Article

A Study of Young Adults with Visual Impairments and Driver's Education

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Abstract: In this qualitative study, young adults with visual impairments aged 18–27 and family members were studied to determine the effects of state-mandated high school driver's education on independent travel, self-efficacy, and the transition to adulthood. A young person's ability to travel independently can determine whether he or she transitions successfully from one life stage to another. Concepts from different social theorists are used to form the theoretical frame for data analysis. The author finds that in spite of curricular and pedagogical intervention, regardless of technological advances, and despite low-vision/blind youth's accomplishments and determination to succeed, young people with low vision/blindness nevertheless continue to be challenged in the realms of the transition to adulthood, securing employment, and independent living due to persistent, societal-level discrimination and perceived incapability. These persistent, unwarranted forms of discrimination profoundly affect young adults' perceptions of self-efficacy and more often than not close doors to their success. The author posits that societal-level intervention is required to effect meaningful, equitable change designed to dismantle the current systemic discrimination plaguing youth and young adults with visual impairments.

Keywords: visual impairments; nondriving youth; independent travel; driver's education; transition; resilience

1. Introduction

One of the major milestones in a teenager's life is the ability to drive. It gives an adolescent a higher standing among her peer group because she has greater independence and mobility [1]. A common theme in the research of driving and people with visual impairments is a lack of spontaneity. Corn and Sacks [2] examine the effect of nondriving on adults with visual impairments and find that not being able to drive moderately affects their participation in social activities and their chances to date and obtain employment. Participants also expressed concern due to a lack of spontaneity because they "needed to plan activities that required independent travel" [3] (p. 212). Although researchers do not explicitly say it, their findings suggest that nondriving has an effect on interpersonal relationships and social inclusion, two significant measures of quality of life [4]. Feeling as though one is unable to engage socially can be frustrating, especially for those who once lived a vibrant and interactional lifestyle. This may exacerbate the effects of vision loss by making the person feel as though, in addition to her vision, she has lost other aspects of her previous life.

The effects of vision loss may be even more pronounced in older adults because it forces them to alter patterns and habits they have acquired over time. Similar to working-age adults, individuals aged 60 and older with vision loss also indicate that ceasing to drive results in major lifestyle changes [5–7] and leaves individuals feeling a reduced sense of self-control and independence [8], because the driver's license can serve as a "symbol of self-worth" [9] (p. 17). Older adults do not tend to be as active in work or volunteering as they were when they were able to drive, they change their living situation

to access transportation, and they do not participate as readily in leisure activities due to the additional planning and time required [6].

Like adults with low vision, adolescents with visual impairments do not have the same opportunities to spontaneously visit friends, travel independently, or participate in age-appropriate activities [3]. Studies also show that students with low vision spend more time alone and engage in passive activities and in sleep more than their functionally blind or sighted peers [10–12]. In Sacks and Rosenblum's [3] study of adolescents' perceptions of driving and nondriving, they find many participants are unclear about the nature of their visual impairment, have minimal information about driving with low vision, and are not familiar with strategies to deal with nondriving alternatives. In addition, they experience "high levels of frustration and feelings of great sadness" regarding their inability to drive. Due to the emotional implications found in Sacks and Rosenblum's [3] study and the role of emotional well-being in quality of life, it is even more important to know if students with visual impairments who could potentially encounter negative feelings by attending a state-mandated high school driver's education course perceive the information as valuable.

To address the issue of nondriving for individuals with visual impairments, Corn and Rosenblum [13] developed a nondriving curriculum to meet the unique needs of this population. In the original *Finding Wheels* [13] curriculum designed for adolescent nondrivers, the authors present a variety of transportation options and ways to obtain said transportation. Since the completion of this study in 2017, Corn and Rosenblum have updated their 2000 version of *Finding Wheels*. The 2020 [14] update is written to include adolescents and young adults with a visual impairment and provides strategies and reflection about nondriving transportation options. Additionally, a chapter is included that describes the driver's education process, the benefits of driver's education classes, and the potential impact of driver's education on emotional well-being [15]. This is the only known contribution to the available literature that specifically addresses driver's education and nondrivers with visual impairments.

