

ARTICLE OPEN ACCESS

What Does Fear Sound Like? Voice Pitch, Cognitive Frames, and Perceptions of Domestic Abuse Victimization

Matthew Hunt

University of Southampton, Southampton, UK

Correspondence: Matthew Hunt (m.c.hunt@soton.ac.uk)

Received: 9 February 2024 | **Revised:** 15 September 2025 | **Accepted:** 16 September 2025

Funding: The author received no specific funding for this work.

Keywords: gender | perception | pitch | sexuality | victim

ABSTRACT

Sociolinguists emphasize the context-dependence of social meanings activated by linguistic variation. I examine this dynamic using the Goffmanian concept of *frames*, focusing on the intersection of gender and sexuality. More specifically, I explore pitch variation as an index of femininity in the domestic abuse victimization frame. People expect the “ideal victim” to be weak, blameless, and, importantly, female. Using an experiment, I show that female victims who diverge from this expectation by having a lower Voice Pitch are perceived as less scared and less rational than their higher pitched counterparts. This effect only emerges for victims in heteronormative relationships, however, with Voice Pitch becoming “indexically inoperative” in cases where a victim already diverges from stereotypical expectations of a victim by having a Female Abuser. I discuss this finding in relation to established dynamics in sociolinguistic perception and to domestic abuse policing.

1 | Introduction

In our daily interactions, we navigate the world through frames—cognitive structures that organize our experiences and shape our perceptions of reality (Goffman 1974). These frames, deeply embedded in cultural norms, influence how we interpret people and their actions, particularly in relation to gender and power dynamics. Patriarchy, the gender binary, and heteronormativity shape our expectations of how individuals should behave (Connell 2005). Patriarchy frames women as subordinate, nurturing, and passive, and when they deviate from these roles, they are often penalized (Ridgeway and Correll 2004). The gender binary reinforces this, categorizing individuals into strict male or female roles with associated behaviors, leaving little room for variation (Butler 1990). Women who exhibit masculine traits may be seen as less authentic in their femininity. Finally, heteronormativity enforces the idea that heterosexual relationships are the default and that gender roles in relationships should conform

to associated traditional masculine and feminine dichotomies. Rich's (2007) concept of compulsory heterosexuality takes this further, arguing that heterosexuality is not just assumed as the norm but is actively enforced through societal structures and cultural expectations. This compulsion reinforces traditional gender roles within heterosexual relationships, shaping not only how relationships are formed but also how power dynamics within them are understood.

These different frames work together to influence how we perceive and evaluate women in specific social roles. One such role is that of a victim. Victimhood is not an objective phenomenon, but rather, it is a status granted to a person based on their adherence to those characteristics that constitute “the ideal victim” (Christie 1986). The “ideal victim” is, according to Christie (1986), weak, blameless, and female. When potential victims diverge from the “ideal victim” frame, their victimhood is delegitimized. One of Christie's examples is the historical delegitimization of married

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Author(s). *Journal of Sociolinguistics* published by John Wiley & Sons Ltd.

women as victims of domestic abuse; due to a historical belief that these women have willingly entered into contractually based relationships, Norwegian police attending such incidents used to refer to them as cases of “husbråk” (*noise in the house*) (Christie 1986, 14). Similarly, when women do not adhere to patriarchal stereotypes of passivity, for example, by fighting back against abuse, their credibility as victims is sharply questioned (Goodmark 2008). Finally, male victims of domestic abuse are often too embarrassed to seek help (Drijber et al. 2013), likely due to their non-adherence to the “ideal victim” stereotype as framed through the lens of heteronormativity and via broader norms of masculinity.

The victim frame is normative, and thus it “imposes normative limits on victims’ experience and behaviours” (Bosma et al. 2018, 37). Victims of particular crimes are expected to behave a certain way because of who they are as individuals but also because of who the offenders are and what their relationships are to those victims; in parallel to the social construction of victimhood, “ideal victims need—and create—ideal offenders” (Christie 1986, 25), and victims with “non-ideal” offenders are delegitimized. For example, with men heavily overrepresented among the perpetrators of domestic abuse (Office for National Statistics 2020)—and therefore broadly considered the most typical offenders—women with Female Abusers are often perceived as less believable, and their allegations are taken less seriously (Poorman et al. 2003). Under the shadow of compulsory heterosexuality (Rich 2007), female-on-female domestic abuse is delegitimized for deviating from the heteronormative expectations about abusive relationships, with many incorrectly assuming such relationships to be mutually combative, particularly if the victim in question displays more stereotypically masculine traits (Little and Terrance 2010).

Another behavior on which gender-normative limits are often imposed is language. More broadly, gendered expectations, rooted in societal norms, prescribe certain ways of speaking that align with traditional views of masculinity and femininity, including, for example, women historically adhering more closely to the standard variety of a language than men (Trudgill 1983). These gender norms create a framework within which individuals are judged, leading listeners to perceive language through a gendered lens (Strand and Johnson 1996). This gendered framing of language reinforces existing stereotypes and constrains how individuals can express themselves within different frames. We see this, for example, in work by Holmes and Schnurr (2005) on humor as a politeness strategy for women in the workplace, with different strategies being employed depending on the specific masculine interactional norms involved.

Language is also subject to a gendered lens within the victim frame, with a particular focus on “powerful” and “powerless” speech styles. In the broader legal context, greater credence is given to “those who speak in a powerful and assertive style. Conversely, those who speak in a powerless style...marked by deference and imprecision, are less likely to be believed” (Conley and O’Barr 2005, 75 in Hildebrand-Edgar and Ehrlich 2017, 90). When examining victim testimony in a Canadian rape trial, Hildebrand-Edgar and Ehrlich (2017) found that the female victim’s credibility was, in fact, undermined when using a more powerful speech style through which she was associated with

traits such as confidence and assertiveness (cf., Lakoff 1973 on the “double bind”). These traits are incompatible with that of the weak “ideal victim” (Christie 1986) and, moreover, may have activated sexual stereotypes about female victims of male rape. This dynamic can be understood through Ochs’ (1992) notion of indirect indexicality: The victim’s linguistic style does not directly index her credibility or lack thereof, but rather stances such as confidence, authority, and control. Within the courtroom frame, these stances are ideologically associated with masculinity and agency, rendering them incongruent with the expected attributes of a rape victim. In this way, indirect indexicality explains how ostensibly neutral linguistic cues become linked to broader social meanings of gender and victimhood, ultimately shaping evaluations of credibility.

Gendered performance is produced in a “highly rigid regulatory frame” (Butler 1990, 32), and, as a result, there is a subset of linguistic enactments of gender that are considered appropriate in a given frame. This includes the deployment of individual linguistic variables with gendered distributions in production. In their experimental study of uptalk (i.e., declaratives with rising intonation) in a rape trial setting, Levon and Ye (2019) found that, while the use of uptalk enhanced the perceived likeability and trustworthiness of a male defendant, the female claimant received no such enhancement when using the same variable. This was in contrast with a similar experiment in which the same voices were used as expert witnesses in a medical malpractice trial context. In this less gendered context, the use of uptalk lowered perceived confidence for both the male and female speakers. In the gendered victim frame, uptalk was rendered “indexically inoperative” (Levon and Ye 2019, 142) for the female speaker, that is, it ceased to function as an indicator of confidence.

In the current study I examine an interpretive frame in which ideologies around both gender and sexuality have the potential to intersect to undermine the evaluation of a victim: coercive control. While the rape trial setting has clearly been fruitful ground for examining how women’s language is constrained and regulated in specific contexts (Hildebrand-Edgar and Ehrlich 2017; Levon and Ye 2019), it is constrained by heteronormativity due to the violent nature of the crime. Coercive control, on the other hand, involves behaviors such as financial control and monitoring movements and communications. As a result, despite coercive control being significantly more prevalent among male offenders and female victims, people’s understandings of the associated risks tend to be conceptually gender-blind (Barlow and Walklate 2021). That is, people see men and women as equally capable of coercive control even though the statistics tell a very different story.

Using an experimental approach similar to Levon and Ye (2019), I examine the effect of pitch variation on perceptions of a female victim of coercive control with either a male or Female Abuser. Voice Pitch can express fear and distress (Sobin and Alpert 1999), but also gender expression (Feinberg et al. 2005) and sexuality (Levon 2007; Cuddy 2019). It is also subject to frame-specific interpretations, such as in the context of men’s football commentary (Hunt et al. in press.).

