- The Influence of Person-based vs. Identity-based language on Attitude and Prosocial
- 2 Behavior
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Author Note

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INFLUENCE OF LANGUAGE ON PROSOCIAL BEHAVIOR

Abstract

This study examines the influence of language framing on prosocial behavior towards the 11

homeless. It contrasts the effects of identity-based language ("homeless people", "unhoused 12

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people") with person-based language ("people who experience homelessness") on donation 13

intentions and attitudes. Conducted with 32 U.S. English speakers, the experiment employed

a between-subjects design, where participants were exposed to varied language framing in a 15

news article context. Measures included hypothetical donation amounts to homelessness 16

support, attitudes towards homeless individuals, and support for relevant government 17

policies. These insights are vital for policymakers and advocates in promoting inclusive 18

discourse and support for marginalized populations. 19

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The Influence of Person-based vs. Identity-based language on Attitude and Prosocial
Behavior

24 Introduction

Language framing can profoundly influence people's perceptions, attitudes, and
behaviors. The concept of framing, as posited by Tversky and Kahneman, illustrates how
different presentations of equivalent information can lead to diverse outcomes in
decision-making processes (Tversky & Kahneman, 1981). This principle extends into the
realm of prosocial behavior, where language framing of social issues can significantly affect
individuals' decisions and willingness to engage in prosocial behavior towards others. Studies
in social psychology and behavioral science have consistently demonstrated that shifts in
language framing can alter prosocial intentions and actions (Ceylan & Hayran, 2021)
(Granello & Gibbs, 2016).

In the current study, we focused on the effect of identity-based framing and
person-based framing, analyze how such factor influence people's attitude to marginalized
group and their prosocial behavior. To be specific, identity-based language focused on one's
identity (eg. disabled people, homeless people, etc.), whereas person-based language put the
person at the center of language expression (eg. people who experience homelessness, people
who have mental illness). By examining the effects of using identity-based language against
person-based language, the study seeks to reveal how subtle shifts in language framing can
impact empathy, reduce stigma, and influence the willingness to support social causes.

The discourse around identity vs. person based language framing occurred among various domains, including disability, mental health, and autism, where the preference and criteria for using different language framing are still vastly debated. The American Psychological Association (APA) and other authoritative bodies like the American Medical Association (AMA) and the National Institute of Health (NIH) have traditionally advocated for the use of person-based language to describe individuals with disabilities or conditions,

aiming to emphasize the personhood over the their physical and/or mental condition (CDC, 2022), (NIH, 2022), (Dunn & Andrews, 2015). However, within the disability and autism communities, there's a growing debate between the preference for identity-based language by people within the marginalized community and advocation for person-based language by medical professionals (Buijsman, Begeer, & Scheeren, 2023), (Taboas, Doepke, & Zimmerman, 2023).

Despite the ongoing discourse around use of person-based vs. identity-based language,
there has been a gap in empirical research, in which less research has focused on the effect of
language on people's perception and prosocial behavior outcomes. Furthermore, much of the
existing literature has focused on specific areas like disability or mental health, without
exploring the broader implications of these findings for other social issues, including
homelessness. Thus, the current research focused specifically within the context of
homelessness, analyzing the effect of identity-based and person-based language on people's
general attitude and prosocial donation behavior.

The current research offers a more comprehensive understanding in language-framing and prosocial behavior within the context of homelessness. Through the experimental manipulation of language framing, we are able to gain insight to the causal consequence of language framing and subsequently measuring its impact on participants' donation intentions. This research also provides a more integrated theoretical framework for understanding the role of language in social issues. It can provide practical guidance for policymakers in crafting more effective information to gain support for marginalized populations, thereby supporting more inclusive public discourse.

### 70 Methods

# 71 Study Design

The current study used between-subjects design, where participants were randomly assigned to one of three language framing conditions: identity-based language ("homeless people"), identity-based language ("unhoused people"), and person-based language ("people who experience homelessness"). The primary dependent variable was the participants' willingness to engage in prosocial behavior (how much are they likely to donate their money out of 100 dollars to support the targeted population if they win lottery)

# 78 Participants

We recruited 33 native English speakers from the U.S. on Prolific (age range: 18 to 67, Mage = 42.97 years, SD = 13; 52% male, 48% female). Participants received 9 pounds/hour. On average they needed 7 minutes to complete the study. Participants were randomly assigned to one of three labelling groups: unhoused people (n = 10), homeless people (n = 12), people who experience homelessness (n = 11). We excluded one participant as they had a duplicated IP address and Prolific ID. The final sample consists of 32 participants.

#### 85 Procedure

After providing informed consent, participants read a news article about an organization aiming to find affordable housing for people who experience homelessness.
Within the news article, we varied the language-framing that is referring to people who experience homelessness/unhoused people/homeless people. Participants were informed that the study aims to understand how informative online news articles are.

