Universidade de Lisboa
Faculdade de Psicologia

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When 1 + 1 Does Not Equal 2: The Contradictions of Intersectional Stereotyping at the Crossroads of Sexual Orientation, Immigrant Status, and Gender

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ABSTRACT

Stereotypes (and their consequences) have been widely examined across contexts and cultures with thousands of articles from various disciplines detailing their effects over the better part of a century. While similar stereotypic content may be applicable to multiple individuals from differing social groups (e.g., both men and professors may be perceived as competent), individuals and researchers alike tend to focus on a singular category, rather than the intersection of multiple categories. Intersectional stereotypes, on the other hand, are a more recent development based on the theory of intersectionality and have seen increased attention over the past few decades. This extension of basic stereotyping was created to better understand the process in which multiple social categories may influence the stereotypes applied to certain social groups. A majority of the research on intersectional stereotyping has focused on the most prevalent groups in society, opting to include gender (e.g., men or women), race (e.g., white or black individuals), or common sexual orientation categories (e.g., gay men). While this is not inherently wrong, because in order to understand an effect, we must first identify patterns using the most visible groups, this has led to the underrepresentation of certain social categories such as immigrant status (e.g., native versus foreign individuals) or other sexual orientations (e.g., lesbian women). Therefore, the main goal of this thesis is to dive into the contradicting effects of intersectionality and intersectional stereotyping using various social groups. Importantly, we examined different groups throughout the projects included in this thesis although the running theme throughout was intersectionality.

The identification of intersectional stereotypes for various immigrant groups and nationalities is first examined in Chapters 2.2 and 2.3.1 by developing an adaptation of Petsko and Bodenhausen's (2019) methodology regarding the de-racialization of intersectional individuals. We found comparable results in which gay immigrants were perceived as less prototypical of immigrants, experiencing a "de-immigrantization" effect, but this effect was not replicated when examining lesbian immigrants (who were prototypically similar to immigrant women), adding complexity to the conceptualization of multiple minority members. The effect of de-immigrantization was also explored with a different paradigm meant

to bring findings from conceptual, to a realized, point of view, by using fictional candidates' curricula veritas (CVs) in Chapter 3.4. In conditions that promote heuristic processes, straight Brazilian immigrants were stereotypically evaluated and penalized, while being gay seemed to protect Brazilian immigrants from receiving such prejudiced evaluations. Next, Chapters 4.2 and 4.3.1 examined the vocal categorization and stereotyping of straight or gay immigrants in Portugal; notably, we found that participants made stereotypical judgements of individuals based on their voices, when speaking both English and Portuguese. Gay voices were perceived as being more feminine and Brazilians speaking in English were evaluated the worst on stereotypical measures, supporting the notion behind stereotyping multiple identities, but, Portuguese speaking English individuals were recalled the least, bringing into question the applicability of intersectional theories in different paradigms. Finally, Chapter 4.4.3 continues the theme of evaluative judgements, adding further contents to the methodologies used in stereotype assessment research, while acting as a pretest for the former two subchapters. When testing stereotypical and counterstereotypical behaviors, we found that stereotypical individuals (e.g., masculine straight men) were perceived as prototypical of their main groups (e.g., straight men) while counterstereotypical individuals (e.g., feminine straight men) were not.

The overall findings of this thesis provide not only the contextualization of prior literature to a Portuguese context, but also show support for theories of intersectional stereotyping, the implicit inversion theory, the prototypicality of various social groups, and how external indicators (i.e., voice) may influence the categorization of individuals from multiple social categories. While there is yet work to be completed in the Portuguese context and abroad, this thesis provides a strong starting point for which intersectionality, and its contradicting effects, may be examined in regard to immigrant status and sexual orientation.

Keywords: Intersectionality, Stereotypes, Immigration, Sexual Orientation, Vocal Stereotypes

RESUMO EXTENSO

Desde a representação de imigrantes nos filmes de Hollywood até às nossas compilações pessoais de pensamentos enquanto caminhamos numa rua movimentada, os estereótipos existem na maioria das facetas da experiência humana, desempenhando um papel predominante na forma como percebemos os indivíduos que categorizamos em grupos sociais com significado. Por exemplo, as lésbicas são geralmente percebidas como mais masculinas ou agressivas do que as mulheres heterossexuais, e os imigrantes de países hispânicos/latino-americanos são frequentemente considerados menos inteligentes quando comparados com os imigrantes de países do Leste Asiático, em contextos ocidentais.

Os indivíduos geralmente possuem múltiplas (e, por vezes, contrastantes) pertenças a grupos, que mudam dependendo de fatores contextuais ou temporais (por exemplo, localização ou hora do dia), trazendo mais complexidade ao processo de estereotipar e adicionando novos níveis de compreensão quando conceptualizamos acerca das consequências dos estereótipos. Por exemplo, comparável ao efeito de des-racialização (de-racialization effect) encontrado em investigações anteriores sobre interseccionalidade, um efeito semelhante pode ocorrer ao tentar perceber homens gays e mulheres lésbicas de certas minorias, com o estatuto implícito de imigrantes (por exemplo, asiáticos ou hispano-americanos). O Capítulo 2.3.1 procurou compreender melhor a ideia de estereótipos interseccionais examinando primeiro os estereótipos específicos atribuídos a 8 grupos na sociedade portuguesa (ou seja, homens/mulheres heterossexuais, homens/mulheres gays/lésbicas, imigrantes heterossexuais masculinos/femininos, imigrantes homens/mulheres gays/lésbicas). Após a geração dos atributos mais e menos estereotípicos de cada grupo, constatámos que os imigrantes gays, mas não lésbicas, eram percebidos como menos prototípicos de imigrantes (ou seja, experimentando um efeito de des-imigrantização), levantando questões sobre a dupla categorização minoritária entre os géneros. Avançámos esta análise introduzindo nacionalidades específicas para lidar com a imprecisão do rótulo da categoria de imigrante; utilizámos um pré-teste para determinar os estereótipos atribuídos a homens/mulheres heterossexuais/gays/lésbicas brasileiros, franceses, indianos e japoneses num contexto

português, e encontrámos evidências de efeitos de des-imigrantização, onde indivíduos de nacionalidades com uma maior percentagem percebida de gays ou lésbicas na sua população (por exemplo, Brasil e França) eram geralmente percebidos como menos prototipicamente imigrantes do que indivíduos de nacionalidades com uma menor percentagem percebida de gays ou lésbicas na sua população (por exemplo, Índia e Japão). As conclusões desta investigação produzem conhecimentos adicionais sobre a categorização de múltiplos grupos minoritários com base na orientação sexual e na nacionalidade, ao mesmo tempo que se baseiam nas ideias de saliência do estereótipo e interseccionalidade, particularmente daqueles que pertencem a nações com uma elevada percentagem percebida de indivíduos gays.

Com o objectivo de transportar os resultados de uma perspectiva conceptual para uma perspectiva mais realista e aplicada, delineámos um estudo (Capítulo 3.4) no qual os currículos vitae (CVs) de candidatos fictícios eram avaliados em quão calorosos e competentes eram percebidos, num ambiente laboral fictício. Utilizámos 2 dos grupos nacionais mais prevalentes na sociedade portuguesa e 2 dos grupos internacionais mais prevalentes (resultando em homens portugueses heterossexuais/gays e homens brasileiros heterossexuais/gays) para aumentar a acuidade geral da experiência sem realizar um estudo de larga escala. Com base em pressupostos anteriores da literatura sobre interseccionalidade e no tipo de preconceito comumente percebido em Portugal, previmos que, ao expor os participantes a um cenário de elevada competência dos candidatos, os currículos de indivíduos de todos os 4 grupos-alvo seriam avaliados de forma semelhante, contra as previsões do Modelo de conteúdo dos estereótipos (Stereotype Content Model - SCM) e, em vez disso, favorecendo uma visão compartimentada dos estereótipos. Os resultados apoiaram totalmente as hipóteses. No entanto, queríamos explorar um cenário em que os indivíduos pertencentes a minorias pudessem, ou não, ser percebidos de forma diferente com base no seu estatuto, e desenvolvemos o Estudo 2 que introduziu um paradigma semelhante, expondo os participantes a um cenário de menor competência. Descobrimos que os brasileiros heterossexuais, mas não os gays, receberam avaliações mais baixas em competência e em quão calorosos eram percebidos, e ofertas salariais mais baixas, do que ambos os grupos-alvo portugueses. No Estudo 2, onde foram fornecidas menos informações objetivas e menor competência implícita, processos heurísticos ancorados em

informações estereotípicas podem ter sido adotados pelos participantes para facilitar a tarefa em questão. Argumentamos que a falta de informação eliminou a oportunidade de ocorrerem julgamentos menos ancorados em dados objectivos, desencadeando o uso de concepções estereotípicas e promovendo avaliações preconceituosas. Além disso, argumentamos que esse processo cognitivo permitiu o aparecimento de sentimentos antibrasileiros, mas não antigays, conduzindo os resultados e fornecendo suporte adicional para a hipótese de des-imigrantização abordada no Capítulo 2.3.1.

Finalmente, queríamos ver se este mesmo processo se aplicaria ou não ao pedir aos participantes que avaliassem os mesmos alvos através das suas vozes (neste caso, vozes de homens portugueses e brasileiros heterossexuais e gays). Recentemente, o trabalho sobre o gaydar e as percepções auditivas tem registado um aumento constante, mas ainda falta uma análise aprofundada da língua portuguesa e dos seus dois sotaques mais prevalentes. O Capítulo 4.2 pediu primeiro aos participantes que avaliassem quão prototipicamente portugueses, brasileiros, heterossexuais e gays, 24 homens pareciam ser com base nas suas vozes. No estudo a seguir, foi pedido aos participantes que avaliassem quão prototipicamente estereotípicos eram uma série de comportamentos de cada um dos quatro principais grupos-alvo, com base nas vozes selecionadas como mais estereotípicas de cada grupo. Descobrimos que, conforme previsto, não houve diferença entre as percepções de nacionalidade, mas que os participantes foram muito menos precisos a adivinhar a orientação sexual dos indivíduos (e particularmente, para indivíduos gays). Os resultados também confirmaram que ter uma voz que soa heterossexual ou gay influenciou as percepções dos participantes sobre a probabilidade ou improbabilidade de os indivíduos se envolverem em comportamentos estereotipicamente masculinos ou femininos; conforme previsto, indivíduos que pareciam heterossexuais eram vistos como mais propensos a envolver-se em comportamentos masculinos e indivíduos que pareciam gays eram vistos como mais propensos a envolver-se em comportamentos femininos. Simultaneamente, este projeto foi utilizado como estudo piloto para o Capítulo 4.3.1, que desenvolveu a ideia de esteriotipização e categorização vocal.