Given that victims are socially constructed as extensions of their abusers (Christie 1986), we might expect the presence of a

“non-ideal” Female Abuser to shape the potential for Voice Pitch to influence how a victim is perceived. For victims with “ideal” Male Abusers, increases in Voice Pitch should straightforwardly predict increased sympathy for a female victim due to the association of higher pitch with a key characteristic of the “ideal” victim: femaleness. For victims with “non-ideal” Female Abusers, however, their existing status as “non-ideal” victims might shape the potential for increased pitch to influence the sympathy they are afforded. Examining this dynamic will shed light on how cognitive frames can shape our perception of gender and sexuality in combination.

2 | Gendered Stereotypes and Gendered Frames

It is widely recognized that linguistic and social information are stored together in cognitive memory, allowing individuals to draw upon both types of information simultaneously when processing language. This process is central to the concept of sociolinguistic indexicality, where specific linguistic features serve as indexes that point to broader social meanings and identities (Silverstein 2003; Eckert 2008). These linguistic features are imbued with meaning potentials that are activated in particular social contexts, allowing listeners to infer information about an individual based on their language use. This has been evidenced in numerous studies that have linked broader accents (Lambert et al. 1960) and individual sociolinguistic variables (Campbell-Kibler 2005, *inter alia*) with context-dependent social meanings using experimental methods.

There is strong evidence that social information can influence how listeners react to linguistic stimuli. A classic example is the work of Rubin (1992) who elicited evaluations of a university lecturer’s voice presented either with an Asian face or a white face, with results suggesting that listeners perceived the same voice as significantly more accented when presented alongside the Asian face. Effectively, when listeners are primed to associate a voice with a particular social meaning, that social meaning can be activated *a priori*, influencing impressions and evaluations of that voice that do not necessarily correspond with reality but rather reflect stored stereotypes (Macrae and Bodenhausen 2001; cf., Inoue 2003 on “indexical inversion”).

This dynamic also plays out in the context of gender and gendered language. Gendered expectations about language can shape linguistic perception of even the smallest units of language. Using a phoneme identification task, Strand and Johnson (1996) showed that perceptions of /s/ phonemes—often more fronted by women than by men—can depend on the gender typicality of a voice, with listeners categorizing the same ambiguous /s/ tokens differently when they heard from either a typically woman-like or typically man-like voice. This finding underscores how deeply entrenched gendered expectations are in the processing of linguistic cues, influencing even the most granular aspects of language perception.

Perceptions of gender and gender typicality via language are inextricably linked to perceptions of sexuality, driven largely by the stereotype that gay men tend to sound less masculine than straight men and gay women tend to sound less feminine than straight women (Munson 2007). Listeners are reasonably reliable

at associating the use of particular linguistic features with a speaker’s sexual orientation, for example, using the frequencies of different vowel productions as cues (Munson, McDonald et al. 2006). This effect extends to the kind of social priming effects identified by Strand and Johnson (1996). Using a similar task, Munson, Jefferson et al. (2006) found that for female voices, listeners provided different responses to a lesbian/bisexual-sounding voice and a heterosexual-sounding voice, showing that expectations about gender and sexuality can intersect in shaping expectations about language.

Indeed, linguistic variables relating to gender and sexuality have the potential to combine to influence speaker evaluation in interesting ways. In an experimental perception study, Levon (2014) varied the presence of multiple sociolinguistic variables in a man’s voice, including Voice Pitch and sibilance, a strong perceptual indicator of gayness in men’s voices (Munson, McDonald et al. 2006). In combination, high Voice Pitch and sibilance were associated with higher ratings of *gay* and *not masculine*, although only for a specific subset of participants with strong pre-existing beliefs in traditional male gender roles, as measured by a separate survey. Levon’s (2014) results suggest that attitudinal differences in how listeners align with gender-normative stereotypes can constrain the indexing of gender and sexuality by linguistic variables.

Expectations based on gender also frequently depend on the interpretive frame in which gender is enacted. This has been shown in the rape trial context (Levon and Ye 2019), but also more recently in the context of men’s football commentary, a domain in which women’s voices are openly criticized in the media, with a particular focus on women’s voices being too high. Using experimental methods, Hunt et al. (*in press.*) tested the effect of pitch variation on evaluations of football commentators. Using one male and one female voice actor to re-record real commentary, Hunt et al. (*in press.*) digitally manipulated the recordings to raise the pitch of the male voice and lower the pitch of the female voice. While previous studies had found that a lower pitch can boost women’s perceived competence, this does not occur in the football commentary frame. Rather, what becomes relevant to listeners is how friendly and attractive the woman sounds, with a lower pitch leading to lower ratings on these evaluative dimensions. The result is a double bind in which “women are penalised for conforming to ‘appropriate’ gendered linguistic norms, yet also penalised for straying from those norms if their linguistic behaviour is less gender-typical” (Hunt et al. *in press*, 26; cf., Lakoff 1973).

Gendered stereotypes and the frames through which they are activated play a crucial role in shaping linguistic perceptions, creating complex dynamics where both conformity to and deviation from gender norms can lead to negative evaluations. These intertwined processes highlight the need to critically examine the impact of gendered expectations on linguistic judgments across social contexts.

3 | Pitch as a Sociolinguistic Cue

The variable of interest in the current study is also Voice Pitch. Pitch is the perceptual correlate of fundamental frequency (F0), a

measure of the rate at which the vocal folds open and close during phonation. People's voices often display a higher F0 in moments of distress (Banse and Scherer 1996). Perceptually, higher pitch is strongly associated with fear. In an experiment testing for acoustic correlates of various emotions, Sobin and Alpert (1999) found that increases in pitch and decreases in volume were associated with fear. However, fear is not the only meaning indexed by high pitch. According to Ohala's (1984) "frequency code," higher F0 more generally signals smallness, submissiveness, and non-threat, associations that can be extended to qualities such as cuteness and playfulness (Puzar and Hong 2018). These meanings are not mutually exclusive: higher pitch can simultaneously convey distress and evoke culturally salient stereotypes of femininity, youth, and vulnerability.

Pitch is therefore also a resource for both expressing and identifying a speaker's gender and sexual orientation. Due to differences in larynx sizes, *cis* women typically speak with a higher F0 than *cis* men. Unsurprisingly, however, there is a significant amount of pitch diversity within these two groups, with differences between average pitch in men and women largely driven by sociocultural factors (Zimman 2018). As a result, Voice Pitch can influence how speakers are perceived with respect to masculinity and femininity (Feinberg et al. 2005). Voice Pitch also functions as a cue to other gendered traits, including attractiveness (Feinberg et al. 2008) and likeability (Krahé et al. 2021).

Voice Pitch is also a somewhat reliable cue to sexuality in women. While neither Moonwomon-Baird (1997) nor Sulpizio et al. (2020) found a correlation between perceived sexual orientation and the acoustic attributes of the gay voices, Munson, McDonald et al. (2006) and Barron-Lutzross (2015) both found correlations between lower F1 pitch and a lower perceived heterosexuality rating for female speakers. In British English, Cuddy (2019) found that digitally lowering the F0 of women's voices led to increased ratings of "homosexual" and lower ratings of "feminine" by both LGBTQ+ and straight listeners.

In summary, although a higher pitch should straightforwardly predict higher perceptions of fear and distress, it also carries broader associations with smallness, submissiveness, and cuteness (Ohala 1984; Puzar and Hong 2018). These qualities overlap with stereotypes linked to femininity and heterosexuality, which align with the stereotype of the "ideal victim" (Christie 1986). We might therefore expect a higher pitch to predict higher ratings on scales that lend legitimacy to a victim's allegation such as perceived vulnerability, rationality, and level of danger. This ought to be most true in contexts where the victim's legitimacy is not otherwise undermined by other factors such as their abuser's gender. When a female victim has a "non-ideal" Female Abuser, however, this might distort the potential for pitch to index femininity and, in turn, it is potential to signal heightened rationality, vulnerability, and danger.

I therefore proposed the following hypotheses (H1–H4) about how Voice Pitch and Abuser Gender would function in my experiment:

Hypothesis 1. *Participants will rate a victim with a Male Abuser as more vulnerable, rational, and in danger than one with a Female Abuser.*

TABLE 1 | Experimental conditions, fully crossed for Voice Pitch and Abuser Gender.

