

How Conceptions of Disabilities are Shaped by Labels and Diagnoses

By

Nicolette G. Granata

Master's Thesis

Submitted to the Faculty of the
Graduate School Vanderbilt University
in partial fulfillment of the requirements

for the degree of

MASTER OF SCIENCE

in

Psychology

August 31, 2021

Nashville, Tennessee

Approved:

Jonathan D. Lane, Ph.D.

Erin E. Barton, Ph.D.

Amy Booth, Ph.D.

Copyright © 2021 Nicolette Granata
All Rights Reserved

TABLE OF CONTENTS

Page

LIST OF FIGURES	IV
1 INTRODUCTION.....	1
1.1 A Preference of Person-first Language	1
1.2 A Preference for Condition-first Language	3
1.3 Essentialism.....	5
1.4 Language & Essentialism.....	7
1.5 Time of Diagnosis & Essentialism	9
1.6 Person-first language versus De-humanized language.....	10
1.7 The Current Studies	13
2 STUDY 1.....	14
2.1 Methods.....	14
2.1.1 Participants	15
2.1.2 Procedure	16
2.1.3 Scoring	18
2.2 Results.....	18
2.3 Discussion.....	21
3 STUDY 2.....	22
3.1 Methods.....	23
3.1.1 Participants	24
3.1.2 Procedure	25
3.1.3 Scoring	26
3.2 Results.....	26
3.3 Discussion.....	27
4 GENERAL DISCUSSION.....	28
4.1 Essentialism Does NOT Depend on how a Disability is Labeled	29
4.2 Essentialism Judgements DO Depend on When a Disability Diagnosis is Acquired	31
4.3 Limitations and Future Directions	33
<i>References</i>	38
<i>Appendix</i>	45

LIST OF FIGURES

Table	Page
1.1 Figure 1	42
1.2 Figure 2	42
1.3 Figure 3	43
1.4 Figure 4	43
1.5 Figure 5	44

How Conceptions of Disabilities are Shaped by Labels and Diagnoses

Persons with disabilities are largely understudied regarding issues such as identity, bias, and discrimination (when compared to other minority groups) (Forber-Pratt & Zape, 2017). Yet, they constitute the nation's largest minority, with 26% or about 1 in 4 adults in the United States having some type of disability. There have been highly funded social movements aimed to improve the lives of persons with disabilities, including the Disability Rights Movement in the 1960s, and the "Person First Language" movement of the 1980s and 1990s. "Person-first language" puts the person ahead of any disability identifier in a label ("Person + Disability" = "Person with a Disability," instead of "Disability + Person" = "Disabled person"), encouraging others to think about people with disabilities as people, first (Texas Center for Disability Studies, 2017). Adherence to and policing of this language seems to have only become stronger over the last decade, even though the efficacy of the movement has not been revisited as I believe necessary for recent social progress. While many recent studies have inquired as to how people with disabilities would like to be referred to or identify as (Darling & Heckert, 2010; Forber-Pratt & Zape, 2017; Hahn & Belt, 2004; Jones, 2012; Phelan & Kinsella, 2014), far fewer have examined how non-disabled persons conceive of persons with disabilities; specifically, the current study investigates how variables such as type of label and the time of disability diagnosis acquisition influence these conceptions.

A Preference for Person-first Language

A handful of informative, qualitative studies demonstrates that a large portion of the disability community prefers to be identified by characteristics other than their disabilities (Forber-Pratt & Zape, 2017; Hahn & Belt, 2004; Jones, 2012; Phelan & Kinsella, 2014). Phelan and Kinsella (2014) recruited six 10-12-year-olds born with a physical disability (and their

parents) for case study interviews. The interviews were centered around occupations (e.g., activities: horseback riding, computer games, basketball, etc.) most frequently discussed and enjoyed by the children. A girl named Laura, diagnosed with Cerebral Palsy, stated: “You know what, there is one thing I want to do in the future. Get rid of my disability. Yeah it drives me crazy.” In fact, all (n = 6) the 10-12-year-old participants avoided discussions about their disabilities. They preferred to discuss their families, pets, hobbies, and talents; they saw themselves (and wanted to be seen) as a person, first. In a 2012 study by Jones, 45% of adolescents (n = 23) with diagnosed intellectual and developmental disabilities answered the question, “Do you have a disability,” with “no”; thus, almost half of the adolescents did not identify with their diagnosis. In a study with disabled adult activists (who were part of an organization called ADAPT) with a median age of 42 years, 53% of participants (n = 83) expressed that they *would* want their disability cured if there was a magic pill to do so (Hahn & Belt, 2004). Forber-Pratt and Zape (2017) inquired as to whether disabled individuals have a disability-specific identity, and if they do, how it is described and weighed when compared to other parts of their identity. The researchers recruited 17 college students with varying disabilities (physical, sensory, and cognitive disabilities) for in-depth qualitative observations and interviews: participants needed to *self-identify* as having a disability to participate in the study. From these interviews, the authors concluded that like any other group, the minority identity may or may not be the most salient aspect of identity on a given day or at a specific point in life. For example, medical complications due to a disability or additional diagnoses may cause a disabled person to push their disability identity away until things become clearer/more settled; in these times, it is reasonable to suppose that person-first language may be preferred.

Perhaps fueled by the findings of studies such as those detailed above, the adopted position seems to be that person-first language should be an *absolute default* (rather than serving a purpose on a case-by-case basis). A 2017 video created by the Texas Center for Disability Studies confidently states that, “A person with a disability is a person first. People with disabilities do not want to be seen first and foremost by their disability. It devalues their inherent uniqueness and personhood” (Texas Center for Disability Studies, 2017). At many universities across the nation, professors require person first language in assignments and student organizations (e.g., “Best Buddies International”) encourage students to sign pledges that they will only use person-first language. Is there enough empirical evidence for such a strong, inflexible default?

A Preference for Condition-first Language

Evidence seems to suggest that many people and/or communities stand in *opposition* to the person-first language movement. Although intra-community differences certainly exist, the type of disability does seem to matter regarding this opposition. Specific groups such as Blind, Deaf, or Autistic people often prefer to be referred to in a condition-first (e.g., “Blind person” or “Autistic person”) fashion because it gives them greater in-group identity and belonging (Foreman, 2005). As a reminder, in the study by Hahn and Belt (2004) (discussed above), nearly half (47%) of participants *agreed* with the statement: “Even if I could take a magic pill, I would not want my disability to be cured”. Lydia Brown, well-known Autistic advocate, put it like this: “It is impossible to affirm the value and worth of an Autistic person without recognizing his or her identity as an Autistic person. Referring to me as “a person with Autism” or “an individual with ASD” demeans who I am...When we say “person with Autism” we say that it is unfortunate and an accident that a person is Autistic. We affirm that the person has value and worth, and that

autism is completely separate from what gives him or her value and worth” (Brown, 2011). In 2009, disability scholar and author of *The Struggle of Blind People for Self-Determination*, wrote: “Why the current person-first language crusade? Isn’t it pretentious to make such convolutions the preferred or even the only acceptable constructions? Is it not rather the effort of some misguided professionals, who, without listening, are trying to change the world of those they purport to serve?” (Vaughan, 2009). Darling & Heckert (2010) found that level of assistance required was a significant predictor of “level of disability pride.” This suggests that there may be a relation between the severity of a disability and desire for in-group identity and belonging. Within the study sample, 46.3% of participants reported a mobility-related impairment, 25.7% cognitive, 19.5% a vision-related impairment, 16.5% speech, and 4.9% cosmetic (Darling & Heckert, 2010). Respondents with a mobility impairment more often adhered to the belief that rather than fitting into society, society should fit to them: accommodate for their differences to make communities a more accessible place.

Another area where differences in disability pride seem to appear is when disability diagnoses are acquired at birth versus acquired later in life, such as the teenage years. For example, a person who was born paralyzed or has never had use of their legs may feel differently about their disability-related identity than a person who became paralyzed in a skiing accident as a teen and lost all use of their legs afterwards. Young adults in Darling and Heckert (2010) were more likely to have been disabled from birth, and to have had their disability for a longer period. Young adults also had significantly greater disability pride than both middle-aged and older adults. Length of time with a disability was also a significant predictor of disability pride in and of itself (Darling & Heckert, 2010). In Hahn and Belt (2004), two variables significantly predicted how the “disability cure” question (discussed earlier) was answered: an affirmative

sense of disability identity, and *an early age of onset of disability* (in their sample, the researchers defined early age of onset as before 18 years old). For individuals who acquire their disabilities before the age of 18 years, imagining life without their disability could be a threat to the identity they have built and maintained around being disabled. “It just is what it is. I don’t know life any other way. So I never really struggled to accept it because I didn’t know anything other than this life” (Forber-Pratt & Zape, 2017, pg. 352). Perhaps, regardless of whether a disability diagnosis was acquired at birth or not, disability pride doesn’t manifest until the teenage/young-adult years; remember, all the 10-12-year-olds (N=6) in the 2014 study by Phelan and Kinsella (discussed above), born with physical disabilities, commonly shunned their disabilities as a part of their identities.

Essentialism

The current study is concerned with the role of language used to describe persons’ disabilities, and the time at which those disabilities are acquired, in how people *without* disabilities essentialize those persons’ disabilities – how essential do folks think disabilities are to disabled persons’ underlying entity – what makes them “who they are”?