De facto, o Capítulo 4.3.1 estendeu o tópico dos estereótipos vocais utilizado no Capítulo 4.2 e no Capítulo 3.4, que procurava identificar se falar inglês versus português ajudaria ou prejudicaria indivíduos

heterossexuais de Portugal e do Brasil. Especificamente, como os brasileiros heterossexuais receberam os piores julgamentos no Capítulo 3.4, queríamos testar se a língua ajudaria ou não os brasileiros heterossexuais, uma vez que a globalização fez com que o inglês fosse a "língua de trabalho" em todo o mundo. Com base num cenário ausente de contexto, descobrimos que os brasileiros que falam inglês eram percebidos como menos calorosos, menos competentes e como tendo o status económico mais baixo, quando comparados com todos os outros grupos, de algum modo contrastando com os resultados do Capítulo 3.4 (no qual indivíduos de duas minorias não foram avaliados negativamente), e acrescentando ainda mais complexidade ao processo de interseccionalidade dos estereótipos. No entanto, se tivéssemos utilizado as mesmas categorias do Capítulo 3.4 (isto é, heterossexual/gay e Português/Brasileiro), provavelmente teríamos produzido resultados semelhantes, pelo menos considerando as medidas avaliativas.

Em seguida, quando a recuperação da memória dos participantes foi testada num paradigma Who Said What (WSW), envolvendo 8 falantes no total (2 de cada categoria social), os resultados indicaram que os indivíduos portugueses que falaram em inglês conduziram a mais erros em vez dos brasileiros que falaram inglês, contra previsões. Inesperadamente, os. Portugueses que falaram inglês receberam o maior número de erros entre-nações/no mesmo-idioma (between-nation/within-language) e erros entre-nações/entre-idiomas (between-nation/between language), o que significa que foi mais provável os participantes confundirem-nos com brasileiros que falaram inglês e brasileiros que falaram português, respetivamente. Portanto, embora os brasileiros não tenham perdido totalmente a sua categorização como brasileiros quando falaram inglês, os portugueses parecem ter perdido a sua categorização como portugueses quando falaram inglês, colocando em questão os processos cognitivos subjacentes à categorização interseccional, particularmente dentro deste paradigma. No entanto, se os alvos portugueses que falaram inglês foram mal categorizados como brasileiros, a nossa hipótese foi, de facto, verdadeira na medida em que a dupla minoria recebeu o maior número de erros. Em qualquer caso, falar inglês como um indivíduo português ou brasileiro, num ambiente de grupo, pode causar o surgimento de impressões negativas em relação a esses membros e influenciar erros atribuições e erros de memória, em geral,

sugerindo que, embora o inglês seja uma "língua global", falar português ainda pode ser melhor, para indivíduos de países de língua portuguesa.

O Capítulo 4.4.3 continua o tema dos julgamentos avaliativos relativos aos membros minoritários e interseccionais na sociedade Portuguesa; no essencial, este projeto foi concebido como um pré-teste para os Capítulos 4.2 e 4.3.1, mas está incluído no final do Capítulo 4, pois também desenvolveu uma linha paralela de pesquisa complementar diferente das 2 seções anteriores, dando aso a outro contributo desta. Nessa linha de investigação abordámos a ideia de que, por causa de identificações superficiais e categorizações generalizadas de outros indivíduos, a forma como percebemos os comportamentos dos outros, estereotípicos ou não, é influenciada. Noutras palavras, os comportamentos estão alinhados com o conteúdo estereotípico, e espera-se que se alinhem com os estereótipos dos indivíduos com base nos mesmos enviesamentos subjacentes, apesar do facto de os comportamentos exigirem mais elaboração cognitiva para serem conceptualizados. Embora existam noções sobre quais os comportamentos são estereotipicamente "gays" ou "lésbicos" (tanto a partir de pesquisas anteriores quanto da comunicação social), sabe-se menos sobre os efeitos interseccionais da masculinidade e feminilidade percebidas de forma congruente ou incongruente, quando relacionada com a orientação sexual. No Capítulo 4.4.3, examinámos primeiro que comportamentos estereotípicos foram percebidos como mais prototípicos de homens heterossexuais, mulheres heterossexuais, homens gays e mulheres lésbicas no Estudo 1, para servirem tanto como uma base de dados para futuras investigações como um ponto de partida para o Estudo 2, que examinou se as percepções dos participantes mudam ou não quando o alvo é estereotípico (por exemplo, um trabalhador da construção civil heterossexual) ou contra-estereotípico (por exemplo, um trabalhador da construção civil gay). Os resultados indicaram que indivíduos estereotípicos (por exemplo, homens heterossexuais e mulheres lésbicas masculinos, ou homens gays e mulheres heterossexuais femininos) foram percebidos como prototipicamente representativos de seu grupo-alvo principal, enquanto indivíduos contra-estereotípicos (por exemplo, homens heterossexuais e mulheres lésbicas femininos, ou homens gays homens e mulheres heterossexuais masculinos) não foram.

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PREFACE: CONTEXTUALIZING TERMINOLOGIES

Before describing the effects one might experience at the intersection of immigrant status and sexual orientation, an important disclaimer must first be made to provide an accurate understanding of the past research on this topic. The social category of immigrants is a vast category that encompasses, at its simplest definition, any individual who voluntarily moves from one location to another, primarily for work-related reasons (Long, 2015). In recent years, however, alternate terms such as expatriate or digital nomad have grown in popularity and are used primarily to describe immigrants from high socioeconomic backgrounds (i.e., the Global North), differentiating them from immigrants from low socioeconomic backgrounds (i.e., the Global South) (Appel et al., 2015; Benson, 2015; Cuddy et al., 2007; da Câmara, 2007; Hofstede, 2010; Koven, 2004; Kunz, 2019; Lee et al., 2006; Long, 2015; Santos, 2013). While it may appear harmless to use these terms, in actuality it perpetuates negative intergroup dynamics and relationships, separating the privileged from the non-privileged in an attempt to maintain a positive group image by negating the stereotypes associated with immigrant status, in line with the social identity theory (see Tajfel et al., 1971; Tajfel & Turner, 1986). For the purpose of this thesis, the term immigrant uses the most simple definition to avoid confusing or conflated results, meaning an individual who has voluntarily moved from one location to another. We are aware that adding a label such as the explicit nationality of the immigrant might trigger perceptions able to differentiate between groups living abroad in a way closely aligned with the terms mentioned above (i.e., immigrant or expatriate), which is why it is also fundamental to demonstrate how people perceive intersectional members of what could, at a first glance, be an indistinct category (such as immigrant).

Moreover, it is common to find underrepresented groups across fields, given that, in order to fully comprehend a process, researchers usually first find patterns within the most prevalent known groups acknowledged by society. Paradoxically, this prompts further research of these groups without considering the experience of less-populated social groups, probably also less consolidated in people's minds, as still emergent groups. This paradox extends to lesbian, gay, bisexual, transgender, and queer (LGBTQ) research where a large proportion of studies has focused on gay [white] men, effectively

excluding the narratives and experiences of other LGBTQ members such as lesbian or bisexual women (Levy, 2017; Rehman et al., 2016; Wright, 2016). At the same time, media has disproportionally cast gay white men into television and movies compared to gay men of other races, and, other members in the LGBTQ sphere (GLAAD, 2021) (even though the portrayals of gay white men often accentuate negative stereotypes) (Sink & Mastro, 2017)). Therefore, general findings of the past research regarding the LGBTQ community must be carefully viewed as negative consequences arise when underrepresented groups are not given space in academic discussions (Levy et al., 2017). We attempt to make accurate notes of which specific LGBTQ groups are discussed throughout this thesis, and if the acronym is used, there are more than one sexual orientation examined in the related research.

CHAPTER 1

INTRODUCTION TO STEREOTYPING

1.1: General Introduction

We rapidly, and with relative cognitive ease, categorize and make certain assumptions about individuals based on their tangible or intangible personal characteristics such as age, height, immigrant status, sexual orientation, or, theoretically, any other arbitrary identifier (Cuddy et al., 2011; Fiske et al., 2002; Fiske et al., 2007; Fiske & Neuberg, 1990; Kang & Bodenhausen, 2015; Tajfel et al., 1971). We have the tendency to engage in social categorization, sorting ourselves and other people into meaningful social groups (Brewer, 1998; Fiske & Neuberg, 1990; Macrae & Bodenhausen, 2000), and to think about the world more broadly, it is an adaptative psychological tendency (Hamilton & Trolier, 1986; Taylor, 1981). Stereotypes are the oversimplified explicit or implicit generalizations we hold about individuals, and social groups to which they belong, which generally materialize within milliseconds (Todorov et al., 2015), and take the form of attributes associated with a particular social category. The descriptive content of the stereotype is then applied to that group, structuring our everyday experiences (Allport, 1954; Bodenhausen, Kang & Peery, 2012; Macrae et al., 1997; Macrae & Bodenhausen, 2000; Tajfel et al., 1971; Taylor, 1981). For instance, if your friend was retelling a story about a woman they met on the street, you would likely quickly form a stereotypical ideation of that woman if you learned she was a mother of three, an 80-year-old, or a university student studying psychology; from her identifiers, you might consider her to be [emotionally] strong, kind, or intelligent, respectively, assuming you have had no overwhelmingly negative experiences with individuals from those groups. In contrast, if you previously met two individuals who were rude psychology students, you might generalize this trait to include all individuals studying psychology, considering them to be rude instead of intelligent, although this may not be the truth (Jussim, 1991; Tajfel et al., 1971).

1.1.1: Negative Stereotyping

Stereotypes are not inherently a negative psychological maladaptation (as they are often considered) but may in fact be a useful psychological tool that assists us with classifying, categorizing, and conceptualizing the chaos of the world around us (Hamilton & Trolier, 1986; Taylor, 1981). As

humans, we typically seek out ways to reduce our cognitive load, meaning we rely on stereotyping more often than not (Macrae et al., 1993; Macrae et al., 1994; Taylor, 1981). Doing so allows us to obtain and recall pertinent information without too much noise. Likewise, categorizing someone as a member of a group can spontaneously activate stereotypes in our mind (Nicolas et al., 2017, Petsko & Bodenhausen, 2022), and these stereotypes can influence our perceptions of that person's behavior. And yet, this tendency is often deleterious for the targets of our perceptions where the mere categorization of someone as an outgroup member seems sufficient to elicit biases disadvantaging that person (Tajfel et al., 1971). Indeed, organizing individuals into social categories may create an "us versus them" mentality, which unfortunately has the potential to transform into prejudiced or discriminatory behaviors toward certain individuals or groups (Fiske & Neuberg, 1990; Kang & Bodenhausen, 2015; Tajfel et al., 1971).

