



¹R. Baumler , ¹Nicholas A. Palomares , ²Cameron W. Piercy 

¹Communication Studies, The University of Texas at Austin, Austin, United States

²Communication Studies, University of Kansas, Lawrence, United States

Exploring Gender Identity Cues in Email Signature Blocks: An Experimental Study

This study examines the effects of gender identity cues in email signatures on outcomes of misgendering, trait perceptions, social exclusion, and language use and how these effects are moderated by transphobia. Using a 3 x 2 between-subjects design, cisgender participants ($N = 354$) read and responded to a forwarded email containing gender identity cues in the signature block with varying pronouns (they/them, she/her, and he/him) and the trans flag emoji (present or absent). There were significant outcomes for social exclusion and language use but not misgendering or trait perceptions. Higher exclusion was associated with they/them and she/her pronouns. The trans flag emoji interacted with transphobia to reduce the use of power-related language as transphobia increased. Further, email signatures including the trans flag emoji directly influenced use of netspeak, or highly informal online language (e.g., u r gr8). Theoretical implications of transphobia and bias toward gender identity cues are discussed alongside practical implications.

Key words: gender, transphobia, prejudice, identity, pronouns, email

Address for correspondence: R. Baumler

Communication Studies, The University of Texas at Austin, Austin, United States

E-mail: r.baumler@utexas.edu

This is an open access article licensed under the CC BY NC ND 4.0 License.

Email signatures, which are blocks of text at the end of an email containing information about the sender, can serve as a digital representation of the sender's identity (Carr, 2017; Young & Rains, 2006). Though signature blocks frequently contain credentials and contact information, they may also include content like the medium of transmission (i.e., "sent from my iPhone"; Carr & Stefaniak, 2012) or other personal or professional information, such as religious affiliation, quotes, and land acknowledgements (Carr, 2017; Friedman & Poole, 2023). Importantly, email signatures affect perceptions of the sender, such as professionalism (Carr, 2017; Carr & Stefaniak, 2012) and can influence behavior, like language use or message responsiveness (McCarty, 2024; Milkman et al., 2015). Thus, signature blocks have broader implications for interpersonal and organizational communication.

An increasingly common practice in signature blocks is the inclusion of cues related to gender identity, like pronouns, to indicate how individuals identify and to foster a culture of inclusivity (Johnson et al., 2021; Kodipady et al., 2023). This study aims to elucidate how people react to gender identity disclosures in email signatures, and in particular, how people respond when the disclosures indicate a non-binary identity (they versus he or she pronouns) or otherwise associate themselves with the trans community (i.e., a trans pride emoji ). This paper begins by presenting the theoretical rationale for perceptions of gender identity cues in email signatures, then presents a method and results, and offers theoretical and practical implications.

Gender Identity Cues in Email Signatures

Gender is a socially constructed category based on cultural norms and expectations and encompasses a range of identities including binary identities of man and woman, as well as those that extend beyond the binary such as nonbinary, agender, and genderqueer identities (Lonergan & Palomares, 2020; Stryker, 2017; Wood & Eagly, 2009). Gender identity refers to one's subjective understanding and internal sense of self in relation to gender norms. Often, people make assumptions about a person's gender identity based on their gender expression such as clothing, hairstyle, and name, which influences how we communicate with someone, including the use of gendered language like pronouns (Stryker, 2017). However, because these assumptions are often shaped by gender norms, sharing information about gender identity, such as pronouns, can help ensure more accurate and respectful communication. In email, where there are fewer visual or contextual gender cues, including pronouns in a signature block can be especially useful to mitigate incorrect assumptions about gender identity, particularly when a sender's identity differs from what the receiver might assume.

Despite pronoun disclosures sometimes reducing misgendering and social exclusion (Johnson et al., 2021; Kodipady et al., 2023), email signatures could inadvertently elicit adverse reactions rooted in transphobia. For example, includ-

ing they/them pronouns in email signatures is associated with significantly lower response rates (McCarty, 2024) and decreases positive employer response when included in resumes (Eames, 2024). Even email signatures for cis people can include pronouns to convey allyship, which can trigger transphobic responses (Friedman & Poole, 2023; Kodipady et al., 2023). But, to our knowledge, past studies have rarely included a measure of transphobia, which can explain perceptions and shape interpersonal interactions based on gender cues.

Aside from pronouns, the inclusion of more overt identity cues, like a trans pride flag emoji (🏳️‍🌈), may also result in unfavorable perceptions and outcomes due to transphobic attitudes. Including overt cues like a trans flag is common in social media (Li et al., 2020), but little work examines their use in email signatures. However, people increasingly include other visual signs in signature blocks, such as company logos, speaker icons linking to name pronunciations, stylized banners, and other visual cues. Emojis, or small image icons, are commonly used to signal phone numbers (📞), email addresses (✉️), websites (🌐), promotions (💎), and more. Using emojis can affect how a person is perceived. For example, emoji use is tied to gendered expectations as their use can lead recipients to perceive male leaders as more likable and effective and female leaders as less effective when used (Riordan & Glikson, 2020), suggesting value in exploring how emojis, pronoun disclosure, and the interaction of the two affect perceptions. Further, people include images in signature blocks that communicate personal values, such as the Safe Zone symbol, which is common in spaces such as college campuses and healthcare, to signal allyship for diverse gender and sexual identities. We theorize that the presence of a trans flag emoji (🏳️‍🌈) will draw attention to pronouns and facilitate transphobic processing of pronouns compared to no emoji.

The Role of Transphobia

Trans and gender-nonconforming (TGNC) people face discrimination rooted in cisgender ideologies and transphobic attitudes, wherein people erase, invalidate, and devalue those who exist beyond binary notions of sex and gender (Bettcher, 2014; Kennedy, 2018; Lennon & Mistler, 2014). Transphobia is a multidimensional construct shaped by negative affect, misinformation about trans identity, and personal beliefs and attitudes about trans rights and acceptance (Clark & Hughto, 2020). An individual's level of discomfort with interacting with trans people centers around fear and highlights the role of negative emotional processes in prejudice towards trans people (Michelson & Harrison, 2020). Additionally, denying that gender is a spectrum and that transgender people exist highlights an ignorance of contemporary knowledge about trans identities. For example, individuals with a more comprehensive understanding of gender identity tend to hold less biased attitudes toward the trans community (Anderson, 2023; Buck, 2016; Reiman et al., 2023). Conversely, people who uphold more binary and limited understandings of gender aligning with essentialism and more

traditional gender beliefs tend to view trans people in a more biased light (Anderson, 2023; Buck, 2016).

Prejudice towards TGNC individuals is often experienced and enacted differently based on gender identity and gender presentation. For example, people with more visible trans identities experience more discrimination compared to trans individuals who are perceived as cisgender (Maji & Sarika, 2024). Additionally, trans women and transfeminine individuals often encounter more transphobia and stigmatization compared to trans men (Verbeek et al., 2020). Non-binary individuals, however, often face even greater levels of negativity and stigmatization compared to binary transgender individuals (Miller & Grollman, 2015; Worthen, 2021). Non-binary individuals are perceived as lower in communion, agency, and status, and are more often conceptualized as mentally unwell, compared to men and women (McCarty & Burt, 2024). The heightened stigma toward non-binary identities is largely due to the legitimacy of non-binary identities being questioned.

Transphobia and Interpersonal Dynamics

Unfortunately, transphobia permeates social interactions in the United States and many other nations, influencing interpersonal perceptions and behaviors (Nadal et al., 2012). These negative attitudes often manifest interpersonally through communication, frequently in the form of microaggressions, which are subtle forms of verbal and nonverbal prejudice that need not be mindfully intentional but are harmful to targets nonetheless (Nadal et al., 2012; Sue & Spanierman, 2020). These microaggressions encompass various acts that are relevant to mediated communication, including developing biased perceptions of transgender individuals, varying language use, or engaging in misgendering or social exclusion.

We argue that harmful outcomes examined in our study of misgendering, social exclusion (i.e., not allowing a member into a group; detrimental language use), and social assessments (i.e., perceptions of agency and communion) are not just tied to a target's gender expression (whether through pronouns or signaling a trans affiliation via an emoji) but are entirely moderated by transphobic attitudes. In other words, if gender identity disclosures lead to negative outcomes, particularly when disclosures deviate from cisgender norms, this is likely because transphobia affects how people process the disclosure. Thus, we position transphobia as a key moderating factor that can explain why these harmful effects occur, rather than expecting main effects independent of this bias. We next explicate how transphobia accounts for these general reactions people have to different pronouns and the use of a trans flag emoji.

Misgendering. Misgendering or the misclassification of other's gender identity (e.g., using incorrect pronouns or other honorifics; McLemore, 2015) is a microaggression that gender cues in email signatures are *intended* to mitigate. However, little empirical research tests if gender identity markers decrease in-

stances of misgendering. Qualitative work has documented extensive misgendering of non-binary individuals (e.g., Matsuno et al., 2022), and survey work has found disproportionately higher rates of misgendering among non-binary students compared to binary trans students (Goldberg, 2019). One study found people were more likely to misgender trans individuals than cis people and that including pronouns tended to reduce degendering, or intentionally not using gendered language, but not misgendering (Howansky et al., 2022). However, this study did not account for non-binary individuals who use they/them pronouns, nor did it assess transphobia.