The issue of driver's education for people with visual impairments is complex. The potential psychological effects of participating in an activity that reminds a person that she is unable to achieve a certain milestone can be devastating. The information covered in driver's education, however, is important for the independent traveler who is visually impaired as both a pedestrian and passenger in a motorized vehicle. How does one reconcile these opposing viewpoints? One of the ways in which professionals attempt to mitigate the effects of vision loss on independence and mobility is through orientation and mobility instruction. In orientation and mobility, professionals work with individuals who are blind or visually impaired to "orient themselves to home, school, and community environments and move about independently" [16] (p. 258).

Through the review of the available literature, the author has examined the role of independence and the ways in which driving (nondriving) connect with emotional well-being and quality of life. The gap in the literature that is filled by this study is the relationship of driving and driver's education to independence and the ways in which this is manifested in self-efficacy, identity construction, and transition outcomes for youth and young adults with visual impairments that have the potential to influence a person's quality of life. It is hoped that policy developers and implementers will gain a greater understanding of how their curricular policies are supporting (or denying) the autonomy of young people with visual impairments.

2. Materials and Methods

2.1. Qualitative Methods

The methodology is rooted in naturalistic inquiry; specifically, a basic interpretivist study was conducted. Naturalistic researchers conducting field research go through a common sequence of steps: (a) gaining access to and entering the field site, (b) gathering data, (c) verifying and cross-checking findings to ensure accuracy and trustworthiness, (d) analyzing data immediately and throughout the study, (e) making interpretations,

(f) writing up findings, (g) sharing conclusions and conferring with participants, and (h) leaving the field site [17]. These similar steps were followed during the study by collecting artifacts, taking field notes of observations, and interviewing participants. After each event, the experience was transcribed using sensory details. Then, the data collected were examined and reexamined to determine common or interesting themes across the various data collection methods. This cycle was repeated after each data collection session. Throughout this process, participants were consulted to ensure the findings were an accurate representation of their experiences.

The purpose of this study was to define a specific phenomenon: the effects of driver's education courses on the knowledge of and travel in the built environment of people with visual impairments. The social model of disability is used as the conceptual model because it focuses on the individual rather than the impairment and emphasizes access, community, health promotion, and independence [18]. As demonstrated previously, there is no research available that has directly addressed this issue. This study signifies the first stage of exploratory work, defining the phenomenon, and thus is an important first step in a much longer line of inquiry, because a definition of the phenomenon is required before researchers can look further at this topic. This study received ethical approval from the Institutional Review Board of Illinois State University in Normal, Illinois.

2.2. Participants

The population studied includes academically oriented [19] young adults aged 18–30 with low vision living in a midwestern state who participated in post-secondary education and the labor force. Participants had either taken driver's education or read their state's handbook concerning driving laws and had a visual impairment that disqualified them from obtaining a driver's license. Pseudonyms for people and locations have been used to ensure the confidentiality of the participants. The goal of this study was to examine their perspectives of the effect of driver's education on their ability to travel independently in a world dominated by motorized vehicles (busses, trains, automobiles). The reason young adults who were slightly removed from taking the course were selected was because they would likely have more of a long-view perspective of the course's effect on their behavior, perceptions, attitudes, knowledge, and practice. School-age students who were taking part in the course at the time of the study or were taking it shortly before the time of the study were not likely to have enough experiences of independent living, for example, to allow them to determine the later effects of taking driver's education on their independent travel and the lasting knowledge gained therefrom. For the participant demographic information for the seven individuals with visual impairments, please see Table 1. Six family members were interviewed for additional information about the participants' lived experiences and to verify and cross-check information. A total of 13 participants were interviewed for this study.

Table 1. Participant Demographic Information.

Name *	Age	Visual Diagnosis	Racial/Ethnic Identity	Gender Identity	Role
Irene	25	Achromotopsia	White	Female	Young Adult
Maverick	25	Leber's Hereditary Optic Neuropathy	White	Male	Young Adult
Devon	27	Traumatic Brain Injury	White	Male	Young Adult
Amelia	21	Cataracts and photophobia	White	Female	Young Adult
Nolan	23	Leber's Hereditary Optic Neuropathy	White	Male	Young Adult

Table 1. *Cont.*

Name *	Age	Visual Diagnosis	Racial/Ethnic Identity	Gender Identity	Role
Tommy	19	High Myopia	White	Male	Young Adult
Wolfgang	22	Unknown retinal condition affecting peripheral vision	Pakistani	Male	Young Adult
Annie	N/A	None	White	Female	Irene's Mother
Mickey	N/A	None	White	Female	Maverick and Nolan's Mother
Dora	N/A	None	White	Female	Devon's Mother
Diana	N/A	None	White	Female	Amelia's Mother
Adele	N/A	None	White	Female	Tommy's Mother
Allegra	N/A	None	Pakistani	Female	Wolfgang's Mother

* Pseudonyms were used to protect participant identities.