Essentialism is the idea that persons or categories have an underlying entity; this entity cannot always be observed, but it makes the being what it is (Gelman, 2003). Essentialism accounts for our understanding of species, as well as the complex entities that make up a diverse human population. Species grow, reproduce, and undergo morphological transformation (e.g., baby to adult, caterpillar to butterfly); essences are whatever qualities remain unchanged through it all (Gelman, 2003). The developmental study of essentialism has increasingly extended from the biological domain to the social domain – areas such as race, gender, traits, and other personality or psychological characteristics (Bogart, Rosa, & Slepian, 2019; Gelman, 2003;

Gelman, Heyman, & Legare, 2007; Haslam, Bastian, & Bissett, 2004; Haslam & Ernst, 2002; Haslam & Levy, 2006; Haslam, Rothschild & Ernst, 2002). It is important to note that *I* am not arguing that these are defining features, or essential differences, among human beings. Research has found that this is how people group their world, in distinct categories. While perspectives vary within the field (Bastian & Haslam, 2006; Haslam et al., 2000; 2002) essentialism is believed to be defined by four dimensions: 1) *biological*: there being a genetic basis or natural grouping for social categories, 2) *discreteness*: social categories fall into distinct categories that have clear boundaries, 3), *immutability*: one cannot change their membership in a certain social category, and 4) *informativeness*: one can make accurate inferences about a person by knowing what social category they belong to (Bastian & Haslam, 2006).

Both disability essentializing and stigma are understudied in the social and developmental sciences. In a 2000 study, Haslam, Rothschild, and Ernst were the first (to the best of their knowledge) to empirically measure essentialist beliefs about a *large* number of social categories: age, appearance, class, diet, disability (blind, paraplegic), disease, ethnicity, gender, intelligence, interest, language, occupation, personality, physique, politics, psychiatric disorder, race, region, religion, and sexual orientation. The researchers found that the categories that were most essentialized on both of two dimensions: “natural kind” (concerning biologicalness, immutability, discreteness, etc.) and “entitativity” (concerning informativeness and similar elements) were especially stigmatized. “Disability” was included in this collection, as well as “ethnic groups, Jews, blacks, and AIDS patients” (Haslam et al., 2000). Some success in reducing stigma has been demonstrated with introducing psychiatric or intellectual disabilities as having biological causes (as opposed to other environmental or social causes) (Lebowitz, Pyun,

& Ahn, 2014; Lebowitz, Ronsenthal, & Ahn, 2016). But no research (to the best of my knowledge) regarding disability essentialism has explored dimensions beyond biological.

Inspired and guided by studies mentioned earlier (Darling & Heckert, 2010; Forber-Pratt & Zape, 2017; Hahn & Belt, 2004; Jones, 2012; Phelan & Kinsella, 2014) examining how people *with disabilities* would like to be referred to and believe their disability does or does not contribute to their identity, I selected three specific dimensions of essentialism to measure in the current study: *consistency* (how consistently particular characteristics are displayed), *inherence* (how deeply-rooted particular characteristics are to identity), and *informativeness* (how broad the ramifications of particular characteristics are to identity). These items were included in the 2004 study by Haslam and colleagues on essentialist beliefs about personality (Haslam et al., 2004), based on the Essentialist Beliefs Scale developed by Haslam et al. (2000, 2002). These dimensions not only seemed the most pertinent to a study specifically focused on disability essentialism but allow the findings of the study to generalize to the largest number of possible physical, sensory, and cognitive disabilities. For example, for disabilities such as Autism Spectrum Disorder (ASD), where the biological origin is not yet known or understood, asking about the biological dimension of essentialism, even with novel disabilities (as presented in the current study), would have limited our ability to consider the implications of the findings for persons with disabilities such as ASD.

Language & Essentialism

The hypothesis of linguistic relativity, or the Sapir-Whorf hypothesis, suggests that the structure of language alone can affect its speakers' cognition or perception; the hypothesis continues to be debated today (Al Sheikh Hussein, 2012). Labels can imply categorization, which can in turn, invoke essentialism. Research on labels and essentialism has suggested that

labels in which the defining feature comes first, as in the case of condition-first labels, are more likely to suggest stability, a defining feature of essentialism (Gelman & Heyman, 1999; Gelman, 2004). Gelman and Heyman (1999) taught 5- and 7-year-old children about characters labeled with count nouns (“Rose is 8 years old. Rose eats lots of carrots. Rose is a carrot-eater”) or a verbal phrase (“Rose is 8 years old. Rose eats lots of carrots. She eats carrots whenever she can”). When asked about the stability of category membership across time and conditions, children who heard the count noun label were more likely to infer stability, a core feature of essentialism (Gelman & Heyman, 1999). A 2004 review by Gelman suggests that preschool children expect certain categories to have numerous properties of essentialism (e.g., inductive potential, innate potential, underlying structure) simply because they *are* categories; children don’t even need to know what the “essence” or the “difference” between the categories is, just that it exists (Gelman, 2004).

It is possible that the relationship between essentialism and language could exist in both directions. In a 2013 study, Howell and Woolgar examined whether a preference for noun labels (“John is a schizophrenic” – John is directly associated with the mental condition) or possessive phrases (“John has schizophrenia” – conveys the disorder as separate from John) exists based on differences in essentialist thinking (Study 1). The researchers predicted that essentialist thinkers (versus non-essentialist thinkers) would show a greater preference for noun labels. The participants in Study 1 were undergraduate, introductory psychology students. In six stimuli, a noun label was pitted against a possessive phrase in relation to the same mental disorder: 1) “He is schizophrenic” versus “He has schizophrenia”, 2) “He is a manic depressive” versus “He has manic depression”, 3) “He is a social phobic” versus “He has social phobia”, 4) “He is a psychotic” versus “He has psychosis”, 5) “He is an anorexic” versus “He has anorexia”, and 6)

“He is an alcoholic” versus “He has alcoholism” (Howell & Woolgar, 2013). With each phrase situated on either end of a Likert scale, participants indicated their preference for one phrase or the other. To gather participants’ generalized essentialist thinking toward people, a 23-item scale created by Bastian and Haslam in 2006 was distributed. The findings supported the researchers’ prediction that lower essentialism scores would be associated with a greater preference for possessive phrasing over noun labels, and vice versa. Thus, this study was the first of its kind to demonstrate a relationship between essentialist thinking and label preference for mental disorders labeled with either noun labels or possessive phrasing.

When extending these findings to inquiries about the impact of person-first versus condition-first labels, condition-first labels seem to align most closely with count nouns, and person-first labels with verbal phrases. In count-noun conditions, the identifier comes first: e.g., “Rose is a carrot-eater” (Gelman & Heyman, 1999), or “John is a schizophrenic” (Howell & Woolgar, 2013); you can imagine it easily being rewritten to say: “Rose is a carrot-eating person” or “John is a schizophrenic person”. In a verbal phrase condition, there is no identifier: e.g., “Rose eats lots of carrots. She eats carrots whenever she can” (Gelman & Heyman, 1999), or “John has schizophrenia” (Woolgar, 2013); possessions (either a behavior or a quality) are all that are being described. Based off these parallels, I hypothesize that disabilities described with condition-first labels (e.g., “Mike is a Daxic person”) in the current study will be essentialized more than disabilities described using person-first labels (e.g., “Mike is a person with Daxism”).

Time of Diagnosis & Essentialism

In addition to language/labels, the current study investigates the effect of disability diagnosis acquisition on how “essential” non-disabled people perceive persons’ disabilities to be to their identity. In a recent study, Bogart and colleagues were the first (to their knowledge

and our knowledge) to explore whether essentialism and stigma differs as a function of whether someone was “born that way” or “became that way” – when their disability was acquired (Bogart, Rosa, & Slepian, 2019). Across three studies they found that individuals born into a stigmatized category faced more stigma than those that joined a category later in life, and that essentialism and blame moderated and mediated the effect, respectively. For similar reasons as discussed earlier (when choosing which dimensions of essentialism to measure), I chose to manipulate the timing of the disability *diagnosis*, rather than the disability itself, in the current study. Disabilities such as ASD are not identifiable at birth, even if they may be “present” at birth. As well, some people may receive a ASD diagnosis at the age of 2-years-old, while others may not receive one until their college years (when they suddenly have acquired access to the information and resources needed to obtain a diagnosis). These individuals have technically all had ASD “since birth,” but it is easy to see how the life experiences of someone with a diagnosis at birth versus a diagnosis given in their 20s could look different along many fronts. Despite this difference in methodology, I hypothesize that our findings will look identical to those of Bogart and colleagues (2019). I expect that disability diagnoses acquired at birth will be essentialized more than disability diagnoses acquired in the teenage years.

Person-first Language versus De-humanized Language

At the time of the person-first language movement’s conception in the 1980s, de-humanizing language (where the “person” is removed altogether from a label: “crips”, “handicaps”, “retards”, etc.) was far more normative when referring to persons with disabilities than it is today. Despite this, St. Louis (1999) argued that there was very little public debate and even less research to justify such a strong adoption of the person first language movement in the 1980s and 1990s, designing a study to investigate whether using person-first versus de-

humanized (direct) labels impacts beliefs and attitudes about fluency disorders and other speech-language disorders. Participants included clients (n = 60), parent (n = 60), student (n = 60), and public groups (n = 226). Questionnaires with the same 28 labels (e.g., “Person with leprosy”/“Leper”, “Person with psychosis”/“Psychotic”, “Person with aphasia”/“Aphasic”, “Person who lisps”/“Lisper”, “Person who stammers”/“Stammerer”, “Person who stutters”/“Stutterer”) were distributed to participants, each questionnaire containing an equal number of person-first and direct labels (St. Louis, 1999). Participants were split into conditions that measured two separate but related components: participants’ own impressions and experiences regarding the label (e.g., first impressions, desire to be like a person named by the label, semantic intent of the label, personal experience with the label or characteristic, and degree of knowledge about the label) or judgments about the appropriateness of others’ use of the labels in certain scenarios (e.g., by professionals, by family members or close friends of the person labeled, by persons who have disabilities, by persons who have been victims of discrimination, and when used in a joke (when the intent was not mal-intent)). The results showed that person-first terminology made *no* significant difference in 98% of 480 comparisons. The 2% of comparisons (n = 10 comparisons) that were significantly different concerned “Person with leprosy” being more positive than “Leper,” and “Person with psychosis” being more positive than “Psychotic.” In conclusion, apart from terms that are widely known to have a stigmatizing effect (e.g., “Moron,” “Psychosis,” “Leprosy”), using person-first labels for different disabilities or characteristics *made little to no difference in minimizing negative reactions*; though, none of the speech-language-hearing labels were perceived as negative in the first place.

