

Labelling Effects on Stigma Surrounding Disabilities

Julia Benson

Northeastern University (2017)

Abstract

Several existing linguistic theories establish that language influences thought – Sapir-Whorf, labelling theory, and the theory of argumentation within language, to name a few. Although previous research into person-first language’s effects is sparse, healthcare professions encourage this modification as an attempt to reduce stigma within the field. This research study intends to examine the link between language and disability stigma. Participants were asked to report their feelings and strength of those feelings responding to one of three potential ways to describe ten individual disabilities, as well as list any associated behaviors and prescribe a treatment frequency for the presented stimuli. After data analysis, no significant effect was found of language use on valence or arousal scores aggregately, but when the data was parsed out based on participant experience with disability, the effects of language were clear in participants with the least experience and participants with the most experience. The lack of an effect in the group with moderate experience may be attributed to gender imbalance in a primary female-identifying study, as that group consisted mostly of self-identified men. The overarching results demonstrate a need for further education surrounding disabilities to reduce the stigma associated with them.

1 Introduction

Several theories in psychology and linguistics - including the theory of argumentative language in discourse analysis and labelling theory - indicate that the words chosen to describe a concept color the concept itself; that is, words have a substantial effect on public perception of a concept. Simultaneously, there is a growing movement against the censorship of language for others' comfort – dubbing it as too “politically correct” and deeming it an ineffective way to mitigate public perception and stigma. This brings into question the idea of *person-first language*.

1.1 An introduction to person-first language

From personal experience working in the special needs field, a common way to refer to patients is to use person-first language – for example, *a person with autism* versus *an autistic person*. It is thought that, by referring to patients as people first, before the disability, the disability is not as strongly linked to their identity. Advocacy of person-first language began in the 1980's, and picked up in the field of speech-language-pathology (among other fields) in the early 90's, when the American Speech-Language-Hearing Association (ASHA) started mandating its usage. In addition to advocating the use of person-first language, publications by ASHA also encouraged using words such as *disability* or *disorder* over *impairment* and *handicap*. Even more granularly, the prefix *dis-* was favored over *dys-* as the literal meanings are ‘different’ over ‘abnormal’ (St. Louis, 1999).

It is unclear what catalyzed the popularization, other than the natural human tendency to modify language throughout history to ameliorate listeners' perceptions

(Pinker, 1994). Furthermore, there have been relatively few studies assessing its effectiveness in reducing negative connotations. Because of this lack of evidence, the divisive term “political correctness” has been used to describe the euphemistic substitutions on topics regarding race, gender, sexuality, and healthcare, to name a few.

1.2 Political correctness

Political correctness is a term describing the euphemisms that replace words and phrases thought to be offensive to specific – often marginalized – communities. Politically correct euphemisms are most often used to refer to disability, gender, sexuality, race, and other indicators of societal status; thus, it can be said that political correctness and socioeconomic status are significantly intertwined (Hughes, 2010).

Hughes (2010) cites linguistic aversion dating back to the 16th and 17th centuries with the English war on “inkhorn” terms – terms introduced into the language from other, often Italic, languages. Although semantic change is certain to have occurred within the English language before then, the controversy over inkhorn terms is the first recorded instance of English speakers actively arguing against language change. Since then, the English lexicon has undergone more semantic changes with potentially increasing frequency - feeding into what Stephen Pinker describes as a “euphemism treadmill” in a New York Times Column in 1994.

1.3 The euphemism treadmill

Pinker (1994) describes the treadmill process as follows: “People invent new ‘polite’ words to refer to emotionally laden or distasteful things, but the euphemism becomes tainted by association and the new one that must be found acquires its own negative

connotations.” He elaborates further by establishing that concepts are not colored by names, but rather names are colored by concepts. Take for example, the multiple phrases used to refer to the place in which one uses the toilet— water closet, toilet, bathroom, restroom, lavatory. Each of these phrases developed to avoid using the older words for the same thing, because the older words had developed negative or inappropriate connotations. However, Pinker asserts that the newer, more “politically correct” phrases develop the same negative connotations as the words they replace, and thus they are replaced with even more euphemistic phrases. The cycle appears to be never-ending, thus drawing the comparison to a treadmill.

