

# Do Semantics Matter in Empathetic Person Perception of Children or Adults with Mental Illness?

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## Abstract

Experiences of stigma, discrimination, or aggression negatively affect the well-being of people experiencing symptoms of psychopathology. However, empathy is thought to undermine prejudice and discrimination and is linked with positive outcomes (e.g., greater well-being, more social support, etc.) among those with stigmatized mental illnesses. The current work investigates the influence of target age (adult or child) and language type (person-first or identity-first) on how much empathic concern perceivers report toward individuals with a hypothetical mental health condition. This research contributes to an ongoing debate about whether person-first or identity-first language carries stigmatizing or protective effects, while also considering a novel potential moderator: target age (i.e., does person-first and identity-first language similarly affect perceptions of adults and children?). To this end, we employed an experimental vignette design examining empathy expressed toward individuals with a mental health condition, where age was manipulated within subjects and language was manipulated between subjects. The results determine that perceivers report greater empathy towards children than adults. However, the use of person-first and identity-first language did not result in significant findings. Thus, whether language type influences empathic concern remains uncertain. These findings suggest a need for increased empirical examination of interventions to inspire empathy towards people, perhaps especially adults, experiencing symptoms of psychopathology.

**Keywords:** Empathy, Age, Language, Mental Health, Stigma, Person Perception.

## 1 INTRODUCTION

It is estimated that people with severe and consistently stigmatized mental illness experience a 15-to-20-year reduction in life expectancy compared to those without a stigmatized mental illness<sup>1</sup>. This mortality difference is theorized to, in part, result from negative experiences of stigma<sup>2</sup> and associated treatment avoidance<sup>3</sup>. For example, 9 out of 10 people with mental health diagnoses report experiences of stigmatization and discriminatory treatment<sup>4</sup>. The current work contributes to a growing literature on the stigmatization of mental illness by focusing on predictors of empathy – a more broadly critical construct in the field of mental health and well-being. Empathy toward people with stigmatized mental illnesses is thought to be associated with decreased perceptions of prejudice and increased positive outcomes (e.g., increased well-being and social support;<sup>5</sup>). Importantly, greater empathy evoked toward an individual with symptoms of psychopathology may be associated with decreased stigma toward

the diagnosis itself<sup>6</sup>. Given the importance of empathy, researchers have invested great effort in understanding the ways in which empathy is supported and undermined<sup>7</sup>. Among these factors, language is theorized to be an important determinant of humanizing and compassionate treatment of those experiencing mental illness<sup>8</sup>.

Experiences of stigmatization related to insensitive language referring to mental illness and psychological diagnoses are prevalent across the lifespan from childhood to older adulthood<sup>9</sup>. Strikingly, the fear of stigmatization prevents children from seeking mental health support with estimates suggesting that as many as 85% of children with mental illness do not seek treatment due to perceived stigma<sup>10</sup>. Despite the evidence of prevalent stigmas across a lifespan, some programs of work suggest stigma may be more readily expressed toward certain age groups<sup>11;12;13</sup>. Based on this, the current work aims to explore perceptions of individuals with mental illness across their lifespan. Considering the potential impact of language on a person's

perception toward people with mental illness<sup>14</sup>, the current work experimentally examines person-first versus identity-first language on empathy for individuals differing in age (i.e., children or adults).

### 1.1 Person- and Identity-First Language in Impression Formation

For years, researchers have debated the best terminology to empathetically communicate about mental illness with some endorsing person-first language (e.g. people with mental illness)<sup>14</sup> and others endorsing identity-first language (e.g. mentally ill person)<sup>15</sup>. Given that the ongoing debate on person-first and identity-first language lacks clear empirical evidence, we identified three theoretically-derived hypotheses for how these types of language may inform empathic concern.

First, scholars have speculated that person-first language may lead to more empathy and less prejudice towards stigmatized conditions than identity-first language<sup>14</sup>. To this point, the American Psychological Association<sup>16</sup> has recommended using person-first language because it is theorized to emphasize the identity of the person and their humanity as well as promote inclusivity and a sense of community. Providing empirical evidence for the benefits of person-first language, Granello and Gibbs<sup>17</sup> randomly assigned participants to report their attitudes toward either “people with mental illness” (i.e., person-first language) or “the mentally ill” (i.e., identity-first language) and found that participants in the person-first condition expressed more tolerance than participants in the identity-first condition. We intend to extend the theoretical framework of this work by assessing whether language carries similar consequences for empathy towards individuals with a hypothetical mental illness. Based on this theory and evidence, we would hypothesize that language will influence empathy such that perceivers will direct more empathy towards individuals described with person-first versus identity-first language.