Granello and Gibbs (2016) distributed a single instrument, the Community Attitudes Toward the Mentally Ill survey, to three samples of participants: undergraduate students, adults

in a community sample, and professional counselors and counselors-in-training. The original version of the instrument uses “the mentally ill” in its phrasing. In an experimental condition, the language in the survey’s instructions was changed to read “people with mental illnesses”. The CAMI is composed of 4 subscales: Authoritarianism (the view that people with mental illnesses are inferior and require “handling”), Benevolence (the view that it is the responsibility of the community to care for people with mental illnesses kindly and sympathetically), Social Restrictiveness (the view that people with mental illnesses are a threat to society), and Community Mental Health Ideology (the view that there is great benefit to community-based/de-institutionalized care over traditional institutionalized care) (Granello & Gibbs, 2016). Undergraduate students scored significantly higher on the Authoritarianism and Social Restrictiveness subscales in the “mentally ill” condition. There were no significant differences in the Benevolence or Community Mental Health Ideology subscales for this sample, yet these were the only two subscales where differences were seen for the adult community sample: when the term “the mentally-ill” was used (versus “people with mental illnesses”), adults were significantly more likely to score lower on these two subscales. The pattern of the third sample (analyzed as a single group), the professional counselors and counselors-in training, matched that of the undergraduate students exactly. In conclusion, when dehumanized language (“the mentally-ill”) was used instead of person-first language (“people with mental illnesses”), lower levels of tolerance were reflected in at least two of the four subscales, although which subscales these were did not match across all three participant pools. Overall, the findings regarding the effectiveness of person-first language versus de-humanized language on attitudes are mixed.

In the studies above, the “person” is removed completely – so it would be more appropriate to refer to these labels as “condition-only” labels rather than “condition-first” labels.

With societal progress in the perception and treatment of people with disabilities over the last decade, it is rare to hear people referred to by just their condition now – this is an ecological limitation of previous work reviewed above (Granello & Gibbs, 2016; Howell & Woolgar, 2013; St. Louis, 1999). What seems to be the more relevant debate today is where the “person” should go in the label (e.g., *Autistic person* vs. *person* with Autism), and most importantly, whether the order matters at all when de-humanized language is removed from the equation. Despite the lack of clarity and research regarding this current question, large institutions outside of disability communities continue to adopt and push the person first language movement on their behalf.

The Current Studies

People have strong opinions about particular disabilities and the way in which they are labeled, a debate that I covered in great detail earlier. The purpose of the current study was not to gather opinions on these specific disabilities, but rather, to answer a more fundamental question – do labels affect how people conceptualize the impact of disabilities on a person’s life and identity, even if they have never seen or heard of them before? So, while I am certainly interested in the implications of the findings for disabilities such as ASD, Down’s Syndrome, Blindness, etc., I created novel diagnoses by combining novel object names from the Novel Object and Unusual Name (NOUN) Database (Horst & Hout, 2015) (see Appendix A). I then gave thought to how I wanted these novel disabilities to vary. If I were to give too much, or too specific detail, participants would know what “real” disability I was describing. In that case, I wouldn’t be effectively removing existing biases from the equation at all, regardless of whether I used novel labels or not. Furthermore, disabilities such as ASD, Cerebral Palsy, Down’s Syndrome, etc. are complex and multi-faceted – they often involve physical, sensory, and cognitive deficits – not just one or another. As well, not every person with a certain disability

diagnosis has the same collection or severity of symptoms or characteristics. It is for these reasons that I initially chose to evaluate how essential non-disabled persons judge individual disability *symptoms* to be. I carefully selected two symptoms per disability category: Bodily Strength and Physical Coordination (Physical), Eyesight and Hearing Ability (Sensory), and Comprehension and Memory Skills (Cognitive).

In addition to investigating the degree of essentializing, I was interested in measuring the *breadth* of essentializing: does the type of label used (person-first vs. condition-first) to describe a disability or the time of diagnosis (since birth vs. teenage years) influence participants' breadth of essentializing? For example, does the type of label used to introduce a disability (e.g., a physical disability) influence how participants essentialize *other* abilities (e.g., sensory or cognitive characteristics) and unrelated personality characteristics (e.g., compassion and generosity)? I hypothesized that when a condition-first (vs. person-first) label is used to describe a disability, that the breadth of essentializing will be greater. Condition-first labels, or labels with a similar structure, seem to imply greater stability and consistency, supporting the possibility that a given disability will pervade through areas of life not directly related to the disability itself. Likewise, I hypothesized that when a disability has been diagnosed since birth (vs. later in life), the breadth of essentializing will be greater. If a disability diagnosis has always been present, and hence, a fundamental piece of a person's identity, there may be greater reason to suppose that said disability will pervade through multiple spheres of an individual's life or functioning.

Study 1

Method

Participants

Participants ($N = 167$, 72 female) ranging from 22 to 70 years in age ($M = 38.40$ years) were recruited online through Amazon's Mechanical Turk. Participants were excluded ($n = 56$) if the study was completed in less than 5 minutes (it is unlikely that they thoroughly read the instructions and questions in that amount of time) or more than 45 minutes (they might have been taking multiple surveys at a time), they did not correctly answer 3 of 4 memory/attention-check questions, they did not pass any of three checks to ensure whether they reside in the United States (as required by the study), or they completed less than 95% of the study. Research has demonstrated that samples obtained from Amazon's Mechanical Turk are often more diverse than U.S. undergraduate samples (Burchmester, Kwang & Gosling, 2011). Among the participants, 42.5% ($n = 71$) of participants completed a Bachelor's degree, 31.1% ($n = 52$) "some college," 16.8% a high school diploma ($n = 28$), 7.8% a Master's degree ($n = 13$), and 1.2% a Doctorate ($n = 2$). Most of the participants (85%; $n = 142$) identified as "White/Caucasian", followed by 9.6% ($n = 16$) as "Black/African American", 9% ($n = 15$) as "Latinx," 4.8% ($n = 8$) as "Asian/Asian American," 2.4% ($n = 4$) as "Native American", and 1.2% ($n = 2$) as "Other". These categories were not mutually exclusive; participants could select more than one. Participants were also asked about the frequency of their relationships with persons with disabilities: 45.5% ($n = 76$) of participants reported having "one or two" relationships, 37.7% ($n = 63$) reported no relationships, 15% ($n = 25$) reported "a few," and 1.8% ($n = 3$) reported "a lot." Participant recruitment, consent, and all study procedures were approved by Vanderbilt University's Institutional Review Board (IRB #201401).

My goal was to recruit a sample large enough to fulfill the requirements of an a priori power analysis (using G*Power 3.1; Faul, Erdfelder, Lang, & Buchner, 2007) for ANOVAs that

included label (2 levels, between-subjects), time of diagnosis (2 levels, between-subjects), and character disability type (3 levels, within-subjects). There is no between-between interaction option in G*Power 3.1, so I ran this analysis with 4 groups to anticipate what that analysis might yield. The analysis determined that I required a minimum of 164 participants to detect medium effect sizes ($f_s \geq .25$; Cohen, 1992) with statistical power $\geq .80$ and $\alpha = .0125$.

Procedure

The survey was delivered exclusively online: constructed and hosted through Qualtrics. Participants were told that the purpose of the survey was to understand how adults view personality and ability characteristics. They were told that they would read a series of brief descriptions of people and, following each description, be asked questions regarding the features and impact of the mentioned personality or ability characteristic on a person's life. Finally, they were told that total participation time should be approximately 8 to 15 minutes. Once participants finished reading the consent and entered basic demographic information and their MTurk Worker ID, they were told that the survey is only available to participants in the United States, and *not to proceed if they do not live the United States*. Several non-US participants ($n = 23$) still proceeded and were excluded on this basis later.

Before the first vignette/description was given, participants were reminded that in the following pages, they would read about 3 different middle-aged people. I felt that it was important to specify that the characters in the vignettes were "middle-aged" in case participants were inclined to think the characters were children or teens; from anecdotal evidence, social media content regarding disability diagnoses, identities, and/or experiences are most often created by children and teens or about children and teens. Finally, participants were told that for each person/character, they would rate whether they agreed or disagreed with statements about

that person's characteristics, and to please read each question carefully. They were then asked to check a box confirming that they agree to read each description and question carefully.

The survey was divided into three blocks: a physical disability block, a sensory disability block, and a cognitive disability block. Every participant saw all three blocks, but the order in which the blocks were presented was randomized. Each block began with a vignette. The contents of the vignette were dependent upon which condition a participant was assigned to: Person-first label/Since-birth diagnosis, Person-first label/Teenage years diagnosis, Condition-first label/Since-birth diagnosis, or Condition-first label/Teenage years diagnosis (see Appendix A for exact vignette wording based on condition). Below each of these vignettes was a statement that told participants they would now be asked about the character's characteristics, one at a time, followed by one more statement of the character's diagnosis and timing of diagnosis (e.g., "Remember, Johnny is a Daxic person, diagnosed since birth"). I included these statements below the vignettes to indicate to participants that remembering the characters' diagnoses and when they were acquired would be important in answering succeeding questions. But, just in case, I included the same diagnosis statements at the top of each measures page; the purpose of the study was not to test participants' memories, and by the time participants got to the 8th characteristic, their memory of the original vignette could be compromised had I not taken this approach.