O’Neil (2011) coins another term related to Pinker’s euphemistic treadmill – a “buffet of insults.” He provides three aspects to delivering an insult – the words chosen, the context, and the tone. He then goes on to claim that proponents of politically correct language ignore the latter two and by doing so contribute to the buffet, for bullies to pick and choose from should their intent be malicious (O’Neil, 2011). Thus, it is not only the words chosen that yield an offensive result.

2 Theories defending political correctness

Despite criticism, it has been theorized (and empirically tested – to be discussed later in this report) that the words used to describe a concept affect perception of said concept. In the health field – and especially with highly stigmatized areas such as a mental and developmental disabilities – myriad terms are known with a degree of aversion to each – for example, *psychotic*, *handicapped*, *retarded* versus *person with psychotic episodes*, *differently abled*, and *developmentally disabled*. The latter three examples in this

comparison demonstrate the elevated language commonly used to mask a less desirable concept and are thought to diminish the stigma applied to the original phrase.

2.1 The theory of argumentation within language

The theory of argumentation within language (TAL) – first popularized in the 1970's – when applied to discourse analysis by the likes of Jose Portoles and Jean Yates (2007), demonstrates that when speaking about other people, adjectives hold more weight than prepositional phrases when qualifying the head of a noun phrase. They cite the use of person-first language as an example of this, but are quick to retract the claim: “that the use of a word can actually change the mental states of those who hear it has always been considered the stuff of fantasy or miracles.” (Portoles et al, 2007).

2.2 Labelling theory

For every claim that words do not influence perception, there is an article denouncing the idea. As stated by Patrick Corrigan (2000), “According to labeling theory, persons who are called mentally ill, or are otherwise known to have such a label (e.g., being observed coming out of a psychiatrist's office), are the object of stigma and discrimination.” Critics of this theory postulated that it was one's behavior, rather than the label applied to it, that led to those defined as mentally ill being more likely unemployed or having lower income – the most common measure of success in the labelling studies included in this review.

Link (1987) conducted a study that supported labeling theory with regards to mental illness by comparing the incomes and unemployment rates of people dependent on their level of psychopathological treatment. In this study, he divided participants in

five groups: untreated community respondents with no evidence of psychopathology, recently labeled first-treatment contact patients, repeat-treatment contact patients, past-treatment contact patients, and the untreated community respondent with evidence of psychopathology. The results of the study concluded that the group that had been receiving repeat treatment had the most unemployment and the least earned income – implying that they were also the group that had been labelled the most ill and most in need of repeat treatment.

Link revisited his test of labelling theory in 1989 to further support the effects of labelling- primarily through how patients respond to their own label. From his investigation, he found that patients react to their diagnoses in three possible ways: secrecy, withdrawal, and education – all as means to reduce stigma. He argues that they would not have to act this way if they had not had the label prescribed to them in the first place. In this revisitation, Link divided his sample population into the same five groups previously studied, and in addition to comparing their income and unemployment rates, he asked the groups to answer questions regarding the three observed responses to stigma (Link, 1989).

3 Person-first language, revisited

Between labelling theory and the theory of argumentation in language, it has been established that phrases have connotations (feelings) that extend beyond their denotations (definitions). Because of these findings, efforts have been made to modify language use so that stigma surrounding disabilities is reduced – such as with person-first language.

In 1994, Kenneth O. St. Louis conducted a study comparing person-first

language and its alternative in speech-language-hearing impaired clients and how it affects perception and attitudes towards people with those impairments.

St. Louis was most interested in comparing the label *stutterer* to the person-first alternative *person who stutters*. To do this, he had participants rank the label – along with several others such as *leper/person with leprosy* and *psychotic/person with psychosis* – on scales regarding the participants’ knowledge of the label as well as the participants’ desire to have the label applied to themselves. The results of St. Louis’s experiment were clear – person-first terminology did not make a significant difference in 98% of 480 comparisons, though it was significant when comparing the person first alternatives of *psychotic* (person with psychosis) and *leper* (person with leprosy). *Stutterer* was the highest ranking phrase in terms of familiarity, but the lowest ranking in terms of one’s desire to be labelled as such.