		Abuser Gender	
		Male	Female
Pitch	High	High Male	High Female
	Baseline	Baseline Male	Baseline Female
	Low	Low Male	Low Female

Hypothesis 2. *Participants will rate a victim with a higher Voice Pitch as more scared and less calm than one with a lower Voice Pitch.*

Hypothesis 3. *If a victim has a Male Abuser, participants will rate that victim as more vulnerable, rational, and in danger if they have a higher Voice Pitch than one with a lower Voice Pitch.*

Hypothesis 4. *If a victim has a Female Abuser, participants' ratings for vulnerable, rational, and in danger in each respective pitch condition will be lower than if a victim has a Male Abuser.*

Hypothesis 1 stems from previous findings that women with Female Abusers are taken less seriously than those with Male Abusers (Poorman et al. 2003). Hypothesis 2 is straightforwardly predicted based on the established positive correlation between high Voice Pitch and perceptions of fear and distress (Sobin and Alpert 1999). Hypothesis 3 is predicted due to the tendency for high Voice Pitch to be perceived as a strong index of femininity and heterosexuality (Feinberg et al. 2005; Cuddy 2019) and due to the abusive relationship in question (male–female) conforming to listener expectations about the "ideal" victim and abuser (Christie 1986). A high Voice Pitch in this condition should lead to victims to be perceived as more in-line with the stereotype of the "ideal victim" and be taken more seriously than their low-pitched counterparts. Hypothesis 4 is predicted from the additive effects of Hypotheses 2 and 3. For example, having a "non-ideal" Female Abuser and a "non-ideal" low-pitched, non-feminine voice should result in these victims being perceived as the least rational, vulnerable, and in danger.

4 | Methods

The current study employed a matched-guise test (Lambert et al. 1960) in which participants heard a scripted allegation of domestic abuse in one of six experimental conditions following a 2×3 between-subjects design (see Table 1). The two-level factor was Abuser Gender (Male, Female) and refers to the gender of the pronouns used by the victim to refer to their abuser. The three-level factor was Pitch (Baseline, High, Low) and refers to artificial pitch manipulations performed on the original (baseline) recording to separately raise (high) and lower (low) its pitch.

4.1 | Stimuli

The same monologue was used across the six experimental conditions. The monologue was written from the perspective of a person reporting an allegation of coercive control to the police (see Appendix A). The passage includes examples of

coercive control outlined in legal guidance provided by the Crown Prosecution Service (CPS) (2023), including isolation from friends and family, monitoring of movements, and controlling spending. The passage was recorded in a single session in a quiet room using a lapel microphone by a female voice actress with a standard Southern British English accent.

The actress recorded versions of the monologue using male and female pronouns to refer to the abuser. A version of the male-abuser recording was then manually edited in Praat (Boersma 2019) to splice in the female pronouns from the female-abuser recording, resulting in two recordings that were identical in every aspect—including accent and intonation—except for these pronouns. These two recordings were then manipulated in audacity using the change pitch function, first by raising the overall pitch by one semitone, then by dropping the overall pitch by one semitone. The resulting six recordings exhausted every possible combination of Voice Pitch (Baseline, High, Low) and Abuser Gender (Male, Female).

The recordings were then normed. The recordings were first normed for naturalness by 55 participants on scales from 0 to 100, with no significant differences between conditions emerging. The recordings were then normed to verify the perceptibility of pitch differences. A total of 51 participants listened to exactly two of the three male-abuser recordings and indicated which recording sounded more “high-pitched” than the other. In each pairing, the pitch manipulations between the different conditions were perceptible for most but not all participants, suggesting the differences to be relatively subtle.

4.2 | Procedure

The task was administered on Qualtrics (Provo, UT). Participants were informed that they would be listening to a recording of a 21-year-old woman reporting a crime to the police before answering a series of questions about their “impression” of that woman. Participants could listen to the recording repeatedly before starting the question section. The test questions required participants to “evaluate the person you just heard using the following descriptions” using a series of 10-point semantic differential scales, including five test scales and two dummy scales (*intelligent* and *tall*). The test scales were *vulnerable*, *scared*, *in danger*, *calm*, and *rational*.

After the test questions, participants completed the Ambivalent Sexism Inventory (ASI) (Glick and Fiske 1996), the Domestic Violence Myth Acceptance Scale (DVMAS) (Peters 2008), and the Balanced Inventory of Desirable Responding (BIDR-16) (Hart et al. 2015). The ASI and DVMAS surveys were included to test for the effects of pre-existing ideologies about gender and domestic violence, whereas the BIDR-16 survey tests for the effects of socially desirable responding. Notably, the DVMAS exclusively includes statements depicting Male Abusers and female victims. Participants also provided basic demographic information.

4.3 | Participants

A total of 300 participants were recruited, paid £2.25 via Prolific Academic (Prolific 2022), and equally divided between the 6

experimental conditions. Two participants were excluded for failing a catch trial, leaving 298 participants (151 M, 146 F; 1 non-binary) available for analysis. The sample had a mean age of 44.33, ranging from 20 to 82. Overall, 98% of participants had never worked as police officers, whereas 16.4% of participants had previously been victims of domestic abuse, with 3.7% declining to answer. A total of 273 identified as white, 11 as Black, 9 as Asian, and 3 as multiracial, with 2 declining to answer. A total of 163 had a bachelor’s degree or higher, 48 had vocational qualifications, and 87 only attended secondary school. All participants were born and are currently residing in the United Kingdom.

5 | Results

The results will be presented in two parts. First, I will detail dimension reduction of the ASI, DVMAS, and BIDR-16 surveys using factor analysis. I will then present the results of ordinal logistic regression on the different semantic differential scales. All analyses were conducted in R (R Core Team 2022).

5.1 | Dimension Reduction

Factor analysis was conducted using the *psych* package (Revelle 2022) using an Oblimin rotation and polychoric correlations to account for the ordinal response variables. A *new* factor indicates a new predictor variable that aggregates across responses for the different covarying statements. All new factors and the dimensions of which they consist are included in Appendix B. The threshold for inclusion as a new factor was at least one eigenvalue, indicating that this factor has more predictive power than any single variable alone (Zwick and Velicer 1986).

For the ASI, two new factors were identified. These factors mapped onto the statements for BENEVOLENT SEXISM and HOSTILE SEXISM, respectively. For the DVMAS, three new factors were identified, which will henceforth be referred to as BLAMING WOMEN, DOWNPLAYING FREQUENCY AND SEVERITY, and WOMEN RETURNING TO ABUSERS. BLAMING WOMEN consisted of eight statements concerning how much blame women should take as victims of domestic violence. DOWNPLAYING FREQUENCY AND SEVERITY consisted of seven statements roughly corresponding to a theme of downplaying the frequency of domestic abuse and the level responsibility attributed to abusers. WOMEN RETURNING TO ABUSERS consisted of three statements concerning a lack of sympathy for women who return to abusive partners.

For the BIDR-16, three new factors were identified, which will henceforth be referred to as IMPRESSION MANAGEMENT, SELF-DECEPTIVE ENHANCEMENT 1, and SELF-DECEPTIVE ENHANCEMENT 2. IMPRESSION MANAGEMENT consisted of five statements from the Impression Management dimension. SELF-DECEPTIVE ENHANCEMENT 1 consisted of four statements from the Self-Deceptive Enhancement dimension. SELF-DECEPTIVE ENHANCEMENT 2 consisted of two statements from the Self-Deceptive Enhancement dimension. Although the remaining Impression Management and Self-Deceptive Enhancement dimensions mapped onto a fourth factor, the lack of a clear interpretation of these dimensions led to this factor being dropped.

