professionals can support students in enduring the emotional implications of brain injury by being conscious of these struggles in the classroom and making decisions about teaching strategies that will support the emotional stability of students with brain injury. Professionals need to be open to understanding the lived experiences of students with brain injury, and supportive of accommodations that speak to the needs of students with brain injury. Professionals can work with the student and (dis)Ability resource centres to develop innovative, effective strategies to accommodate the educational needs of students with brain injuries.

This research could effect changes in policies that influence post-secondary students as well. Professionals can also support amendments in policy. Brain injury is becoming a better-known phenomenon, but policies for accommodation services and equipment often need updating to account for the realities experienced by students. Student loan policies were identified as having oppressive effects on students and case specific consideration in special circumstances around the realities in the lives of a person who has recently acquired a brain injury is identified as a need.

Significance of This Research

Participating in this research provided participants with a meaningful avenue for expressing frustrations about access and accommodations within post-secondary education. This research uncovers a portion of the range of experiences that post-secondary students who have acquired a brain injury might endure that require accommodation in either a formal or informal way. This research highlights the need for individualized accommodations to be put in place for post-secondary students with brain injuries in order for this education to be accessible for all. The need for an internal analysis of (dis)Ability services at post-secondary educational institutions is apparent, given the findings of this research. Ideally, this research will reach both academic circles and individuals living with brain injury. This research has the potential to affect broader university policy as well as the on-the-ground efforts of professionals to educate students with brain injury to become optimal learners. The experience of acquiring a brain injury is one that has become more prevalent in recent years and, over time, it is anticipated that understandings of this injury will be enhanced and this will positively influence service provision (Gottschall, 2013). For universities to remain comprehensive in scope, and provide appropriate and effective aids, post-secondary (dis)Ability services need to be restructured to best meet the needs of students.

References

- Atkinson, R. (1998). *The life story interview*. Thousand Oaks, CA: SAGE Publications.
- Barnes, C. (2007). Disability, higher education and the inclusive society. *British Journal of Sociology of Education*, 28(1), 135-145.
- Beverley, J. (2000). Testimonio, subalternity, and narrative authority. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.) (pp. 555-565). Thousand Oaks, CA: Sage.
- Borland, J., & James, S. (1999). The learning experience of students with disabilities in higher education. A case study of a UK university. *Disability & Society*, 14(1), 85-101.
- Brown, C. (2007). Dethroning the suppressed voice: Unpacking experience as story. In C. Brown & T. Augusta-Scott (Eds.), *Narrative therapy. Making meaning, making lives* (pp. 177-196). Thousand Oaks, C.A.: Sage.
- Bryman, A., Teevan, J., & Bell, E. (2009). *Social research methods*. Toronto, Canada: Oxford University Press.
- Carter, I., Hanes, R., & MacDonald, J. (2012). The inaccessible road not taken: The trials, tribulations and successes of disability inclusion within social work post-secondary education. *Canadian Journal of Disability Studies*, 1(1), 109-142.
- Corker, M. (1999). Differences, conflations and foundations: The limits to 'accurate' theoretical representation of disabled people's experience? *Disability & Society*, 14(5), 627-642.
- Corker, M. (2000). Disability politics, language planning and inclusive social policy. *Disability & Society*, 15(3), 445-261.
- Degeneffe, C. (2001). Family caregiving and traumatic brain injury. *Health and Social Work*, 26(4), 257-268.
- Dunn, P., Hanes, R., Hardie, S., & MacDonald, J. (2006). Creating disability inclusion within Canadian schools of social work. *Journal of Social Work in Disability & Rehabilitation*, 5(1), 1-19.
- Dunn, P., Hanes, R., Hardie, S., Leslie, D., & MacDonald, J. (2008). Best practices in promoting disability inclusion within Canadian schools of social work. *Disability Studies Quarterly*, 28(1), 1-18.
- Faulkner, C., & Faulkner, S. (2009). *Research methods for social workers: A practice based approach*. Chicago, IL: Lyceum Books Inc.
- Gottschall, K. (2009). Parental experiences of educating children with disabilities (unpublished undergraduate thesis). Antigonish, Canada: Saint Francis Xavier University.
- Gottschall, K. (2013). Female students with acquired brain injury: Experiences in university (unpublished graduate thesis). Halifax, Canada: Dalhousie University.
- Iaquinta, M. (2007). The experience and meaning of career decision-making as lived by women with brain injury. ProQuest Dissertations and Theses. March 2007, 1-265.
- King, L. (2010). Disability in higher education: A position paper. *American Annals of the Deaf*, 155(3), 386-391.
- Kraglund-Gauthier, W., Young, D. & Kell, E. (2014) Teaching students with disabilities in post-secondary landscapes: Navigating elements of inclusion, differentiation, universal design for learning and technology. *Transformative Dialogues*, 7(3), 1-9.
- Laforce, R., Jr., & Martin-MacLeod, L. (2001). Symptom cluster associated with mild traumatic brain injury in university students. *Perceptual and Motor Skills*, 93(1), 281-288.
- Lin Haag, H. K. (2009). Exploring the experience of university students coping with acquired or traumatic brain injury. (Master's thesis). Retrieved from Dissertations and Theses database. ISBN: 978-0-494-49980-1.

- Lornez, L. (2010). Discovering a new identity after brain injury. *Sociology of Health and Illness*, 32(6), 862-879.
- Madaus, J. (2011). The history of disability services in higher education. *New Directions for Higher Education*, 154, 5-15.
- Mantell, A. (2010). Traumatic brain injury and potential safeguarding concerns. *The Journal of Adult Protection*, 12(4), 31-42.
- MacDonald, J., & Friars, G. (2010). Structural social work from a (dis)Ability perspective. In S. Hicks, H. Peters, T. Corner, & T. London (Eds.), *Structural social work in action* (pp. 138-156). Toronto, Canada: Canadian Scholars Press.
- McDonough, P. (1997). The social pattern of work disability among women in Canada. *Journal of Disability Policy Studies*, 8(1 & 2), 75-94.
- Mukherjee, D., Reis, J., & Heller, W. (2003): Women living with traumatic brain Injury. *Women & Therapy*, 26(1-2), 3-26.
- Nes, K., & Stromstad, M. (2006). Strengthened adaptive education for all-No more special education? *International Journal of Inclusive Education*, 10(4), 363-378.
- Nosek, M., Hughes, R., Taylor, H., & Taylor, P. (2006). Disability, psychosocial and demographic characteristics of abused women with physical disabilities. *Violence Against Women*, 12(9), 838-850.
- Oliver, M. (1990). The individual and social models of disability. (Paper presented at Joint Workshop of the Living Options Group and the Research Unit of the (College of Physicians). July 23 1990. Retrieved from <http://www.leeds.ac.uk/disability-studies/archiveuk/Oliver/in%20soc%20dis.pdf>
- Sandelowski, M. (2000). Focus on research methods: Combing qualitative and quantitative sampling, data collection and analysis techniques in mixed-methods studies. *Research in Nursing and Health*, 23, 246-255.
- Statistics Canada. (2009). Social participation of children with disabilities. Retrieved from <http://www.statcan.gc.ca/pub/11-008-x/2009002/article/11021-eng.pdf>
- Stienstra, D. (2012). Race/ethnicity and disability studies: Towards an explicitly intersectional approach. In N. Watson, A. Roulstone, & C. Thomas (Eds.), *The Routledge handbook of disability studies* (pp. 376-389). New York, NY: Routledge
- Tierney, W. (2000). Undaunted courage: Life history and the postmodern challenge. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.) (pp. 537-553). Thousand Oaks, CA: Sage Publications.