Though there is little evidence directly linking attitudes and beliefs about trans individuals with misgendering, studies tend to show a pervasive bias against trans individuals, especially by those with transphobic beliefs. Thus, we predict that individuals harboring more negative attitudes toward trans people (i.e., with higher self-reported transphobia) are more likely to engage in misgendering. When individuals hold more negative beliefs toward trans people, such as ignorant conceptualizations of gender as a binary construct and discomfort interacting with trans people, they will likely reject gender identities that fall outside cisnormative notions of gender. Thus, individuals' levels of transphobia will precipitate increased misgendering, which will be more pronounced when the cues signal an affiliation with the trans community, whether by signaling a non-binary identity via pronouns (they/them) or by using the trans flag emoji.

Attitudes Toward Targets. Besides affecting a partner's use of correct gender terms, including gender markers in email signatures could affect perceptions of trait attributions toward a target, such as agency and communion. Agency and communion are purported to represent two stable and attributable constructs individuals use to evaluate known and unknown others (Abele & Wojciszke, 2007). Agency reflects the ability to pursue intentions (intelligence, competence) and is associated with outcomes such as respect, whereas communion reflects connection (trustworthiness, warmth, kindness) and is associated with outcomes such as affinity (Fiske, 2018; Fiske et al., 2002; Wojciszke et al., 2009). Agency and communion are crucial in understanding perceptions and stereotypes based on intergroup affect and have been linked to gender stereotypes (Cuddy et al., 2008; Sczesny et al., 2019). Women are historically associated with communion and men with agency, with these attributes being derived from gendered social role stereotypes that attribute nurturing and relational qualities to women and assertive and dominant qualities to men (Sczesny et al., 2019).

Research has found that people tend to perceive trans and non-binary individuals as different from cis individuals, viewing them more negatively (Gallagher & Bodenhausen, 2021; McCarty & Burt, 2024). Typical gender stereotypes have not held for binary trans individuals. Research has identified a degendering effect for trans men and women whereby people do not perceive them as differing in communion and agency in gender stereotypical ways but instead perceive trans men and women as equally less communal and agentic compared to cisgen-

der men and women (Gallagher & Bodenhausen, 2021). Additionally, non-binary individuals tend to be rated lower in terms of agency and warmth compared to trans men and women (Gallagher & Bodenhausen, 2021; McCarty & Burt, 2024). These findings not only indicate that trans individuals are perceived more negatively than cis individuals but also that these negative perceptions are heightened for non-binary individuals. Attitudes and beliefs about trans individuals likely shape perceptions of agency and communion because they filter judgments about others in biased ways. Thus, when gender cues indicate a non-cis identity or affiliation with the trans community via the email signature targets will be rated lower in agency and communion as transphobia increases.

Social Exclusion. Attitudes and beliefs about trans people extend to other outcomes, such as the extent to which trans people are socially included. Social exclusion broadly encompasses acts such as rejection, ostracism, and other offensive behavior aimed at not allowing others to participate (Riva & Eck, 2016; Wesselman et al., 2016). Though work has not directly examined whether transphobia precipitates social exclusion, research has found that transphobic behavior, such as misgendering, has similar psychological outcomes as social exclusion, and thus argues for it to be considered as a form of social exclusion (Wesselman et al., 2022). Furthermore, non-binary pronoun disclosures in work contexts, such as email signatures (McCarty, 2024) and resumes (Eames, 2024) are associated with fewer and less positive replies, indicating ostracism. Theorizing about social exclusion suggests that perceived stigma and stereotyping significantly impact the degree to which individuals are included in groups (Liamputtong & Rice, 2021; Rudert et al., 2023). Thus, transphobia, as a manifestation of biased social norms, likely influences willingness to include trans people when an email signature indicates affiliation with the trans community, albeit whether that is a function of pronouns (they/them) or by using the trans flag emoji.

Exclusion and bias may emerge in both subtle and overt language use when talking about trans people, especially as transphobia filters perceptions. Because language use reflects social hierarchy, intergroup contexts likely produce differences in language use that reflect implicit attitudes and biases (Collins & Clément, 2012; Ruscher, 2017; von Hippel et al., 2008). Subtle bias and prejudices can manifest linguistically both through direct interactions with marginalized individuals and when talking about outgroup members to others (Collins & Clément, 2012; Ruscher, 2017).

How people communicate, like tone and formality, as well as language related to social interaction dynamics, such as politeness and social power, can be influenced by how people perceive gender identity cues present in email signatures and transphobia. Tone is an expression of sentiment, relaying information about an individual's feelings or attitude toward a topic (Boyd et al., 2022). While a negative tone might convey disapproval or an otherwise adverse attitude, and informal language use might similarly suggest a favorable attitude. Netspeak is an informal language style that consists of abbreviations, emojis, and slang and

is specific to digital contexts (Crystal, 2006). Since our study involves college students and an informal email conversation among peers, netspeak is likely to represent a comfortable and friendly communication style (Crystal, 2006). In all, more negative and formal language are a likely effect of transphobia and less netspeak.

On the other hand, psychological and social processes like power and politeness can also be a byproduct of transphobia. Language use can indicate social power, as more powerful language may be used in cases where individuals perceive themselves as having a higher social standing or feel their social standing is threatened (Reid & Ng, 1999). Thus, transphobia is likely to lead individuals to engage in more powerful language when a non-binary identity is communicated as a way to exert dominance through language and reflect traditional gender hierarchies (Palomares, 2009). Politeness might also fluctuate depending on transphobia. Agreement and avoiding conflict foster positive environments with little tension and bias and assenting language is positivity correlated with feeling similar to group members (Van Swol et al., 2021). For instance, individuals may use more curt and unfriendly language when they view an individual more negatively, especially for high levels of transphobia.

Current Study

The purpose of the present study is to understand differences in how individuals process and react to two common gender identity markers in email signatures: pronouns and the trans flag emoji. In a three (pronoun: they/them, she/her, or he/him) by two (trans flag emoji : present or absent) between-subjects factorial design, we test (1) the extent to which people accurately use pronouns found in others' signature blocks in a subsequent email, (2) the extent to which these gender identity cues affect interpersonal dynamics in terms of trait perceptions of communion and agency and enacted social exclusion, (3) how language use changes relative to pronoun disclosure and emoji cues, with a focus on (4) the extent to which transphobia explains these outcomes.

Including pronouns, pride emoji flags, or other gender markers in email signatures offer meaningful identity cues that can reduce misgendering and lead to positive outcomes like perceptions of allyship (Kodipady et al., 2023). At the same time, negative attitudes toward transgender individuals can adversely affect how people perceive these identity cues. These attitudes towards trans individuals often manifest as microaggressions, such as misgendering (e.g., incorrect pronoun use, e.g., McLemore, 2015), biased trait inferences (e.g., Gallagher & Bodenhausen, 2021; McCarty & Burt, 2024), and social exclusion (Wesselmann et al., 2022). We expect a three-way interaction where gender identity cues (i.e., pronouns and trans flag emoji) interact with transphobia to predict outcomes. While experimental research directly examining transphobia as a predictor of transphobic behaviors, such as misgendering or social exclusion, is limited, we expect that transphobia will moderate the effects of pronouns and the trans flag

emoji, as these cues are associated with the trans community and may be perceived as challenging cisnormative beliefs. Specifically, as transphobia increases, we anticipate more negative outcomes (e.g., misgendering, social exclusion, negative social assessments) when gender identity cues signal a non-binary identity (such as using they/them pronouns) or an affiliation with the trans community via the use of the trans flag emoji. Thus, we propose the following hypotheses:

H1: The relationship between transphobia and misgendering will be strongest when the email signature contains they/them pronouns and the trans flag emoji is present, more than all other conditions.

H2: Transphobia will predict decreased trait perceptions of agency when the email signature contains they/them pronouns and a trans flag emoji is present more than all other conditions.

H3: Transphobia will predict decreased trait perceptions of communion when the email signature contains they/them pronouns and a trans flag emoji is present more than all other conditions.

H4: Transphobia will predict social exclusion when the email signature contains they/them pronouns and a trans flag emoji is present more than all other conditions.

H5: Transphobia will predict linguistic forms of social exclusion when the email signature contains they/them pronouns and a trans flag emoji is present more than all other conditions.

Method

Participants

Data were collected in fall 2023 and spring 2024, following approval from the first and second authors' institutional review board. Students at a major university were recruited from undergraduate courses through SONA systems to complete a survey administered through Qualtrics in exchange for extra credit. Thirty-three participants withdrew their data after reading a debriefing statement disclosing the full purpose of the study. Additionally, 42 participants started the survey but stopped at the writing task without responding to any survey items and 43 participants failed the attention check ("select 'agree' if you are paying attention"). Lastly, to retain a focus on cis people's responses, two participants were removed because they identified as trans. Thus, the final sample consisted of 354 participants. Appropriate tests confirm that no differences existed between the Fall and Spring data, deletions occurred randomly across conditions, and random assignment was successful. A post hoc sensitivity analysis conducted in G*Power 3.1 confirmed that our data were sufficiently powered to detect small effects, $F(347) = 3.02$, Cohen's $f = 0.21$. Participants' age ranged from 18 to 42 ($M = 20.08$, $SD = 1.80$); most participants identified as women ($n = 284$, 80.2%), and the majority identified as straight ($n = 290$, 81.9%). Additionally, 154 (43.5%) participants identified as white, 90 (25.4%) as Hispanic or Lat-

inx, 79 (22.3%) as Asian, 13 (3.7%) as Black or African American, two (0.6%) identified as Native American, three (0.8%) as selected other/unknown, and 13 (3.7%) did not disclose.