2.3. Data Collection

The research methods used in this study are participant observation, interviews, and artifact/document collection. Observations took place not just in interview settings but also during times when participants engaged in independent travel, attended class, and walked to work.

Participants with visual impairments who met the exclusionary criteria for participation in this study (must have a visual impairment that disqualified them from obtaining a driver's license in their state and must have either taken driver's education or read their state's driving handbook) were interviewed for a minimum of one session. During the first session, the subject's educational history, experiences with orientation and mobility, family attitudes, and feelings about driver's education were explored. The audio from the initial interview was transcribed, and follow-up questions were developed. A second interview was scheduled, when appropriate, to expand on the follow-up questions devised from the initial interview or to clarify information from the initial interview and observation. If follow-up questions were only for clarification and would not have elicited a storied response, a follow-up interview was not scheduled. Thirteen initial interviews and three follow-up interviews were conducted for a total of sixteen interviews. All seven participants with visual impairments were observed at work, in class, or engaged in some other activity. Interviews were conducted with at least one parent/guardian of the participants to provide context for the young adults' experience of driver's education through educational policy, attitude, and pedagogical practice.

2.4. Data Analysis

The data were analyzed using the constant comparative analysis method. The constant comparative method includes both coding and analysis simultaneously to generate theory [20]. In this method, theory is constantly being designed and redesigned according to the researcher's interpretations of the data. The constant comparative method is used when the researcher intends to "generate and plausibly suggest many categories, properties, and hypotheses about general problems" [20] (p. 104). Researchers using the constant comparative method are not looking for universality or proof of causality. Instead, they look for a saturation of data to determine which themes emerge instead of considering all of the available data. The constant comparative method was used when collecting and analyzing the data because it allowed for the flexibility necessary to define the phenomenon.

2.5. Theoretical Framework for Data Analysis

The concepts and subconcepts that compose the theoretical framework all share a relation to identity, meaning the internal and external factors that play a role in a person's membership to a specific social category and/or a distinguishing feature someone takes special pride in [21,22]. The concepts chosen were seen as complimenting and magnifying identity because the data from the interviews and observations point to ways in which participants construct and perform their identities. The data were analyzed using the following theoretical concepts as the lens: significant adversity and positive adaptation to adversity, which is drawn from resilience theory [23], and the concept of unbecoming human, specifically the notions of object-becoming and proximity [24]. These concepts are rooted in emancipatory social theories developed by Heavy Runner and Marshall [23] and Kim [24]. These concepts were chosen to analyze the data because young adults with visual impairments are among a number of marginalized groups who continue to experience societal discrimination, even in an age of legislation that promotes the inclusion of people with disabilities. These three theorists suggest a shift in the discourse from deficit thinking to strengths-based ontologies to effect positive social change for Native American cultures and people with disabilities. This work is consistent with the work of Yosso [25], who first conceptualized community cultural wealth as a means to illuminate the strengths-based perspective of the value of "cultural knowledge, skills, abilities, and contacts held by socially marginalized groups" (p. 69) rooted in race-based oppression that have gone unrecognized and unacknowledged as containing significance.

3. Discussion

The impetus for this study arises from the author, during her years as a teacher in public schools, encountering adolescents who had visual impairments but were required to take driver's education. Little research, if any, exists in the field of visual impairments that draws from qualitative data to examine the lived experiences of young adults with visual impairments, specifically in driver's education. Little work has been done in the field of visual impairments that seeks to apply critical theory to understand and theorize the experiences of youth and young adults with visual impairments. Utilizing the theories of Heavy Runner and Marshall [23] and Kim [24] has helped to reveal important analytic insights that have the potential to inform practice at both grassroots and societal levels. In the following sections, the reader is presented with two large analytic claims that emerged from analyzing participant data through the aforementioned theoretical frame.