5.2 | Ordinal Regression: Semantic Differential Scales

Ordinal regression was conducted using cumulative link models in the *ordinal* package (Christensen 2022). Similar to linear regression models, cumulative link models assume a dependent variable to be meaningfully ordered, but not continuous, as is the case with Likert scales. Separate models were run for each of the five semantic differential scales. Full models included the following main effect predictors:

- VOICE PITCH (BASELINE, HIGH, LOW)
- ABUSER GENDER (MALE, FEMALE)
- PARTICIPANT GENDER (MALE, FEMALE)
- PARTICIPANT AGE (CENTERED)
- PARTICIPANT SEXUALITY (HETEROSEXUAL, BISEXUAL, GAY, QUEER, OTHER)
- PARTICIPANT VICTIM (HAVE YOU EVER BEEN A VICTIM OF DOMESTIC ABUSE? NO, RATHER NOT SAY, YES)
- HOSTILE SEXISM, BENEVOLENT SEXISM (centered)
- BLAMING WOMEN, DOWNPLAYING FREQUENCY/SEVERITY, AND WOMEN RETURNING TO ABUSERS (centered)
- IMPRESSION MANAGEMENT, SELF-DECEPTIVE ENHANCEMENT 1, SELF-DECEPTIVE ENHANCEMENT 2 (centered)

Three- and two-way interactions with Voice Pitch and Abuser Gender were included for all other factors. Due to low numbers of participants in all categories except for HETEROSEXUAL, Participant Sexuality was excluded from interactions due to issues with model convergence; these participants' data were nonetheless included. Both Abuser Gender and Participant Gender were sum-coded, with all other categorical predictors treatment-coded. Full models were reduced via stepwise regression using the `step()` function in base R (R Core Team 2022). Only those effects that reached a threshold of $p < 0.05$ in the final models are reported here. To model participant gender, results for the single non-binary participant were removed. I will begin by discussing main and two-way interaction effects for Voice Pitch and Abuser Gender, before discussing interactions involving survey factors and participant demographics.

5.3 | Voice Pitch and Abuser Gender

First, there were no significant main or two-way interaction effects for Voice Pitch and Abuser Gender on scales for *vulnerable* or *in danger*. There were, however, significant main effects for Male Abuser on scales for *calm* ($estimate = 0.394$) and *rational* ($estimate = 0.743$), such that a victim with a Male Abuser was perceived to be calmer and more rational than one with a Female Abuser, regardless of pitch differences. Finally, there were significant two-way interactions for Male Abuser and low pitch on scales for *scared* ($estimate = -0.810$) and *rational* ($estimate = -0.753$). For *rational*, although victims with Male Abusers were considered more rational overall, this effect was reversed when the victim's Voice Pitch was lowered. That is, for victims with Male Abusers, a lower Voice Pitch led listeners to perceive them as less rational compared to the baseline. The same was true for *scared*, although without a main effect for Abuser

Gender. Although victims with Male and Female Abusers were perceived to be equally as scared overall, the victims with Male Abusers could have their perceived level of fear decreased if they had a lower Voice Pitch.

To visualize the estimated differences on the scales of *rational* and *scared* across Abuser Gender and Voice Pitch conditions, model coefficients were extracted from the cumulative link models. Pairwise contrasts for key comparisons were computed using a linear combination of coefficients. Standard errors were derived using the variance sum formula, and 95% confidence intervals were calculated. The results for *scared* and *rational* are visualized in the coefficient plots in Figures 1 and 2, where points represent estimated differences, and horizontal lines indicate confidence intervals. Positive estimates indicate that the first condition in the comparison (e.g., male high) was associated with a higher likelihood of the speaker being perceived as scared or rational relative to speaker in the second condition (e.g., male baseline), whereas negative estimates suggest the opposite effect.

These results provide only partial support for certain experimental hypotheses. Regarding Hypothesis 1, although victims with Male Abusers were not perceived to be more vulnerable or in danger than those with female victims, they were perceived to be calmer and more rational. Although the effect for perceived rationality was predicted based on the "ideal victim" frame (Christie 1986), the same was not true for perceived calmness. Responses on these scales may have simply co-varied, however, with "rational" victims perceived to be calm in delivering their allegations. Regarding Hypothesis 2, Voice Pitch did not straightforwardly predict perceptions of fear and calmness across conditions. Rather, it was only for the victim with a Male Abuser that pitch variation affected ratings, and only on the *scared* and *rational* scales.

Regarding Hypotheses 3 and 4, some support is provided on the *rational* scale, but not on the *vulnerable* or *in danger* scales. For a victim with a Male Abuser, a lower Voice Pitch led participants to view the victim as less rational compared to the baseline. For a victim with a Female Abuser, however, pitch had no effect on perceived rationality. Rather than the additive effect of a "non-ideal" Female Abuser and a "non-ideal" victim voice leading to lower ratings than all other conditions, it appears instead that the presence of a "non-ideal" Female Abuser may have precluded Voice Pitch from influencing responses. That is, the concept of a Female Abuser may have been sufficiently salient so as to render Voice Pitch indexically inoperative in the manner described by Levon and Ye (2019, 142). I will return to this in the discussion.

5.4 | Survey Factors and Demographics

As the model outputs show (see Tables 2–6), survey factors and participant demographics moderated many of the effects involving Voice Pitch and Abuser Gender. In many cases, these effects are complex to interpret, but for the ASI, DVMAS, and participant demographics, a consistent picture does emerge. The BIDR_16 factors were, unfortunately, too difficult to interpret and occasionally contradictory when included in three-way interactions, so they will not be discussed further.

TABLE 2 | Model output for *calm*, excluding non-significant effects and interactions.

Predictor	Estimate	Std. error	z value	Pr(> z)
Male Abuser	0.394	0.199	1.980	0.048
Women Returning To Abusers	0.268	0.134	2.000	0.046
Impression Management	0.464	0.220	2.104	0.035
Male Abuser: Blaming Women	−0.432	0.208	−2.077	0.038
Low Pitch: Blaming Women	−0.653	0.310	−2.106	0.035
Low Pitch: Hostile Sexism	−0.694	0.318	−2.181	0.029
Low Pitch: Self-Deceptive Enhancement 1	−0.587	0.274	−2.144	0.032
Male Abuser: High Pitch: Blaming Women	0.607	0.292	2.082	0.037
Male Abuser: High Pitch: Participant Age	−0.620	0.288	−2.153	0.031

TABLE 3 | Model output for *rational*, excluding non-significant effects and interactions.

Predictor	Estimate	Std. error	z value	Pr(> z)
Male Abuser	0.743	0.198	3.743	0.000
Hostile Sexism	0.520	0.235	2.216	0.027
Participant Victim	−2.088	0.616	−3.388	0.001
Male Abuser: Low Pitch	−0.753	0.277	−2.717	0.007
Low Pitch: Hostile Sexism	−1.031	0.320	−3.227	0.001
High Pitch: Benevolent Sexism	0.633	0.301	2.107	0.035
Low Pitch: Self-Deceptive Enhancement 1	−0.626	0.281	−2.229	0.026
Male Abuser: Participant Age	0.408	0.194	2.098	0.036
High Pitch: Participant Victim	3.016	0.817	3.693	0.000
Low Pitch: Participant Victim	1.853	0.891	2.080	0.038
Male Abuser: High Pitch: Impression Management	−0.626	0.298	−2.099	0.036
Male Abuser: High Pitch: Participant Age	−0.647	0.288	−2.248	0.025

TABLE 4 | Model output for *scared*, excluding non-significant effects and interactions.

Predictor	Estimate	Std. error	z value	Pr(> z)
Women Returning To Abusers	−0.426	0.196	−2.177	0.029
Participant Victim: Prefer not to answer	1.180	0.579	2.040	0.041
Male Abuser: Low Pitch	−0.810	0.269	−3.016	0.003
Male Abuser: Impression Management	0.436	0.204	2.135	0.033
High Pitch: Self-Deceptive Enhancement 1	0.811	0.292	2.783	0.005
Low Pitch: Self-Deceptive Enhancement 2	0.639	0.285	2.241	0.025
Male Abuser: Low Pitch: Downplaying Frequency and Severity	−0.635	0.301	−2.110	0.035
Male Abuser: Low Pitch: Women Returning To Abusers	0.601	0.282	2.135	0.033
Male Abuser: High Pitch: Impression Management	−0.619	0.293	−2.111	0.035
Male Abuser: Low Pitch: Self-Deceptive Enhancement 1	−0.589	0.270	−2.177	0.029