As mentioned before, participants are asked about one characteristic at a time. For example, after the diagnosis statement, they are told to "Consider Johnny's EYESIGHT." On the same page are the three essentialism measures/statements: 1) "Johnny will display this characteristic consistently across very different situations" (Consistency), 2) "This characteristic is a deeply-rooted part of who Johnny is as a person" (Inherence), and 3) "This characteristic has

broad ramifications: it will influence many aspects of Johnny's life" (Informativeness). These measures were taken and adapted from a 2004 study by Haslam and colleagues (mentioned earlier); the language in the current study is simplified to avoid fatigue effects and modified to fit personality AND ability characteristics (versus just personality characteristics as in the Haslam and colleagues (2004) study). Using a 5-item Likert scale from strongly disagree (1) to strongly agree (5), participants decide whether each characteristic (e.g., EYESIGHT) is consistent, deeply rooted, and has broad ramifications. Participants responded to these three statements for each of the 8 characteristics.

Scoring

The key dependent variables are Physical Essentialism (Bodily Strength + Physical Coordination), Sensory Essentialism (Eyesight + Hearing Ability), Cognitive Essentialism (Comprehension + Memory Skills), and Personality Essentialism (Compassion + Generosity). The Physical Essentialism variable is created by averaging across Consistency, Inherence, and Informativeness scores for Bodily Strength and Physical Coordination. The Sensory Essentialism variable is created by averaging across Consistency, Inherence, and Informativeness scores for Eyesight and Hearing Ability. The Cognitive Essentialism variable is created by averaging across Consistency, Inherence, and Informativeness scores for Comprehension and Memory Skills, and the Personality Essentialism score is created by averaging across Consistency, Inherence, and Informativeness scores for Compassion and Generosity.

Results

Analyses were conducted to explore how the type of label used to describe a disability (person-first label versus condition-first label), as well as the time of diagnosis (since birth diagnosis versus teenage years diagnosis), influence the degree to which disability symptoms are

essentialized. As well, analyses evaluate the *breadth* of essentializing: does the type of label or the time of diagnosis used to describe a certain type of disability influence how people essentialize *other* abilities (e.g., sensory or cognitive characteristics) and unrelated personality characteristics (e.g., compassion and generosity)? Personality characteristics (compassion and generosity) were included in the current study because they are not (or should not) be related to any one of the disabilities more than another. By including unrelated characteristics such as these, I was able to investigate whether knowledge of one cluster of disability characteristics would “bleed over” to others. For example, if people conceptualized cognitive disabilities as affecting more characteristics or qualities of a person than just cognitive ones, then I would expect to see personality characteristics essentialized significantly more for cognitive disabilities than physical or sensory disabilities.

Four separate ANOVAs were conducted, one for each of the dependent variables: 1) Physical essentialism, 2) Sensory essentialism, 3) Cognitive essentialism, and 4) Personality essentialism. For the sake of conciseness and considering the results were consistent across all four analyses, they will be presented simultaneously. The 2 (LABEL (between-subjects): person-first label versus condition-first label) X 2 (TIME OF DIAGNOSIS (between-subjects): since birth vs. teenage years) X 3 (DISABILITY (within-subjects): physical vs. sensory vs. cognitive) ANOVAs revealed no significant effects of Label (physical essentialism: $F(1,158) = .39, p = .53$; sensory essentialism: $F(1,158) = .27, p = .60$; cognitive essentialism: $F(1,158) = .01, p = .94$; personality essentialism: $F(1,158) = .21, p = .65$) or Time of Diagnosis (physical essentialism: $F(1,158) = .67, p = .41$; sensory essentialism: $F(1,158) = 3.02, p = .08$; cognitive essentialism: $F(1,158) = 3.25, p = .07$; personality essentialism: $F(1,158) = .40, p = .53$) on the degree to which participants essentialized characters’ disabilities. Participants essentialized a disability the

same way whether it was described with a person-first or condition-first label, and whether the diagnosis was acquired at birth or in the teenage years.

There was, however, a significant effect of Disability on the degree to which participants' essentialized characters' disabilities for three of the four dependent variables: physical essentialism, sensory essentialism, and cognitive essentialism. Mauchly's test indicated that the assumption of sphericity had been violated (physical essentialism: $X^2(2) = 27.52, p < .01$; sensory essentialism: $X^2(2) = 46.76, p < .01$; cognitive essentialism: $X^2(2) = 42.63, p < .01$) so a Greenhouse-Geisser correction was used (physical essentialism: $F(1.72, 158) = 32.45, p < .01$; sensory essentialism: $F(1.59, 158) = 25.51, p < .01$; cognitive essentialism: $F(1.62, 158) = 19.77, p < .01$). When participants read that a person had a disability diagnosis affecting their physical development, they essentialized physical characteristics (bodily strength and physical coordination) ($M = 3.90, SE = .07$) significantly more than when they read that a person had a diagnosis affecting sensory ($M = 3.22, SE = .07, p < .001$) or cognitive development ($M = 3.24, SE = .08, p < .001$) (see Figure 1). The same pattern replicated for sensory and cognitive disabilities. When a person had a disability diagnosis that affected their sensory development, sensory characteristics (vision and eyesight) ($M = 3.96, SE = .07$) were essentialized significantly more than when they had a diagnosis affecting physical ($M = 3.27, SE = .08, p < .001$) or cognitive development ($M = 3.29, SE = .09, p < .001$) (see Figure 2). Finally, when participants read a vignette where a person had a disability diagnosis affecting their cognitive development, they essentialized their cognitive characteristics (comprehension and memory skills) ($M = 3.97, SE = .07$) significantly more than when a diagnosis affected sensory ($M = 3.55, SE = .07, p < .001$) or physical development ($M = 3.35, SE = .09, p < .001$) (see Figure 3). For

all three types of disability (physical, sensory, cognitive), capacities directly compromised by a disability were essentialized more.

There was no effect of Disability for the fourth dependent variable, personality essentialism. Results showed no significant differences between the disabilities ($F(2,158) = 1.58$, $p = .21$), meaning that no disability was essentialized beyond its scope (i.e., physical disabilities affecting physical qualities, sensory affecting sensory qualities, etc.). In conclusion, personality characteristics were not essentialized any more for one type of disability than another. There was no evidence of bleed/spill-over. No significant interaction effects were found.

Discussion

The purpose of Study 1 was to answer a fundamental question – do labels and the time in which a diagnosis is acquired affect how people conceptualize the impact of disabilities on a person’s life and identify, even if they have never seen or heard of these disabilities before? Real disabilities are complex and multi-faceted – they often involve deficits spanning multiple areas of development. Even within the same disability diagnosis, individual characteristics and/or symptoms can vary widely. It is for these reasons that I initially chose to evaluate how essential non-disabled persons conceived individual disability *symptoms* to be. Participants reasoned about two characteristics per disability category: Bodily Strength and Physical Coordination (Physical), Eyesight and Hearing Ability (Sensory), and Comprehension and Memory Skills (Cognitive). I hypothesized that I would see higher essentialism scores for condition-first labels (vs. person-first labels) and diagnoses given at birth (vs. diagnoses given in the teenage years). Neither of these hypotheses were supported: the type of label used and the time in which a disability diagnosis was acquired made no significant difference in how much disability symptoms were essentialized. Additionally, I hypothesized that when a condition-first (versus person-first) label

and a diagnosis acquired since birth (versus in the teenage years) is used to describe a disability, that the breadth of essentializing - “spillover effects” – would be significantly greater. This hypothesis was also unsupported, as there were no significant spillover effects. Only the capacities directly related to a particular type of disability were essentialized more, for all three types of disabilities.

There are two ways of interpreting these findings: either the type of label and time of diagnosis really do not matter when the label is structured in a person-first versus condition-first fashion and dehumanizing language is absent, or the effect is being masked by Study 1’s method. Study 1 was purposely designed to explore how specific disability symptoms are essentialized (rather than the disability as a whole). Is it possible that persons might essentialize a diagnosis, but not the characteristics associated with the diagnosis? A diagnosis of multiple sclerosis (MS) may be considered more meaningful, essential, or identifying than specific symptoms related to MS, such as physical coordination. If so, we might find effects of label for diagnoses, but not associated symptoms. We expect this could be the case even for diagnoses that people have never seen or heard of before (novel diagnoses). As a reminder, the purpose of the current studies was not to gather opinions on specific disabilities.

Study 2

Based on the findings of Study 1, I posited that I might find more essentializing based on condition-first labels and diagnosis timing information if I asked about the impact of the diagnosis as a *whole entity*. Interviews with disabled persons, discussed earlier, asked participants about their disabilities or diagnoses as whole entities, not at a symptom-level (Darling & Heckert, 2010; Forber-Pratt & Zape, 2017; Hahn & Belt, 2004; Jones, 2012; Phelan & Kinsella, 2014), Participants in these studies expressed positive or negative sentiments about

their disability statuses or diagnoses overall, not about specific characteristics. For example, participants did not positively identify with being Autistic, but wish they could eliminate the extra sensitivity to sound and textiles (often a symptom). Perhaps non-disabled people conceptualize the impact of persons' disabilities similarly. Our hypotheses regarding the effects of label and timing remained the same as in Study 1, however, the "breadth of essentializing" hypotheses were no longer relevant (as I was no longer asking about individual disability characteristics, and thus, could not measure this).

I also added a "no disability information" condition, where no information besides the diagnosis and the timing of the diagnosis would be provided; in other words, the type of disability would not be specified. This condition was included to investigate whether there would be an effect of disability or timing given the most minimal information possible. In sum, I wanted to be careful in concluding that label and timing do not matter based on the findings of Study 1 alone, which was concerned with disability symptoms – especially considering that no other study (to the best of our knowledge) has studied disability essentialism at the symptom-level. In Study 2's vignettes, I made the diagnosis (e.g., "Consider Josh's diagnosis") salient in the vignette rather than a specific characteristic (e.g., "Consider Josh's BODILY STRENGTH"), and asked about the diagnosis in the essentialism measures (e.g., "Josh will display this diagnosis consistently..."; "This diagnosis is a deeply-rooted part of who Josh is as a person..."; "This diagnosis has broad ramifications.") - the world "diagnosis" replaces the world "characteristic." The word diagnosis was used instead of "condition" because the word condition may have negative connotations or prime participants to think about medical conditions, specifically.