3.1. Societal Perception of Humanity and Driver's Education

When schools require students with visual impairments to participate in driver's education when they are medically ineligible to drive, they devalue the ability of the person by reinforcing that the visually impaired are never going to be part of this aspect of society, thus perpetuating ableism when schools should be giving young people with low vision or blindness appropriate instruction to aid in the transition, including real-life skills and how to become resilient young adults. Participation in driver's education satisfies a graduation requirement in some school districts. By adopting and executing a blanket policy that obviously caters to certain populations and ignores others, school boards and administrators are neither making decisions based on the *entire* population of students they serve (including those with disabilities) nor considering the social-emotional implications of taking the classroom portion of driver's education for students with visual impairments. This oversight speaks volumes about the values of school leadership in terms of students with disabilities by ignoring the unique needs of all students attending their schools. It also demonstrates the lack of insight policymakers have regarding the effects of their policies on specific populations. Tommy, a recent high school graduate enrolled in community college courses, laments about the hit his self-confidence took while in driver's education.

It didn't really help it, because like I know I'm not going to get to drive. Why just punish me even more by [making me sit in this class and] giving all these other kids their permits at the end of the semester [when I don't get one]?

Amelia also recalls her distressing experience in driver's education, as it was also a graduation requirement in her rural town.

It was really uncomfortable. It's like, you're surrounded by all these people that are learning how to drive, and it's like, "Why am I here?" It's really uncomfortable, it's like, most of the time I don't really care that I can't drive, but that one class, just really front and center, made it . . . awkward. And it really makes you stand out from your peers when they get to the driving session and you're not, er, you're not able to do anything but watch the other people. They're like, "Why is she standing there by herself?" Cause they don't know. It just made me really uncomfortable and it made me feel, you know, even more ostracized from my peers.

To subject students to these feelings of inadequacy that cause them to question their self-efficacy and ability is inhumane and runs counter to the goal of educating students with disabilities: creating self-assured and self-determined members of society. It also does nothing to promote resiliency in youth or to teach them "real-life" skills. Instead, it acts as a destructive force on one's self-worth and ability to transition to adulthood while they are at an impressionable age. Another participant, Wolfgang, did not take driver's education while in high school but still read his state's driving handbook because he and his mother believed the information drivers learned was important for him as a pedestrian. He agrees with Tommy and Amelia that requiring participation in the classroom portion of driver's education "would kind of be discouraging for people. Especially if they can't really take the class. Like if they wouldn't qualify [to drive because of their vision], because it would just be a reminder that they can't really do it". It is difficult enough not to share driving as a rite of passage with their peers, it is irresponsible for leadership to knowingly and forcibly put students with visual impairments in a situation that acts as a constant reminder of how they differ from the sighted world and how they will never be deemed capable members of this group in society, effectively reifying a second-class-citizen status among students with visual impairments. All told, a few participants had strong, even visceral reactions to participation in the classroom portion of driver's education, while others saw value in completing the classroom-based coursework.

While none of the participants advocated for requiring driver's education coursework to earn a high school diploma, some did not experience the intense emotional response described by Tommy and Amelia. Unlike participants who grew up in rural areas, Irene's involvement in driver's education did not affect her self-confidence and self-esteem because she was aware and proficient in the use of other transportation options available to her as a resident of a large, metropolitan area. This was in large part due to her access to consistent orientation and mobility instruction. Tommy and Amelia lived in towns where they had access to a fixed-route bus system; however, traveling beyond the confines of the town created logistical issues and made them feel more limited and stifled as a result. In Irene's experience, she was required to take the classroom portion of driver's education, but her family advocated for a "pass/fail" option to reduce the pressure arising from earning a grade that would affect her grade point average in a course that was deemed pointless by the family, as her vision disqualified her from obtaining a driving permit. Irene agreed with this decision and notes that she benefited from some of the information covered because she holds the belief it is, "important to be literate, even in areas that may not appear to pertain to you".