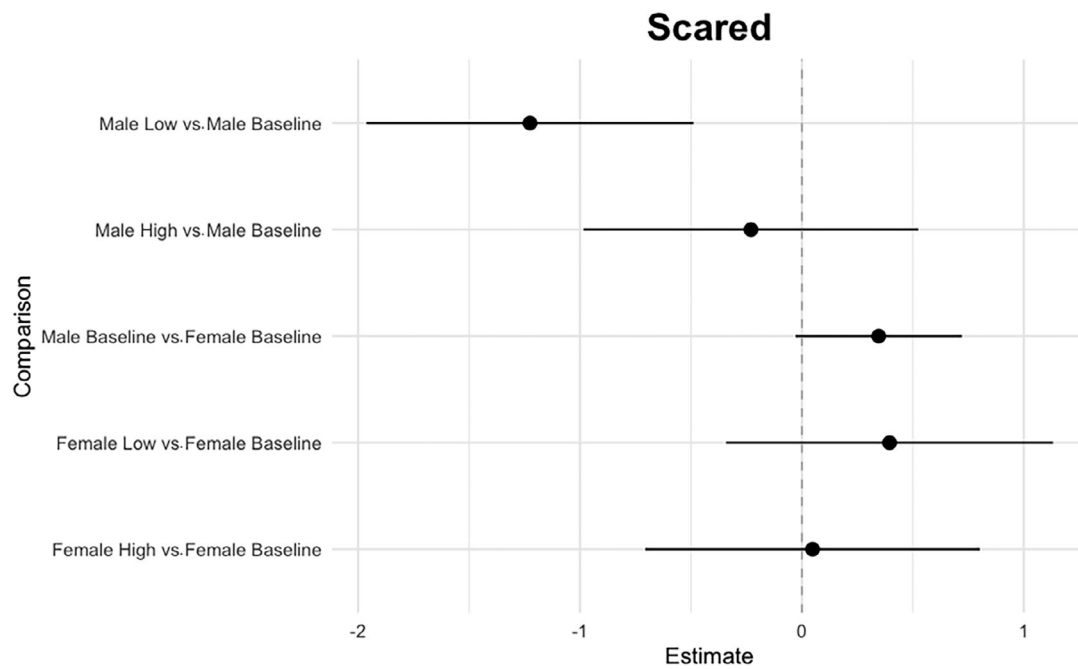


FIGURE 1 | Coefficient plot for scared.

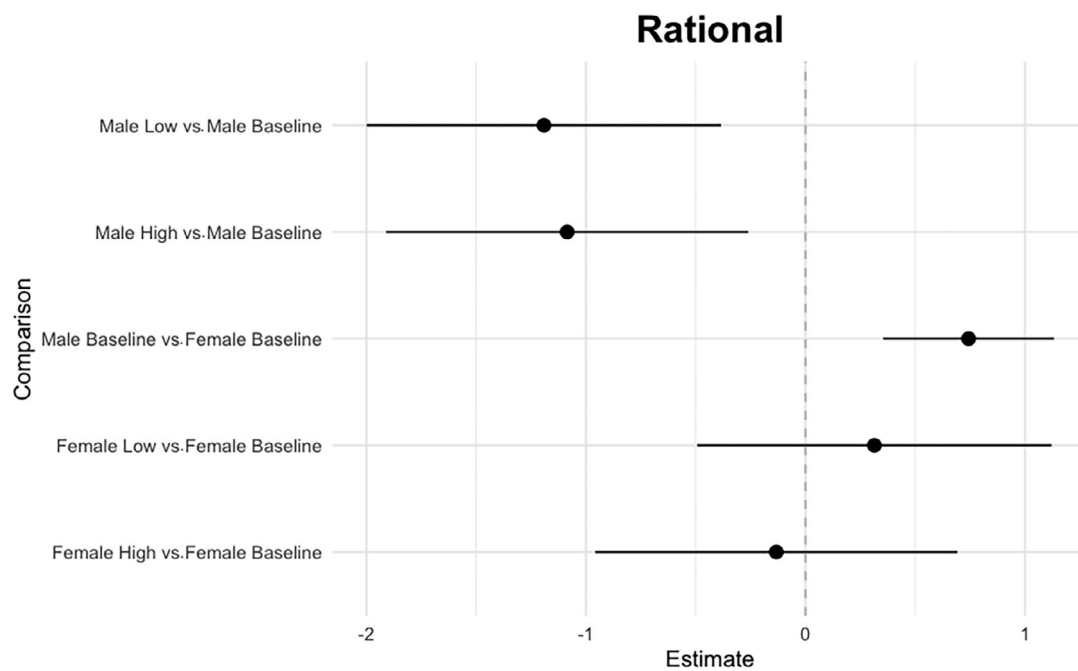


FIGURE 2 | Coefficient plot for rational.

Endorsement of gender-stereotypical views (ASI) strengthened the influence of pitch on evaluations. Participants with high Benevolent Sexism scores tended to perceive the high-pitched victim as more vulnerable and more rational than the baseline. In contrast, those with high Hostile Sexism scores rated the low-pitched victim as less rational and less calm than the baseline. Hostile Sexism also reduced perceptions of danger for the high-pitched victim. In short, the more participants endorsed traditional gender roles, the more strongly pitch shaped their evaluations.

The DVMA factors produced a complex set of effects, but a clear trend emerged: Stronger endorsement of abuse myths was linked to less sympathetic perceptions of the victim. Participants scoring high on WOMEN RETURNING TO ABUSERS rated victims as less scared, less vulnerable, and less in danger, and as calmer. When combined with a high-pitched voice, however, these participants paradoxically rated the victim as more vulnerable and in danger than the baseline. The BLAMING WOMEN factor led participants to downplay victims' danger and vulnerability while amplifying perceptions of calmness, but only when the abuser was male.

TABLE 5 | Model output for *in danger*, excluding non-significant effects and interactions.

Predictor	Estimate	Std. error	z value	Pr(> z)
Women Returning To Abusers	−0.834	0.232	−3.598	0.000
Participant Queer	4.173	1.395	2.992	0.003
High Pitch: Women Returning To Abusers	0.850	0.346	2.459	0.014
Low Pitch: Women Returning To Abusers	0.701	0.336	2.088	0.037
High Pitch: Hostile Sexism	−0.800	0.316	−2.532	0.011
Male Abuser: Impression Management	−0.327	0.119	−2.759	0.006
Low Pitch: Self-Deceptive Enhancement 2	0.647	0.304	2.132	0.033
Male Abuser: Participant Victim	0.686	0.317	2.168	0.030
Male Abuser: High Pitch: Blaming Women	−0.812	0.325	−2.500	0.012
Male Abuser: High Pitch: Women Returning To Abusers	0.763	0.343	2.224	0.026
Male Abuser: High Pitch: Self-Deceptive Enhancement 2	−0.611	0.287	−2.127	0.033

TABLE 6 | Model output for *vulnerable*, excluding non-significant effects and interactions.

Predictor	Estimate	Std. error	z value	Pr(> z)
Women Returning To Abusers	−0.766	0.243	−3.148	0.002
Male Abuser: Women Returning To Abusers	−0.553	0.249	−2.224	0.026
High Pitch: Women Returning To Abusers	0.842	0.341	2.468	0.014
Male Abuser: Impression Management	−0.298	0.119	−2.510	0.012
Low Pitch: Self-Deceptive Enhancement	0.894	0.308	2.901	0.004
Male Abuser: Low Pitch: Blaming Women	−0.810	0.337	−2.403	0.016
Male Abuser: High Pitch: Women Returning To Abusers	0.754	0.344	2.194	0.028
Male Abuser: Low Pitch: Women Returning To Abusers	0.704	0.335	2.099	0.036
Male Abuser: High Pitch: Benevolent Sexism	0.678	0.302	2.243	0.025
Male Abuser: High Pitch: Self-Deceptive Enhancement 1	0.648	0.305	2.128	0.033

Finally, high scores on DOWNPLAYING FREQUENCY/SEVERITY reduced ratings of fear for low-pitched victims with Male Abusers. Together, these results indicate that participants who endorse abuse myths were less inclined to view the victim sympathetically, especially when she had a lower pitched voice or a Male Abuser.

Finally, the demographic information also played a role in shaping perceptions of victims. Notably, participant gender had no effect on ratings on any scale. This finding is surprising given the gendered frame being tested. It may be, however, that either the ASI or the DVMAS accounts for gender more comprehensively. The only significant effect of sexuality was that the two queer participants rated the victim as more *in danger* than heterosexual participants (see Table 5). Older participants tended to see victims with Male Abusers as more rational than those with Female Abusers. But when the victim’s pitch was raised, this pattern flipped: Older participants now rated the high-pitched victim with a Male Abuser as less rational than the high-pitched

victim with a Female Abuser. Participants who had themselves experienced domestic abuse rated victims with Male Abusers as being in greater danger than did those without such experience. On rationality, the pattern was more complex: overall, previous victims rated the speaker as less rational than non-victims. But in both the high- and low-pitch conditions, this pattern reversed—previous victims now rated the manipulated-pitch victim as more rational than non-victims did.