Conversely, proponents of identity-first over person-first language suggest that identity-first language allows individuals to claim their condition or identity with pride<sup>16</sup>. This allows stigmatized populations to have more control over the narrative surrounding the value and experience of their mental illness<sup>15</sup>. Further, other researchers theorize that person-first, relative to identity-first, language may actually reinforce stigma by avoiding condition labels, leading perceivers to assume greater severity or negativity about the identity<sup>18</sup>. However, there is a dearth of empirical evidence that supports this perspective. Nonetheless, we hypothesize that language will influence empathy such that perceivers will direct more empathy toward individuals described with identity-first versus person-first

language.

Third, a less polarizing approach is to use both person-first and identity-first language interchangeably when contextually appropriate<sup>19</sup> and with thoughtful consideration of the language preferences of the target group<sup>20</sup>. Person-first language receives more support in substance use and criminality research<sup>21</sup>, whereas identity-first language gains support in Autistic and Deaf communities<sup>22</sup>. The conflict between the former perspectives may reflect that there is not one accepted framework for understanding language type. Ultimately, the effects of each type of language may be mixed or contextually dependent. Thus, it is possible that neither person-first nor identity-first would yield more empathy than the other in the current literature. To this point, a pilot study was conducted testing the effects of language type (person-first and identity-first) on prejudice and dehumanization of a target individual experiencing a hypothetical psychological disorder<sup>23</sup>. This study revealed no significant effect of language type on prejudice or dehumanization of an individual with symptoms of psychopathology. Therefore, we similarly hypothesize that no difference in empathy will emerge across language types.

In short, there is contradicting evidence as to whether and how person- and identity-first language influence critical aspects of perception including stigmatization, dehumanization, and prejudice<sup>24</sup>. Beyond experimentally examining the effect of language (person-first vs. identity-first) on expressed empathy, the current work also aims to extend this literature by examining empathic concern across the lifespan. In other words, how does the age of an individual influence empathy towards them and does age interact with language in determining perceiver empathy? Below, we overview the literature on target age in impression formation (specifically within mental health contexts) before discussing the potential interactive effects of age and language. Thereby, the current work aims to build upon existing research to explore how language type (person-first and identity-first) and target age (child and adult) influence empathy toward individuals with a hypothetical mental illness.

### 1.2 The Role of Age in Impression Formation

Symptoms of psychopathology can emerge early in life and persist across the lifespan<sup>25</sup>. Perceptions of an individual with mental illness may vary by the age (child or adult) of the target individual. Therefore, it may be the case that children with a mental illness are evaluated more negatively than adults with a mental illness; however, some argue that these negative perceptions are a result of greater concern for children relative to adults, rather than greater prejudice<sup>26</sup>. One examination found that Americans expressed more concern for children,

compared to adults, with the same mental health condition<sup>26</sup>. Thus, it seems likely that children, compared to adults, with mental illness may be stigmatized less and therefore perceived with greater empathic concern.

Supporting this idea, one study found that children, relative to adults, were associated with feelings of more warmth<sup>11</sup>. Similarly, in human infants, relative to adults, facial expressions evoked more implicitly positive emotional expressions<sup>27</sup>. In sum, perceptions toward children may differ from adults with the same mental health condition<sup>28</sup>. Based upon previous work, we anticipate that children with a mental illness will elicit greater empathy from perceivers relative to adults. While there are some inconsistencies in previous work on how a target's age informs empathy or negativity in other domains, we believe that our findings will be consistent with the literature on perceptions of individuals with mental illnesses with children evoking more empathy ascriptions than adults<sup>26</sup>. It is possible that this anticipated effect of target age interacts with language type (i.e., person-first and identity-first) and influences empathy.

### **1.3 Potential Interactive Effects of Age and Language on Empathy**

In addition to considering the separate effects of language type (i.e., person-first and identity-first) and target age (i.e., child and adult) on empathy towards individuals experiencing a hypothetical mental illness, we must also consider the interactive effect of language type and target age. The possible interaction between language type and target age is a novel research inquiry with little existing literature. However, there is some evidence that person-first language may be used more frequently to refer to children with disabilities, such as mental illness, than to adults with the same conditions<sup>18</sup>. Despite this frequency of use, one of the main critiques of person-first language is that it is disfluent<sup>29</sup> and disfluency tends to lead to less positive evaluations<sup>30</sup>. However, given that person-first language is used more regularly when referencing children than adults, this disfluency may be lessened when person-first language is referring to children relative to adults. Ultimately, this may suggest that person-first language will have more deleterious effects on perceptions of adults, but neutral or positive effects on perceptions of children. Based on the work thus far, we anticipate a significant interaction between language type and age such that person-first language towards children will lead to greater empathetic concern than identity-first language. Comparatively, we do not anticipate an effect of language type on empathy for adults.