Method

Participants

Participants ($N = 118$, 51 female) ranging from 21 to 64 years in age ($M = 37.50$ years) were once again recruited online through Amazon's Mechanical Turk. Participants were excluded ($n = 9$) if the study was completed in less than 2 minutes or more than 25 minutes, they did not correctly answer 3 of 4 memory/attention-check questions, they did not pass any of three checks to ensure they reside in the United States, or they completed less than 95% of the study. Among the participants, 47.5% ($n = 56$) completed a Bachelor's degree, 25.4% ($n = 30$) "some college," 16.1% ($n = 19$) a high school diploma, 5.9% ($n = 7$) a Master's degree, and 3.4% ($n = 4$) a Doctorate. Most of the participants (79.7%; $n = 94$) identified as "White/Caucasian", followed by 11% ($n = 13$) as "Latinx," 10.2% ($n = 12$) as "Black/African American", 10.2% ($n = 12$) as "Asian/Asian American," 2.5% ($n = 3$) as "Native American", and 3.4% ($n = 4$) as "Other". These categories were not mutually exclusive; participants could select more than one. Participants were also asked about the frequency of their relationships with persons with disabilities: 53.4% ($n = 63$) of participants reported having "one or two" relationships, 31.4% ($n = 37$) reported no relationships, 12.7% ($n = 15$) reported "a few," and 1.7% ($n = 2$) reported "a lot." Participant recruitment, consent, and all study procedures were approved by Vanderbilt University's Institutional Review Board (IRB #201401)

My goal was to recruit a sample large enough to fulfill the requirements of an a priori power analysis for ANOVAs that included label (2 levels, between-subjects), timing of diagnosis (2 levels, between-subjects), and character disability type (4 levels, within-subjects). The power

analysis determined that I required a minimum of 116 participants to detect medium effect sizes ($f_s \geq .25$; Cohen, 1992) with statistical power $\geq .80$ and $\alpha = .05$.

Procedure

The procedure of Study 2 closely paralleled that of Study 1, with a few small changes. The survey was again delivered exclusively online through Qualtrics. Participants were told that the purpose of the survey was to understand how adults view diagnoses affecting ability. They were told that they would read a series of brief descriptions of people and, following each description, be asked questions regarding the impact of a mentioned diagnosis on a person's life. Finally, they were told that total participation time should be approximately 4 to 8 minutes. As in Study 1, participants were told that this survey is only available to participants in the United States, and not to proceed if they do not live the United States. A few non-US participants ($n = 3$) still proceeded and were excluded on this basis later. Participants were told that they would read about *four* different middle-aged people. Finally, participants were told that for each person/character, they would rate whether they agreed or disagreed with statements about that person's *diagnosis*, and to please read each question carefully. They were then asked to check a box confirming that they agree to read each description and question carefully (as in Study 1).

In Study 2, the survey was broken into four blocks: a physical disability block, a sensory disability block, a cognitive disability block, and a no disability information block. Every participant saw all four blocks, but the order in which the blocks were presented was randomized. As in Study 1, each block began with a vignette. The contents of the vignette depended upon which condition a participant was assigned to. The physical disability, sensory disability, and cognitive disability vignettes were identical to those in Study 1. An example of the no disability information condition is as follows: "*Johnny is a person with Daxism. Johnny*

has been diagnosed with Daxism since he was a teenager.”

The “diagnosis statements” (a reminder of the information in the vignette) were again included at the top of each measures page. The biggest difference in Study 2 is that after the diagnosis statement, participants are told to “Consider Johnny’s *diagnosis*” (rather than a specific characteristic, such as EYESIGHT). The same three essentialism measures/statements were used as in Study 1, but the “diagnosis” was referred to instead of the “characteristic”: 1) “Johnny will display this *diagnosis* consistently across very different situations” (Consistency), 2) “This *diagnosis* is a deeply-rooted part of who Johnny is as a person” (Inherence), and 3) “This *diagnosis* has broad ramifications: it will influence many aspects of Johnny’s life’ (Informativeness). Using a 5-item Likert scale from strongly disagree (1) to strongly agree (5), participants decide whether each *diagnosis* is consistent, deeply rooted, and has broad ramifications. In total, each participant responded to 12 questions, 3 per diagnosis.

Scoring

The key dependent variable is Disability Essentialism: an average of the Consistency, Inherence, and Informativeness scores for each of four vignettes (physical disability, sensory disability, cognitive disability, no disability information).

Results

In Study 2, I was interested in exploring how the type of label used to describe a disability (person-first label versus condition-first label), as well as the time of diagnosis (since birth diagnosis versus teenage years diagnosis), influence the degree to which *disability diagnoses* are essentialized. A 2 (LABEL (between-subjects): person-first label versus condition-first label) X 2 (TIME OF DIAGNOSIS (between-subjects): since birth vs. teenage years) X 4 (DISABILITY (within-subjects): physical vs. sensory vs. cognitive vs. no disability information)

ANOVA revealed no significant effects of Label ($F(1, 114) = .45, p = .51, \eta^2_p = .004$) on the degree to which participants essentialized characters' disabilities. Participants essentialized a disability to the same extent whether it was described with a person-first or condition-first label; this finding was consistent with that of Study 1.

There was, however, a significant effect of Time of Diagnosis ($F(1, 114) = 5.41, p < .05, \eta^2_p = .05$) on the degree to which participants essentialized characters' diagnoses; this finding was unique to Study 2. When a disability diagnosis had been present since birth ($M = 4.03, SE = .07$), it was essentialized significantly more than when a disability diagnosis was acquired in the teenage years ($M = 3.80, SE = .08$) (see Figure 4). That is, diagnoses present since birth were considered that much more "essential" (consistent, inherent, and informative) to a person's being than diagnoses present since the teenage years. The effect of timing did not interact with other variables.

Finally, like in Study 1, I found a significant effect of Disability. Mauchly's test indicated that the assumption of sphericity had been violated, $X^2(5) = 18.73, p < .001$, so a Greenhouse-Geisser correction was used ($F(2.73, 310.91) = 49.34, p < .001, \eta^2_p = .30$). There was significantly less essentializing in the "no disability information" condition ($M = 3.36, SE = .07$) versus the three disability conditions (physical: $M = 4.02, SE = .07, p < .001$; sensory: $M = 4.09, SE = .07, p < .001$; cognitive: $M = 4.15, SE = .07, p < .001$) (see Figure 5). Thus, when participants read a vignette in which no information was given as to what the diagnosis affects, they judged the diagnosis as far less "essential" to a person's identity than when they were told that a diagnosis affects physical development, sensory development, or cognitive development.

Discussion

The purpose of Study 2 was to determine whether label and timing of a disability diagnosis would affect how typically-developing participants might essentialize a disability diagnosis. My findings suggest that even at a diagnosis-level, person-first versus condition-first labels do not impact essentializing a disability. Participants judged a diagnosis as just as “essential” to a person’s being whether the diagnosis was written in person-first language (e.g., “Johnny is a person with Daxism”) or condition-first language (e.g., “Johnny is a Daxic person”).

Where I did find a difference is in the effect of timing. In Study 2, diagnoses at birth were essentialized significantly more than those acquired in the teenage years. This finding supports our original hypothesis and previous work suggesting that there may be important differences in the way people conceive persons born with their disabilities versus having acquired their disabilities (Bogart et al., 2019), as well as how persons feel about their own disability identities dependent on when they received their diagnosis (Darling & Heckert, 2010; Forber-Pratt & Zape, 2017; Hahn and Belt 2004; Phelan and Kinsella, 2014).

Finally, a significant difference in essentializing between the three conditions (physical disability, sensory disability, cognitive disability) in which specific disability information was given (identical to the 3 conditions for Study 1) and the condition in which just a diagnosis and timing information was given (unique to Study 2) suggests that people may be hesitant to make inferences about the impact of a diagnosis when they only have minimal information about what it affects. Participants thought a diagnosis was significantly less “essential” to a person’s identity when there was no information given about *what* the diagnosis affected.

General Discussion

The current study was designed to examine the impact of how a person’s disability is labeled (person-first label versus condition-first label) and the timing of their diagnosis (since

birth versus in the teenage years) on the extent to which adults *without* disabilities essentialize persons' disabilities. Study 1 investigated how disability symptoms are essentialized, while Study 2 investigated how disability diagnoses are essentialized. Surprisingly, I found no effect of label in either Study 1 or Study 2 – regardless of whether participants saw a person-first (e.g., “Johnny is a person with Daxism”) or a condition-first disability label (“Johnny is a Daxic person”), they essentialized disabilities to the same extent. I did, however, find that the type of disability influenced essentializing: in Study 1, participants essentialized symptoms directly related to the described disability (which was either physical, sensory, or cognitive) significantly more than unrelated symptoms. In other words, physical symptoms were essentialized most for physical disabilities, sensory symptoms for sensory disabilities, and cognitive symptoms for cognitive disabilities. In Study 2, disabilities that were specified (i.e., participants were told that a diagnosis affects physical, sensory, or cognitive development) were essentialized significantly more than disabilities that were left unspecified (i.e., no information was given about which aspects of development were impacted). Finally, an effect of timing was found in Study 2, but not Study 1. When participants were asked to reason about disability *diagnoses* (Study 2), diagnoses acquired at birth were essentialized significantly more than diagnoses acquired in the teenage years. In the following sections, I review these findings in greater detail, and integrate them with prior work on disability language preferences and work on essentialism, labels, and timing. I also identify important directions for future research on these topics.