6 | Discussion and Conclusions

The aim of this study was to examine the ways in which ideologies linked to gender and sexuality can intersect to shape listeners’ perceptions in a specific interpretive frame. As people navigate the world, they organize their experiences using frames (Goffman 1974), taking with them expectations about how gender and sexuality will shape others’ behaviors in those frames. I argued

that in a frame like coercive control victimization, in which the associated risks are often perceived to be conceptually gender-blind (Barlow and Walklate 2021), and thus in which female and male perpetrators might be considered as equally likely, listeners may hold competing stereotypes about how the “ideal victim” ought to behave (Christie 1986; Bosma et al. 2018). I predicted that Voice Pitch—a cue to emotional states (Sobin and Alpert 1999) and both gender and sexuality in female speakers (Cuddy 2019)—would influence how a victim of coercive control was evaluated.

The findings offer some support for these predictions, although the picture is not as straightforward as initially predicted, with effects often moderated by individual differences in the endorsement of gender stereotypes and domestic abuse myths. While complex to interpret, a picture emerges of the effects of changing Voice Pitch being more extreme in those listeners with more conservative views about gender, offering some support for previous findings that the evaluation of gendered voices is shaped by a listener’s pre-existing ideologies about gender stereotypes (Levon 2014).

The effects for Abuser Gender and Voice Pitch in combination and independent of individual differences are straightforward, however. It is first worth noting that the estimates here are relatively small and are limited to two evaluative dimensions, namely, rationality and fear, with no such effects on scales for perceived vulnerability, calmness, or level of danger. On these three scales, the variable of interest (Voice Pitch) had no consistent effect on victim perception independent of pre-existing ideologies around gender roles and domestic abuse. This might result from the subtlety of the pitch manipulations (see Section 4.1.) Alternatively, these may simply be the incorrect scales to use when testing the relevance of the abuse victim frame to perceptions of Voice Pitch.

For perceived fear and rationality, however, it appears that if you are a female victim in a heteronormative relationship, conforming to normative ideals about femininity by raising the pitch of your voice might buy you something. As well as making you sound more scared, as Voice Pitch does more broadly (Sobin and Alpert 1999), raising your Voice Pitch could make your allegations against an abuser sound more rational. If you are in a non-normative relationship, however, for example, a female-female relationship, changes in pitch are not expected to influence how scared or rational you are perceived to be.

While remaining cautious, I believe that these effects may result from the multiple competing elements within the “ideal victim” frame. In effect, if your abuser is the “ideal offender” (Christie 1986), you start from a position where adhering to the stereotype of the “ideal victim” is considered relevant. From here, emphasizing your femaleness via a higher Voice Pitch can more closely align you with this stereotypical image, boosting perceived rationality and fear. Victims who deviate from this ideal by having a lower, less feminine Voice Pitch may lose out. In contrast, if your abuser is not considered “ideal” because they too are female, adhering to the “ideal victim” stereotype becomes less relevant, because you are already ruled out as less rational—per the main effect for Abuser Gender—blocking any further pitch-related boost or penalty you could receive. This

effect emphasizes the relevance of compulsory heterosexuality (Rich 2007) in shaping our cultural understanding of gendered power dynamics; victims who diverge from heteronormative expectations about relationships may be underestimated if their voices are not being used as reliable cues to their level of fear and rationality; this is further evidenced by the fact that, irrespective of pitch manipulations, the victim with a Female Abuser was also rated as less calm and rational than the victim with a Male Abuser, chiming with previous studies on the perceived believability of such victims (Poorman et al. 2003). Ochs’ (1992) notion of indirect indexicality is relevant here.¹ Lower pitch does not directly signal a lack of credibility but instead indexes stances such as control, strength, or emotional restraint, which are ideologically tied to masculinity. When the abuser is male, these stances jar with the expected affective display of the “ideal victim,” reducing perceptions of fear and rationality. When the abuser is female, however, the victim is already excluded from the “ideal victim” frame, and so the indirect indexical link between Voice Pitch and stance has less interpretive weight.

Although this effect for perceived rationality was predicted, the effect for perceived fear was unexpected. Given that Male Abusers are more likely to use physical violence than Female Abusers (Hester 2013), we might expect a listener to deem allegations involving Male Abusers as more rational because of the potential for physical harm to occur. It was predicted, however, that a higher pitch voice would straightforwardly predict a higher level of perceived fear. That this only occurred for the victim of a Male Abuser suggests the relationship between Voice Pitch and perceived fear to be speaker dependent. Another way to think about this result is to widen the interpretive lens: higher pitch doesn’t just mark fear, it can also signal of childlikeness, gentleness, or dependency (Ohala 1984). In abusive contexts, these qualities may be taken up by listeners as compatible with—but not identical to—fear. Thus, evaluations of fear may be partly piggybacking on broader impressions of smallness and fragility, which are themselves culturally tied to femininity and to normative ideas of how a victim “should” sound.

The results fit with previous findings suggesting that individual linguistic features often only become socially meaningful in certain speech styles (Pharao et al. 2014) or when combined with other specific linguistic features (Levon 2014). In the coercive control context, Voice Pitch was “indexically inoperative” (Levon and Ye 2019, 142) for one type of victim, while being perfectly operative for another. This might result from “indexical inversion” (Inoue 2003), whereby “ideologies about kinds of people precede and inform the kinds of linguistic signs those people are expected to use” (Jessee and Calder 2025, 170), even when those expectations do not match reality (see Endnote 1). Ideologies about gay women may have led listeners to expect a lower pitch voice by default, rendering pitch variation inoperative as an index of fear and rationality for them.

What this and other studies may point to is the existence of frame-specific hierarchies of social category relevance, that is, in a particular interpretative frame, a speaker’s membership to one social category may be considered more relevant than their membership to another. When multiple category memberships are signaled simultaneously, the more relevant of those memberships can come to the fore, reducing the potential for the

less relevant membership to guide how listeners react to the respective stimuli. We see this trade-off in Levon (2014), where the prominence of a phonetic feature linked to speaker sexuality (sibilance) led listeners to disregard a feature linked with gender (Voice Pitch) when assessing a speaker's competence. Similarly, Pharao et al. (2014) show that a speech style associated with a particular ethnic group reduced the relevance of a phonetic feature linked to speaker sexuality. In both studies, however, stimuli were presented to participants in a neutral context, that is, not in the context of a specific interpretive frame. The current study underlines the relevance of interpretive frames to this dynamic.

Another useful comparison is with the findings of Hunt et al. (in press.) for the effects of Voice Pitch on evaluations of female football commentators. In the men's football commentary frame, although women with high-pitched voices are overtly derogated by the sporting media, a woman with a low-pitched voice received less favorable evaluations in the experiment. In the abuse victim frame, it is again a woman with lower pitched voice that loses out, underscoring the relevance of a voice's gender typicality to listeners (Hunt et al. in press.). Notably, in the abuse victim frame, I have suggested that a speaker's sexuality is more relevant to listeners than their Voice Pitch, as a pitch effect only appears for female victims with Male Abusers. The frame specificity of this dynamic needs to be tested empirically, however; the men's football commentary frame would be an appropriate comparison, as the high prevalence of gay women in football might render a female commentator's sexuality less salient to listeners.

I will finish by considering the wider relevance of these findings to non-academic readers. The UK College of Policing's guidance on the context and dynamics of domestic abuse (College of Policing 2023) lists several crimes in which fear of violence is sufficient for a crime to have been committed, including verbal abuse and harassment. Perceived levels of fear are also relevant to the police's risk assessment of victims; in a sample of 265 British police officers, 86% reported a victim's fear to be important during risk assessment of a domestic incident (Robinson et al. 2016). This relevance is heightened in evidence-based (or "victimless") prosecutions in which a victim does not support prosecution (Metropolitan Police Service 2020), with the CPS instead using the attending officers' statements, any 999 calls, and/or body-worn footage to help bring charges against a suspect (CPS 2022). In effect, a police officer's account of the victim's behavior can itself be used as evidence.