### **1.4 Hypotheses of the Current Work**

Previous research provides contradictory evidence regarding the effects of language type (person-first versus identity-first) on outcomes; in addition, we observed no significant effect of language type on prejudice and dehumanization for people with a fictitious mental health condition in a pilot study<sup>23</sup>. Thus, we hypothesize that language type will not significantly impact empathy towards people with mental illness. Past research on target age and empathy<sup>11;26;28</sup> informs our second hypothesis. We predict the main effect of target age on empathy such that adults will be regarded with less empathy than children. Lastly, the higher frequency of using person-first language when referring to children with disabilities compared to children without disabilities<sup>18</sup> informs our final hypothesis predicting interaction between language type (person-first versus identity-first) and age (child versus adult). Specifically, we expect that identity-first, relative to person-first, language will result in less empathy for target children, and hypothesize no significant effect of language type on empathy toward target adults.

### **1.5 Overview of the Current Work**

To test the hypotheses outlined above, we conducted an experimental study examining the effects of hypothetical patient age (adult and child) and language (person-first and identity-first) on participants' self-reported empathy toward the target individuals. The language was manipulated in a between-subjects fashion via random assignment to one of two versions of a vignette describing a fictitious mental health condition. For half of the participants, the description employed person-first language; for the other half, identity-first language. Target age was manipulated within subjects with all participants viewing two patient profiles of hypothetical individuals experiencing the fictitious condition, one depicting a child and one an adult. Following the presentation of each patient profile, participants self-reported their empathy toward the hypothetical patient. This design enabled examination of our key questions: whether language type and target age independently or interactively influence empathy.

## **2 METHODS**

### **2.1 Participants and Power**

This project had a limited research budget of \$166, therefore we could recruit 126 participants with our planned compensation of \$1.00 per participant. Given this budget, a total of 128 participants were recruited through the CloudResearch crowdsourcing software, Mechanical Turk. A sensitivity power analysis was conducted in G\*Power<sup>31</sup>. Overall, a total of 128 participants were

recruited and completed the study. This analysis indicated that 128 participants would enable us to detect a small to medium ( $f=0.28$ );  $\eta_p^2=.07$  effect with 95% power in a mixed model factorial ANOVA. Each participant was compensated \$1 upon debriefing. No participants were excluded from the analyses.

Participants self-reported demographic information such as age, gender, ethnicity, and race. Participants varied in age from 19 to 75 years old ( $M=39.23$ ,  $SD=11.50$ ). Of the 128 responses, 59.4% of participants identified as men, and 40.6% identified as women. Additionally, 89.8% of participants did not identify as Hispanic/Latinx, 9.4% of participants identified as Hispanic, with 1.28% abstained from answering. The participants were primarily White (76.56%), with an additional 8.59% identifying as East Asian, 7.8% identifying as Black/African American, 6.3% identifying as bi- or multi-racial, 0.8% identifying as other, and 0.8% who preferred not to say. Participants' level of education ranged from no high school diploma (0.8%) to a doctorate degree (0.8%), with the majority of the participants receiving a bachelor's degree (42.2%) as their highest level of education. Less than half of the participants were a parent (35.2%) and a majority of participants had never worked in childcare (85.9%).

## 2.2 Procedure

Participants first completed a consent form, confirming that they were at least 18 years old and were aware they would be participating in a research study. If participants chose to not consent, the study was terminated. Following the consent form, participants were instructed to read about a hypothetical mental health condition and respond to questions about two patients with that condition. The instructions also encouraged them to trust their gut when answering the questions. Following the instructions, participants were shown the vignette, a brief description of a hypothetical mental health condition named Munder. Participants were randomly assigned to view a vignette using either person-first or identity-first language to describe Munder; vignettes were otherwise identical across conditions. Then, participants saw two patient profiles depicting patients experiencing Munder, one child, and one adult. Following each patient profile, participants indicated their empathy toward the patient via the Empathic Concern Scale<sup>32</sup>. The order in which the child and adult profiles were shown was randomized between participants. Between patient profiles, participants re-read the vignette to refresh their knowledge of Munder. Upon completion of primary measures, participants completed a brief demographic questionnaire. Participants were asked about the quality of their self-reported data and were given a chance to provide feedback to the researchers. Lastly, participants were

debriefed on the current work, compensated \$1, and thanked for their participation in the study.