#### Measures 1

Recognition Measure. The participants were first asked to answer three recognition check for the online news article. The three multiple choice question asked: "who is Dan Valdez?", "what is the main goal of Brilliant Corners", and "what is a major issue in Los Angeles mentioned in the article?". The recognition measure were developed based on the content of the news article, and the answers were obvious if the participants carefully read the article.

Article Perception Measure. The participants were asked to report their perception of the online news article in five dimensions (informative, understandable, interesting, read in detail, concentration), in which the five item survey was measured through 7-point Likert scale ( $0 = Not \ at \ all, \ 6 = Very$ ).

Donation Intention. Participants were presented with a hypothetical scenario
where they could win 100 dollar in a study lottery and were asked how much they would like
to donate to support the homeless population, with options ranging from 0 dollar to 100
dollars.

Attitude Measure. Participants reported their thoughts and feelings about the homeless population through several statements related to mental and material resources, dishonesty, and other dimensions. Responses were captured on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). The attitude measure is adapted from measures of stigmatization scale (Newman, Tang, & Bakina, 2022).

Tax Support for Housing Program. Participants were asked about their willingness to pay extra taxes for a "Housing-for-all" program from 0 (*Very unlikely*) to 6 (*Very likely*) and their general support for such a program, indicated by binary measure of yes or no.

Government Support and Policy Measures. Questions in this section explored
the perceived priority of government support for homeless individuals and willingness to sign
a petition for initiatives to help the homeless population. Responses varied from 0 (very low
priority) to 6 (very high priority) for budget priorities and 0 to 100 for petition signing
willingness.

Demographics. Participants provided information on age, ethnicity, education level, employment status, and annual household income.

### 122 Data analysis

We used R (Version 4.2.3; R Core Team, 2023) and the R-packages dplyr (Version 123 1.1.0; Wickham, François, Henry, Müller, & Vaughan, 2023), forcats (Version 1.0.0; 124 Wickham, 2023), qqplot2 (Version 3.4.2; Wickham, 2016), qqsci (Version 3.0.0; Xiao, 2023), 125 lubridate (Version 1.9.2; Grolemund & Wickham, 2011), papaja (Version 0.1.2; Aust & Barth, 126 2023), purr (Version 1.0.1; Wickham & Henry, 2023), readr (Version 2.1.4; Wickham, 127 Hester, & Bryan, 2023), stringr (Version 1.5.0; Wickham, 2022), tibble (Version 3.2.1; Müller 128 & Wickham, 2023), tidyr (Version 1.3.0; Wickham, Vaughan, & Girlich, 2023), tidyverse 129 (Version 2.0.0; Wickham et al., 2019), and tinylabels (Version 0.2.4; Barth, 2023) for all our 130 analyses. 131

132 Results

### 33 Participants Demographics

We recruited 33 native English speakers from the U.S. on Prolific (age range: 18 to 67, 134 Mage = 44 years, SD = 13; 52% male, 48% female). Participants received 9 pounds/hour. 135 On average they needed 7 minutes to complete the study. Participants were randomly 136 assigned to one of three labelling groups: unhoused people (n = 10), homeless people (n = 10) 137 12), people who experience homelessness (n = 11). We excluded one participant as they had 138 a duplicated IP address and Prolific ID. The final sample consists of 32 participants. In terms of education, 28.1% of participants indicated to have a high school degree, 28.1% associate's degree, 31.3% a bachelor's degree, and 12.5% a master's degree. In terms of 141 employment status, 56.3% of participants indicated to have a full-time employment status, 18.8% a part-time, 15.6% unemployed, 9.4% not employed. In terms of ethnicity, 72% of 143 participants indicated to be white, 22% to be black or African American, and 6% Hispanic. For a detailed account for the demographics of participants by each condition, see table included in the supplementary material.

## 147 Recognition Measure

30 out of 32 participants (93.8%) passed the first recognition test ("Who is Dan 148 Valdez?" [a] A landlord in Los Angeles, [b] An advocate for luxury housing, [c] A team 149 member at Brilliant Corners, [d] The mayor of Los Angeles.). All 32 participants (100%) 150 passed the second ("What is the main goal of Brilliant Corners?" [a] Building new 151 apartments, b Finding homes for unhoused people people who are homeless, homeless 152 people, [c] Providing job training, [d] Offering medical assistance) and all participants 153 (100%) passed the third recognition test ("What is a major issue in Los Angeles mentioned 154 in the article?" [a] Lack of public transportation, [b] Shortage of affordable housing, [c] High 155 crime rates, [d] Pollution). 156