Procedure

After providing consent, participants were instructed to imagine they had received an email from a classmate named C. Jones. The email was presented as an image or screengrab and contained the subject line “Group project” and a message from C. Jones stating that someone in their class named Riley emailed asking to join their group to complete the project. C. Jones then asked for their thoughts, stated they were okay with adding Riley, and pointed to Riley’s email forwarded at the end of the message. At the end of Riley’s forwarded email was a signature block that included one of three randomly assigned pronouns (they/them, she/her, or he/him) followed by the presence or absence of the trans flag emoji () also randomly assigned. This email was designed to mirror experiences participants had likely had in peer interactions. We chose Riley because, based on U.S. Social Security Administration records, it is the common gender-neutral name assigned to both males and females born approximately 20 years prior to this study, making it relevant to the college-aged participants (Datayze, n.d.). See Figure 1 for an example scenario.

Following the scenario, participants were asked to write an email replying to C. Jones in an open-ended item mimicking an email, providing their opinion and justification for Riley joining the group. Then, participants answered randomized questions regarding transphobia, political ideology, perceptions of Riley’s agency and communion, and how likely they were to let Riley join the group. Participants found the scenario more realistic than the mid-point of the scale (“How realistic does the scenario you engaged in seem to you?”; $M = 4.68$, $SD = 1.24$; $t(347) = 10.21$, $p < .001$). A printout of the Qualtrics survey, along with all output for the results, can be found here: https://osf.io/3f4vk/overview?view_only=1fa48b7c69184b29af99e067719dbbdc.

Measures

Open-ended Email Response. Two authors coded the open-ended email reply item, assessing if participants used proper pronouns based on the signature block condition and if participants said Riley could join the group. Coders separately coded all responses, with intercoder agreement at 98% (Krippendorff’s $\alpha = 1.0$). The 13 discrepancies were resolved through discussion. Coders noted that 13.3% of participants misunderstood the email reply task, often replying directly to Riley (the one asking to join the group) rather than the existing group member, C. Jones, who sent the email asking for participants’ opinions. These participants were retained because they still responded to the study in a way that demonstrated engagement, even though they misunderstood who they were replying to in the writing task.

Figure 1*Example Stimuli of He/No Flag and They/Flag Conditions*

Group project Inbox x

C Jones <cjones@utexas.edu>
to me ▾

Hey,

Someone emailed asking to join our group, what do you think? I'm okay with it. See the email below.

Thanks,
C. Jones

...

----- Forwarded message -----
From: **Riley Smith** <rsmith@utexas.edu>
Date: Mon, Oct 30, 2023 at 12:29 PM
Subject: Group project
To: <cjones@utexas.edu>

Hello,

I've been trying to find a group to join for the class project. Can I join your group?

Thanks,
Riley Smith (he/him)
The University of Texas at Austin

↩ Reply ➦ Forward

Group project Inbox x

C Jones <cjones@utexas.edu>
to me ▾

Hey,

Someone emailed asking to join our group, what do you think? I'm okay with it. See the email below.

Thanks,
C. Jones

...

----- Forwarded message -----
From: **Riley Smith** <rsmith@utexas.edu>
Date: Mon, Oct 30, 2023 at 12:29 PM
Subject: Group project
To: <cjones@utexas.edu>

Hello,

I've been trying to find a group to join for the class project. Can I join your group?

Thanks,
Riley Smith (they/them) 🏳️
The University of Texas at Austin

↩ Reply ➦ Forward

Pronoun Use. Pronoun use was coded into three categories. Coders looked for instances of participants correctly using the pronouns, which was coded as a dichotomous variable (1 = correct; 0 = incorrect). One hundred and fifty (42.4%) of responses used the correct pronoun, 93 used incorrect pronouns (26.3%), and 64 (18.1%) did not use any pronouns (Krippendorff's $\alpha = .98$). Responses that did not include any pronouns were coded as missing data. While avoiding the use of correct pronouns can serve as a form of misgendering (Ansara & Hegarty, 2014), the context of our study's email exchange did not necessarily require pronoun usage. For instance, a participant's response – "I'm okay with Riley joining our group. The more people we have, the less work each of us to do. This can save us time and help us put more detail into our own parts of the project," demonstrates that the omission of pronouns is more due to the way the response was structured rather than deliberately avoiding gendered language. Because of this ambiguity, we determined that the absence of pronouns did not consistently indicate bias within our study's context, leading us to code such responses as missing data.

Acceptance into the Group. Coders looked for the extent to which responses stated that Riley could join the group. Responses that clearly accepted or rejected Riley as part of the group were coded accordingly ("Thanks for reaching out. I have no problem with having Riley join us."). Most participants, 87.9% ($n = 311$), said they would accept Riley into the group and 1.4% ($n = 5$) said they would not want Riley to join the group. Responses that indicated ambivalence were coded as Maybe ("Hi! I think we should meet and talk about it before making this harsh of a decision? It should definitely be more thought out and not so rushed.") and 9% ($n = 32$) of responses fell into this category (Krippendorff's $\alpha = .93$).

Acceptance. We also included a more discriminant single-item measure to capture participants' likelihood of letting Riley join their group, "How likely would you be to accept Riley into your group?" The item was measured on a 7-point Likert-style response (1 = *extremely unlikely* to 7 = *extremely likely*), with higher scores indicating a greater likelihood of letting Riley join their group ($M = 5.82$, $SD = 1.13$). Results from a one-way ANOVA indicated that the three-level coded acceptance variable (0 = *no*, 1 = *yes*, 2 = *maybe*) aligned with the continuous variable to demonstrate reliability. The model was significant, $F(2, 342) = 18.60$, $p < .001$, showing that individuals who accepted Riley into the group in the written response had the highest mean of acceptance on the continuous measure ($M = 5.95$, $SD = 1.03$), followed by responses coded as 'maybe' ($M = 5.09$, $SD = 1.33$), with individuals who excluded Riley from the group having the lowest mean ($M = 3.80$, $SD = 1.48$). We use this more nuanced measure rather than the coded acceptance measure in analyses.

Communion and Agency. Participants were asked to rate how well a series of words described Riley to capture their perceptions of communion and agency on a 7-point Likert scale (Cuddy et al., 2008; 1 = *Not well at all* to 7 = *Extremely well*). The words describing communion are "Friendly," "Kind," "Likeable," and "Nice," while the words describing agency are "Capable," "Competent,"

“Efficient,” and “Skillful.” Both measures were reliable; we report McDonald’s Omega (ω) for reliability (Hayes & Coutts, 2020; Communion: $M = 4.73$, $SD = 1.42$, $\omega = .98$; Agency: $M = 4.62$, $SD = 1.38$, $\omega = .97$).

Transphobia. Twenty-two items from the Transgender Knowledge, Attitudes, and Beliefs (T-KAB) scale assessed participants’ attitudes toward transgender people (Clark & Hughto, 2020). Participants were asked to respond on a 7-point Likert scale (1 = *Strongly Disagree* to 7 = *Strongly Agree*), with higher scores corresponding with more negative attitudes toward trans folks. The scale was reliable ($M = 2.86$, $SD = 1.41$, $\omega = .97$).

Linguistic Analysis. Linguistic Inquiry and Word Count 22 (LIWC-22; Boyd et al., 2022) was used to assess how participants’ language use varied as a result of transphobia and the different email signature conditions. LIWC is a reliable and validated text analysis program that calculates words in a text that are associated with various categories that reflect numerous sociopsychological processes (Boyd et al., 2022; Tausczik & Pennebaker, 2010). We included linguistic dimensions of politeness, power, positive and negative tone, and net-speak. *Politeness* indicates manners and social norms and includes words like “please” and “thank you” ($M = 3.36$, $SD = 3.15$). *Power* includes words such as “own,” “allow,” and “order” and is indicative of exerting social power ($M = 0.22$, $SD = 0.79$). *Positive tone* words include “good” and “well” ($M = 10.25$, $SD = 4.77$), and *negative tone* words include “bad,” “wrong,” and “hate” ($M = 0.19$, $SD = 0.69$). *Netspeak* captures informal language that is similar to that used on social media or through instant messaging, such as emoticons and words such as “lol,” “u” and “haha” ($M = 0.91$, $SD = 1.55$). See Table 1 for descriptive statistics and correlations.