## 2.3 Materials

### 2.3.1 Manipulation of Language Type

Participants were randomly assigned to view either the identity-first (Table 1A) or person-first (Table 1B) version of a vignette describing the hypothetical mental health disorder, Munder. The vignette was identical across conditions beyond the manipulation of language type. The described condition included a mixture of Attention Deficit Hyperactivity Disorder, Obsessive-Compulsive Disorder, and Autism Spectrum Disorder symptoms.

(A) "Imagine you hear about a new disorder called Munder that is diagnosed at equal rates in children and adults. [ <b>Munder children and adults</b> ] have equal chances of expressing the various symptoms caused by Munder. The possible symptoms that [ <b>Munder people</b> ] may display include difficulty focusing on tasks, repeated disturbing/intrusive thoughts/impulses, an inability to control/suppress these repeated thoughts/behaviors, low frustration tolerance, and poor social skills. [ <b>Munder people</b> ] may begin demonstrating these symptoms at any age."
(B) "Imagine you hear about a new disorder called Munder that is diagnosed at equal rates in children and adults. [ <b>Children and adults with Munder</b> ] have equal chances of expressing the various symptoms caused by Munder. The possible symptoms that [ <b>people with Munder</b> ] may display include difficulty focusing on tasks, repeated disturbing/intrusive thoughts/impulses, an inability to control/suppress these repeated thoughts/behaviors, low frustration tolerance, and poor social skills. [ <b>people with Munder</b> ] may begin demonstrating these symptoms at any age."

**Table 1** The vignettes are shown to participants in the identity-first language condition (A) and the person-first language condition (B). The language manipulation is indicated with brackets and bolding.

### 2.3.2 Manipulation of Target Age

Two patient profiles (one adult, one child) and two versions of each profile (one with person-first ("patient with Munder") and one with identity-first ("Munder patient") were created (Fig 1). All four profiles provided the same sex, insurance provider, and the patient's city and state. To manipulate age, two of the patient profiles

consisted of a blurred image of a male child wearing a red shirt while the other two profiles consisted of a blurred image of a male adult wearing a red shirt. The adult profiles also differed from the child profiles by listing a different age (i.e., 10 vs. 40 years old), birthday (i.e., 02/23/12 vs. 01/22/82), height (i.e., 4'7" vs. 5'9"), and weight (i.e. 70 vs. 190 lbs) to account for the difference of weight and height between an average male adult and an average male child. To manipulate language type, all patient profiles provided the patient's diagnosis using different language. One of the adult profiles and one of the child profiles described the diagnosis as "Munder Patient," while the other adult and child profiles described the diagnosis as "Patient with Munder." Participants viewed one adult and one child patient profile. However, both patient profiles a participant viewed used the same language type (person-first language or identity-first language). All other information provided on the profiles was blocked out.

### 2.3.3 Outcome Measure

For both patient profiles, participants completed the Empathic Concern Scale<sup>32</sup> to assess feelings of empathy towards each target individual. The scale included six items assessing the extent to which participants reported feeling sympathetic, softhearted, compassionate, warm, moved, and tender toward each target. Participants responded to each item on a Likert-type scale ranging from 1 ("Not at all") to 7 ("Extremely"). Items were modified to reflect the language type (person-first or identity-first) that the participant was randomly assigned, and the target age (adult and child). For example, participants randomly assigned to the person-first condition viewing the adult patient profile saw items such as "How warm do you feel toward this adult with Munder?," whereas participants assigned to the identity-first condition viewing the adult patient profile saw items such as "How warm do you feel toward this Munder adult?" Two composite variables were created for each participant prior to performing the analysis. For participants who were randomly assigned the identity-first language condition, a composite variable for empathy towards target adults ( $M= 4.62$ ,  $SD = 1.42$ ,  $\alpha = .97$ ) was created and a composite variable for empathy towards target children ( $M= 5.51$ ,  $SD= 1.33$ ,  $\alpha = .96$ ) was created by averaging the participant's responses to the six scale items. Similarly, for participants randomly assigned to the person-first language condition, composite variables for empathy towards target adults ( $M= 4.76$ ,  $SD = 1.27$ ,  $\alpha = .96$ ) and target children ( $M= 5.40$ ,  $SD= 1.40$ ,  $\alpha = .97$ ) were computed.