Irene's perspective regarding "life literacy" is in line with some statements made by Maverick and Nolan, the brothers who experienced vision loss at the age they became eligible to begin learning to drive. Looking back, both maintain that the information they gained from the course was valuable enough to warrant their participation in the classroom portion. Maverick even considers the value of "observing" the behind-the-wheel

experience as a means to provide background knowledge to add depth to orientation and mobility instruction.

> *Because trying to think—and I've thought about this for a while when you asked me the question. If I didn't know driver's ed, or if I didn't have that base of understanding of driver's ed, I wonder how that would be different when I learned O&M. I don't know. Because [the orientation and mobility specialist] taught me the same types of things or the understanding of things of what I knew in driver's ed, too. "So, this is what is going to happen" and so I just agreed and then I told him, "yes, I know that understanding because . . . ." I guess that's my answer. I don't know how it would be different if I didn't learn O&M, or if I didn't know driver's ed compared to O&M. But it did help me to build upon . . . so it did help me. I'm trying to phrase this. It took me to a next level of O&M instruction because I did know about driver's ed. So, it did help [the O&M instructor at the time] to try and build off of what I did or I did not learn in driver's ed or understanding of the [layout of the] streets.*

At first, Maverick did not believe that taking driver's education prior to losing his vision was as important as his instruction in the specific ways in which a person with visual impairments may access his physical environment through systematic instruction by a certified orientation and mobility specialist. However, upon further reflection, Maverick questions whether his depth of knowledge in independent travel would have been as comprehensive had it not been for his background knowledge of the laws governing motorized travel in the built environment. Maverick's viewpoint is important because his experience further supports the individualization of curricula for young people with visual impairments.

Nolan echoes his brother's belief that driver's education may be beneficial for some because it provides the pedestrian/passenger with the opportunity to learn about how drivers are taught to behave in certain situations such that the visually impaired may make informed decisions when a driver is engaging in unsafe behavior. He also notes that not being able to drive is a sensitive topic for him to this day.

For the participants, the underlying issue is not whether driver's education is made available in public schools but that it is required for graduation in some districts, which serves as a reminder of one arena in which people with visual impairments are excluded. Each participant named at least one concept taught in driver's education that was valuable to them as a traveler; however, this value did not outweigh the negative social and emotional experiences for some participants. The variance in participant experiences, geographic regions, and age of the onset of vision loss makes it impossible and ill-advised to advocate for blanket policies regarding student participation in driver's education, especially when those students include adolescents with disabilities. It also signals to the individual that the institution does not understand their disability and removes the autonomy of the person with a visual impairment, which they have come to develop differently than sighted students, which eats into their accomplishment as independent travelers. When simply given a choice, this allows the person with a visual impairment to exercise agency and is consistent with the development of emotional well-being.

3.2. Societal Perception of Humanity Based on Nondriving

The individualistic nature of American society makes it difficult for people with visual impairments to reconcile their need for assistance with their desire to be independent, which is based in part on the idea that ability equals humanity [24]. American society differs from much of the rest of the world in that success is measured by the actions and abilities of the individual, not of the collective community, and it is largely focused on humans demonstrating autonomy. Teenagers are socialized to take pride in exhibiting independence and gaining responsibility, as evidenced by their ability to drive when they turn 16. The transition to adulthood takes the form of getting a full-time job (or attending college), moving away from home, and paying for one's own expenses. When a person is unable to exercise the same level of independence as her able-bodied peers existing in

an individualistic environment, her ability to contribute in the same way is questioned. Depending on others for everyday tasks can reduce the notion of autonomy of a person with a visual impairment because she is unable to execute said tasks without the assistance of another person. Providing for oneself is highly valued in the U.S., and when one is unable to do so, it threatens his identity as a truly independent person. Some of the ways in which people with visual impairments take back control of their autonomy is by making the decision to refuse rides or offer reciprocal services as reimbursement for services rendered. These feelings come to light when participants express their desire to be as independent as possible by declining offered rides. Some participants prefer reciprocity if they do accept rides because they want to demonstrate their ability to provide for those who provide a service for them. They also do not want to be perceived as a "burden." One participant notes that he chooses to walk to his destination in lieu of accepting a ride, even if that walk is two miles in inclement weather. Another participant, Devon, a college student in his late 20s, talks about his experience with asking others for rides:

> It put a burden on me to ask people for rides home [when in high school]. At that time, me and my sister didn't get along really well, so she would never give me a ride, even though we lived at the same place. I don't know if it affected my confidence or whatnot, but I'm kind of stubborn in some ways. I don't like asking for rides or help, so I try to figure it out on my own. I have a pretty good support group of friends who were always willing to give me rides.