Results

All analyses were conducted using SPSS (v.29). Omnibus tests and post hoc tests are reported for main effects and lower-order interactions. Full results are available in our OSF repository.e

H1: Misgendering Pronoun Use

H1 predicted that transphobia would increase misgendering when the email signature contained they/them pronouns and the trans flag emoji compared to other conditions. A binary logistic regression analysis was conducted using PROCESS Model 3 (Hayes, 2022) to test for the three-way interaction with correct pronoun use as the dependent variable (1 = correct use; 0 = misgendered use). The overall model was not significant, ModelLL(11, 228) = 17.75, $p = .09$, Nagelkerke $R^2 = .10$. There was a significant main effect of pronouns on correct pronoun use, $b = -2.18$, $SE = 0.99$, 95% CI [-4.11, -0.24]. However, a post hoc chi-squared test of independence revealed that there were no significant differences across the three conditions on misgendering, $X^2(2, 243) = 1.42$, $p = .49$. There were no main effects for the flag condition ($b = 1.47$, $SE = 0.35$, 95% CI

Table 1

Means, Standard Deviations, and Correlations

	M	SD	1	2	3	4	5	6	7	8	9	10
1. Transphobia	2.86	1.41	--									
2. Correct pronoun use	.62	.49	-.02	--								
3. Communion	4.73	1.42	-.09	.02	--							
4. Agency	4.62	1.38	-.03	-.03	.84***	--						
5. Acceptance	5.82	1.14	-.20**	.19**	.52***	.49***	--					
6. Politeness	3.36	3.16	.03	-.01	.00	.07	-.02	--				
7. Power	.22	.79	.06	-.02	.04	.04	-.05	-.04	--			
8. Positive tone	10.28	4.79	.07	-.00	-.08	-.00	-.09	.54***	-.13*	--		
9. Negative tone	.18	.69	-.01	.08	-.10	-.07	-.05	-.07	-.01	-.03		
10. Netspeak	.90	1.54	-.05	.12	.10	.08	.12*	-.33***	-.05	-.21***	-.03	--

Note. *p < .05. **p < .01. ***p < .001.

[-0.99, 3.94] or transphobia ($b = -0.30$, $SE = 0.26$, 95% CI [-0.90, 0.20]), and there were no significant interactions. H1 is not supported.

H2 and H3: Trait Attributions of Agency and Communion

H2 and H3 predicted that transphobia would moderate the relationship between pronoun type and flag status on agency and communion, with the strongest negative relationship expected in the condition with they/them pronouns and the trans flag. Two separate ANCOVAs were conducted to examine the effects of pronoun type, the presence of the trans flag emoji, and transphobia on the outcomes of agency and communion, assessing main effects, two-way interactions, and the three-way interaction.

When agency was the outcome variable, the main effects for pronoun ($F[2, 333] = 0.32$, $p = .72$), the trans flag emoji ($F[1, 333] = 0.07$, $p = .79$), and transphobia ($F[1, 333] = 0.46$, $p = .50$) were not significant. Furthermore, the two-way interactions between the trans flag emoji and transphobia ($F[1, 333] = 0.77$, $p = .38$), pronouns and transphobia ($F[1, 333] = 0.08$, $p = .93$), and pronouns and the trans flag emoji ($F[1, 333] = 0.08$, $p = .92$) were not significant. Finally, the three-way interaction between pronouns, the trans flag emoji, and transphobia was not significant ($F[2, 333] = 0.29$, $p = .75$). Thus, H2 was not supported.

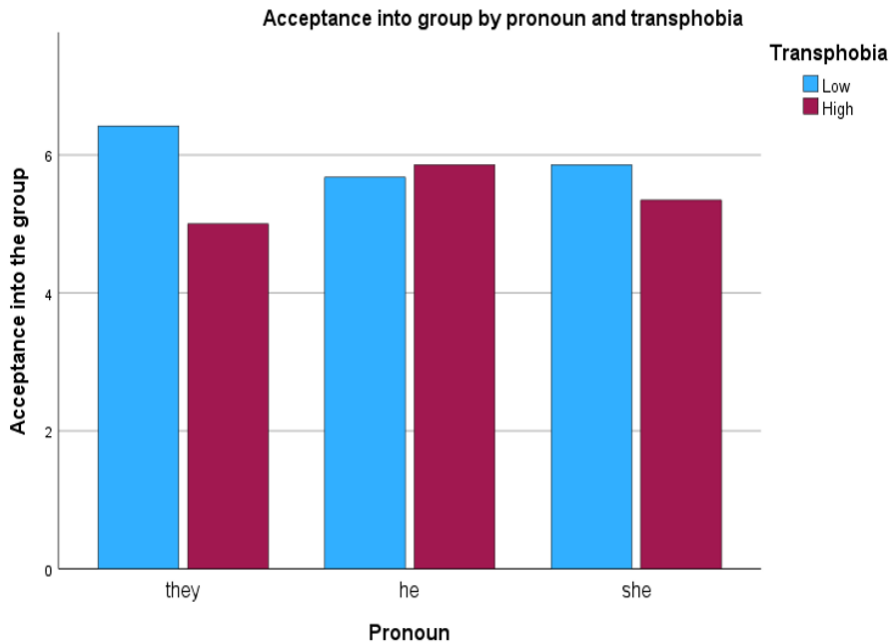
A similar pattern emerged when communion was the outcome. The main effects of pronouns ($F[2, 333] = 0.91$, $p = .41$), trans flag emoji ($F[1, 333] = .01$, $p = .94$), and transphobia ($F[1, 333] = 2.62$, $p = .11$) were all nonsignificant. Additionally, the two-way interactions between transphobia and the trans flag emoji ($F[2, 333] = 0.50$, $p = .48$), transphobia and pronouns ($F[2, 333] = 0.39$, $p = .68$), and pronouns and the trans flag emoji ($F[2, 333] = 0.34$, $p = .71$) were all not significant. Lastly, there was a nonsignificant three-way interaction between pronouns, the trans flag emoji, and transphobia ($F[2, 333] = 0.25$, $p = .78$). H3 was also not supported.

H4: Acceptance into the Group

Hypothesis 4 predicted that the likelihood of accepting Riley into the group would decrease as levels of transphobia increased and that this relationship would be strongest when the email signature included they/them pronouns and the trans flag emoji. An ANCOVA was conducted to examine the effect of pronoun type, the presence of the trans flag emoji, and transphobia on the likelihood of accepting Riley into the group. There was a main effect of pronouns, $F(2, 333) = 5.19$, $p = .01$, $\eta_p^2 = .03$; however, pairwise comparisons revealed there were no significant differences across the pronoun conditions on the outcome. Additionally, there was a main effect of transphobia on acceptance into the group, $F(1, 333) = 12.93$, $p < .001$, $\eta_p^2 = .04$, such that as transphobia increased, acceptance into the group decreased $r(349) = -.18$, $p < .001$. There was not a significant main effect of the trans flag emoji, $F(1, 333) = 1.71$, $p = .19$.

Figure 2

Bar Chart for Two-Way Interaction Between Transphobia and Pronoun Condition on Acceptance Into the Group



There was a significant two-way interaction between pronouns and transphobia, $F(2, 333) = 4.84, p = .01, \eta_p^2 = .03$. However, there were not significant interactions between the trans flag emoji and transphobia ($F[1, 333] = 0.76, p = .38$), pronouns and the trans flag emoji ($F[2, 333] = 0.32, p = .73$), or pronouns, the trans flag emoji, and transphobia ($F[2, 333] = 0.37, p = .69$). To understand the significant two-way interaction from the omnibus tests, we looked at the simple slopes between transphobia and acceptance within the different pronoun conditions. Transphobia was negatively correlated with acceptance when the pronouns were they/them, $r(113) = -.34, p < .001$, and she/her, $r(112) = -.24, p = .01$. When the pronouns were he/him, transphobia was not correlated with acceptance, $r(120) = .04, p = .33$. They/them and she/her correlations differed significantly from the he/him condition (they: $z = -2.92$, one-tailed $p = .002$; she: $z = -2.19$, one-tailed $p = .01$). However, they/them and she/her correlations were not significantly different ($z = -0.73$, one-tailed $p = .23$), indicating that participants were less likely to accept Riley into the group as transphobia increased when pronouns were they/them or she/her. Figure 2 presents a bar graph depicting this interaction. H4 was partially supported.

H5: Linguistic Content

We expected that transphobia would predict linguistic forms of social exclusion and that the effects would be greatest when the email signature contained they/them pronouns and the trans flag emoji more than all other conditions. Specifically, we expected greater negative tone and power, and reduced positive tone, netspeak, and politeness. ANCOVAs were conducted with the LIWC variables of politeness and positive tone. However, the assumptions of normality were violated for the variables of power, negative tone, and netspeak. These variables were zero-inflated, as most participants did not use words associated with these categories. This resulted in highly positively skewed and leptokurtic distributions, making regular ANCOVA unsuitable for these data. To address this issue, we employed a two-part model, a method well-suited for (semi)continuous data with many zeros (Boulton & Williford, 2018; Neelon & O'Malley, 2019). The first part of the model involves creating a binary variable from the skewed variable to indicate the presence or absence of a non-zero response (0 = *absent*, 1 = *present*). In our study, step one helps us understand what leads an individual to use words associated with a specific LIWC category. The second part involves analyzing only the non-zero values, treating zero values as missing data. This approach helps us understand, for those who used words that aligned with these LIWC categories, what influences the extent to which people engaged in this language use. We, however, do not report the results of the second step because the sample size is so small when only looking at non-zero values that the results were undiagnostic.