Consider the stereotypes associated with black men, for example. Based on society's ideations of black men, one may conclude black men are often perceived as being more threatening than white men or women (Pedulla, 2014; Petsko & Bodenhausen, 2019), which may, in turn, result in less occupational success for black men due to lowered evaluations of friendliness or trustworthiness in a business context (Pedulla, 2014). Similarly, immigrants from Latin American nations are generally portrayed as having less intellectual capabilities compared to immigrants from East Asian nations (Appel et al., 2015), which may undoubtedly harm Latinx individuals' chances of obtaining high-paying or powerful occupational positions, although, contradictorily, anti-discrimination laws are typically present (Neto et al., 2017). Additionally, as men (in general) are not considered to be as warm as women (Fiske et al., 2002; Fiske et al., 2007) male workers in female-oriented jobs such as childcare may suffer from the effects of stereotype threat or psychological distress (e.g., lower satisfaction rates) due in large to the assumption that men cannot provide the same care as women (Kalokerinos et al., 2017). In many cases, the characteristics people typically associate with social categories reflect cultural points of view which might justify a group's social positioning (Gardner et al., 1995), and because of insidious or implicit manners of socialization, people may reinforce these notions without being aware of it (e.g., Kohne et al., 2020; Lyons & Kashima, 2003; Payne et al., 2019).

Essentially, regardless of the valence of attitudes toward certain social groups, the descriptive content of cultural stereotypes affects the manner in which individuals are treated and influences the type of discrimination they might be subject to (Bodenhausen et al., 1998). It is important to note, however, prejudiced or discriminatory behaviors are not always a product of stereotypical thoughts (Brauer & Er-rafiy, 2011) and the aforementioned examples should not be treated as a causal relationship, although of course, this is sometimes the case. For instance, Souza and colleagues (2016) found that, while participants were able to categorize the accents of speakers, accent-based discrimination was predicted only by participants who had prejudiced attitudes. Therefore, caution should be applied when researching and understanding stereotypes and their effects.

1.1.2: Positive Stereotyping

As previously mentioned, stereotyping can be, and is largely understood, to be negatively-charged, but an important aspect of stereotyping is the use of positive stereotypes. Positive stereotyping is theoretically the same as negative (i.e., "traditional") stereotyping, but reversed; that is, positive stereotyping is the process of applying oversimplified positive generalizations toward an individual, or social group to which he belongs, again with the goal of organizing the world around us (e.g., Cheryan & Bodenhausen, 2000; Czopp et al., 2015; Kay et al., 2013; Shih et al., 1999). In the same manner that negative stereotypes were created, so, too, were positive stereotypes. For instance, black individuals found early athletic success in various sports after times of slavery, and because of the modernization and accessibility of sports to the general public, positive stereotypes regarding black individuals' athleticism were both created and perpetuated (Czopp & Monteith, 2006). Additionally, particularly in the American context, Asian individuals have relatively high economic and educational statuses compared to other ethnic minorities, contributing to their label as a "model minority" (Appel et al., 2015; Sue et al., 1995; Gupta et al., 2011). Individuals who positively stereotype themselves may benefit from a heightened sense of self-confidence regarding themselves and their group (Czopp et al., 2015; Tajfel et al., 1971). For instance, Moore and Stathi (2020) found that, when exposed to positive stereotypes regarding feminism,

women were more likely to self-report themselves as being a feminist, regardless of sexual orientation. At the same time, benefiting from positive stereotyping as a coping strategy aimed at reducing the internalization of the negative stereotypes attributed to them or their group (Crocker & Major, 1989; Tajfel et al., 1971).

While positive stereotyping may seem like it has positive effects on individuals, it may, in actuality, influence negative internalizations caused by the pressure to maintain said stereotypes (Cheryan & Bodenhausen, 2000; Czopp et al., 2015; Gupta et al., 2011). When examining the relationship between the endorsement of positive stereotypes and psychological distress for Asian Americans, Gupta and colleagues (2011) found a positive correlation between the two; in other words, individuals that held higher levels of endorsement regarding positive stereotypes were more likely to display symptoms of low psychological wellbeing (e.g., anxiety). Similar results were produced by Cheryan and Bodenhausen (2000), where Asian American participants performed worse on a math test upon being made aware of their ethnicity in a priming task, testing the effect of stereotype threat with the stereotype that Asians are good at math. Herein, however, lies one of the issues with stereotypes we attempt to tackle with the presentation of several studies throughout this thesis – the same individual may have multiple, competing stereotypes associated with them that may influence positive or negative results (or both, depending on context) which makes it increasingly difficult to accurately understand the breadth of stereotyping.

1.1.3: The Importance of Studying Stereotype Content

Studying stereotypes by exposing participants to potential stereotypical targets may, understandably, be viewed as a counterintuitive action as participants themselves could strengthen, or confirm, the stereotypical notions they hold – particularly when using sensitive or vulnerable social groups such as sexual orientation minorities. First, throughout this work, we intend to address the perceptions individuals have about what society in general considers to be the stereotype(s) toward a certain social group (Devine & Elliot, 1995). Furthermore, as prior research has shown (e.g., Garcia-Marques et al., 2006), there is little evidence that stereotypes are actually as static as we believe them to

be, from the individual point of view. In theory, even if a participant were to agree with a stereotypical assumption regarding a group included in one of the projects in this thesis, it is unlikely they would maintain this thought in all the contexts in which members of that group could be present. Moreover, although stereotypical thoughts do not always transform into prejudice or discrimination (Brauer & Er-rafiy, 2011), they, without a doubt, have the potential to do so. That alone should be a strong enough reason to support the study of stereotypes, particularly as globalization has not only introduced individuals to different social groups but has also influenced the display of emergent social categories (some of which were not present, or visible, in the past few decades). In order to reduce the effects of stereotyping, we must first identify and explore the stereotypes that are attributed to certain groups and their individual members; much like other scientific fields, if we are unsure of what to search for, our research is purely exploratory in nature. Upon the identification of attributed stereotypes, we may then, and only then, use these findings to create further research focused on real-world agents, effects, and scenarios, which may be used to design and implement meaningful social policies aimed at increasing the knowledge of specific social groups or reducing discrimination against certain minorities.

1.2: Intersectionality

Intersectionality is the phenomenon in which unique experiences and stereotypes may be attributed to individuals belonging to multiple minorities, consistently examined across contexts (e.g., Bergstrom et al., 2023, Cole, 2009; Crenshaw, 1989, Ghavami & Peplau, 2012; Petsko et al., 2022). The idea of intersectionality originated within the feminist school of thought by Crenshaw (1989) as a method of detailing the manner in which black women may be discriminated against as a product of the combined racism and sexism that their multiple minority identities highlighted. Although black women belong, separately, to the social categories of black individuals and women, their experiences are generally not representative of both groups and may instead be influenced by overlapping stereotypes, dependent on situational aspects (Crenshaw, 1989; Ghavami & Peplau, 2012; Wilkins, 2012). However, that is not to suggest all black women share the same experiences, as all multiple minority groups have inherent

variabilities which may alter personal experiences such as socioeconomic status, age, or physical attributes (e.g., weight or skin color) – an important factor in intersectional research. For instance, as Wilkins (2012) described, economic status influenced the identities of black female students where middle-class individuals adopted more "racially-neutral" identities, behaving more similar to, and being more likely to befriend, white students. Due to their heightened socioeconomic status and social group, the black students were also more likely to exclude (i.e., reject friendships with) other black female students from lower socioeconomic backgrounds, confirming the notion that certain demographic variabilities may drive personal experiences.

1.2.1: The Models of Intersectional Stereotyping

The idea of intersectionality has since been extended to the field of psychology, but instead of focusing on the social effects of discrimination, it refers more closely to the manifestation of certain psychological processes (e.g., stereotyping), to better understand how it is that perceivers stereotype targets in light of targets' interlocking social identities (e.g., Cole, 2009; Ghavami & Peplau, 2016; Purdie-Vaughns & Eibach, 2008; Rosenthal, 2016). Indeed, perceivers do not always respond to others in terms of isolated dimensions of social identity; social impressions arise holistically, with different identity dimensions being interpreted interactively (Cole, 2009; Kang & Bodenhausen, 2015). Thus, perceptions of social categories, as well as the stereotypes these categories imply, can be augmented and attenuated by perception of seemingly social categories to which a person belongs (Petsko & Bodenhausen, 2019). For instance, individuals from certain ethnic minorities (e.g., Latino or Arab men) have different stereotypes attributed to them based on their sexual orientation (i.e., being straight or gay) (Petsko & Bodenhausen, 2019) and/or age (i.e., being young or old) (Bergstrom, 2023), and separately, immigrants from certain nationalities are perceived differently depending on their gender (i.e., male or female) (Eagly & Kite, 1987) and sexual orientation (i.e., straight or gay) (Reese et al., 2023).

A vast range of empirical findings has highlighted the dynamism of social stereotypes and how intersectional forces can shape all elements of stereotyping including activation, application, and patterns

of continued discrimination (for a revision, see Petsko & Bodenhausen, 2020). It has also made the difference in outcomes salient, making the process, or processes, behind intersectional stereotyping a contested topic in the domain of social psychology (Cole, 2009; Petsko & Bodenhausen, 2019), particularly as conflicting results are exceedingly present in intersectional research and stereotypes have been shown to not be a "one size fits all" characteristic when considering multiple minority members (Cole, 2009; Petsko & Bodenhausen, 2019; Purdie-Vaughns & Eibach, 2008; Reese et al., 2023; Remedios & Snyder, 2018). Only more recently have these conflicting advances prompted interest in theorizing about intersectional stereotyping, and likewise, researchers have only recently begun to create and apply theoretical approaches in an attempt to explain intersectional stereotyping that go beyond empirical findings. Generally, scholars gravitate toward one of three theoretical routes – the dominance, integrative, and compartmentalized (lens) models. In the next subchapter, we depart from approaching a variety of intriguing research findings to acknowledge that those contradicting results pose challenges for prevalent theories of intersectional stereotyping. We then describe the assumptions of two prevalent theories, arguing either that perceivers inevitably focus on certain social identities (e.g., gender) when stereotyping intersectional targets, or that perceivers inevitably consider all detectable social identities simultaneously. Finally, we describe the assumptions of compartmentalization models which propose that perceivers typically concentrate on just one social identity (or one combination of identities) at a time when stereotyping intersectional targets, depending on the social context – arguably the most flexible of the models of intersectional stereotyping.