Essentialism Does *Not* Depend on How a Disability is Labeled

A primary goal of this study was to investigate whether the degree of essentializing a disability differs depends on whether a person-first label or a condition-first label is used to describe it. Adults (without disabilities) generally did *not* cater their judgements of persons'

disabilities to how those disabilities were labeled; they judged persons' disabilities to be just as consistent, inherent (deeply rooted) and informative to persons' lives, regardless of label. These findings are inconsistent with work suggesting that the structure of language alone can affect cognition or perception (Al Sheikh Hussein, 2012). Specifically, labels in which the *defining feature comes first*, can invoke essentialism (Gelman & Heyman, 1999; Gelman, 2004).

However, the current study was run with adults (as opposed to children in Gelman and Heyman (1999)) and used person-first labels versus condition-first labels (as opposed to count noun labels versus verbal phrases in Gelman and Heyman (1999)). In crafting our hypotheses, I posited that condition first labels match most closely with count nouns, and person-first labels with verbal phrases by where the identifier is placed. Based on these parallels, I hypothesized that disabilities described with condition-first labels (e.g., "Mike is a Daxic person") would be essentialized more than disabilities described using person-first labels (e.g., "Mike is a person with Daxism"). In the count-noun condition, the identifier comes first, just like in condition-first labels. In verbal phrases, there is *no* identifier - a single behavior is all that is being described. Person-first labels have an identifier (e.g., "Johnny is a person with Daxism), but it does not come *first*.

Perhaps, the lack of an effect of label can be attributed to my conditions (person-first versus condition-first labels) not being as distinct as count-noun versus verbal phrase conditions, as used in past work on labels and essentialism (Gelman & Heyman, 1999; Gelman, 2004). This reasoning also holds when comparing my label conditions to past work using person-first labels versus de-humanized labels (Granello & Gibbs, 2016; Howell & Woolgar, 2013; St. Louis, 1999). To the best of our knowledge, studies designed in this fashion are the only to investigate the effect of specific, disability labeling on attitudes and essentializing. It is interesting to note that many de-humanized labels are simultaneously *generic phrases*. Work by Gelman and

colleagues (2002) demonstrates that generic noun phrases induce essentialist judgments. When 4-year-olds heard a new fact in generic form (e.g., “Bears have three layers of fur”), they believed this to be true of most or all other category members (Gelman, Star, & Flukes, 2002). Children and adults hear generic noun phrases often: consider how many times a year a teacher starts class with, “Ok boys and girls...” Now consider the parallels between generic noun phrases and the de-humanized disability language that prevailed a few decades ago (e.g., “Morons,” “Psychos,” “Crips,” “Handicaps,” etc.). Perhaps it is the combination of de-humanization *and* a generic noun phrase that results in the strongest essentialist judgments? Perhaps for disabilities specifically, the most drastic difference in labeling is in the form of a generic phrase versus a person-first phrase (as studied in past work).

In designing the current studies, I wanted to reassess the person-first language crusade in a way more appropriate for the times – it seems people are rarely referred to by just their condition now – so where should the “person” go in a disability label? Does it matter at all? The findings of the current study suggest that it does not. When de-humanized language is removed from the equation and the labels are formatted in a person-first versus condition-first fashion, there does not seem to be any “gain” (i.e., any differences in essentialist judgments) depending on which type of label is used. Considering that the position in many spheres continues to be that person-first language should be an *absolute default* (rather than serving a purpose on a case-by-case basis), the findings of the current study call this practice into question and encourage continued research with labels structured as in the current studies.

Essentialism Judgments *Do* Depend on When a Disability Diagnosis is Acquired

A second goal of this study was to investigate whether the time in which a disability diagnosis is acquired (since birth vs. later in life) impacts the degree to which a disability is

essentialized. Note that I chose to manipulate the timing of the disability *diagnosis*, rather than the disability itself. Many disabilities are not identifiable at birth, even if they may be “present” at birth. There are also many instances of a diagnosis not being acquired until later in life due to external factors such as community resources, familial support, or even misdiagnosis. Growing up without a diagnosis may look extremely different from growing up with one. Despite the difference in methodology, I hypothesized that our findings would be like those of Bogart and colleagues (2019), who found that disabilities acquired at birth were essentialized more than disabilities acquired in the teenage years.

In Study 2, adults modified their judgements of persons’ disabilities based on whether they were told disability diagnoses were acquired at birth, or in the teenage years; they judged persons’ disabilities to be *more* consistent, inherent (deeply rooted) and informative to their lives if those disabilities had been diagnosed since birth. Along with the Bogart and colleagues (2019) study, these findings were consistent with qualitative studies (reviewed earlier) suggesting differences in disability-related pride/identity based on whether persons’ diagnoses were acquired at birth versus later in life, such as the teenage years (Darling & Heckert, 2010; Forber-Pratt & Zape, 2017; Hahn & Belt, 2004). Although I did not find support for my hypothesis in Study 1 (at the symptom-level), I did in Study 2 when participants were asked to reason about disability diagnoses. This finding supports the possibility that people might consider timing important when essentializing a diagnosis, but not the characteristics associated with the diagnosis – it may be too complex to posit how a diagnosis acquired since birth would impact memory-skills or physical coordination differently than a diagnosis given later in life would impact those abilities. Future work could include a qualitative component where participants are directly asked about this distinction. In past work, researchers interviewing disabled persons

(Darling & Heckert, 2010; Forber-Pratt & Zape, 2017; Hahn & Belt, 2004; Jones, 2012; Phelan & Kinsella, 2014) ask about the overall disability experience rather than specific disability symptoms. There may be good reason for this: disabled persons *themselves* may have a difficult time reasoning about their identities in such a piecemeal (symptom by symptom) fashion.

Most of the participants in the current study stated that they had one or two, if any, relationships with persons with disabilities. In recent decades, people with disabilities, who may have difficulty traveling to speak or do advocacy work in-person for various reasons, have been able to do so through social media. Anecdotally, many of these individuals provide extensive background on how and when they acquired their diagnosis. Perhaps, people with relatively little in-person exposure to disability communities still hear about and internalize the sentiments of disabled persons this way. Future work could explore the inclusion of survey questions that address this contactless exposure to disability-related pride/identity and its impact on essentialist judgments.

Limitations and Future Directions

The current studies investigated if labels affect how people conceptualize the impact of disabilities on a person's life and identify, even if they have never seen or heard of them before; novel disability names were used. If I had used real disabilities (ASD, Down's Syndrome, Blindness, etc.), existing biases, experiences, and sentiments would have been confounds extremely difficult to control for. Yet, in the real world, these factors are a piece of the puzzle, and from existing research, they oftentimes sway persons' perceptions, conceptions, and judgments. I predict that had I used well-known, existing disabilities in the current study, that the degree of essentializing would have been greater, regardless of condition. Yet, there are new diagnoses with new names constantly emerging, and basic research such as that conducted in the

current study has the potential to inform the introduction of and education surrounding those disabilities. Overall, there was a tradeoff of greater internal validity at the expense of some external validity. People have extremely strong opinions about disabilities and the way in which they are labeled, and this debate may play a role in the success of the person-first language movement for some disabilities, but not others.

A further limitation of the current study is that the labels were constructed in an “-ic” versus “-ism” format (i.e., “Person with Daxism” vs. “Daxic person”). This structure was modeled after the labels used for Autism Spectrum Disorder (ASD): “Person with Autism” vs. “Autistic person”. This was an intentional decision, as a review of the literature and review of social media debates suggests that the person-first language crusade is most relevant to, and most directly affecting, the ASD community. Yet, it is possible that even though novel disabilities were used, the “-ic” vs. “-ism” construction primed participants to think about ASD. Most disabilities will have their own, unique “person-first” versus “condition-first” constructions. For example, the person-first language debate is also largely impacting the Blind community, and their construction is, “Person with blindness/a visual impairment” vs. “Blind person”. Future work is needed to explore whether these minute differences matter in essentialist judgments regarding label.

In addition to between-disability community differences, there are differences *within* disability communities. Not every person with a certain disability diagnosis has the same collection or severity of symptoms or characteristics. It is for these reasons that I initially chose to evaluate how essential non-disabled persons judge individual disability *symptoms* to be. I carefully selected two symptoms per disability category: Bodily Strength and Physical Coordination (Physical), Eyesight and Hearing Ability (Sensory), and Comprehension and

Memory Skills (Cognitive). These characteristics were chosen because of their relevance to common disabilities of particular interest to the research team and worded in a way so that they could not be misinterpreted; for example, if I had just written “Strength” (as opposed to “Bodily Strength”), participants may be inclined to think of mental or emotional strength (i.e., “grit” or “resilience”). Despite the intentionality behind these specific characteristics/symptoms, there are only two per disability category, and that limits my ability to generalize the findings of Study 1 beyond this narrow scope. Even so, Study 2 served to remediate any concerns about Study 1’s methods by asking participants about disabilities at the diagnosis-level (rather than the symptom-level).

The characters in my vignettes were described as “middle-aged”. A 2010 study by Darling & Heckert (reviewed earlier) suggests some important relationships between age and disability identity. The 18-35 years group comprised 56% of the sample, the 36-64 years group 35% of the sample, and the 65 years and older age group 9% of the sample. Older people with disabilities were more likely to adopt a medical model (e.g., hoping for a cure, placing trust in medical professionals), to feel isolated from social happenings (e.g., their disability prevents a fulfilling work and social life), and to reject disability pride as a part of their identity (even though they thought of themselves as disabled more than younger participants, they did not view this identity as positive). Adults aged 36-64 years were the greatest activists according to the study, with more than half participating in some form of activism, yet it was the young adults that had the highest level of disability pride. If participants in the current study had conceptions of or experiences with persons with disabilities that parallel the findings of the Darling & Heckert (2010) study, it is possible that our results may have looked different if I had described characters as “young adults” or “in their 20s”. Future work could manipulate the age of the

characters described in the vignettes to rule out any effect on the degree of essentializing characters' disabilities.