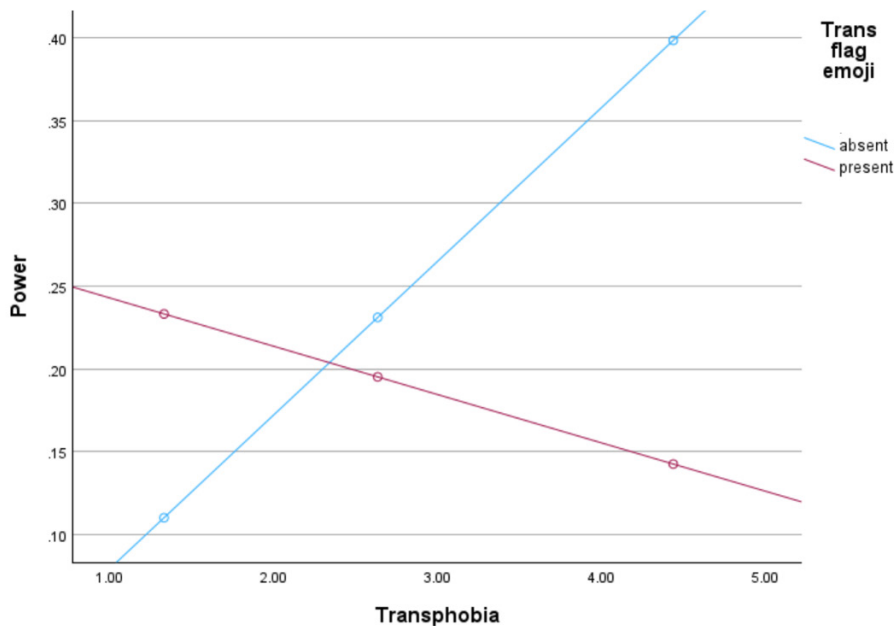
Politeness. An ANOVA with politeness as the outcome variable revealed that there were no significant main effects: trans flag emoji, $F(1, 337) = 1.0, p = .32$; pronouns, $F(2, 337) = 2.69, p = .07$; transphobia, $F(1, 337) = 0.42, p = .52$; and two-way interactions: (trans flag emoji x transphobia, $F(1, 337) = 0.67, p = .41$; pronouns and transphobia, $F(2, 337) = 0.57, p = 0.57$; pronouns and trans flag emoji, $F(2, 337) = 2.60, p = .08$). The three-way interaction between pronouns, the trans flag emoji, and transphobia was also not significant: ($F[2, 337] = 0.43, p = .65$).

Positive tone. The model with positive tone as the outcome variable had no significant main effects: trans flag emoji, $F(1, 337) = 0.03, p = .86$; pronouns, $F(2, 337) = 0.36, p = .70$; transphobia, $F(1, 337) = 1.78, p = .18$; and two-way interactions of trans flag emoji x transphobia, $F(2, 337) = 0.13, p = .72$; pronouns x transphobia, $F(2, 337) = 0.65, p = .52$; pronouns x trans flag emoji, $F(2, 337) = 2.71, p = .07$. The three-way interaction between pronouns, the trans flag emoji, and transphobia was also not significant, $F(2, 337) = 1.30, p = .28$.

Power. The first step using binary logistic regression analysis predicting power language was significant, $\text{ModelLL}(7, 342) = 16.81, p = .02$, Nagelkerke $R^2 = .11$. There was a main effect of transphobia on the use of power-related language, suggesting that as transphobia increased, participants were more likely to use language indicating power, $b = 0.84, SE = 0.30, 95\% \text{ CI } [0.26, 1.42]$.

Figure 3

Two-way Interaction Between Transphobia and Trans Flag Emoji on Power-Related Language



There was also a main effect of the trans flag condition, showing that participants were more likely to use power-related words when the trans flag was present, $b = 3.02$, $SE = 1.41$, 95% CI [0.24, 5.79]. However, there was not a significant main effect of pronouns, $b = 0.85$, $SE = 1.01$, 95% CI [-1.14, 2.84].

Lastly, there was a significant interaction between transphobia and the flag condition indicating that as transphobia increased, participants were less likely to use power-related words when the trans flag was present (mean of power when the flag was present, $M = .19$, $SD = .67$ vs absent, $M = .24$, $SD = .90$), $b = -1.11$, $SE = 0.42$, 95% CI [-1.93, -0.28]. There was not a significant interaction between transphobia and pronouns ($b = -0.55$, $SE = 0.30$, 95% CI [-1.15, 0.04]), pronouns and the trans flag emoji ($b = -1.41$, $SE = 1.28$, 95% CI [-3.92, 1.09]), or transphobia, pronouns, and the trans flag emoji ($b = 0.64$, $SE = 0.49$, 95% CI [-0.14, 1.42]). Figure 2 shows the significant interaction using the raw data.

Negative tone. The first step using binary logistic regression analysis predicting negative tone did not yield a significant model fit (ModelLL[7, 342] = 5.83, $p = .56$, Nagelkerke $R^2 = .04$). Thus, there were no significant main effects (transphobia: $b = -0.54$, $SE = 0.55$, 95% CI [-1.71, 0.43]; pronouns: $b = -0.15$, $SE = 0.81$, 95% CI [-1.74, 1.44]; trans flag emoji: $b = 0.125$, $SE = 1.71$, 95% CI [-4.60, 2.11]) or interactions (transphobia x pronouns: $b = 0.34$,

SE = 0.32, 95% CI [-0.29, 0.97]; transphobia x trans flag emoji: $b = 0.71$, SE = 0.65, 95% CI [-0.57, 1.98]; pronouns x trans flag emoji: $b = 0.12$, SE = 1.28, 95% CI [-2.40, 2.63]; transphobia x pronouns x trans flag emoji: $b = -0.38$, SE = 0.44, 95% CI [-1.24, 0.49]) for negative tone.

Netspeak. The first step using binary logistic regression analysis predicting netspeak was significant (ModelLL(7, 342) = 91.60, $p = .00$, Nagelkerke $R^2 = .33$). The flag condition had a significant main effect, showing that when the flag was present, people were more likely to use netspeak, $b = 2.04$, SE = 0.99, 95% CI [0.11, 3.98]. However, there was not a significant main effect for transphobia ($b = -0.28$, SE = 0.31, 95% CI [-0.90, 0.33]) or pronouns ($b = -0.75$, SE = 0.75, 95% CI [-2.22, 0.72]). There were also no significant interactions (transphobia x pronouns: $b = 0.16$, SE = 0.25, 95% CI [-0.33, 0.65]; transphobia x trans flag emoji: $b = 0.23$, SE = .36, 95% CI [-0.47, 0.93]; pronouns x trans flag emoji: $b = 0.56$, SE = 0.88, 95% CI [-1.16, 2.29]; transphobia x pronouns x trans flag emoji: $b = -0.31$, SE = 0.29, 95% CI [-0.88, 0.26]).

Discussion

The content of email signatures, such as job title, education, and even religious disclosures, affect perceptions of the sender (Carr, 2017; Young & Rains, 2006). Recent research has found that emails with they/them pronouns in their signature blocks are less likely to receive responses compared to those using she/her or he/him pronouns, suggesting that prejudice toward trans identities influences the perception of gender cues in email signatures and subsequent treatment of the individual using those cues (McCarty, 2024). The purpose of our study was to examine how people react to different gender cues by investigating how these cues jointly influence the accurate use of pronouns, interpersonal perceptions, and language use.

In our study, pronouns and transphobia interacted to influence social exclusion. Specifically, as transphobia increased, participants were less likely to accept Riley into the group when the email signature included they/them and she/her pronouns, highlighting an overt relationship between transphobic attitudes and social acceptance. Furthermore, the trans flag emoji influenced language use, but in unexpected ways. The presence of a trans flag emoji was associated with more use of power-laden words, and transphobia also had a positive relationship to power words. But, the trans flag emoji interacted with transphobia to reduce the use of language indicative of power; specifically, as transphobia increased, the flag's presence was associated with a decreased likelihood of using power-related language. The trans flag emoji also directly influenced the use of netspeak, with participants being more likely to use informal words associated with texting and online messaging when the emoji was present.

Theoretical and Practical Implications

Including cues about gender identity in email signatures can signal identity, foster allyship, and normalize inclusive practices (Johnson et al., 2021; Kodipady et al., 2023). However, our study indicates that these cues can also provoke bias, manifesting through social exclusion, though not attitudinal evaluations of agency and communion. Participants were less willing to accept Riley into the group as transphobia increased when the email signature included they/them or she/her pronouns compared to he/him, suggesting bias against non-masculine pronouns. Men are often perceived as more competent and better suited for leadership roles, likely leading people to be more inclined to include Riley when he/him pronouns were used (Eagly & Sczesny, 2009; Sczesny et al., 2019).

Furthermore, transphobia is linked to constructs such as gender essentialism and social dominance orientation, which reinforce binary gender categories and uphold social hierarchies (Ching et al., 2020; Jones et al., 2023; Perez-Arche & Miller, 2021). Thus, the interaction between transphobia and pronouns not only shows the relationship between transphobia and social exclusion but also suggests the influence of strongly held normative beliefs about gender. It is worth noting that the effect size was slightly larger for they/them compared to she/her, suggesting that with a larger sample size, the exclusion of non-binary identities could become more pronounced. So, future work would benefit from seeking a clearer distinction between responses to they/them and she/her pronouns. The findings suggest that organizations and educational institutions should implement interventions or training programs to address gender biases, particularly those that challenge inaccurate assumptions and stereotypes about gender.