1.2.2: Prior Research and Contradictory Findings

Let's first examine gender and sexual orientation, which are two of the primordial social categories approached by stereotype literature. Eagly and Kite (1987) found stereotypes of nationalities, in most cases, were more closely related to the men of each nationality, rather than the women. While immigrant women from various nations did share some of the same stereotypes with the men from the same nation, their stereotypes were shifted away from what was considered prototypical of each nation

and closer to the stereotypes of what it is to be a woman, suggesting perceivers viewed immigrant women as nonprototypical (compared to immigrant men). Similarly, Bergstrom (2023) asked participants to generate a short list of attributes that might be applicable of certain social groups (e.g., straight Arab men, gay Arab men, young Arab men, and old Arab men, among others), finding that both age and sexual orientation correlated with the reduction of perceived threat where gay and old Arab men were viewed as more friendly than straight and young Arab men, respectively, who themselves were perceived as threatening. In this specific example, being gay or old resulted in a similar to the "de-racialization" effect described by some authors (see Petsko & Bodenhausen, 2019) in which the stereotypes attributed to the typical Arab male were diminished, perhaps due to the stereotypical salience of each individual category and/or the assumption that gay Arab men are incompatible with the preconceptions one has about Arab men in general. Finally, Acosta (2008) details the stories of lesbian immigrant women in the United States to highlight the personal struggles they might face when integrating into a new, more welcoming, culture. Although not experimental in nature, Acosta's work provides an in-depth look into the effect of de-immigrantization where lesbian immigrant women were essentially left with a choice – to adopt either a lesbian, or an immigrant, identity. That is, being both a lesbian and an immigrant was not an option to many, particularly within their family unit.

In all of the examples above, stereotype shifts manifested upon the introduction of additional social categories. In other words, the introduction of multiple minority social categories may make individuals appear as less prototypical, or similar, to their constituent groups with perceivers attributing different stereotypical traits to intersectional individuals. This fact has important implications toward the perception of individuals with multiple minority statuses harkening back to original feminist literature; although some subcategories share one, or more, main social categories, this does not mean the multiple subcategories will be conceptualized similarly in the minds of perceivers.

While past research does provide valuable insight into the stereotypes attributed to, and prejudice toward, certain multiple minority members which could be used to create interventional practices or update social policies (e.g., Rosenthal, 2016), there are numerous contradictions within past research

regarding the same social groups. Specifically, intersectionality does not generally account for (i.e., test for) contextual differences, but rather acts as an observation of the effects of intersectional stereotyping and/or discrimination. For instance, gay black men have been perceived as more competent in business-related scenarios when compared to straight black men, highlighting a positive stereotype shift in the minds of perceivers (Pedulla, 2014; Wilson et al., 2017), but simultaneously, participants did not alter their judgements of black criminals upon learning the defendant was straight or gay, suggesting no stereotype shift in the minds of perceivers (Petsko & Bodenhausen, 2017). Moreover, using specific examples from this thesis, gay Brazilians were perceived as more competent than straight Brazilians when participants were asked to evaluate candidates' curricula vitae (CVs) in an implicit competence scenario, but, in an explicit competence scenario, gay and straight Brazilian candidates were assumed to have equal levels of competence (Reese et al., 2023). Similar to the latter findings, when tasked with selecting the most applicable traits for straight and gay Brazilians in a context-absent scenario, participants did not perceive straight or gay Brazilians to be more, or less, competent than each other (Reese et al., 2023), adding complexity to the notions of the processes which may guide intersectional stereotyping.

The contradicting results from prior research, including some examined within this thesis, brings into question the applicability of the ideas or assumptions behind intersectionality and intersection stereotyping. As Cole (2009) argues, how might we examine social categories such as gender without extending this category to include prominent subcategories such as economic status, sexual orientation, or disability status, bringing scholarly representation to poor women, lesbian women, or disabled women, for example? If we do not account for the integration of social categories in one another, and their intracategory relationships, there is little point in examining these social categories as crucial aspects and implications are neglected. Moreover, if intersectionality does not produce the same experiences for individuals from the same multiple minorities based on personal attributes such as socioeconomic status, and intersectional stereotyping is not consistent across different contexts when viewing the same multiple minority groups, how can we, as researchers, accurately identify and define processes of intersectionality? The former question is slowly being answered by the diversification of participants included within

psychological research and of the groups that are examined within said research. The latter of these questions is an ongoing debate within the subfield of intersectional stereotyping and has yet to produce an answer that appeases most scholars.

1.2.3: Dominance Models

The dominance model is perhaps the most straightforward model of the three, positing that perceivers give more attention to certain social categories than others, disregarding the individuals' full multiple minority status (e.g., Kuzban et al., 2001; Pietraszewski et al., 2015; Sidanius et al., 2018). In other words, extremely salient social categories such as age, gender, or race may take precedent over more ambiguous social categories such as sexual orientation or immigrant status. The cause of these categories being more salient than others, as argued by Sidanius and colleagues (2018), is that we, as humans, are preconditioned by society to think of others in terms of the most relevant social structures – namely age-based hierarchies, patriarchal systems, and "arbitrary" systems such as race-based stereotyping. These social systems can then describe how we might stereotype others in dominance models; however, these models do not generally apply nicely to intersectional individuals. For instance, black women may experience the effects of intersectional invisibility (see Crenshaw, 1989; Purdie-Vaughns & Eibach, 2008) because the stereotypes associated with the categories of both black individuals and women become less applicable to black women. Dominance models cannot predict how individuals might react to black women, but instead, they can only predict how individuals will *not* react (Petsko & Bodenhausen, 2020). That is, they will likely not react to a black woman with racism or sexism but will instead render them invisible across all contexts. Herein lies the main problem with dominance models and intersectionality. While it may be useful for single-category individuals, we cannot accurately describe or understand the experiences of intersectional individuals if we cannot account for differences in contexts.

1.2.4: Integrative Models

The next model of intersectional stereotyping, integrative stereotyping, argues that perceivers are able to conceptualize all of the intersectional individual's social categories at the same time and may work similar to additive models of stereotyping (Crisp & Hewstone, 2000; Singh et al., 1997; Wojnowicz et al., 2009). For instance, if a team of office workers engaging in a team-building exercise and were told to split into teams, stereotypes of other groups may form in the context of this situation. If three-fourths of the shirts were blue, and one-fourth of the shirts were red, group differences are expected to emerge; however, if the letters A and Z were also placed on the shirts, with A being the majority and Z being the minority (separated equally across shirt colors), the individuals wearing a red shirt with a Z on it may be stereotyped based on their interconnected relation to the other groups' shirt colors (in this context). In real-world scenarios, this is what may happen when we conceptualize intersectional individuals (such as gay immigrants) in accordance with the interconnectedness of their sexual orientation and immigrant status (Hall et al., 2019; Wojnowicz et al., 2009); in integrative models, we must first be able to identify the individuals' multiple social categories, and then, be aware of how they might interact with other groups (particularly, the majority group) in any given context. Because of this, integrative models may be useful in understanding a large amount of psychological processes, but they may also be cumbersome as the potential outcomes for an intersectional individual becomes infinite (Petsko & Bodenhausen, 2020). For example, if we test the stereotypes of gay immigrants working in an office building, working in a hair salon, studying chemistry at university, studying music at university, or walking their dog in the park, it is likely that the stereotypes attributed to gay immigrants will be different in each scenario. Therefore, how useful are integrative models if there are, theoretically, an infinite number of possibilities?

1.2.5: Compartmentalization Models

The final main model of intersectional stereotyping, the compartmentalized model, accounts for differences in contextual stimuli arguably better than the former two theories (e.g., Turner et al., 1987). A recent update to compartmentalization, the lens theory (Petsko et al., 2022), argues that, although

individuals create somewhat static mental frameworks (i.e., lens) of various social groups (and members from those social groups), we are more likely to use these lenses only when they are activated by situational stimuli, subconsciously differentiating others based on context. In other words, individual social categories may be made more, or less, salient depending on the context in which they are viewed, harkening back to earlier research regarding stereotype activation or inhibition based on various social categories or contexts (see Hogg, 2007; Macrae, 1995). The authors stress this approach might explain the diverse findings in intersectional stereotyping research, and, furthermore, by identifying the factors that make certain identities prominent in the minds of social perceivers, this approach provides clear and testable predictions about the situational stereotyping of multifaceted individuals. The authors tested this proposal in a series of six experiments by using various social groups included in who said what paradigms (Taylor et al., 1978) which test memory recall.

Experiments 1a and 1b examined whether or not participants used only one lens at a time when conceptualizing intersectional individuals, providing support that perceivers may focus more on one social category when influenced by external lens. When black women were perceived through the lens of gender, rather than race, participants focused so much on the gender category that they confused black women with white women. Experiments 2a and 2b were replications of the first two experiments, but measured the stereotypes applied to each intersectional target. Again, the researchers found evidence that perceivers make subconscious stereotype shifts under specific lens. In Experiment 2a, participants were more likely to associate men with scientific qualities, and women with liber arts qualities, only when the gender lens was activated; similar results were produced in Experiment 2b where participants were more likely to associate black individuals with weapons (than white individuals) when the race, not age, category was triggered. Finally, Experiments 3a and 3b explored the possibility that perceivers might be able to use multiple lenses at a time to conceptualize intersectional individuals. Results suggested perceivers were able to employ an intersectional lens, and the authors argue that when we use an intersectional lens to perceive another individual, we are able to realize their identity. However, when we view another individual through a single lens (e.g., race), we are only able to perceive them as their race.

1.3: AIMS OF THE THESIS

The primary goal of this thesis, and the set of studies included within it, is to expand psychological research related to the stereotyping of intersectional individuals to a Portuguese context in order to better understand the effects of belonging to multiple, and intersecting, minorities. As a large portion of psychological research, and research in general, is conducted within the English-speaking world, it is increasingly important to not only replicate data in non-English-speaking countries, but also to include citizens of these countries to provide a more well-rounded understanding and dissemination of knowledge using a diverse sample (Case & Smith, 2000; Cuddy et al., 2014; Grapin et al., 2016; Petsko & Bodenhausen, 2019). At the same time, all of the set of studies included throughout this thesis introduce themes of immigration, sexual orientation, or the combination of both – an underrepresented and understudied facet in psychological research (Case & Smith; Cuddy et al., 2014). Indeed, we know little about the descriptive content applied to such underrepresented groups and how they are stereotyped alongside the more established groups in the same domain. Finally, and most importantly, we hope to contribute to the research on intersectional stereotyping by specifying factors that render particular identities more or less salient in the minds of social perceivers. To address these topics we first relied on a common approach for assessing stereotypes toward multiple groups in Chapter 2 by using the checklist method first developed by Katz and Braly (1933) to examine the stereotypes attributed to men, women, and immigrants (across sexual orientations), finding evidence of de-immigrantization for certain individuals. Next, Chapter 3 attempted to bring these findings from a theoretical, to a real, point of view in a CV study. Results were consistent with prior research which found that straight immigrants, but not gay immigrants, were perceived as more negative candidates. Finally, Chapter 4 tested whether or not the work thus far might be applicable to non-physical stimuli – voices. Again, we found interesting results within the realm of intersectionality which suggested that, when participants were asked to evaluate individual differences (Study 1), they focused on the farthest prototypical group (evaluating them more negatively), but when they were asked to evaluate targets in a group setting (Study 2) , they focused more

on the group closest to the majority group (producing more recall errors). To perform the studies from Chapter 4, we had to develop extensive pretests on stereotypical behaviors for multiple groups; that database was used to develop a parallel line of research. As so, Chapter 4.4.3 then takes the idea of stereotyping and, instead of using single-word attributes, focuses on the more complex conceptualizations of behaviors. Specifically, we examined the stereotypical behaviors attributed to stereotypical or counterstereotypical straight or gay men and women, when manipulating occupational categories, and find that perceived masculinity of occupational categories shifted perceivers' judgements about what are considered to be stereotypical behaviors.