St. Louis expounds on his results by arguing that changing the name of a stigmatized condition may have the effect of euphemistically promoting the conclusion that a disease is not what it really is. He continues to reflect on how America has become a “culture of victimization” as per C. J. Sykes in a 1992 commentary on how marginalized groups use language to assert their place in society, thus contributing the what has been referred to in this paper and in the public sphere as “political correctness.” St. Louis’s methodology, however, appears to focus on how people without disabilities would like to be referred to if they had one, and it does not attempt to illuminate how the wording affects perception of disabilities by those without.

4 Implications for current study

Although there have been studies approaching the way that language is used and confirming that there is a correlation between labels and the associations with them, there has yet to be extensive research into how, when a disability diagnosis is presented as a noun, adjective, or prepositional phrase (for instance, *an autistic*, *an autistic person*, *a person with autism*), public perception changes with the word associations. Furthermore, while studies such as the one conducted by St. Louis (1994) have demonstrated the ineffectiveness of person-first language, it is still common practice, and a google search of ‘disability language’ yields several pamphlets with examples of what is and is not acceptable. Rose and colleagues conducted a survey in 2007 to yield 250 labels used to spread mental illness stigma, though it has not been determined why words such as *retard*, *psycho*, and *moron* have gone from being commonplace medical terminology (Hughes, 2010) to developing the negative connotations they have today.

5 Methodology

The primary purpose of this study is to investigate how the language used to refer to disabilities affects the perceived symptoms and severity of the disabilities themselves. If progress can be made regarding the effects of person-first language on perception of disability, it is likely that stigma in the field can be reduced. If there is no effect of this language modification, then it would be best to focus efforts elsewhere in terms of educating others about disabilities and creating more accessible public spaces for those with disabilities. Current research suggests that person-first language and other euphemistic modifications have no effect on public perception, but the methodologies

used leave room for further investigation.

5.1 Participants

Participants for this study were recruited primarily through social media - specifically Facebook groups - and in-person interaction. Participants were recruited primarily from a variety of school settings - mainly Northeastern University and University of Colorado at Boulder. There were a few recent college graduates willing to participate as well. No experience with disabilities or disabled populations was necessary for participation. 40 participants were recruited for this survey – 25 identified as female, 14 identified as male, and 1 identified as genderfluid.

5.2 Survey Development and Distribution

Thirty phrases used to describe a range of ten mental, physical, emotional, and behavioral disabilities were selected for this study. Each selected disability was intended to be well-known to those with little to no experience around others with disabilities, and were divided into phrases as seen in Table 1 in the Appendix.

From these thirty terms, the terms were randomized such that four survey variations of 15 questions each were produced. Each survey presented five prepositional phrases, five nominal phrases, and five adjectival phrases. The four variations were created so that each disability would have the opportunity to appear as person-first with an alternate (adjectival or nominal) version within the same survey.

The survey was given in-person by setting up meeting times with each individual willing participant.

5.3 Rationale behind the survey terms

The disabilities were primarily chosen from pamphlets, such as the one created by Silver (2015), intended to educate on respectful language surrounding disabilities. The nominal and adjectival varieties were pulled from research done by Diana Rose and colleagues (2007) and by Geoffrey Hughes (2010). It was established in this prior research that terms such as *schizo*, *spaz*, and *psycho* in general elicited stronger rankings of stigma from experimental participants; however, due to familiarity with these terms, they were included along with the less-stigmatized variants such as *a paraplegic*. In general, the disabilities surveyed were chosen due to the frequency with which they occurred and were explained in educational pamphlets found googling “disability language.” By taking examples from established sources, the researcher presumed such resources were used by the general populace and thus those surveyed would have familiarity with the terms. Discrepancies in phrasing i.e. *a mute*, *a speech-impaired person*, *a person with a speech disability* can be attributed not only to frequency of occurrence but also what was more syntactically natural when put in a sentence to describe someone, as the survey demanded.

5.4 Pre-Survey Questions

Before taking the survey, participants were asked to identify their gender, if they or someone they were close with had a disability - and to elaborate if so, and if they or someone they were close with worked closely with a disabled population.

5.5 Survey Questions

Each phrase was presented with a gender-neutral name before it, as in “Hayden is

_____”. Gender-neutral names were chosen to avoid gender bias in judging disabilities, as found in previous research studies (Garb, 1997). Following each phrase, participants were asked to rank their reactions to the condition described on a valence and arousal scale from 1-7. For valence, 1 = very negative and 7 = very positive, whereas for arousal, 1=very weak, 7=very strong. This model of emotional assessment was selected from the researcher’s experience in the lab directed by Northeastern faculty and esteemed researcher Dr. Lisa Feldman-Barrett.