While Riley was more likely to be excluded from the group when using they/them or she/her pronouns, our findings also revealed the potential for identity cues, particularly those that draw attention to one's identity, to facilitate more positive responses. We found main effects of the trans flag condition and transphobia which both separately predicted increased power-laden language. However, the flag condition and transphobia also interacted, showing that as transphobia increased, participants were less likely to use language denotative of power when the flag was present. The flag likely made people aware of the person's affiliation with the trans community and, because of their increased prejudice towards trans individuals, seems to have prompted them to reduce their use of language intended to exert social power. The outcome for netspeak supports this conclusion, as the presence of the trans flag emoji led participants to use words associated with colloquial internet lingo compared to when the flag was absent. Netspeak, as a form of informal language specific to the Internet and other mediated contexts, may be interpreted as participants trying to appear friendly and approachable and, therefore, can be interpreted positively (Crystal, 2006).

The significance of the trans flag in producing more positive outcomes and lessening the effects of transphobia is an important finding because it suggests that overt symbols of trans identity may potentially counteract negative biases. This finding bolsters other work suggesting that emojis affect perceptions (Riordan &

Glikson, 2020). Thus, including explicit signifiers of identity, like a pride flag or Safe Zone symbol, might be useful to more overtly signal beliefs related to identity and inclusion, helping to reduce prejudice and promote more positive interactions (Kodipady et al., 2023). However, it is important to recognize that this response is superficial in a sense, as participants were likely altering their behavior to conform to perceived social expectations and maintain a positive self-image (Brown & Levinson, 1987; Goffman, 1967). Nevertheless, the fact that participants may be compelled to strategically shift their language use likely indicates an awareness of expectations regarding trans inclusivity, even if this reaction is more performative than genuine. This suggests a tension in our results between who people are and who people want to be seen as. Future work should investigate how individuals perceive the inclusion of the flag (i.e., does it lead them to perceive the partner as an ally or as a trans individual and to what end?).

Our findings indicate that biases, like transphobia, manifest in behaviors including social exclusion and language use, though they do not seem to be reflected in evaluative attitudes (i.e., agency and communion). These findings reiterate past claims that language is important (Boyd et al., 2022) and that the role of language in communicating identity accounts for variance in trans people's experience (see Baumler & Piercy, 2025). In our study, the more implicit measures revealed stronger relationships to pronouns and the trans flag emoji while including the moderating role of transphobia. Restated, while very few participants directly excluded Riley from the group (only 1.4%), many more were hesitant to include this outsider based on identity cues. These subtle changes were implicated in both harmful ways relative to pronoun cues (i.e., more power-laden language, more social exclusion) and in beneficial ways relative to trans emoji cues (i.e., more casual language). So, while participants did not vary their ratings of agency and communion relative to the experimentally manipulated target, they did vary their language use in subtle and important ways that likely translate into varied lived experiences for the target.

Lastly, we did ask participants whether they engage in the practice of including pronouns in their own email signature, 49 (13.8%) participants did, 294 (83.1%) did not, and four (1.1%) indicated "other." Chi-square tests of independence examining whether including pronouns in their email signature was associated with the correct use of Riley's pronouns in the written response showed no significant association ($\chi^2 [2, 236] = 3.24, p = .20$). This finding might suggest that including pronouns in an email signature is a performative action that does not necessarily translate into meaningful allyship or behavioral change. Since adding pronouns is often a one-time action when creating or updating an email signature, individuals may engage in this practice without reflecting on its purpose on a regular basis. This highlights the importance of initiatives that not only encourage people to adopt inclusive practices but also explain their purpose and meaning. Applied research could explore how policy guidance or educational interventions might enhance the effectiveness of such practices by examining whether they lead to more consistent engagement with inclusive behaviors.

Additionally, the open-ended responses from participants who selected “other” regarding including their pronouns in email signatures shared that they did so sometimes, and that it depended on context, suggesting that pronoun inclusion is situational and influenced by perceived social norms. Future work should investigate selective self-presentation to understand how individuals navigate identity disclosure, including how they adapt their identity presentation to align with perceived expectations and what factors increase their comfort in expressing their identity. Research could also examine what motivates or prevents allyship among cisgender individuals, as well as concerns faced by trans and gender-nonconforming individuals, such as stereotype threat (Steele & Aronson, 1995).

Limitations and Future Directions

There are a few limitations to this study. Foremost, our study design has some weaknesses. We aimed to enhance the ecological validity of our hypothetical scenario by using a realistic email and written response. However, this approach, which explicitly told participants to justify their decision to let Riley into the group, may have introduced more concentrated or systematic processing in participants’ replies, leading participants to think that letting Riley into the group was the “right” thing to do and potentially explaining the high acceptance rate (Bohner et al., 1995). Whereas we believe that linguistic bias would carry itself over to replies to the third party, the context of a forwarded message from a peer asking to join a group may not have been sufficient to generate significant reactions, though our realism check did demonstrate it felt like a realistic request. Future studies might include an opportunity for participants to respond to a third party to generate the use of pronouns but also reply directly to the individual themselves to see if linguistic bias presents itself differently. This limitation may explain the nonsignificant results in agency and communion outcomes and the LIWC variables with high instances of zeros. Since linguistic content did not differ much regarding some of our variables of interest (power, negative tone, and netspeak), leading to the zero-inflated data, these results should be interpreted cautiously. Further, because we attribute the LIWC outcomes of power and Net-speak, at least in part, to social desirability and impression management, future research should consider how identity cues may influence individuals’ self-presentation and behavioral responses.

Participants were also unable to revisit the email while writing their response, which is unrealistic compared to real-life settings and likely led some participants to misunderstand the prompt and respond to Riley directly. This may also be one reason misgendering was not a significant outcome, since 31.7% of the data were coded as missing due to the absence of pronouns in the written responses. Therefore, the impact of gender cues and transphobia on misgendering remains unclear and future research should ensure effective ways of getting participants to use pronouns without making the purpose of the experiment obvious.

Lastly, the design also lacked a true control condition; thus, we cannot compare outcomes with instances where gender cues are absent.

Furthermore, our study used a small convenience sample of university students, which limits the generalizability of our findings. Young adults are more likely to support trans individuals compared to other age groups (Greenberg et al., 2019), which may be reflected in our study, given the low levels of transphobia observed among participants ($M = 2.85$, $SD = 1.41$). While young adults are an important demographic due to their role in shaping future trends, other age groups, many of which are the basis of studies we use to derive hypotheses, may yield different outcomes that are important for understanding the current context. Additionally, participants were mostly women ($N = 284$, 80.2%). Given that men tend to exhibit higher levels of transphobia (Fisher et al., 2016; Jones et al., 2023; Norton & Herek, 2013), future research should aim for a more representative sample. Other individual differences and sociodemographic measures that were not captured in our study may be important to consider, too, such as gender essentialism, social dominance orientation, religiosity, geographic location, and familiarity with the queer and trans community.

Lastly, our study focused on email signature cues that might be used to signal gender identity, using a context relevant to the study's demographic. However, given the limited research on pronouns and other cues signaling gender identity, future research should explore these cues in other mediated contexts. This may include examining identity portrayals in work contexts and professional communication platforms like Microsoft Teams or Slack, as well as other interpersonal settings such as social media profiles and online platforms like Discord. We also only included three pronoun conditions likely familiar to most people. Outcomes may differ with less familiar neopronouns (e.g., *ze/zie*) and paired pronouns (e.g., *he/they/she*). Additionally, we used a name that is relatively gender-neutral in the United States to minimize assumptions about pronouns and gender identity. However, we did not include an item asking participants how they perceived Riley, meaning that we cannot determine if participants made assumptions about Riley's gender identity that influenced their responses. The experimental control added to our study limits regarding the study's generalizability to other gender-neutral names. Future research should also consider including names that carry specific gender associations that are paired with assumably discordant pronouns to understand how assumptions about gender identity influences prejudice.

Conclusion

Sharing information about gender identity, like disclosing pronouns, is an important practice that can help LGBTQ+ individuals feel more included (Johnson et al., 2021). Understanding how gender identity cues interact with transphobia to influence microaggressions offers valuable insights into strategies for reducing bias and promoting more positive outcomes. Our findings indicated a bias towards non-masculine pronouns, as *they/them* and *she/her* pronouns led to

similar levels of exclusion from the group. Thus, our findings highlight the need for interventions addressing gender biases rooted in sexism and transphobia, particularly in professional settings.

Additionally, and against our hypotheses, signaling a non-binary identity via the trans flag did not necessarily result in more negative outcomes and, in fact, suggests that such direct affiliation with the trans community may actually lessen negative reactions. This is important, as being able to communicate gender-related cues is crucial for trans individuals to have their identity recognized and validated. Expressing a stigmatized identity can have positive outcomes across work and life domains, and in contexts where email is a common mode of communication, such as the workplace, explicit acknowledgment of one's trans identity can positively impact well-being outcomes (Baumler & Piercy, 2025). Sharing pronouns can also help convey identity safety, demonstrate allyship, and foster positive organizational perception among LGBTQ+ individuals (Johnson et al., 2021; Kodipady et al., 2023). Therefore, all individuals should be encouraged to include pronouns in their email signatures to create a more inclusive and supportive environment.