CHAPTER 2

STEREOTYPE CONTENT AT THE INTERSECTION OF SEXUAL ORIENTATION AND IMMIGRANT STATUS

In Chapter 2 we first start by reflecting on the Portuguese context when considering the intersection of immigrant status and sexual orientation (Chapter 2.1), to better contextualize the choices made about multiple social categories in the subsequent studies. Then, the next two sections (Chapter 2.2 and Chapter 2.3.1) developed a set of studies that were inspired by Petsko and Bodenhausen's 2019 paper titled, "Racial stereotyping of gay men: Can a minority sexual orientation erase race?", with Chapter 2.2 acting as a pretest for Chapter 2.3.1. According to Petsko and Bodenhausen (2019), intersectional invisibility is essentially rooted in the dominance model of intersectional stereotyping (see Chapter 1.2.3 for more information), where, inevitably, one of the social categories of an individual may be rendered irrelevant to perceivers, although, this has been empirically observed across contexts (Nicolas et al., 2017). Essentially, the main question with intersectional research is: why do some categories have more salience over others? Is it the context, the time, how prototypical the target is of each category, or another reason? This is what we wanted to examine in the studies introduced in Chapter 2. Specifically, how might individuals at the intersection of sexual orientation and immigrant status be perceived and mentally represented by others? Will they be viewed as more, or less, prototypical to their constituent groups if they are learned to be from a sexual minority?

To test these questions, we first developed Chapter 2.2 as a pretest to determine which nationalities were to be used in Chapter 2.3.1. We wanted to know to what extent the men and women from different nationalities might be perceived in terms of masculinity or femininity, the estimated percentage of gays or lesbians in their group, and their economic status. From this, we were able to detect mental representations of different nationalities originating from these objective measures of classifications, with such work producing a paper that analyzed all the nationalities pretested (see Chapter 2.2). In Chapter 2.3.1, we adapted the paradigm used in Petsko and Bodenhausen (2019) in which a de-racialization effect was found. Instead of focusing on race, as a large portion of intersectional studies does, we wanted to focus on the immigrant status of the targets to test whether or not participants had a common mental conceptualization of what it means to be 'immigrant'. We tested intersectionality invisibility by introducing the categories of Portuguese men/women, Portuguese gay men, Portuguese

lesbian women, immigrant men/women, and gay/lesbian immigrant men/women, effectively comparing various minority groups to the majority. We extended findings from the first study by introducing a methodology using an anchor system; that is, we included straight and gay/lesbian men and women from Brazil, France, India, and Japan in the second study, attempting to better understanding the effects of intersectional stereotyping based on the outputs from the first study.

2.1: Sexual Orientation and Immigrant Status in the Portuguese Context

The rate of emigration from Portugal to other countries has steadily declined since 2014 while the rate of immigration from other countries to Portugal has steadily increased during the same time frame (Pires, 2019), facilitating tense relations between Portuguese natives and foreign individuals (i.e., immigrants) (de Sousa, 2019). Due to Portugal's colonial history, a large portion of these individuals immigrate from former Portuguese colonies such as Brazil or Angola (GEE, 2020), although upon the nation's admission into the European Union (EU) in 1986, there has been substantial immigration from countries such as England or the Netherlands (Padilla & França, 2016). Because of Portugal's reliance on foreign individuals (Guerra et al., 2015), immigration is generally discussed in various sociopolitical institutions as a welcome process that might further the nation's well-being (Carvalho & Duarte, 2020), however, at the micro level, immigrants may be subject to specific types of discrimination or prejudice from Portuguese natives such as occupational abuse stemming from unfair power imbalances (Figueiredo et al., 2018), feeling unaccepted in Portuguese society (regardless of time spent in Portugal (Sardinha, 2011)), or being perceived as less educated than Portuguese individuals (Carvalho & Duarte, 2020), suggesting there is a societal disconnect between reliance on immigrants and their integration into society (Guerra et al., 2015). As with many countries worldwide, these specific types of discrimination are generally experienced, unproportionally, by individuals immigrating from nations with economic hardships. For instance, British immigrants living in Portugal are often perceived as "model citizens" who bring, rather than take money (experiencing little xenophobia) (Cole, 2006), and inversely, Brazilian immigrants living in Portugal are often perceived as laborers who exhausted Portugal's economic reserve

(Sardinha, 2011), giving insight into the different experiences individuals may face based on societal perceptions of their group.

In contrast, the lesbian, gay, bisexual, transgender, and queer (LGBTQ) community has a unique, but largely positive, relationship with Portugal and Portuguese individuals caused by a mixture of the nation's relationship with Catholicism and the economic prosperity the LGBTQ community brought upon the dissolvement of the dictatorship. Specifically, being gay was viewed as a deviance from the social norm before and during the dictatorship (Cascais, 2009), but after the dictatorship fell, discussions centered on the potential economic benefits of the LGBTQ community (i.e., pink tourism) led to the overall acceptance of LGBTQ persons. Since then, Portugal has become one of the world's leading countries for LGBTQ rights (Hines & Santos, 2017; Santos, 2004). Nonetheless, especially with the rise of political conservatism in Western countries, LGBTQ members may experience occupational (Hollis & McCalla, 2013), healthcare (Pinto & Nogueira, 2016), and familial (Passani & Debicki, 2016), and other forms of discrimination in Portugal. For instance, research found that students held negative attitudes toward LGBTQ adoption, citing immorality or a lack of the child's best interests (Costa et al., 2014), directly supporting other research regarding perceptions of promiscuity (followed by parental incompetency). That is, as LGBTQ members (more often than not, gay men) are seen as promiscuous, non-LGBTQ members use this stereotype as an explanation for their opposition to LGBTQ adoption or parenting, although it is crucial for LGBTQ parents to disclose their sexual orientation to increase the potentiality of facilitating beneficial social networks (Gato et al., 2021; Pinsof & Haselton, 2017).

Finally, when considering the intersection of immigrant status and sexual orientation, there is a severe lack of research not only in the Portuguese context, but the global context, as well. Specifically, prior literature tends to focus on individuals' experiences with sexual orientation-related prejudice with their immigrant status not explicitly examined; rather, they are often grouped by nationality which expresses implicit, not explicit, immigrant status. For instance, Gkiouleka and Hujits (2020) mention Portugal in passing as a country where migrants may face intersectional problems related to poor healthcare, without going into any further detail on the country itself or the problems of LGBTQ migrants

specifically. However, there are quite a few stories recorded about LGBTQ migrants' (and LGBTQ natives') experiences in Portugal through the Queer Lisboa and Queer Porto film festivals (Queer Lisboa, 2021). The festivals are renowned for their in-depth focus on the LGBTQ community, particularly how intersectional identifying factors such as race or immigrant status may shape personal experiences. As such, although it is not necessarily experimental in nature, the Queer Lisboa festival is arguably one of the (if not, the) best resource for information regarding LGBTQ migrants living in Portugal. One of the main goals of this thesis is to tackle this issue in an experimental manner, providing resources and findings for scholars and the public, alike, to explore, regarding the intersectional experiences that LGBTQ immigrants may endure.

One of the main goals of this thesis was to investigate the extent to which past findings may be applicable to individuals from different immigrant backgrounds, sexual orientations, and genders in a Portuguese context. Although there has been an increase in research related to this thesis in Portugal, there is yet a sizable amount of work to be completed; generalizability in research is increasingly important given the diversification of all aspects related to the development, production, and dissemination of theoretical and applicable knowledge, alike. Moreover, the increased visibility of various intersectional individuals gives importance to the work introduced within this thesis.

2.2: Interpreting the perceptions of men and women from 17 nationalities in a Portuguese context: A pretest[1]

Abstract

Individuals have the propensity to attribute certain characteristics to nations or regions, and those living within, although the accuracy of this is under debate. In this pretest, Portuguese participants were asked to evaluate men and women from 17 nationalities based on dimensions which might be related to individualistic- or collectivistic-oriented nations – namely perceived masculinity, percentage of gays/lesbians in each group (PGL), and economic status. We predicted conceptualizations of nationality to trump gender triggers, resulting in general evaluations of individuals from each nation in this context-absent scenario. Results revealed strong relationships between men and women from the same nationality, and greater variability among nationalities in the evaluations of male targets, supporting the notion national stereotypes may be more representative of the men from each nation (i.e., androcentrism). Additionally, individualist-oriented nations were found to have higher PGL and economic status ratings when compared to collectivist-oriented nations, but both were perceived as equally masculine. Finally, gross domestic product per capita (GDPpc) of each nation appeared to somewhat act as a function of participants' judgements. Findings generalize literature to a Portuguese context, providing insight into the manner in which individuals may categorize those from various nationalities.

Keywords: National Stereotypes, Immigration, Masculinity, Femininity, LGBTQIA+

[1] Reese, J., Santos, A. S., & Palma, T. A. (2024). Interpreting the perceptions of men and women from 17 nationalities in a Portuguese context: A pretest. *Analise Psicologia* (In Press)

The conceptualization of nations, and immigrants from those nations, are driven by unique relationships shared between the host and home states, which in turn, perpetuate stereotypes resulting in the overgeneralization and/or personification of nations (Eagly & Kite, 1987; Hrebíčková & Graf, 2014; Lee & Fiske, 2006; Mace, 1943; McCrae et al., 2013). This simplification may be, in part, explained by the stereotype content model (SCM) which argues that the judgements of outgroup members (e.g., foreigners) are defined by the potentiality of causing harm (related to warmth) and the capability of causing harm (related to competence) to the ingroup (e.g., Fiske et al., 2002; Fiske et al., 2007). The behaviors from intergroup affect and stereotypes (BIAS) model (Cuddy et al., 2007) expanded the theoretical applications of the SCM to investigate the notion of active and passive behavioral tendencies, where warmth was considered an active variable and competence was considered a passive variable. From this, 4 groupings, which could be combined to make quadrants, were proposed: high and low warmth (e.g., either helping or hurting an individual, respectively), and high or low competence (e.g., either associating with or ignoring an individual, respectively).