## 3 RESULTS

The primary goal of this study was to examine whether empathy is affected by age, language type, or interac-

tion. We had three a priori hypotheses: 1) there would be no effect of language type on empathy, 2) participants would report greater empathy toward children than adults (i.e., the main effect of target age), and 3) identity-first language would lead to less empathy than person-first language in judgments of children but language type would not influence perceptions of adults (i.e., an interaction between target age and language type). To this end, we conducted a 2 (age: child, adult)  $\times$  2 (language type: person-first, identity-first) mixed model factorial ANOVA on empathy with age as the repeated factor and language type as the between-subjects factor.

Consistent with our predictions, we did not observe a significant main effect of language type on empathy,  $F(1, 126) = 0.00$ ,  $p = .963$ ,  $\eta_p^2 = .00$ . Also consistent with predictions, there was a significant main effect of target age on empathy ( $F(1, 126) = 84.69$ ,  $p < .001$ ,  $\eta_p^2 = .40$ ) such that participants reported greater empathy toward the child patient ( $M= 5.46$ ,  $SD= 0.12$ ) compared to the adult patient ( $M= 4.69$ ,  $SD= 0.12$ ). However, contrary to our a priori interaction hypothesis, we did not find a significant interaction between language type and target age on empathy,  $F(1,126) = 2.26$ ,  $p = .135$ ,  $\eta_p^2 = .02$  (Fig 2).

These results indicate that participants felt more empathy toward children than toward adults. However, whether person-first or identity-first language was used to describe the condition did not seem to impact empathy toward patients with that condition. Additionally, we did not find evidence that the effect of language type on empathy depended on the target's age.

## 4 DISCUSSION

We found evidence to support two of our three a priori hypotheses. Specifically, we found no significant effect of language type on empathy. We did, however, find a significant effect of target age on empathy such that participants indicated feeling more empathy toward children, compared to adults, diagnosed with a hypothetical mental illness. However, we also anticipated that language type and target age would interactively inform empathy such that person-first, relative to identity-first, language would yield greater empathy for target children, but not for target adults. This hypothesis was not supported in this study as language type and target age did not interactively inform empathy. The current work provides insight into how language and target age may impact empathy towards people with mental illness. Because increased empathy is associated with positive mental health outcomes (e.g., increased response to therapy<sup>33</sup>), understanding how factors such as language choice and target age influence empathy could be an important foundation for improving the quality of life for people struggling with mental

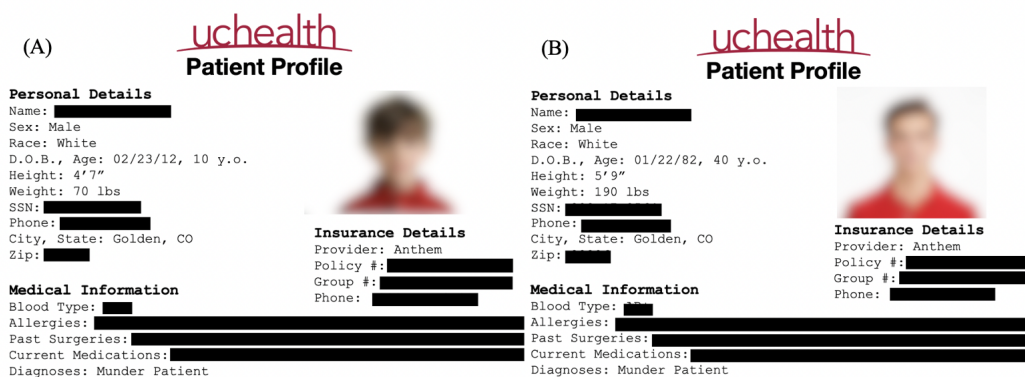


Figure 1. Example of the child (A) and adult (B) patient profile shown to participants in the identity-first condition.