Authorship Details

R. Baumler: research concept and design, collection and/or assembly of data, data analysis and interpretation, writing the article, critical revision of the article, final approval of the article.

Nicholas A. Palomares: research concept and design, collection and/or assembly of data, data analysis and interpretation, writing the article, critical revision of the article, final approval of the article.

Cameron W. Piercy: research concept and design, collection and/or assembly of data, data analysis and interpretation, writing the article, critical revision of the article, final approval of the article.

Conflict of Interest Disclosure

The authors report no conflicts of interest.

Funding

No external funding.

Research Ethics Statement

The University of Texas at Austin was the approving institution, IRB study approval number: STUDY00006342. The IRB protocol was followed during all steps of the process. Informed consent was obtained at the beginning of our study by asking participants to read an informed consent form and select whether they agree to participate in the study or not.

Data Availability Statement

Study materials associated with this study are shared in a public, open-access repository: https://osf.io/3f4vk/overview?view_only=1fa48b7c-69184b29af99e067719dbbdc

References

- Abele, A. E., & Wojciszke, B. (2007). Agency and communion from the perspective of self versus others. *Journal of Personality and Social Psychology*, 93(5), 751–763. <https://doi.org/10.1037/0022-3514.93.5.751>
- Ansara, Y. G., & Hegarty, P. (2014). Methodologies of misgendering: Recommendations for reducing cisgenderism in psychological research. *Feminism & Psychology*, 24(2), 259–270. <https://doi.org/10.1177/0959353514526217>
- Anderson, V. N. (2023). What does transgender mean to you? Transgender definitions and attitudes toward trans people. *Psychology of Sexual Orientation and Gender Diversity*, 10(4), 600–612. <https://doi.org/10.1037/sgd0000566>
- Baumler, R., & Piercy, C. W. (2025). Crystallized trans identity: How authenticity and identity communication affect job and life satisfaction. *Communication Research*, 52(7), 859–884. <https://doi.org/10.1177/00936502241234840>
- Bettcher, T. M. (2014). Transphobia. *Transgender Studies Quarterly*, 1(1-2), 249–251. <https://doi.org/10.1215/23289252-2400181>
- Bohner, G., Moskowitz, G. B., & Chaiken, S. (1995). The interplay of heuristic and systematic processing of social information. *European Review of Social Psychology*, 6(1), 33–68. <https://doi.org/10.1080/14792779443000003>
- Boulton, A. J., & Williford, A. (2018). Analyzing skewed continuous outcomes with many zeros: A tutorial for social work and youth prevention science researchers. *Journal of the Society for Social Work and Research*, 9(4), 721–740. <https://doi.org/10.1086/701235>
- Boyd, R. L., Ashokkumar, A., Seraj, S., & Pennebaker, J. W. (2022). *The development and psychometric properties of LIWC-22*. University of Texas at Austin. <https://www.liwc.app>
- Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage*. New York: Cambridge University.
- Buck, D. M. (2016). Defining transgender: What do lay definitions say about prejudice? *Psychology of Sexual Orientation and Gender Diversity*, 3(4), 465–472. <https://doi.org/10.1037/sgd0000191>
- Carr, C. T. (2017). A social identification approach to the effects of religious disclosures in business communication. *The Journal of Social Psychology*, 157(5), 571–587. <https://doi.org/10.1080/00224545.2016.1248810>
- Carr, C. T. & Stefaniak, C. (2012). Sent from my iPhone: The medium and message as cues of sender professionalism in mobile telephony. *Journal of Applied Communication Research*, 40(4), 403–424. <https://doi.org/10.1080/00909882.2012.712707>
- Ching, B. H.-H., Xu, J. T., Chen, T. T., & Kong, K. H. C. (2020). Gender essentialism, authoritarianism, social dominance orientation, and filial piety as predictors for transprejudice in Chinese people. *Sex Roles*, 83(7–8), 426–441. <https://doi.org/10.1007/s11199-020-01123-3>

- Clark, K. A. & Hughto, J. M. W. (2020). Development and psychometric evaluation of the Transgender Knowledge, Attitudes, and Beliefs (T-KAB) scale. *Sexuality Research & Social Policy*, 17(3), 353–363. <https://doi.org/10.1007/s13178-019-00399-9>
- Collins, K. A., & Clément, R. (2012). Language and prejudice: Direct and moderated effects. *Journal of Language and Social Psychology*, 31(4), 376–396. <https://doi.org/10.1177/0261927X12446611>
- Crystal, D. (2006). *Language and the internet*. (2nd ed.). Cambridge University Press.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The Stereotype Content Model and the BIAS Map. *Advances in Experimental Social Psychology*, 40, 61–149. [https://doi.org/10.1016/S0065-2601\(07\)00002-0](https://doi.org/10.1016/S0065-2601(07)00002-0)
- Datayze (n.d.). *Baby Name Uniqueness Analyzer: Riley*. Retrieved from <https://datayze.com/name-uniqueness-analyzer?name=riley>
- Eagly, A. H., & Sczesny, S. (2009). Stereotypes about women, men, and leaders: Have times changed? In M. Barreto, M. K. Ryan, & M. T. Schmitt (Eds.), *The glass ceiling in the 21st century: Understanding barriers to gender equality* (pp. 21–47). American Psychological Association. <https://doi.org/10.1037/11863-002>
- Eames, T. (2024). A field experiment on pronoun disclosure and nonbinary hiring discrimination. Available at SSRN. <http://dx.doi.org/10.2139/ssrn.4694653>
- Fisher, A. D. Castellini, G., Ristori, J., Casale, H., Giovandardi, G., Carone, N., ...Ricca, V. (2016). Who has the worst attitudes toward sexual minorities? Comparison of transphobia and homophobia levels in gender dysphoric individuals, the general population and health care providers. *Journal of Endocrinological Investigation*, 40, 263–273. <https://doi.org/10.1007/s40618-016-0552-3>
- Fiske, S. T. (2018). Stereotype content: Warmth and competence endure. *Current Directions in Psychological Science: A Journal of the American Psychological Society*, 27(2), 67–73. <https://doi.org/10.1177/0963721417738825>
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878–902. <https://doi.org/10.1037/0022-3514.82.6.878>
- Friedman, M. & Poole, J. (2023). Sign "In the space provided": Academic email signatures as sites of narrative, branding, and refusal? In L. Lisa Ortiz-Villarelle (Ed.), *Career narratives and academic womanhood 1st ed.* (pp. 54–67). Taylor & Francis.
- Gallagher, N. M. & Bodenhausen, G. V. (2021). Gender essentialism and the mental representation of transgender women and men: A multimethod investigation of stereotype content. *Cognition*, 217, 1–19. <https://doi.org/10.1016/j.cognition.2021.104887>

- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. New York: Pantheon.
- Goldberg, A. E. (2019). Higher educational experiences of trans binary and nonbinary graduate students. In G. Beemyn (Ed.), *Trans people in higher education* (pp. 135-157). State University of New York Press. <https://doi.org/10.1515/9781438472751>
- Greenberg, D., Najle, M., Jackson, N., Bola, O., & Jones, R. P. (2019, June 11). *America's growing support for transgender rights*. PRRI. <https://www.prri.org/research/americas-growing-support-for-transgender-rights/>
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). The Guilford Press.
- Hayes A. F., & Coutts J. J. (2020). Use Omega rather than Cronbach's Alpha for estimating reliability. But.... *Communication Methods and Measures*, 14(1), 1–24. <https://doi.org/10.1080/19312458.2020.1718629>
- Howansky, K., Wittlin, N., Bonagura, D., & Cole, S. (2022). Him, her, them, or none: misgendering and degendering of transgender individuals. *Psychology and Sexuality*, 13(4), 1026–1040. <https://doi.org/10.1080/19419899.2021.1978529>
- Johnson, I. R., Pietri, E. S., Buck, D. M., & Daas, R. (2021). What's in a pronoun: Exploring gender pronouns as an organizational identity-safety cue among sexual and gender minorities. *Journal of Experimental Social Psychology*, 97, 1–14. <https://doi.org/10.1016/j.jesp.2021.104194>
- Jones, B. A., Cahill, L., & McDermott, D. T. (2023). Gender, traditional gender ideology, gender essentialist beliefs, and masculinity threat as determinants of attitudes toward trans and gender diverse people in a U.K. sample. *Psychology of Sexual Orientation and Gender Diversity*. Advance online publication. <https://doi.org/10.1037/sgd0000658>
- Kennedy, N. (2018). Prisoners of lexicon: Cultural cisgenderism and transgender children. In E. Schneider & C. Baltes-Löhr (Eds.) *Normed Children: Effects of gender and sex related normativity on childhood and adolescence* (pp. 297–312). transcript Verlag. <https://doi.org/10.1515/9783839430200-022>
- Kodipady, A., Kraft-Todd, G., Sparkman, G., Hu, B., & Young, L. (2023). Beyond virtue signaling: Perceived motivations for pronoun sharing. *Journal of Applied Social Psychology*, 53(7), 582–599. <https://doi.org/10.1111/jasp.12937>
- Lennon, E., & Mistler, B. J. (2014). Cisgenderism. *TSQ: Transgender Studies Quarterly*, 1(1–2), 63–64. <https://doi.org/10.1215/23289252-2399623>
- Li, J., Longinos, G., Wilson, S. & Magdy, W. (2020). Emoji and self-identity in twitter bios. *Proceedings of the Fourth Workshop on Natural Language Processing and Computational Social Science*, pp. 199-211. <https://doi.org/10.18653/v1/2020.nlpccs-1.22>
- Liamputtong, P., Rice, Z.S. (2021). Stigma, discrimination, and social exclusion. In Liamputtong, P. (Ed.) *Handbook of Social Inclusion* (pp. 1-17). Springer. https://doi.org/10.1007/978-3-030-48277-0_6-2