For instance, middle-class outgroup members may be considered high in both warmth and competence, eliciting both a desire to facilitate a relationship with and a feeling of admiration toward members of this specific outgroup. On the other hand, immigrants may be perceived low in both warmth and competence, eliciting both an aversion to facilitating a relationship with and a feeling of contempt toward members of this outgroup (Cuddy et al., 2007). As such, expats and immigrants are generally conceptualized differently in sociocultural spheres where positive perceptions of foreigners from "expat" or "middle-class" nations (e.g., England and Italy), and negative perceptions of foreigners from "immigrant" or "lower-class" nations (e.g., Angola and Mexico) may be a function of the stereotypical assumptions one has about the foreign individuals' nationality, rather than the stereotypical assumptions about the foreign individual (Cuddy et al., 2007; Lee & Fiske, 2006; Olier & Spadavecchia, 2022; Ramsay & Pang, 2017).

Of course, this may translate to real-world implications for immigrants of different nations, such as Latino immigrants being regarded as less intelligent (Appel et al., 2015) and less capable (Lee et al., 2006) than immigrants from East Asian countries, which undoubtedly poses disadvantages in the global job market. In the Portuguese context, specifically, Brazilian immigrants are arguably the most stereotyped group, due in part to perpetuated ideations from colonial times which only reinforce Portuguese individuals' conceptualizations of Brazilians' behaviors – real or not (Carvalho & Duarte, 2020; Guerra et al., 2015; Santos, 2013). In stark contrast, individuals from Japan and Frace (both high-income nations) are generally not stereotyped in a negative manner, but may be the target of negative economic sentiments from Portuguese individuals, who earn a lower wage (da Câmara, 2007, Koven, 2004).

There appears to be some consistency in the judgements of immigrants from various nations, even if citizens from the same nations do not agree with the international consensus (*Anonymized for Review,* 2023; Esses, 2021; Hrebíčková & Graf, 2014; Terracciano et al., 2005). That is, while Canada is typically perceived as a kind nation, and simultaneously, kinder than the United States (Reyna et al., 2013; Snefjella et al., 2018), Canadians may not self-categorize themselves as being kind. Of course, however, shifts in international migration patterns or worldwide events may cause the perception of specific immigrant groups to change over time (Lee & Fiske, 2006). This consistency of foreign categorization goes beyond national-level ideations, aligning with assumptions from the social dominance theory (e.g., Sidanius & Pratto, 1999; Sidanius, 1993); there exists overlapping perceptions of men and women from the same country, (Bem, 1994; Cuddy et al., 2015; Eagly & Kite, 1987; Pratto et al., 2006). Specifically, because of global patriarchism, an androcentric point of view, or simply a lack of cross-cultural knowledge, the stereotypes of men and women from the same nationality might be blurred and national stereotypes more closely relate to the men of a certain nationality (Eagly & Kite, 1987; Pratto et al., 2006; Purdie-Vaughns & Eibach, 2008). In other words, if men from a specific nationality are considered to be intelligent, so too, should the nationality itself (Cuddy et al., 2015). Undoubtedly, this

negates the experiences of women from outgroup nationalities, calling for the increased visibility of women on an international scale and rejecting assumptions created from modern androcentrism.

Additionally, nations may be categorized into groups as a function of their cultural proximity to one another, despite vast differences at micro levels of conceptualization (e.g., Brubaker & Cooper, 2000). There have been multiple methods of categorizing the individuals from various regions, all of which have justified criticisms: comparing the Global North with the Global South (e.g., Dados & Connell, 2012), "first world" versus "third world" countries (e.g., Sloan, 1990), and, central to this paper, the individualist- versus collectivist-oriented approach (e.g., Greif, 1994). Broadly speaking, individualist-oriented nations and cultures emphasize individual achievements, prioritizing personal differences over collective similarities, while, contrastingly, collectivist-oriented nations and cultures emphasize group achievements, prioritizing group cohesion over societal deviances (Greif, 1994; Hofstede, 2011; Jetten et al., 2002; Triandis, 1989; van Hoorn, 2014).

Notably, these patterns of group behavior provide unique spaces in which solutions for societal issues may be catalyzed or hindered. For instance, individualism tends to facilitate higher levels of gender and sexuality equality due in part to rising levels of feminism, while collectivism promotes gender and sexuality inequality, partly from the idea of personal honorability as defined by the group (e.g., Bettinsoli et al., 2019; Cuddy et al., 2015; Davis & Williamson, 2019; Lowe et al., 2021), which in turn, may correlate with greater stereotypical gender differences in Western contexts than elsewhere (Löckenhoff et al., 2014). Moreover, individualistic nationalities appear to correlate with masculinity where increased individualism appears to resonate with increased masculinity (e.g., Barry, 2015; Cuddy et al., 2015; Gelade et al., 2008), although it should be noted that contradicting arguments (i.e., nonsignificance between individualism and masculinity) have been constructed which warrant further empirical research (e.g., Bain & Bongiorno, 2015; Hofstede, 2010).

However, that is not to say that all individuals from these classifications behave according to national or cultural stereotypes; in fact, personal differences and various structural proponents may influence or discourage certain behaviors prototypical of each culture, developing societies which value

aspects of both individualism and collectivism (e.g., Hofstede, 2011; Triandis & Gelfand, 1998). Importantly, we do not argue that collectivism is a worse societal system than individualism – although the argument may be ascertained that collectivist-oriented nations have less gender and sexual equality, the argument may also be made that individualist-oriented nations have less strong familial relations, but stronger independence, meaning both culture orientations hold unique strengths and criticisms (e.g., Davis & Williamson, 2019; Hofstede, 2011; Triandis, 1989).

The Current Study

While some, particularly those from the fields of social sciences, may deem it problematic to categorize individuals on a macro level (i.e., nationality) instead of micro levels (i.e., self-identity) (e.g., Anthias, 1998; Anthias, 2012; Brubaker & Cooper, 2000; Schinkel, 2018), it is nonetheless important to categorize nations in psychological research to further understanding intergroup relations, which typically, homogenize outgroup members based on the most prevalent outgroup members and/or stereotypes (Hogg, 2001; Purdie-Vaughns & Eibach, 2008). Similar to prior research on the stereotyping or categorization of nationalities (e.g., Eagly & Kite, 1987; Hofstede, 1980; Hofstede, 2011; Lee & Fiske, 2006), the current pretest explored Portuguese individuals' perceptions of 21 nationalities or groups on the dimensions of masculinity, perceived percentage of gays or lesbians (PGL) [2], and economic status. Specifically, 16 nationalities prevalent in Portuguese society (based on number of immigrants in Portugal (SEF, 2022) and international statuses), 4 neutral groups, and the control group of Portuguese citizens were chosen for analysis.

The three dimensions of categorization were considered based on the potentiality of correlation with aspects of individualist- or collectivist-oriented nations. Specifically, masculinity was chosen to further examine the debate on the relationship between masculinity and individualism; that is, will

[2] Perceived percentage of gay or lesbian individuals in each nationality/group. This measure was created to first identify potential patterns without introducing extra, or confounding, variables. For instance, participants might not have a suitable knowledge to evaluate the percentage of LGBTQIA+ members, as they might not be familiar with the individuals included within this community.

masculinity be correlated with individualism in a Portuguese context? We explored this in a straightforward manner by asking participants how masculine or feminine individuals from each nationality are, rather than using an open-ended methodology. Next, as individualistic nations tend to have greater acceptance of gay and lesbian members in society (Brewer, 2014; Cuddy et al., 2015; Lowe et al., 2021), the unique PGL dimension was proposed to indirectly test participants' perceptions of social justice in certain nations. If participants assume a nation has better treatment of gay and lesbian people, and this is based on global assumptions, it is plausible they will overestimate the actual percentage of gay or lesbian individuals from said nation based on demographic ignorance stemming from bias (e.g., Landy et al., 2017); for instance, Americans tend to overestimate the actual percentage of gays and lesbian in the United States (Haider-Markel & Joslyn, 2018; Newport, 2015), while Colombians tend to underestimate the percentage of gays and lesbian in Colombia (Ham et al., 2024). Finally, individualist- and collectivist-oriented nations may be subject to detrimental stereotypical assumptions of their economic status based on identifiers such as "first world" and "third world" where highly capitalistic nations (typically, individualist nations), and individuals from those nations, are regarded as higher in economic competence or competitiveness than less-capitalistic nations (e.g., Gorodnichenko & Roland, 2011; Tang & Koveos, 2008). Because of this, we predicted participants would transpose objective global rankings (i.e., gross domestic product per capita (GDPpc)) to the perceived economic status of individuals from certain nations, highlighting the stereotypical assumptions of people from low-income countries. Importantly, this measure asked about the individuals from each nation, not the nation itself to strengthen the argument made that international stereotypes may be applied to the individual.

Although the methodological approach was exploratory in nature, might be able to derive theoretical expectancies from similar past literature. First, we expected national perceptions to trump gender stereotypes in this specific context; specifically, we predicted that men and women from the same within-nation grouping would be perceived similar across all dimensions (Hypothesis 1). Next, we expected individualist-oriented nations would be perceived higher in masculinity, PGL ratings, and

economic status compared to collectivist-oriented nations (Hypothesis 2a), and that participants' evaluations may be a function of each nation's economic growth (Hypothesis 2b).

Method

Participants

Portuguese participants of at least 18 years of age were recruited through Prolific and were rewarded £1 (€1.15) for their effort. Although we did not conduct a priori power analysis before the study, we aimed to recruit as many participants as possible with our limited resources. However, a G*Power sensitivity power analysis (Faul et al., 2009) confirmed our sample size allowed us to detect an effect (η^2p) as small as 0.01 with 80% power when $\alpha = 0.05$. Of the 87 total respondents, 59 were men, 25 were women, and 3 did not specify their gender. Ages of participants ranged from 18 to 46 years old (M = 24.93, SD = 6.22) and most participants self-reported their sexual orientation as straight (n = 78). Additionally, participants were asked to self-report their personal economic status on a Likert-type scale ranging from 1 (Extremely low economic status) to 7 (Extremely high economic status); participants were largely from middle-class economic backgrounds (M = 4.19, SD = 0.81). All participants gave their informed consent to participate in this study, and this project was approved by the ethics committee of the lead author's institution. This study was not preregistered.