After rating their responses on a valence and arousal scale, participants were then asked to provide 2-3 behaviors associated with the condition described, as well as to select a frequency of treatment from a series of options. An example of one series of questions is in Figure 1 (see Appendix).

5.6 Problems and challenges

One possible challenge towards the reliability of the data is the different locations in which the survey was delivered, as well as the method of recruitment being through social media, limiting the participant pool to the researcher’s social circle, save for some public interest gained from posting in public Facebook groups. The biggest challenge for recruiting participants from the public sphere is the lack of compensation available. By recruiting primarily from social circles, coercion and familiarity were likely factors that could influence participants to respond a certain way, though participants were assured that their data would be entirely anonymous and confidential.

A possible problem with the survey itself is the phrasing of the questions being the same from stimuli to stimuli. As the stimuli differ slightly in phrasing, this could

create some dissonance in comprehension. Great care was taken to create questions applicable to all disabilities and phrases to avoid linguistic bias.

All this said, participants did express some confusion when answering the survey questions, primarily with regards to what counted as “negative” and what counted as “positive” when ranking one’s valence in response to another, theoretical person’s disability. In response to these questions, the researcher assured participants that she was not expecting any one response to the survey, just that some variant of sad or angry counted as negative, and some variant of amused or happy counted as positive. Participants demonstrated less confusion after.

5.7 Data collection, coding, and analysis

Data was collected and coded for valence, arousal, and treatment frequency on a numerical scale within each survey, as well as across surveys for individual phrases within their respective disabilities. The free-written behaviors were analyzed for frequency distribution between the three possible variations across disabilities and analyzed for patterns of stigmatization as pulled from research conducted by Diana Rose and colleagues in 2007.

After being coded in an excel spreadsheet, one-way ANOVAs were conducted to analyze the valence and arousal scales across all 40 participants, as well as within the participant pool depending on their experience with disabilities and the disabled community. To code for this experience, participants were either in a 0-experience, 1-experience, 2-experience, or 3-experience group – dependent entirely on if the participant indicated personal disability, closeness to someone with a disability, having worked or

known someone who worked with a disabled population, or having no experience with disability whatsoever. In the final data analysis, the 40 participants were broken up as nine 0-experience participants, eleven 1-experience participants, thirteen 2-experience participants, and seven 3-experience participants.

6 Results

Overall, when comparing valence and arousal scores across all forty participants, little to no significant effect was found for most disabilities and phrases associated. Average obtained valence and arousal scores are included in Table 2 (see appendix).

At $p < .05$, *a retard* yielded a significant F-value of 11.7 ($F_{crit} = 3.15$) and “a spaz” yielded a significant F-Value of 10.1 ($F_{crit} = 3.15$). Other comparisons were not statistically significant.

The average valence and arousal scores for each of the four participant sub-groups are found in Table 3 in the appendix.

When conducting an ANOVA analysis of valence effects caused by phrase types within groups, the 1-experience and 3-experience groups yielded F-values of 3.86 and 3.74 respectively, when the F_{crit} s were 3.05 and 3.08 respectively at $p < 0.5$. No significant effects were found regarding valence in the 0-experience group and the 2-experience group, and no significant effects were found regarding arousal across all four groups.

In addition to conducting ANOVA analyses on self-reported valence and arousal, chi-squared tests were performed to analyze the frequency of treatment selections both from the whole 40 participants, and from each sub-group. In all conducted analyses, the comparison of *person with speech disability*, *mute*, and *speech-impaired person*; as well

as *person with epilepsy*, *spaz*, and *epileptic person* yielded significantly different frequencies from what was expected, inferred and extrapolated from the total selected treatment frequencies (see table 4, appendix).

In general, the treatment frequency most frequently selected was once per week, followed closely by once per month. Although this distribution varied with disability described, there was no significant variation because of the phrases used to describe each of the ten disabilities.

7 Discussion

The purpose of this study and the data gathered from it was to identify if the language we use – in particular, person-first language – has a significant effect on perception of disabilities. At its core, significant effects were not found as frequently as expected based on the frequency with which the use of person-first language is promoted. However, there does appear to be a link between personal experience with disabilities and the feelings they evoke when presented with different phrases pertaining to them.