- Lonergan, C. A., & Palomares, N. A. (2020). Physically, biologically, and socially constructed notions of sex and gender in communication science. In K. Floyd & R. Weber (Eds.), *The Handbook of Communication Science and Biology*. New York: Routledge. doi.org/10.4324/9781351235587-37
- Maji, S., & Sarika, K. (2024). LGBTQ microaggression on the campus: A systematic review. *Journal of School Violence*, 23(1), 124–138. https://doi.org/10.1080/15388220.2023.2289107
- Matsuno, E., Bricker, N. L., Savarese, E., Mohr, R., & Balsam, K. F. (2022). “The default is just going to be getting misgendered”: Minority stress experiences among nonbinary adults. *Psychology of Sexual Orientation and Gender Diversity*. https://doi.org/10.1037/sgd0000607
- McCarty, M. K. (2024). Email responsiveness varies based on the pronouns in the requesters’ email signature: The role of they/them pronouns. *Psychology of Sexual Orientation and Gender Diversity*. https://doi.org/10.1037/sgd0000737
- McCarty, M. K., & Burt, A. H. (2024). Understanding perceptions of gender non-binary people: Consensual and unique stereotypes and prejudice. *Sex Roles*, 90(3), 392–416. https://doi.org/10.1007/s11199-024-01449-2
- McLemore, K. A. (2015). Experiences with misgendering: Identity misclassification of transgender spectrum individuals. *Self and Identity*, 14(1), 51–74. https://doi.org/10.1080/15298868.2014.950691
- Michelson, M. R., & Harrison, B. F. (2020). *Transforming prejudice: Identity, fear, and transgender rights*. Oxford University Press.
- Miller, L. R., & Grollman, E. A. (2015). The social costs of gender nonconformity for transgender adults: Implications for discrimination and health. *Sociological Forum*, 30(3), 809–831. https://doi.org/10.1111/sof.12193
- Milkman, K. L., Akinola, M., & Chugh, D. (2015). What happens before? A field experiment exploring how pay and representation differentially shape bias on the pathway into organizations. *Journal of Applied Psychology*, 100(6), 1678–1712. https://doi.org/10.1037/apl0000022
- Nadal, K. L., Skolnik, A., & Wong, Y. (2012). Interpersonal and systemic microaggressions toward transgender people: Implications for counseling. *Journal of LGBT Issues in Counseling*, 6(1), 55–82. https://doi.org/10.1080/15538605.2012.648583
- Neelon, B., & O’Malley, A. J. (2019). Two-part models for zero-modified count and semicontinuous data. In *Health Services Evaluation* (pp. 695–716). Springer US. https://doi.org/10.1007/978-1-4939-8715-3_39
- Norton, A. T., & Herek, G. M. (2013). Heterosexuals’ attitudes toward transgender people: Findings from a national probability sample of U.S. adults. *Sex Roles*, 68(11–12), 738–753. https://doi.org/10.1007/s11199-011-0110-6
- Palomares, N. A. (2009). Women are sort of more tentative than men, aren’t they?: How men and women use tentative language differently, similarly, and counterstereotypically as a function of gender salience. *Communication*

- Research*, 36(4), 538–560. <https://doi.org/10.1177/0093650209333034>
- Perez-Arche, H., & Miller, D. J. (2021). What predicts attitudes toward transgender and nonbinary people? An exploration of gender, authoritarianism, social dominance, and gender ideology. *Sex Roles*, 85(3–4), 172–189. <https://doi.org/10.1007/s11199-020-01212-3>
- Reiman, A.-K., Ocasio, T. S., & Mezzapelle, J. L. (2023). How cisgender people define “transgender” is associated with attitudes toward transgender people. *Archives of Sexual Behavior*, 52(3), 991–1007. <https://doi.org/10.1007/s10508-022-02454-w>
- Reid, S. A., & Ng, S. H. (1999). Language, power, and intergroup relations. *Journal of Social Issues*, 55(1), 119–139. <https://doi.org/10.1111/0022-4537.00108>
- Riordan, M. A., & Glikson, E. (2020). On the hazards of the technology age: How using emojis affects perceptions of leaders. *International Journal of Business Communication*, article 2329488420971690. <https://doi.org/10.1177/2329488420971690>
- Riva, P., & Eck, J. (2016). The many faces of social exclusion. In P. Riva & J. Eck (Eds.), *Social exclusion: Psychological approaches to understanding and reducing its impact (1st ed.)* (pp. ix–xv). Springer International Publishing. <https://doi.org/10.1007/978-3-319-33033-4>
- Rudert, S. C., Möring, J. N. R., Kenntemich, C., & Büttner, C. M. (2023). When and why we ostracize others: Motivated social exclusion in group contexts. *Journal of Personality and Social Psychology*, 125(4), 803–826. <https://doi.org/10.1037/pspi0000423>
- Ruscher, J. (2017). Prejudiced communication. *Oxford Research Encyclopedia of Communication*. <https://doi.org/10.1093/acrefore/9780190228613.013.419>
- Szesny, S., Nater, C., & Eagly, A. H. (2019). Agency and communion: Their implications for gender stereotypes and gender identities. In B. Wojciszke & A. Abele (Eds.), *Agency and communion in social psychology* (pp. 103 – 116). Routledge. <https://doi.org/10.4324/9780203703663>
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797–811. <https://doi.org/10.1037/0022-3514.69.5.797>
- Stryker, S. (2017). *Transgender history: The roots of today’s revolution (2nd ed.)*. Seal Press.
- Sue, D. W., & Spanierman, L. (2020). *Microaggressions in everyday life (2nd ed.)*. John Wiley & Sons, Inc.
- Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology*, 29(1), 24–54. <https://doi.org/10.1177/0261927X09351676>
- Verbeek, M. J. A., Hommes, M. A., Stutterheim, S. E., van Lankveld, J. J. D. M., & Bos, A. E. R. (2020). Experiences with stigmatization among transgender individuals after transition: A qualitative study in the Netherlands. *Interna-*

- tional Journal of Transgender Health*, 21(2), 220–233. <https://doi.org/10.1080/26895269.2020.1750529>
- Van Swol, L. M., Ahn, P. H., Prah, A., & Gong, Z. (2021). Language use in group discourse and its relationship to group processes. *SAGE Open*, 11(1), 1–17. <https://doi.org/10.1177/21582440211001852>
- von Hippel, W., Sekaquaptewa, D., Vargas, P. T., (2008). Linguistic markers of implicit attitudes. In R. E. Petty, R. H. Fazio, & P. Brinol (Eds), *Attitudes: Insights from the new implicit measures* (pp. 429–458). Psychology Press. <https://doi.org/10.4324/9780203809884>
- Wesselmann, E. D., DeSouza, E. R., AuBuchon, S., Bebel, C., & Parris, L. (2022). Investigating microaggressions against transgender individuals as a form of social exclusion. *Psychology of Sexual Orientation and Gender Diversity*, 9(4), 454–465. <https://doi.org/10.1037/sgd0000513>
- Wesselman, E D., Grzybowski, M. R., Steakley-Freeman, D. M., DeSouza, E. R., Nezlek, J. B., & Williams, K. D. (2016). Social exclusion in everyday life. In P. Riva & J. Eck (Eds.), *Social exclusion: Psychological approaches to understanding and reducing its impact (1st ed.)* (pp. 3–23). Springer International Publishing AG. <https://doi.org/10.1007/978-3-319-33033-4>
- Wojciszke, B., Abele A. E., & Baryl W. (2009). Two dimensions of interpersonal attitudes: Liking depends on communion, respect depends on agency. *European Journal of Social Psychology*, 39, 973–990. <https://doi.org/10.1002/ejsp.595>
- Wood, W. & Eagly, A. H. (2009). Gender identity. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 109–125). Guilford Press.
- Worthen, M. G. F. (2021). Why can't you just pick one? The stigmatization of non-binary/genderqueer people by cis and trans men and women: An empirical test of norm-centered stigma theory. *Sex Roles*, 85(5–6), 343–356. <https://doi.org/10.1007/s11199-020-01216-z>
- Young, A. M. & Rains, S.A. (2006). A sign of the times: An analysis of organizational members' email signatures. *Journal of Computer-Mediated Communication*, 11(4), 1046–1061. <https://doi.org/10.1111/j.1083-6101.2006.00307.x>