Procedure

Upon agreement to take part in the study, participants were instructed to provide evaluations of each target group based on Portuguese society's point of view (rather than their own opinions) in an attempt to alleviate potential issues caused by a small sample size. Participants were then asked to consider each target group (shown in writing) before evaluating them on the scales of masculinity/femininity, PGL, and economic status. Importantly, participants evaluated men and women from all of the 21 groups (42 total targets), and each gender was randomly assigned to appear first.

Masculinity and femininity were presented on a single, bipolar Likert-type scale from 1 (*Extremely feminine*) to 7 (*Extremely masculine*) with the prompt, "How masculine or feminine are [*target group*]?" and to indicate PGL ratings, participants were asked to estimate what percentage of the target group is gay/lesbian from 0 (*percent*) to 100 (*percent*) with the prompt "What percentage of [*target group*] are likely to be gay/lesbian?" For instance, if a participant believed that half of all gay German men are likely to be gay, they would have marked 50 percent on the slider scale presented. Finally, economic status was evaluated in a separate bipolar, Likert-type scale from 1 (*Extremely low economic status*) to 7 (*Extremely high economic status*) with the prompt "What economic status do people, in general, attribute to [*target group*]?" Importantly, before each of the three questions, participants were reminded that we were interested in obtaining the Portuguese society's point of view. Following this procedure for all 42 targets, participants reported their demographic information before receiving payment for participation.

Results

Descriptive Results

For a rank-ordered list of all target groups, please refer to Tables 1 – 3. In addition to rank-order organization, categorizations for each nation were provided based on their position relative to other targets within the same measure. To do so, each target's mean was compared against the averaged, overall mean of each measure (separated by gender) in a one sample t-test and were examined if they were statistically greater (i.e., high categorization), statistically lower (i.e., low categorization), or not statistically different (i.e., neutral categorization) than the overall mean. Doing so provided us with a descriptive categorization of all targets and their relation to one another; importantly, the nature of this procedure allowed for more, or less, neutral categories to emerge based on the degree of variability. For instance, the evaluations of masculinity and femininity (for both genders) received lower ranges than the evaluations of economic status (for both genders), resulting in fewer neutral categories for the economic status measure.

Upon categorization, participants appeared to evaluate the neutral categories (i.e., blood type and handedness) as intended, but in different manners. Specifically, participants evaluated all neutral categories as neutral (compared to all target groups) when considering the PGL and economic status measures; however, the neutral categories followed a different pattern when considering the masculinity and femininity measure. Instead of being evaluated as neutral (i.e., in the middle of all targets), they were instead positioned closer to the scale's midpoint (4), both suggesting participants viewed them as neither masculine nor feminine and, simultaneously, resulting in lower perceived masculinity for male neutral targets and higher perceived masculinity in female neutral targets. At the same time, it is important to view male and female targets in the masculinity scale together, yet separately, simultaneously due to the nature of perceived masculinity or femininity. As men are generally perceived as stereotypically more masculine than women (Ellemers, 2018), it was expected that men would be evaluated as more masculine than women (as was the case, here). However, this does not mean that male targets cannot be perceived as feminine (when compared to other men; e.g., Brazilian men) or female targets cannot be perceived as masculine (when compared to other women; e.g., Angolan women), and special attention must be paid not only to the between-nation relationships, but also the within-gender relationships.

Table 1

Perceived Masculinity or Femininity Across Groups

	Perceived Masculinity or Femininity								
Target	*M*	*SD*	*SE*	*Categorization*	Target	*M*	*SD*	*SE*	*Categorization*
Angolan Men	5.55	1.13	0.12	Masculine	Women w/ O+ Blood	3.54	0.96	0.10	Masculine
Cape Verdean Men	5.37	1.18	0.13	Masculine	Women w/ A+ Blood	3.49	1.01	0.11	Masculine
Ukrainian Men	5.29	1.13	0.12	Masculine	Left-Handed Women	3.41	1.05	0.11	Masculine

German Men	5.22	1.13	0.12	Masculine	Right-Handed Women	3.36	1.01	0.11	Masculine
Portuguese Men	5.10	1.20	0.13	Masculine	German Women	3.32	1.49	0.16	Masculine
Mexican Men	5.10	1.19	0.13	Masculine	Angolan Women	3.16	1.16	0.12	Masculine
Venezuelan Men	5.08	1.08	0.12	Masculine	Mexican Women	3.08	1.20	0.13	Neutral
American Men	4.92	1.29	0.14	Neutral	Cape Verdean Women	3.06	1.10	0.12	Neutral
Indian Men	4.79	1.27	0.14	Neutral	British Women	2.97	1.27	0.14	Neutral
Dutch Men	4.67	1.11	0.12	Neutral	American Women	2.94	1.20	0.13	Neutral
British Men	4.63	1.08	0.12	Neutral	Venezuelan Women	2.85	1.20	0.13	Neutral
Swiss Men	4.63	1.04	0.11	Neutral	Dutch Women	2.85	1.29	0.14	Neutral
Right-Handed Men	4.56	1.00	0.11	Neutral	Ukrainian Women	2.83	1.46	0.16	Neutral
Italian Men	4.40	1.39	0.15	Feminine	Indian Women	2.79	1.25	0.13	Neutral
Left-Handed Men	4.40	1.07	0.12	Feminine	Portuguese Women	2.70	1.05	0.11	Feminine
Men w/ O+ Blood	4.39	0.98	0.11	Feminine	Chinese Women	2.64	1.25	0.13	Feminine
Men w/ A+ Blood	4.31	0.93	0.10	Feminine	French Women	2.46	1.32	0.14	Feminine
Brazilian Men	4.28	1.27	0.14	Feminine	Swiss Women	2.46	1.15	0.12	Feminine
Chinese Men	4.21	1.22	0.13	Feminine	Brazilian Women	2.44	1.24	0.13	Feminine
Japanese Men	4.08	1.22	0.13	Feminine	Italian Women	2.38	1.15	0.12	Feminine
French Men	3.85	1.33	0.14	Feminine	Japanese Women	2.35	1.18	0.13	Feminine

Note. All male targets were subject to a one sample t-test against the mean for men, overall ($M = 4.71$), while all female targets were subject to the same test against the mean for women, overall ($M = 2.91$).

Evaluations of male targets received greater variability (Range = 1.70) than female targets (Range = 1.19).

Table 2

Perceived PGL Ratings Across Groups

Perceived Percentage of Gay Men or Lesbian Women									
Target	*M*	*SD*	*SE*	*Categorization*	Target	*M*	*SD*	*SE*	*Categorization*
Brazilian Men	29.76	18.42	1.98	High	American Women	27.43	17.85	1.91	High
French Men	29.51	17.92	1.92	High	Brazilian Women	24.10	20.07	2.15	High
American Men	29.45	19.07	2.04	High	French Women	23.46	17.68	1.90	High
Italian Men	26.31	17.91	1.92	High	Dutch Women	23.03	20.03	2.15	High
British Men	25.84	18.11	1.94	High	British Women	22.46	19.80	2.12	Neutral
Dutch Men	23.86	18.74	2.01	Neutral	German Women	22.15	17.27	1.85	Neutral
Right-Handed Men	23.37	18.60	1.99	Neutral	Women w/ A+ Blood	21.77	19.18	2.06	Neutral
Portuguese Men	23.12	17.19	1.84	Neutral	Portuguese Women	21.62	17.04	1.83	Neutral
Left-Handed Men	22.55	18.23	1.95	Neutral	Right-Handed Women	21.20	18.45	1.98	Neutral
Swiss Men	22.25	15.92	1.71	Neutral	Italian Women	20.81	17.92	1.92	Neutral
Men w/ A+ Blood	21.82	18.62	2.00	Neutral	Swiss Women	20.16	17.09	1.83	Neutral
German Men	21.06	14.37	1.54	Neutral	Women w/ O+ Blood	20.14	18.72	2.01	Neutral
Men w/ O+ Blood	20.77	18.13	1.94	Neutral	Left-Handed Women	19.82	18.22	1.95	Neutral

Chinese Men	19.36	18.76	2.01	Neutral	Ukrainian Women	18.58	18.10	1.94	Neutral
Japanese Men	18.91	15.69	1.68	Neutral	Mexican Women	16.70	13.91	1.49	Low
Mexican Men	17.76	13.99	1.50	Low	Japanese Women	15.56	14.25	1.53	Low
Venezuelan Men	16.49	13.63	1.46	Low	Venezuelan Women	14.95	13.37	1.43	Low
Indian Men	16.26	13.92	1.49	Low	Cape Verdean Women	14.32	14.07	1.51	Low
Ukrainian Men	15.78	13.99	1.50	Low	Chinese Women	13.44	12.36	1.33	Low
Angolan Men	14.10	13.16	1.41	Low	Angolan Women	13.36	14.48	1.55	Low
Cape Verdean Men	13.47	11.92	1.28	Low	Indian Women	13.13	11.74	1.26	Low

Note. All male targets were subject to a one sample t-test against the mean for men, overall (M = 21.51), while all female targets were subject to the same test against the mean for women, overall (M = 19.44). Evaluations of male targets received greater variability (Range = 16.29) than female targets (Range = 14.30).

Table 3

Perceived Economic Status Across Groups

Perceived Economic Status									
Target	*M*	*SD*	*SE*	*Categorization*	Target	*M*	*SD*	*SE*	*Categorization*
Swiss Men	5.93	1.01	0.11	High	German Women	5.68	1.04	0.11	High
German Men	5.90	0.98	0.11	High	Swiss Women	5.63	1.18	0.13	High
Dutch Men	5.66	0.99	0.11	High	Dutch Women	5.49	0.94	0.10	High
British Men	5.58	0.90	0.10	High	British Women	5.48	0.90	0.10	High

American Men	5.56	1.16	0.12	High	French Women	5.41	0.92	0.10	High
Japanese Men	5.36	1.05	0.11	High	American Women	5.37	1.17	0.13	High
French Men	5.29	0.99	0.11	High	Japanese Women	5.12	1.15	0.12	High
Italian Men	4.90	0.92	0.10	High	Italian Women	4.97	0.83	0.09	High
Chinese Men	4.52	1.42	0.15	High	Chinese Women	4.30	1.37	0.15	Neutral
Left-Handed Men	4.16	0.57	0.06	Neutral	Women w/ O+ Blood	4.07	0.33	0.04	Low
Right-Handed Men	4.14	0.41	0.04	Neutral	Left-Handed Women	4.03	0.52	0.06	Low
Men w/ A+ Blood	4.07	0.43	0.05	Neutral	Right-Handed Women	4.02	0.48	0.05	Low
Men w/ O+ Blood	4.06	0.47	0.05	Neutral	Women w/ A+ Blood	4.01	0.29	0.03	Low
Portuguese Men	3.61	0.97	0.10	Low	Portuguese Women	3.97	0.83	0.09	Low
Ukrainian Men	3.10	1.06	0.11	Low	Ukrainian Women	3.23	1.21	0.13	Low
Brazilian Men	2.71	0.93	0.10	Low	Brazilian Women	3.12	1.18	0.13	Low
Indian Men	2.66	1.22	0.13	Low	Mexican Women	2.82	1.10	0.12	Low
Mexican Men	2.62	0.91	0.10	Low	Indian Women	2.81	1.25	0.13	Low
Angolan Men	2.56	1.33	0.14	Low	Venezuelan Women	2.51	1.20	0.13	Low
Venezuelan Men	2.43	1.13	0.12	Low	Cape Verdean Women	2.48	1.07	0.11	Low
Cape Verdean Men	2.24	0.92	0.10	Low	Angolan Women	2.45	1.13	0.12	Low

Note. All male targets were subject to a one sample t-test against the mean for men, overall ($M = 4.15$), while all female targets were subject to the same test against the mean for women, overall ($M = 4.14$).