Devon refers to a "support group of friends" who provided him with transportation when he was in high school and from whom he felt comfortable accepting rides. This form of support is invaluable because it reinforces to the individual with a visual impairment that needing and asking for assistance are acceptable, even if he is surrounded by messages that say they are not, allowing the person with a visual impairment to feel in control. Shifting to a societal emphasis on collectivism and/or unbecoming human [24] affects participants and students with visual impairments by removing the value placed on the capacity of the individual. This is important because having a visual impairment results in an increased reliance on others to obtain visual information and to engage in some tasks (e.g., travelling in rural areas). Measuring the success of the collective community and the ways in which they support those in their community instead of focusing on the lack of capacity of one person allows for the fostering of more inclusive environments that do not reject or exclude based on ability.

A common concern for participants with visual impairments is thinking of themselves as a "burden" if they must ask someone for help. Such a frame exemplifies the oppressed adopting the perspective of the oppressor [26], and there is something inherently unkind with and uncharitable about such a characterization. People with visual impairments are influenced by and urged to serve the individualistic mentality because they have operated for years in a system where certain groups are, in essence, set up to fail because they can only thrive in a collectivist enterprise. U.S. society centers individualism because of the way our infrastructure and information gathering have been designed to benefit the sighted and require each person to fend for himself and compete against others for finite resources, positioning those who cannot do so without support lower in the social hierarchy or even rendering them less-than-human [24]. This is evidenced by participants' feelings of "being a burden" and thus experiencing a reduced sense of autonomy because they are required to rely on others for assistance. The author's experience with some adults with visual impairments is that they want to be as independent as possible, and some feel very strongly about wanting to get to places without help, even if that means taking a bus for two hours to get across town. They do not want to be seen as a "charity case" and feel strongly about making sure the person offering a ride is not inconvenienced by the offer. The issue becomes more complex because the public perception is that people with visual impairments are underestimated in terms of capacity because we live in a society that is highly visual and individualistic. Many sighted individuals have shared that they find it difficult to imagine a person who is blind traveling independently using public transit or

paratransit. Because most folks live outside urban public transit hubs, they require the use of a car to reach a destination conveniently and largely have little experience with public transportation. The author is also frequently told by able-bodied adults when working with people with visual impairments that, "I could not imagine losing my vision. The hardest thing would be relinquishing my driver's license. How would I get around?" This focus on rugged individualism is so engrained in the U.S. psyche that a few of the participants in this study who experienced reduced vision asked themselves the same question: "How will I ever get around if I'm blind?" Imagining an alternative to the highly valued driver's license and access to a car can be difficult to wrap one's head around. Not only that, it can be emotionally devastating when one realizes she is unable to exercise the level of independence she envisioned for herself because she is reminded by others of "how difficult it must be" or "how long it takes" to reach a destination and the ways in which she is perceived as less-than autonomous based on visual ability. Participants with visual impairments have shared frustrations regarding the length of time it takes to use public transportation and that they "wish they could drive," which is, in part, based on the limited availability of public transportation in certain areas but is also largely based on society telling them that independence is valued and interdependence is not.

4. Findings

4.1. Driving as a Metaphor for Ableism

Driving as a rite of passage and a transition to adulthood is exposed by participants as a metaphor for ableism. Young adults with visual impairments are all too aware of the ways in which some members of society view them. Even though driving is viewed as a right entitled to all, the process to acquire a driving license is selective and exclusionary. People are excluded based on mental, physical, and sensory abilities. The lack of entry into this idealized "club" can magnify feelings of loss and mourning when a person experiences vision loss because they have to change the way in which they engage with the world from a travel perspective as well as their expectations for the kinds of freedom of movement and spontaneity that they will experience as adults. Driving and driver's education also challenge how people perceive what it means to be an adult, be independent, and develop self-efficacy. These attitudes work against people with visual impairments because driving is viewed as the path by which people achieve independence, responsibility, and adulthood.