In addition to investigating the degree of essentializing, I was interested in measuring the *breadth* of essentializing: does the type of label used to introduce a disability (e.g., a physical disability) or the timing of a diagnosis influence how participants essentialize *other* abilities (e.g., sensory or cognitive characteristics) and unrelated personality characteristics (e.g., compassion and generosity). My findings failed to support my hypotheses – there was no “spill-over” regarding essentialist judgments – that is, when participants learned about a physical, perceptual, or cognitive disability, they were hesitant to make inferences outside of the characteristics directly related to the disability described. However, this may be attributed to participants' reasoning about novel disabilities. When learning about a disability one has never heard of, one may be expected to take the limited information provided quite literally. That is, if one is told Daxism affects physical development (bodily strength and physical coordination) then one may be hesitant to reason about any characteristics or symptoms aside from those. Future work could explore whether there remains a lack of spill-over if the same set of characteristics is linked to familiar disabilities (versus novel disabilities).

Thus, when reasoning about novel disabilities, person-first versus condition-first labels do not seem to impact non-disabled persons' essentialist judgments. This is the case whether persons reason about disability symptoms or diagnoses. Given empirical work and tremendous and impactful policy changes that have been implemented around this issue, the current findings suggest that resources may presently be mis-allocated. There may have been a return in investment a few decades ago when de-personalized language was the norm for referring to people with disabilities, but that return may now be diminished (and that is a good thing!) – it

means the benefits have already been garnered. In addition to shifting from a default to person-first to a prioritization of personal preference, we may be able to shift resources toward other efforts that have more promise in benefitting these communities in today's societies.

References

- Al Sheikh Hussein, B. (2012). The sapir-whorf hypothesis today. *Theory and practice in language studies*, 2(3), 642-646. doi:10.4304/tpls.2.2.642-646.
- Bastian, B. & Haslam, N. (2006). Psychological essentialism and stereotype endorsement. *Journal of Experimental Social Psychology*, 42(2), 228-235.
doi:10.1016/j.jesp.2005.03.003
- Bogart, K. R., Rosa, N. M., & Slepain, M. L. (2019). Born that way or became that way: Stigma toward congenital versus acquired disability. *Group Processes & Intergroup Relations*, 22(4), 594-612. doi:10.1177/1368430218757897
- Brown, L. (2011). The significance of semantics: person-first language: why it matters.
<https://www.autistichoya.com/2011/08/significance-of-semantics-person-first.html>
- Darling, R. B., & Heckert, A. (2010). Orientations toward disability: differences over the lifecourse. *International Journal of Disability, Development and Education*, 57(2), 131-143. doi:10.1080/10349121003750489
- Forber-Pratt, A. J. & Zape, M. P. (2017). Disability identity development model: voices from the ADA generation. *Disability and Health Journal*, 10(2), 350-355.
doi:10.1016/j.dhjo.2016.12.013
- Foreman, P. (2005). Language and disability. *Journal of Intellectual and Developmental Disability*, 30(1), 57-59. doi:10.1080/13668250500033003
- Gelman, S. A. (2003). *The essential child: origins of essentialism in everyday thought*. Oxford University Press. doi:10.1093/acprof:oso/9780195154061.001.0001
- Gelman, S. A. (2004). Psychological essentialism in children. *Trends in Cognitive Sciences*, 8(9), 404-409. doi:10.1016/j.tics.2004.07.001

- Gelman, S. A. & Heyman, G. D. (1999). Carrot-eaters and creature-believers: the effects of lexicalization on children's inferences about social categories. *Psychological Science*, 10(6), 489-493. doi:10.1111/1467-9280.00194
- Gelman, S. A., Heyman, G. D., & Legare, C. H. (2007). Developmental changes in the coherence of essentialist beliefs about psychological characteristics. *Child Development*, 78(3), 757-774. doi:10.1111/j.1467-8624.2007.01031.x
- Gelman, S. A., Star, J. R., Flukes, J. (2002). Children's use of generics in inductive inferences. *Journal of Cognition and Development*, 3(2), 179-199. doi:10.1207/S15327647JCD0302_3
- Granello, D. H. & Gibbs, T. A. (2016). The power of language and labels: "the mentally ill" versus "people with mental illnesses". *Journal of Counseling and Development*, 94(1), 31-40. doi:10.1002/jcad.12059.
- Hahn, H. D. & Belt, T. L. (2004). Disability identity and attitudes toward cure in a sample of disabled activists. *Journal of Health and Social Behavior*, 45(4), 453-464. doi:10.1177/002214650404500407
- Haslam, N., Bastian, B. & Bissett, M. (2004). Essentialist beliefs about personality and their implications. *Personality and Social Psychology Bulletin*, 30(12), 1661-1673. doi:10.1177/0146167204271182
- Haslam, N. & Levy, S. R. (2006). Essentialist beliefs about homosexuality: structure and implications for prejudice. *Personality and Social Psychology*, 32(4), 471-485. doi:10.1177/0146167205276516
- Haslam, N., Rothschild, L., & Ernst, D. (2000). Essentialist beliefs about social categories. *British Journal of Social Psychology*, 39(1), 113-127. doi:10.1348/014466600164363

- Haslam, N., Rothschild, L., & Ernst, D. (2002). Are essentialist beliefs associated with prejudice? *British Journal of Social Psychology, 41*(1), 87-100
doi:10.1348/014466602165072
- Horst, J. S., & Hout, M. C. (2015). The Novel Object and Unusual Name (NOUN) Database: A collection of novel images for use in experimental research. *Behavior Research Methods, 48*, 1393-1409. doi:10.3758/s13428-015-0647-3.
- Howell, A. J. & Woolgar, S. R. (2013). Essentialism and compassion: predicting preference for noun labels applied to people with mental disorders. *Personality and Individual Differences, 54*(1), 87-91. doi:10.1016/j.paid.2012.08.013
- Jones, J. L. (2012). Factors associated with self-concept: adolescents with intellectual and development disabilities share their perspectives. *Intellectual and Developmental Disabilities, 50*(1), 31-40. doi:10.1352/1934-9556-50.1.31
- Lebowitz, M. S., Pyun, J. J. & Ahn, W. (2014). Biological explanations of generalized anxiety disorder: effects on beliefs about prognosis and responsibility. *Psychiatric Services, 65*(4), 498-503. doi:10.1176/appi.ps.201300011
- Lebowitz, M. S., Rosenthal, J. E., & Ahn, W. (2016). Effects of biological versus psychological explanations on stigmatization of children without ADHD. *Journal of Attention Disorders, 20*(3), 240-250. doi:10.1177/1087054712469255
- Phelan, S. K., & Kinsella, E. A. (2014). Occupation and identity: perspectives of children with disabilities and their parents. *Journal of Occupational Science, 21*(3), 334-356.
doi:10.1080/14427591.2012.755907
- St. Louis, K. O. (1999). Person-first labeling and stuttering. *Journal of Fluency Disorders, 24*(1), 1-24. doi:10.1016/S0094-730X(98)00024-2

Texas Center for Disability Studies (2017, September 27). *Person First Language*. YouTube.

<https://www.youtube.com/watch?v=lz40q5lydnQ&t=1s>

Vaughn, C. E. (1997). People-first language: An unholy crusade. National Federation of the

Blind. <http://www.blind.net/a-philosophy-of-blindness/individual-articles/people-first-language.html>

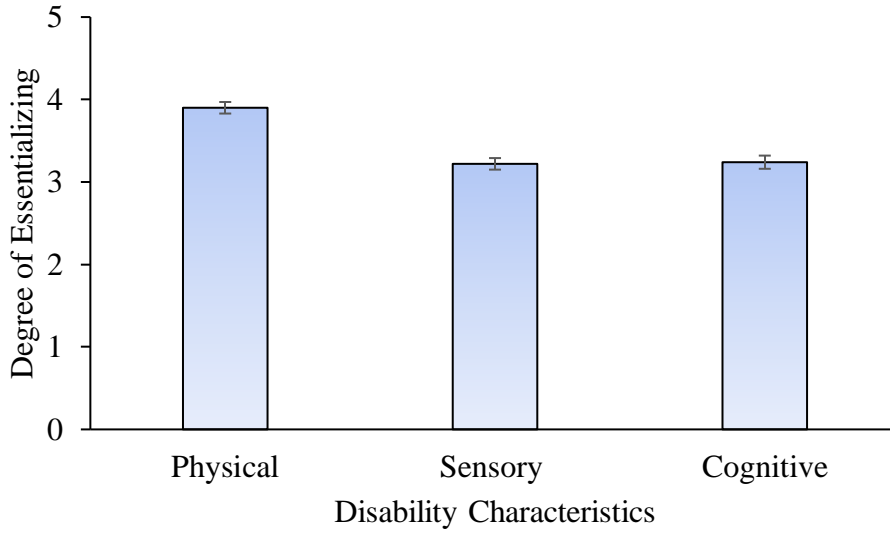


Figure 1: Degree of essentializing physical, sensory, and cognitive characteristics for a disability that affects **physical development**. Individual essentialism judgments can range from 0-5. Error bars represent +/- 1 standard error of the mean.