The impression an officer has of a victim's level of fear and rationality could therefore directly influence the outcome of their case. If the effect observed for Voice Pitch and victim sexual orientation in the current study were to extend beyond the general population to serving police officers, this might mean that women with Male Abusers and lower pitched voices would be described in statements as less scared and rational than if they had higher pitched voices. The results of the current study therefore underscore the need for more research into the possible effects of language-related factors on how victims of abuse are perceived, both by the police and the general population. This should include accents linked to social class and ethnicity, two factors that undoubtedly shape the "ideal victim" stereotype.

Acknowledgments

I would like to extend my thanks to Sophie-Holmes Elliott, Louis Strange, Eleanor Jones, and audiences at University of Konstanz, University of Southampton, and University of Glasgow for their contributions to this work.

Conflicts of Interest

The authors declare no conflicts of interest.

Endnotes

¹I'd like to thank an anonymous reviewer for this suggestion.

References

- Banse, R., and K. Scherer. 1996. "Acoustic Profiles in Vocal Emotion Expression." *Journal of Personality and Social Psychology* 70, no. 3: 614–636.
- Barlow, C., and S. Walklate. 2021. "Gender, Risk Assessment and Coercive Control: Contradictions in Terms?" *British Journal of Criminology* 61, no. 4: 887–904.
- Barron-Lutzross, A. 2015. *The Production and Perception of a Lesbian Speech Style*. UC Berkeley. <https://escholarship.org/uc/item/7f6332bh>.
- Boersma, P. 2019. *Praat: Doing Phonetics by Computer*. University of Amsterdam. <http://www.praat.org/>.
- Bosma, A., E. Mulder, and A. Pemberton. 2018. "The Ideal Victim Through Other (s') Eyes." In *Revisiting the 'Ideal Victim'*, 27–42. Policy Press.
- Butler, J. 1990. *Feminism and the Subversion of Identity*. Routledge.
- Campbell-Kibler, K. 2005. *Listener Perceptions of Sociolinguistic Variables: The Case of (ING)*. Stanford University.
- Christensen, R. H. B. 2022. *Ordinal—Regression Models for Ordinal Data. R Package Version 2022.11-16*. <https://CRAN.R-project.org/package=ordinal>.
- Christie, N. 1986. "The Ideal Victim." In *From Crime Policy to Victim Policy: Reorienting the Justice System*, 17–30. Palgrave Macmillan UK.
- College of Policing. 2023. *Domestic Abuse: Context and Dynamics of Domestic Abuse*. College of Policing. <https://www.college.police.uk/app/major-investigation-and-public-protection/domestic-abuse/context-and-dynamics-domestic-abuse>.
- Conley, J. M., and W. M. O'Barr. 2005. *Just Words: Law, Language, and Power*. University of Chicago Press.
- Connell, R. W. 2005. *Masculinities*. Routledge.
- Crown Prosecution Service. 2022. *Domestic Abuse*. CPS. <https://www.cps.gov.uk/legal-guidance/domestic-abuse>.
- Crown Prosecution Service. 2023. *Controlling or Coercive Behaviour in an Intimate or Family Relationship*. Crown Prosecution Service. <https://www.cps.gov.uk/legal-guidance/controlling-or-coercive-behaviour-intimate-or-family-relationship>.
- Cuddy, S. 2019. "Can Women 'Sound Gay'? A Sociophonetic Study of/s/and Pitch of Gay and Straight British-English Speaking Women." Doctoral diss., University of York.
- Drijber, B. C., U. J. Reijnders, and M. Ceelen. 2013. "Male Victims of Domestic Violence." *Journal of Family Violence* 28: 173–178.
- Eckert, P. 2008. "Variation and the Indexical Field." *Journal of Sociolinguistics* 12, no. 4: 453–476.
- Feinberg, D. R., L. M. DeBruine, B. C. Jones, and D. I. Perrett. 2008. "The Role of Femininity and Averageness of Voice Pitch in Aesthetic Judgments of Women's Voices." *Perception* 37, no. 4: 615–623.

- Feinberg, D. R., B. C. Jones, A. C. Little, D. M. Burt, and D. I. Perrett. 2005. "Manipulations of Fundamental and Formant Frequencies Influence the Attractiveness of human Male Voices." *Animal Behaviour* 69, no. 3: 561–568.
- Glick, P., and S. T. Fiske. 1996. "The Ambivalent Sexism Inventory: Differentiating Hostile and Benevolent Sexism." *Journal of Personality and Social Psychology* 70, no. 3: 491–512.
- Goffman, E. 1974. *Frame Analysis: An Essay on the Organization of Experience*. Northeastern University Press.
- Goodmark, L. 2008. "When Is a Battered Woman Not a Battered Woman—When She Fights Back." *Yale Journal of Law and Feminism* 20: 75.
- Hart, C. M., T. D. Ritchie, E. G. Hepper, and J. G. Gebauer. 2015. "The Balanced Inventory of Desirable Responding Short Form (BIDR-16)." *Sage Open* 5, no. 4: 2158244015621113.
- Hester, M. 2013. "Who Does What to Whom? Gender and Domestic Violence Perpetrators in English Police Records." *European Journal of Criminology* 10, no. 5: 623–637.
- Hildebrand-Edgar, N., and S. Ehrlich. 2017. "'She Was Quite Capable of Asserting Herself': Powerful Speech Styles and Assessments of Credibility in a Sexual Assault Trial." *Language and Law* 4, no. 2: 89–107.
- Holmes, J., and S. Schnurr. 2005. "Politeness, Humor and Gender in the Workplace: Negotiating Norms and Identifying Contestation." *Journal of Politeness Research* 1, no. 1: 121–149.
- Hunt, M., L. Strange, and S. Holmes-Elliott. in press. "Gender Penalty? Linguistic Discrimination and Perceptions of Female Football Commentators." *Gender & Language*.
- Inoue, M. 2003. "The Listening Subject of Japanese Modernity and His Auditory Double: Citing, Sighting, and Siting the Modern Japanese Woman." *Cultural Anthropology* 18, no. 2: 156–193.
- Jessee, E., and J. Calder. 2025. "The Cisgender Listening Subject in Sociolinguistic Perception: Transgender Identity Affects Sibilant Categorization in American English." *Journal of Sociolinguistics* 29, no. 3: 168–181.
- Krahe, B., A. Uhlmann, and M. Herzberg. 2021. "The Voice Gives It away." *Social Psychology* 52: 101–113.
- Lakoff, R. 1973. "Language and Woman's Place." *Language in Society* 2, no. 1: 45–79.
- Lambert, W. E., R. C. Hodgson, R. C. Gardner, and S. Fillenbaum. 1960. "Evaluational Reactions to Spoken Languages." *Journal of Abnormal and Social Psychology* 60, no. 1: 44–51.
- Levon, E. 2007. "Sexuality in Context: Variation and the Sociolinguistic Perception of Identity." *Language in Society* 36, no. 4: 533–554.
- Levon, E. 2014. "Categories, Stereotypes, and the Linguistic Perception of Sexuality." *Language in Society* 43, no. 5: 539–566.
- Levon, E., and Y. Ye. 2019. "Language, Indexicality and Gender Ideologies: Contextual Effects on the Perceived Credibility of Women." *Gender and Language* 14, no. 2: 123–151.
- Little, B., and C. Terrance. 2010. "Perceptions of Domestic Violence in Lesbian Relationships: Stereotypes and Gender Role Expectations." *Journal of Homosexuality* 57, no. 3: 429–440.
- Macrae, C. N., and G. V. Bodenhausen. 2001. "Social Cognition: Categorical Person Perception." *British Journal of Psychology* 92, no. 1: 239–255.
- Metropolitan Police Service. 2020. *Evidence Based Prosecutions: Standard Operating Procedures*. Metropolitan Police Service.
- Moonwomon-Baird, B. 1997. "Toward the Study of Lesbian Speech." In *Queerly Phrased: Language, Gender, and Sexuality*, edited by A. Livia and K. Hall, 233–256. Oxford University Press.
- Munson, B. 2007. "The Acoustic Correlates of Perceived Masculinity, Perceived Femininity, and Perceived Sexual Orientation." *Language and Speech* 50, no. 1: 125–142.
- Munson, B., S. V. Jefferson, and E. C. McDonald. 2006. "The Influence of Perceived Sexual Orientation on Fricative Identification." *Journal of the Acoustical Society of America* 119, no. 4: 2427–2437.
- Munson, B., E. C. McDonald, N. L. DeBoe, and A. R. White. 2006. "The Acoustic and Perceptual Bases of Judgments of Women and Men's Sexual Orientation From Read Speech." *Journal of Phonetics* 34, no. 2: 202–240.
- Ochs, E. 1992. "14 Indexing Gender." In *Rethinking Context: Language As an Interactive Phenomenon*, 335. Cambridge University Press.
- Office for National Statistics. 2020. *Domestic Abuse and the Criminal Justice System, England and Wales: November 2020*. Office for National Statistics. <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/domesticabuseandthecriminaljusticesystemenglandandwales/november2020>.
- Ohala, J. J. 1984. "An Ethological Perspective on Common Cross-Language Utilization of F₀ of Voice." *Phonetica* 41, no. 1: 1–16.
- Peters, J. 2008. "Measuring Myths About Domestic Violence: Development and Initial Validation of the Domestic Violence Myth Acceptance Scale." *Journal of Aggression, Maltreatment & Trauma* 16, no. 1: 1–21.
- Pharao, N., M. Maegaard, J. S. Møller, and T. Kristiansen. 2014. "Indexical Meanings of [s+] Among Copenhagen Youth: Social Perception of a Phonetic Variant in Different Prosodic Contexts." *Language in Society* 43, no. 1: 1–31.
- Poorman, P. B., E. P. Seelau, and S. M. Seelau. 2003. "Perceptions of Domestic Abuse in Same-Sex Relationships and Implications for Criminal Justice and Mental Health Responses." *Violence and Victims* 18, no. 6: 659–669.
- Prolific. 2022. *Prolific Academic*. Prolific. <https://www.prolific.co>.
- Puzar, A., and Y. Hong. 2018. "Korean Cuties: Understanding Performed Winsomeness (aegyo) in South Korea." *The Asia Pacific Journal of Anthropology* 19, no. 4: 333–349.
- R Core Team. 2022. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Revelle, W. 2022. *Psych: Procedures for Psychological, Psychometric, and Personality Research*. Northwestern University Evanston. <https://CRAN.R-project.org/package=psych>. R package version 2.2.9.
- Rich, A. 2007. "Compulsory Heterosexuality and Lesbian existence." In *Culture, Society and Sexuality*, 225–252. Routledge.
- Ridgeway, C. L., and S. J. Correll. 2004. "Unpacking the Gender System: A Theoretical Perspective on Gender Beliefs and Social Relations." *Gender & Society* 18, no. 4: 510–531.
- Robinson, A. L., G. M. Pinchevsky, and J. A. Guthrie. 2016. "Under the Radar: Policing Non-Violent Domestic Abuse in the US and UK." *International Journal of Comparative and Applied Criminal Justice* 40, no. 3: 195–208.
- Rubin, D. L. 1992. "Nonlanguage Factors Affecting Undergraduates' Judgments of Nonnative English-Speaking Teaching Assistants." *Research in Higher Education* 33: 511–531.
- Silverstein, M. 2003. "Indexical Order and the Dialectics of Sociolinguistic Life." *Language & Communication* 23, no. 3–4: 193–229.
- Sobin, C., and M. Alpert. 1999. "Emotion in Speech: The Acoustic Attributes of Fear, Anger, Sadness, and Joy." *Journal of Psycholinguistic Research* 28: 347–365.
- Strand, E. A., and K. Johnson. 1996. "Gradient and Visual Speaker Normalization in the Perception of Fricatives." In *KONVENS*, 14–26.
- Sulpizio, S., F. Fasoli, R. Antonio, F. Eyssel, M. P. Paladino, and C. Diehl. 2020. "Auditory Gaydar: Perception of Sexual Orientation Based on Female Voice." *Language and Speech* 63, no. 1: 184–206.
- Trudgill, P. 1983. *On Dialect*. Blackwell.