4.2. Unbecoming Human as a Way Forward

Policymakers and policy implementers must be made aware of their own perceptions of incapacity and the ways in which attitudes have a lasting effect on the self-efficacy, identity construction, independence, and transition outcomes of young adults with visual impairments. It is alarming and discouraging given their extensive training and education that the young adults with visual impairments in this study should be viewed as anything other than highly accomplished and highly competent in an area in which they are highly educated. This perspective is based in privileging some and oppressing others. Unbecoming human [24] as a theory of intervention is a way in which society could begin to remove the privilege and value placed on capacity in order to fully value the contributions of people with visual impairments. The participants are currently in the most technologically rich moment in human history, where access is made available to people with visual impairments with "off the shelf" technology like it has never been in the past. Regardless of this fact, access to this technology is not changing societal perceptions of incapacity and does nothing to challenge oppression and discrimination. Such a lack of change is starkly apparent in the participant descriptions of experiences of discrimination emanating from peers and supervisors, in particular, despite access to technology that allows the visually impaired to engage in the same tasks as their sighted peers (e.g., smart phones, tablets). Maverick, for example, continues to feel compelled, if not required, to "overachieve" and "overlearn" the use of some technological hardware and software just to be considered on the same playing field as his sighted employers and those competing

against him for a job. Unbecoming human [24] is important because it brings to light the difference between equity and equality. People with visual impairments have equal access to physical environments, technology, and other social spheres; however, equity cannot and will not be reached until the oppressive societal systems that are currently in place are challenged.

5. Limitations

One of the limitations of this study is that the data were collected in 2017. While the time since the data collection is ever growing, one benefit is that it was before the pandemic, when driver's education and schooling were not impacted by COVID-19. Another limitation is that, while this research lays no claim to generalizability, participants with visual impairments predominantly identified as male and White, and family members predominantly identified as female and White. Future research should solicit participants from a variety of ethnic backgrounds and gender identities.

6. Conclusions

This research project began with the goal of creating a list of concepts that can be taught to adolescents with visual impairments to supplement (or replace) traditional driver's education instruction. During this venture, the discrepancy between what educators teach to prepare youth with visual impairments to transition successfully and how this does little to help them against the public perception of what constitutes "humanity" and their treatment as less-than-human was illuminated. The practices and plans of advocates, teachers, educators, and professionals within the field of visual impairments as a discipline have not changed the discrimination of participants with visual impairments during their transition to adult and work life, as was described in their interviews. What has been exposed is a broad gap in the discipline between the pedagogical practices in use and what policymakers and policy implementers need to realize in terms of how hard people with visual impairments are working to be accepted as able and highly competent. Over half of the population of non-institutionalized adults with visual impairments between the ages of 21 and 64 are unemployed (54.6%), according to the 2018 American Community Survey [27]. Clearly there is a disconnect between how the participants in this study were prepared in schools and what they are able to accomplish due to societal norms despite being highly educated, highly trained, and highly competent. In addition to the work being done to teach students how to become self-determined, autonomous individuals capable of exercising agency, professionals who work with people with visual impairments must also focus their attention on overcoming the societal roadblocks and attitudes about disability as opposed to the attitudes of ability, which is what Kim [24] argues in her theory of unbecoming human.

The implication of the able-bodied mindset that people with visual impairments lack ability and capacity is important to specialists working with students with visual impairments, policymakers, and policy implementers because it has the potential to alter not just the way in which people with visual impairments are educated but the way in which other marginalized groups are educated as well. The perceived incapacity of individuals with disabilities is a real and present issue. Young adults with visual impairments were the only population interviewed for this study; however, discrimination and exclusion are not limited to this group. Education about accommodations acts as the prescription for "leveling the playing field" and "rising above" one's situation to experience success as an adult. However, what if special educators and policymakers are wrong? No matter how well educators prepare youth with disabilities to transition from school to adulthood [28], they can neither account for the oppressive perspectives and discrimination they will encounter nor expect every student who faces oppression to know how to, have the resources to, or be emotionally able to "push through" those experiences. As a profession, we need deeply to examine the ways in which youth with disabilities are prepared in anticipation of able-bodied people perceiving them as incapable of contributing within

shared spaces, because the potential exists to create generations of learned, helpless adults with visual impairments who struggle to realize independence.

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