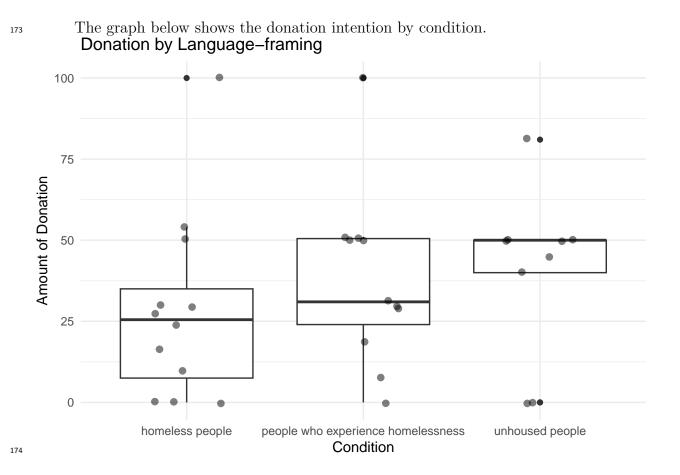
# 157 Article Perception Measure

On average, participants perceived the article as informative (M = 4.84, SD = 1.27, 159) scale: 1 = not at all informative to 6 = very informative), understandable (M = 5.47, SD = 1.60) 0.67, scale: 1 = not at all understandable to 6 = very understandable), and as interesting (M = 4.25, SD = 1.52, scale: 1 = not at all interesting to 6 = very interesting). On average, participants indicated that they read the article well and in detail (M = 5.44, SD = 0.98, 163) scale: 1 = not at all well to 6 = very well and in detail) and that it was not difficult to read the news article (M = 1.75, SD = 1.97, scale: 0 = not at all difficult to 6 = very difficult).

#### Donation Intention

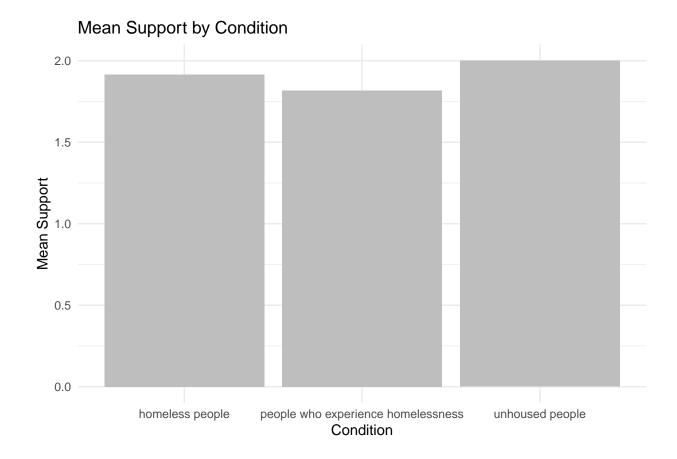
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The main dependent variable that we are interested in here is the donation intention, in which we asked the participants to report their intention to donate to support homeless people, unhoused people, or people who experience homeless, out of 100 dollar. A one-way ANOVA was conducted to examine the impact of language framing on participants' intention to donate intention. The analysis revealed that language framing did not significantly affect donation intentions, F(2, 29) = 0.61, p = 0.55, with a mean square between groups (Condition) of 463.32 and a mean square within groups (error) of 753.64.



#### Support for Housing for All Program

Then, we are interested in the whether the secondary outcome measure, support for housing for all program (scale:  $0 = Not \ at \ all$ ,  $6 = Very \ much$ ), differ across different language framing conditions. A one-way anova was conducted, revealing that the effect of language framing on support for housing-for-all program is no statistically significant (F(2, 29) = 0.941, p = .402). The bar graph below shows the mean of support for housing-for-all program across conditions.



Discussion

The current study examine the influence of language framing on prosocial behaviors, specifically donation intentions, and support for housing initiatives. The findings from the one-way ANOVA analyses suggest language framing does not significantly impact donation intentions or support for a "housing for all" program.

One possible explanation for the non-significant result is the small sample size. In the current pilot study, there are only 32 participants, meaning approximately 10 participants within each condition. As a result, with the small sample size in the study, we might not detect any significant differences in donation amount. For future study, we will include more participants to see if there is a significant differences among language-framing conditions.

The current study design contributes to the ongoing discourse on the influence of language-framing on prosocial intention and behavior. Future studies could explore more

- $_{195}$  diverse language frames with larger sample size to have enough effect size to detect
- $_{196}$  significance result. The person-based and identity-based framing is also being used in
- different context beyond homelessness. Possible future research can analyze the influence of
- language-framing to different marginalized group.

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Table 1
Summary of Demographic Variables by Condition

Condition	Avg_Age	Avg_Political_Economy_Issue	Avg_Political_Social_Issue	Avg_Education_Level	Avg_Employment_Status
homeless people	37.16667	3.583333	3.583333	2.833333	2.083333
people who experience homelessness	47.72727	3.454546	3.363636	3.181818	1.818182
unhoused people	44.88889	3.777778	3.333333	4.000000	2.222222