Zimman, L. 2018. "Transgender Voices: Insights on Identity, Embodiment, and the Gender of the Voice." *Language and Linguistics Compass* 12, no. 8: e12284.

Zwick, W. R., and W. F. Velicer. 1986. "Comparison of Five Rules for Determining the Number of Components to Retain." *Psychological Bulletin* 99, no. 3: 432–442. <https://doi.org/10.1037/0033-2909.99.3.432>.

Appendix A: Coercive Control Passage

So we've been together for about 2 years. I was living with my mum and dad before, but then in March I moved into **his** place and I've been living here since then. It was better to start with, because **he** didn't charge me any rent, and **he** was always buying me things, like clothes and bags, stuff like that. I used to work in an office, so I had my own money too. So yeah like, things were fine for the first 3 months or so of living here, it was really nice. But then later **he** said I could just quit my job because **he** was making enough money for both of us. So **he** pays all the rent and the bills, and **he** gives me a bit of money each month to buy stuff. He asks me a lot about what I buy, and sometimes I think **he** checks the receipts in my bag. He also asks me where I go a lot, like where I've been in the day while **he's** working and who I've seen. I used to have my friends round for coffee as well, but **he** doesn't like the hassle, so now I just stay in and watch TV.

Appendix B: New Factors

Factor	Dimensions
HOSTILE SEXISM	2. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality" 5. Women are too easily offended 7. Feminists are not seeking for women to have more power than men (reverse) 10. Most women fail to appreciate fully all that men do for them 11. Women seek to gain power by getting control over men 14. Women exaggerate problems they have at work 15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash 16. When women lose to men in a fair competition, they typically complain about being discriminated against 18. There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances 21. Feminists are making entirely reasonable demands of men (reverse) 3. In a disaster, women ought not necessarily to be rescued before men
BENEVOLENT SEXISM	

(Continues)

Factor	Dimensions
	6. People are often truly happy in life without being romantically involved with a member of the other sex 8. Many women have a quality of purity that few men possess 9. Women should be cherished and protected by men 12. Every man ought to have a woman whom he adores 13. Men are complete without women 17. A good woman should be set on a pedestal by her man 19. Women, compared to men, tend to have a superior moral sensibility 20. Men should be willing to sacrifice their own well-being in order to provide financially for the women in their lives 22. Women, as compared to men, tend to have a more refined sense of culture and good taste
BLAMING WOMEN	4. Making a man jealous is asking for it 5. Some women unconsciously want their partners to control them 6. A lot of domestic violence occurs because women keep on arguing about things with their partners 8. Most domestic violence involves mutual violence between the partners 12. Women who flirt are asking for it. 13. Women can avoid physical abuse if they give in occasionally 14. Many women have an unconscious wish to be dominated by their partners 17. Women instigate most family violence
DOWNPLAYING FRE- QUENCY/SEVERITY	1. Domestic violence does not affect many people 2. When a man is violent it is because he lost control of his temper 7. If a woman doesn't like it, she can leave 9. Abusive men lose control so much that they don't know what they're doing 11. Domestic violence rarely happens in my neighborhood 15. Domestic violence results from a momentary loss of temper

(Continues)

Factor	Dimensions
WOMEN RETURNING TO ABUSERS	18. If a woman goes back to the abuser, how much is that due to something in her character?
	3. If a woman continues living with a man who beats her then it's her own fault if she is beaten again
	10. I hate to say it, but if a woman stays with the man who abused her, she basically deserves what she gets
	16. I don't have much sympathy for a battered woman who keeps going back to the abuser
BIDR_1	9. I sometimes tell lies if I have to
BIDR_2	11. There have been occasions when I have taken advantage of someone
	12. I sometimes try to get even rather than forgive and forget
	13. I have said something bad about a friend behind their back
	15. I never take things that don't belong to me
BIDR_3	2. I always know why I like things
	4. I never regret my decisions
	6. I am a completely rational person
	7. I am very confident of my judgments
BIDR_4	1. I have not always been honest with myself
	8. I have sometimes doubted my ability as a lover
	10. I never cover up my mistakes
	14. When I hear people talking privately, I avoid listening
BIDR_4	16. I don't gossip about other people's business
	3. It's hard for me to shut off a disturbing thought
	5. I sometimes lose out on things because I can't make up my mind soon enough