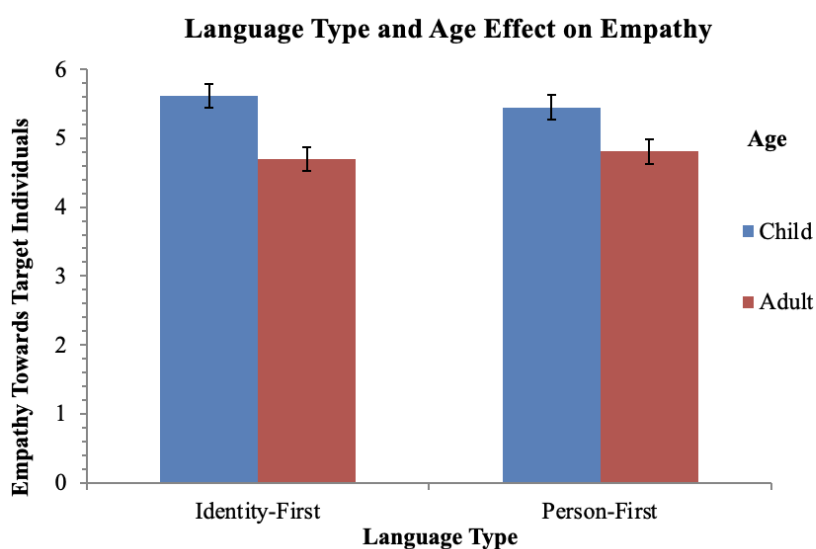


Figure 2. Graph depicting the effect of language type (person-first and identity-first) and target age on empathy. Error bars indicate standard error.

illness.

#### 4.1 Practical Applications

Past work has yielded mixed findings and support for the influence of person-first versus identity-first on stigmatization<sup>24</sup>. The current work extends this literature, documenting the null effects of language (person-first vs. identity-first) on empathy for *both* children and adults with mental health symptomatology. These null effects are important to document as we continue to build an understanding of how and when language may or *may not* play a role in stigmatization and discriminatory action. Based on the current work, as well as past research<sup>23</sup>, person-first versus identity-first language does not seem to affect ascriptions of empathy when referencing those experiencing symptoms of psychopathology; therefore, time, funding, and effort dedicated to reducing stigmatization of mental health may

be better allocated to predictors or interventions other than language type.

Given the finding that children evoked greater empathic concern than adults in the current work, it seems that mental health symptomatology may differentially affect person perception across target ages. These findings suggest that educational programming relating to increased empathic concern and decreased stigmatization may need to vary by age of the target population (children or adults). For example, it might be the case that some educational approaches for mental health awareness may work better for children than adults, possibly because of the actual or perceived empathy of educators.

#### 4.2 Limitations and Future Directions

The primary limitation of the current work was our achievable power. With our budget, we recruited 128

participants. This number of participants allowed us to detect a small effect ( $f = .28$ ) with 95% power in a mixed model factorial ANOVA. In particular, our limited sample size resulted in lower statistical validity for the interaction effect ( $\eta_p^2 = .02$ ). Given our statistical power to detect an effect, and the results of our interaction effect, we conclude we were significantly underpowered to detect an effect. This deficiency of power provides a significant limitation in the current work. Additionally, we were unable to conduct pre-testing on the symptomatology and we did not conduct a language manipulation check for the vignettes.

Despite limitations, the current work provides a strong starting place for future research that may recruit larger samples and strengthen generalizability. Using real symptomatology instead of a fictitious disorder could enhance empathy or, conversely, stigma for our target populations. We predict that using a real disorder would enhance empathy or stigma by assessing real-world prejudices and biases towards people with a disorder rather than a hypothesized illness. Assessing perceptions of a highly stigmatized disorder (e.g., bipolar disorder or depression) may result in stronger stigmatization and, therefore, less empathy in adults or children given real-world applicability. This would expand upon the current study and may increase generalizability.

Similarly, increasing the generalizability and real-world applicability of the current findings, mental health treatment providers' empathy toward patients may vary by age. Provider empathy has been found to play an important role in mental health treatment outcomes<sup>34</sup>. Our research suggests that providers may have varying levels of empathy for adults vs. children with the same disorder. This research may prove useful for family therapists, where age could interfere with the treatment of different family members due to varying levels of empathy towards clients. Expansion upon the findings in this study seeks to increase generalizability and real-world applicability.

### 4.3 Conclusion

Notably, our findings suggest that people may be more empathetic toward children as compared to adults with mental illness. However, there was no effect of person-first versus identity-first language nor an interaction between target age and language type. This implicates the possibility that efforts towards education and public policy surrounding language type may not have the effects originally assumed. Our research also provides insight into future directions for research such as assessing perceivers' stigma or assessing perceptions of known disorders.

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## 6 EDITOR'S NOTES

This article was peer-reviewed.

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