7.1 Valence and arousal related to experience

Unsurprisingly, no significant effects of phrase variation were found in the group with no personal connection to a disability or a person with a disability. However, there were significant effects in the 1-experience and 3-experience group. The 3-experience group indicated the lowest average valence score for each nominative phrase when compared to the adjectival and prepositional phrases. This indicates that they felt most negatively about the phrases used to describe people with disabilities most like nouns, and felt more positively about both the prepositional and adjectival phrases.

Given this trend, one would expect the 2-experience group to also show a significant effect of language modification on disability perception. However, this is not the case. One consideration for this change - other than a restructuring of the methodology - would be the balance of male and female participants in each group. The sample population weighed slightly on the female side, with 62.5% of participants identifying as female. However, the 2-experience group was the only subgroup consisting of more male participants than female. While this does not indicate that gender is the only factor that contributes to this outlying group result, it is a pattern that should not be ignored. Previous studies have shown a trend in language usage across genders portraying women as “choosier” with their words than men (Newman, 2008). Future studies on this topic could isolate gender as an independent variable and analyze for interaction effects between gender and language variation on disability perception.

It is also important to note that, though the 1-experience and 3-experience groups demonstrated the strongest reactions in the form of higher arousal ratings overall, they did not necessarily feel the most *negatively* about the phrases themselves. In fact, the 0-experience group - which, recall, did not demonstrate a significant effect of phrasing on valence/arousal ranking - appeared to feel the most negatively across the board about the phrases they were presented with. This demonstrates an inclination to feel more negatively about concepts we are less familiar with, thus furthering the need for education in less-familiar areas.

7.2 Treatment frequency analysis

It is interesting to note that, of the phrases, only *mute* and *spaz* demonstrated significant

changes in treatment frequency from the norm described in Table 3. This is likely due to the semantic shifts that *mute* and *spaz* have undergone, as per Geoffrey Hughes (2010). *Mute* has an admittedly much different denotation than strictly speech-impaired. While one thinks of speech-impediments as being something akin to a stutter or lisp, *mute* carries the meaning of being unable to produce speech whatsoever. This comparison of phrases could be an error on the researcher's part.

More interestingly is the amelioration that a word such as *spaz* has undergone. It demonstrated more "never" responses than expected because several participants associated it with being "energetic," "hyper," or "silly." This shows a clear departure from its original usage to objectively describe someone with epilepsy. (Hughes, 2010). Due to these shifts in denotation, it is likely that the connotations have shifted as well to influence participant responses.

7.3 Education and stigma reduction

The overall analysis lends itself to the idea that the words used to describe disabilities do not influence how the general population views people to whom the disabilities are prescribed. However, it is clear from the self-reported valence and arousal ratings that some disabilities carry more weight than others. Schizophrenia and psychosis ranked low in arousal across all three phrases used to describe it. This is likely a reflection of the stigma associated with mental illnesses outside of depression and anxiety. This is not to say that no stigma is associated with depression or anxiety, but rather there is less familiarity with psychosis and schizophrenia. Thus, this strongly supports the idea that education and experience lends itself to stigma reduction.

On the other side of the scale, dyslexia, while not demonstrating a positive average valence ranking, ranks highest of the described disabilities overall. It is also one of the more common disabilities tested. During the study, several participants mentioned not viewing dyslexia as a disability, which may account for its generally more positive (albeit truly neutral) responses.

7.4 Research limitations

Due to the selected methodology being a somewhat lengthy survey, the most significant limitation to this research was getting willing participants without a personal connection to the researcher and without incentives or compensation. In addition to this, time-constraints prevented this research from diving deeply into potential confounding variables such as gender and experience. The sole manipulated variable in this study was the phrase that participants were presented with, and it is possible that variables such as gender and experience – which were surveyed but not necessarily normed and accounted for statistically – have more of a significant effect than the phrase used itself.

An additional limitation would be the survey itself and the words used for comparison. Though an effort was made to choose words and phrases backed by previous research to have similar denotations, it's possible that researcher bias influenced word selection. Given more time, norming would be a necessary step to identify most or least stigmatizing phrases and their meanings. The researcher in this study attempted to norm simultaneously by asking for behaviors associated with each phrase. To create a more statistically valid study, norming would need to occur as a separate step before administering the experimental survey.