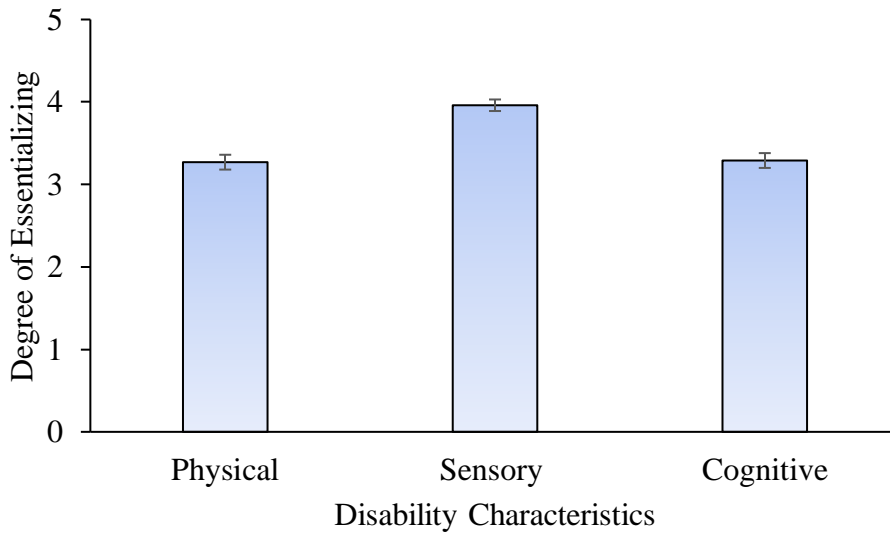


Figure 2: Degree of essentializing physical, sensory, and cognitive characteristics for a disability that affects **sensory development**. Individual essentialism judgments can range from 0-5. Error bars represent +/- 1 standard error of the mean.

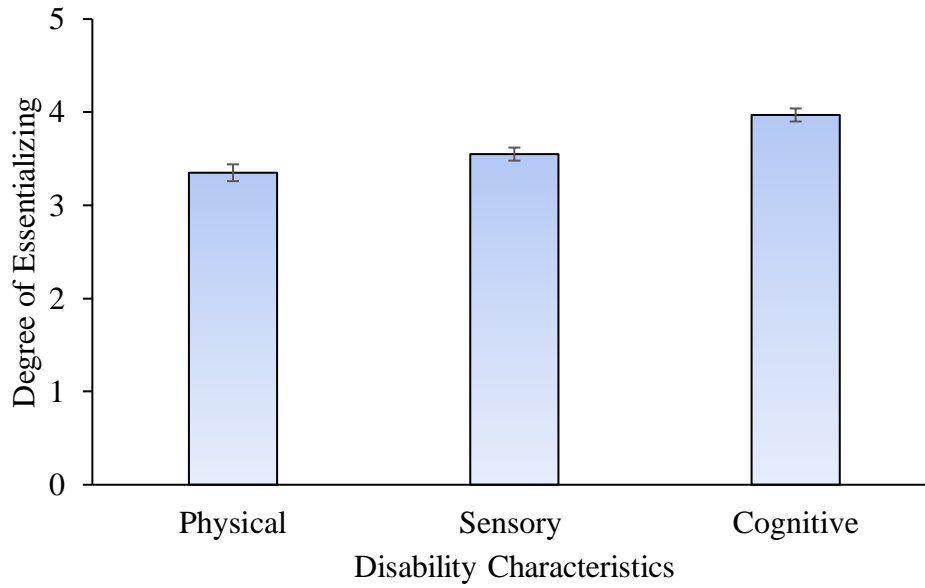


Figure 3: Degree of essentializing physical, sensory, and cognitive characteristics for a disability that affects **cognitive development**. Individual essentialism judgments can range from 0-5. Error bars represent +/- 1 standard error of the mean.

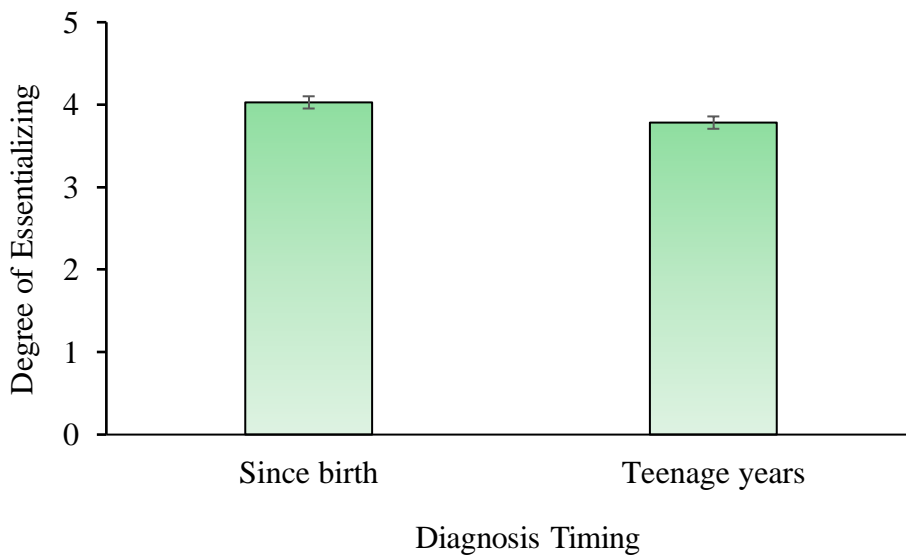


Figure 4: Degree of essentializing disabilities based on whether they were diagnosed **since birth** or in the **teenage years**. Individual essentialism judgments can range from 0-5. Error bars represent +/- 1 standard error of the mean.

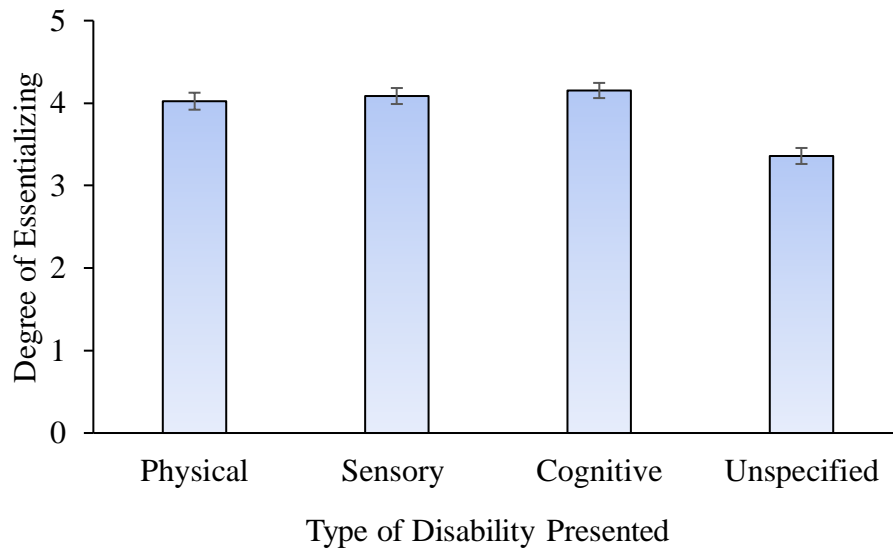


Figure 5: Degree of essentializing diagnoses that affect **physical, sensory, cognitive, or unspecified** development. Individual essentialism judgments can range from 0-5. Error bars represent +/- 1 standard error of the mean.

Appendix A

Novel disabilities

1. Piskerism/Piskeric
2. Brissism/Brissic
3. Derderism/Derderic
4. Tandodism/Tandodic
5. Junsism/Junsic
6. Khatsism/Khatsic
7. Perarism/Peraric
8. Miverism/Miveric

Appendix B

Vignettes based on condition

Physical Disability		
	<i>Since-birth diagnosis</i>	<i>Teenage years diagnosis</i>
<i>Person-first label</i>	Johnny is a person with Daxism. People with Daxism tend to experience challenges in their physical development, for example, their bodily strength and physical coordination. Johnny has been diagnosed with Daxism since birth.	Johnny is a person with Daxism. People with Daxism tend to experience challenges in their physical development, for example, their bodily strength and physical coordination. Johnny has been diagnosed with Daxism since he was a teenager.
<i>Condition-first label</i>	Johnny is a Daxic person. Daxic people tend to experience challenges in their physical development, for example, their bodily strength and physical coordination. Johnny has been diagnosed as Daxic since birth.	Johnny is a Daxic person. Daxic people tend to experience challenges in their physical development, for example, their bodily strength and physical coordination. Johnny has been diagnosed as Daxic since he was a teenager.

Sensory Disability		
	<i>Since-birth diagnosis</i>	<i>Teenage years diagnosis</i>
<i>Person-first label</i>	Johnny is a person with Daxism. People with Daxism tend to experience challenges in their sensory development, for example, their eyesight and hearing ability. Johnny has been diagnosed with Daxism since birth.	Johnny is a person with Daxism. People with Daxism tend to experience challenges in their sensory development, for example, their eyesight and hearing ability. Johnny has been diagnosed with Daxism since he was a teenager.
<i>Condition-first label</i>	Johnny is a Daxic person. Daxic people tend to experience challenges in their sensory development, for example, their eyesight and hearing ability. Johnny has been diagnosed as Daxic since birth.	Johnny is a Daxic person. Daxic people tend to experience challenges in their sensory development, for example, their eyesight and hearing ability. Johnny has been diagnosed as Daxic since he was a teenager.

Cognitive Disability		
	<i>Since-birth diagnosis</i>	<i>Teenage years diagnosis</i>
<i>Person- first label</i>	Johnny is a person with Daxism. People with Daxism tend to experience challenges in their cognitive development, for example, their memory skills and comprehension. Johnny has been diagnosed with Daxism since birth.	Johnny is a person with Daxism. People with Daxism tend to experience challenges in their physical development, for example, their cognitive development, for example, their memory skills and comprehension. Johnny has been diagnosed with Daxism since he was a teenager.
<i>Condition- first label</i>	Johnny is a Daxic person. Daxic people tend to experience challenges in their cognitive development, for example, their memory skills and comprehension. Johnny has been diagnosed as Daxic since birth.	Johnny is a Daxic person. Daxic people tend to experience challenges in their physical development, for example, their cognitive development, for example, their memory skills and comprehension. Johnny has been diagnosed as Daxic since he was a teenager.