In addition to potential researcher bias, it can be noted that the phrases used vary in structure – i.e. *a maniac* vs. *a bipolar person* vs *a person with manic depression* when *a manic depressive* vs. *a manic-depressive person* vs. *a person with manic depression* would limit those discrepancies compared to the rest of the stimuli variations. While the primary motive for keeping the phrases as is was familiarity and naturalness (the former being more natural than the latter), it is possible that a shift in phrase structure could have yielded a different result.

7.5 Suggestions for future research

This study supports the idea that there is not an innate preference towards more “political correct” language. However, there is a clear need for more research into just how these preferences are learned and who is teaching them. Are they established from external stigma and able-bodied people, or do they stem from the disabled community itself? Furthermore, the reduction of stigma appears to have a correlation with familiarity with disabilities.

While the results of this study do not provide a clear-cut analysis that person-first language affects how disabilities are viewed, they do provide interesting insights into the nuances of gender, education, language use, and stigma. Perhaps a longitudinal study testing reactions to these phrases before and after exposure (long-term and short-term) to a person or persons with disabilities could support the result that experience leads to more significant consideration of the language used to describe people.

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Appendix: Tables and Figures

Table 1: Terms tested for effects on severity of perception

Copula	Nominal	Adjectival	Person-First (Prepositional)
Is...	A psycho	A psychotic person	A person with psychosis
	A schizo	A schizophrenic person	A person with schizophrenia
	A spaz	An epileptic person	A person with epilepsy
	A retard	a cognitively disabled person	A person with a cognitive disability
	A paraplegic	A paraplegic person	A person with paraplegia
	A mute	A speech-impaired person	A person with a speech disability
	A maniac	A bipolar person	A person with manic depression
	Depressed	A depressed person	A person with depression
	An autistic	An autistic person	A person with autism
	A dyslexic	A dyslexic person	A person with dyslexia

Table 2: Average valence and arousal scores across all 40 participants for each of thirty phrases

Disorder	Nominative		Adjectival		Prepositional	
	Valence	Arousal	Valence	Arousal	Valence	Arousal
Dyslexia	4.1	3.3	4.2	3.3	4	3.3
Cognitive	2.4	5.3	3.4	4.2	3.6	3.9

Delay						
Epilepsy	2.4	4.6	3.6	3.9	3.6	4.2
Speech	3.7	3.5	3.6	4.1	3.5	4.1
impediment						
Schizophrenia	2.5	5.2	2.5	5.1	2.8	4.7
Manic	3.2	4.2	3.3	4.1	3.4	4.2
Depression						
Paraplegia	3.15	4.2	3.6	4.2	3.6	4.3
Psychosis	2.6	5	2.7	5.2	2.8	4.7
Depression	3.4	4.4	3.5	4.4	3.1	4.6
Autism	3.2	4.8	3.4	4.2	3.4	4.5

Table 3: Valence and arousal scores across all participant experience sub-groups

Group	Nominative		Adjectival		Prepositional	
	Valence	Arousal	Valence	Arousal	Valence	Arousal
0-experience	3.04	4.30	3.39	3.81	3.2	4.2
1-experience	3.22	4.84	3.1	4.81	3.63	4.43
2-experience	3.30	4.10	3.49	3.96	3.22	3.89
3-experience	2.98	4.57	3.56	4.37	3.31	4.51

Table 4: Frequency treatment selections used for chi-squared analysis

Treatment Frequency	# of Selections	Percentage
Never	25	4%
Once per day	76	13%
Once per week	260	44%
Once per month	184	31%
Once per year	52	9%

Figure 1: Example of survey questions

1. Jesse is a person with dyslexia.

a. How does Jesse's condition make you feel? (1=very negative, 4=neutral, 7=very positive)

1 2 3 4 5 6 7

b. How strong is your reaction to Jesse's condition? (1=very weak, 4=neutral, 7=very strong)

1 2 3 4 5 6 7

c. Please provide 2-3 behaviors that you associate with Jesse's condition as a person with dyslexia. Be as specific and concise as possible.

-
-
-

d. How often should Jesse seek professional help?

- never
- once per day
- once per week
- once per month
- once per year