Evaluations of male targets received greater variability (Range = 3.69) than female targets (Range = 3.23).

Testing the Hypotheses

Hypothesis 1 examined relationships between genders of the same nationality. Importantly, neutral categories (e.g., left-handed men) were excluded from this analysis to avoid noise. First, masculinity and femininity were compared with correlative tests using Pearson's *r,* as t-tests were not appropriate due to the nature of the measure. For instance, while a paired-samples t-test revealed that Angolan men ($M = 5.55$, $SD = 1.13$) and women ($M = 3.16$, $SD = 1.16$) differed in perceived masculinity ($t(86) = 13.38$, $p < .001$, $d = 2.09$), both groups were evaluated as relatively masculine compared to all other groups. First, participants' individual correlations for each target group across all 3 measures were measured, revealing a weak positive correlation between the perceived masculinity of men and women from the same nation ($r(15) = 0.17$, $p < .001$), a moderately strong positive correlation between the PGL scores of men and women from the same nation ($r(15) = 0.46$, $p < .001$), and a strong positive correlation between the economic scores of men and women from the same nation, $r(15) = 0.91$, $p < .001$. However, when examining the averaged means of participant evaluations across each target group, a very strong positive correlation was found between the perceived masculinity of men and women from the same nation, $r(15) = 0.81$, $p < .001$. Further correlative tests found very strong positive correlations between the perceived PGL scores of individuals from the same nation separated by gender ($r(15) = 0.88$, $p < .001$), and the perceived economic status of men and women from each nation, $r(15) = 0.99$, $p < .001$. Individualized and averaged correlations largely supported Hypothesis 1, apart from the discrepancy detected on the masculinity scale; specifically, when examined at the individual level, male and female targets were not as strongly correlated on the scale of masculinity when compared to the group testing, suggesting that individuals may not evaluate men and women from the same nation similar in perceived masculinity, although the group does appear to do so.

Hypotheses 2a and 2b were first examined using regression modeling to identify potential trends in the continuous data before proceeding to the grouped variables. When using participants' individual scores, in line with the approach used to test correlations, a significant regression model was produced ($F(3, 2965) = 940.40$, $p < .001$), with an adjusted R^2 of 0.49. The regression coefficient for masculinity was -0.19 and the standard error was 0.31, suggesting that masculinity does not predict the individualism score of a country. However, the regression coefficient for economic status (14.46) and PGL (1.92) and their standard errors (0.28 and 0.32, respectively), suggested that both variables predicted the individualism score of a country (with economic status being a stronger predictor).

Participants' individual scores were also used to examine the influence of variables on individualism using GDPpc as a function of participant evaluations. A significant regression model was again produced, ($F(7, 2950) = 768.80$, $p < .001$), with an adjusted R^2 of 0.65. Overall, each nation's GDPpc predicted the individualism scores of each nation (regression coefficient = 13.34, standard error = 0.37). At the same time, the regression coefficient for masculinity (as a function of GDPpc) was -0.01 and the standard error was 0.25, the regression coefficient for PGL (as a function of GDPpc) was -0.99 and the standard error was 0.26, and separately, the regression coefficient for economic status (as a function of GDPpc) was -3.06 and the standard error was 0.30. Results suggest that, again, masculinity did not predict individualism scores, even as a function of GDPpc.

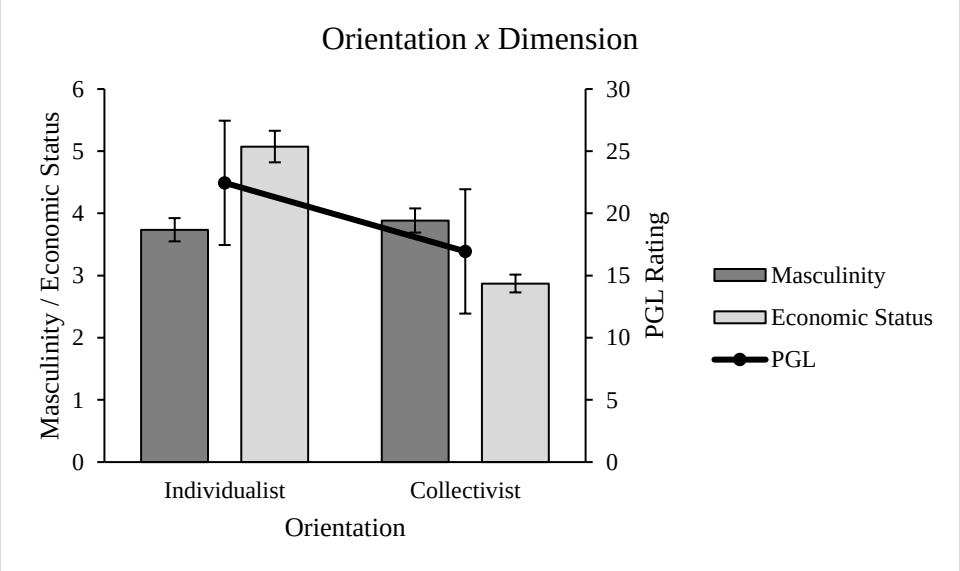
Next, Hypothesis 2a was further examined using a 2 (Orientation: individualist vs collectivist) x 3 (Dimension: masculinity, PGL, and economic status) repeated measures analysis of variance (ANOVA) test aimed at identifying differences in the categorizations of nation groups. Importantly, 9 nationalities were considered more individualist than collectivist[3], while 7 were considered more collectivist than individualist[4] according to Hofstede's dimensions (2023)[5]. Italy was excluded from this analysis as it was

[3] England, France, Germany, Japan, the Netherlands, Portugal, Switzerland, the United States, and Ukraine
[4] Angola, Brazil, Cape Verde, China, India, Mexico, and Venezuela
[5]The classifications of nationalities as individualist or collectivist are derived from Hofstede Insights' online tool (2023), which provides information on these cultural dimensions for multiple nationalities. This tool not only quantifies the dimensions from the original scale used by Hofstede, but also provides a detailed interpretation that explicitly defines each nationality's orientation.

neither individualist nor collectivist; please refer to Table 4 for further information. Results indicated, as expected, a significant main effect of orientation, ($F(1, 86) = 115.59$, $p < .001$, $\eta^2p = 0.57$), dimension ($F(2, 172) = 125.57$, $p < .001$, $\eta^2p = 0.59$), and a significant interaction between variables, $F(2, 172) = 50.19$, $p < .001$, $\eta^2p = 0.37$, meaning that depending on the nationality type, the differently-evaluated dimensions would behave uniquely. As the interaction was most important, we examined each pairing in a series of post-hoc tests with a Bonferroni comparison. First, a nonsignificant difference in perceived masculinity between individualist ($M = 3.74$, $SD = 0.44$) and collectivist nations ($M = 3.89$, $SD = 0.46$) was revealed, $p > 0.999$, $d = -0.02$. However, individualist nationalities ($M = 22.46$, $SD = 14.63$) had a significantly higher PGL score than collectivist nations ($M = 16.94$, $SD = 12.28$), ($p < .001$, $d = 0.71$), and individualist nationalities ($M = 5.08$, $SD = 0.58$) had significantly higher perceived economic status than collectivist nationalities ($M = 2.87$, $SD = 0.70$), $p < .001$, $d = 0.28$. Results largely supported Hypothesis 2a (see Figure 1).

Figure 1

Comparison of Nationality Type by Dimension



Note. Masculinity and economic status are fixed on the primary (left) axis, while PGL ratings are fixed on the secondary (right) axis. Error bars represent 95% confidence intervals.

Finally, to test whether or not participants' evaluations were a function of perceived economic growth (Hypothesis 2b), each nationality's GDP per capita[6] was considered in a 2 (GDPpc: high vs low) x 3 (Dimension: masculinity, PGL, and economic status) repeated measures ANOVA. To reduce data manipulations, nations were classified as either high or low GDPpc nations by sorting all values from the most to least GDPpc and separating the targets in half to achieve 8 high-GDPpc nations[7] and 9 low-GDPpc nations[8] (see Table 4). Results revealed a significant main effect of GDPpc, ($F(1, 86) = 116.27$, $p < .001$, $\eta^2p = 0.58$), dimension ($F(2, 172) = 137.63$, $p < .001$, $\eta^2p = 0.39$), and a significant interaction between variables, $F(2, 172) = 53.87$, $p < .001$, $\eta^2p = 0.39$. Again, as the interaction between variables was most important, we conducted post-hoc comparisons with a Bonferroni correction to test statistical differences. First, it was revealed that high-GDPpc countries ($M = 4.55$, $SD = 0.77$) were *not* perceived as more masculine than low-GDPpc countries ($M = 4.97$, $SD = 0.84$), $p > 0.999$, $d = -0.05$. However, further planned contrasts revealed that high-GPpc nations had higher PGL ratings ($M = 24.65$, $SD = 15.08$) and perceived economic statuses ($M = 5.52$, $SD = 0.68$) than low-GDPpc countries ($M = 18.46$, $SD = 12.53$; $M = 2.94$, $SD = 0.61$), respectively, $p < .001$, $d = 0.77$, $p < .001$, $d = 0.32$. Results corroborated those of the regressions.

Table 4

Individualism and GDPpc Across Nationalities

Nationality	*Individualism*	*Categorization*	*GDPpc ($)*	*Categorization*
Angola	18	Collectivist	3,000	Low

[6] GDP per capita was taken from The World Bank (2024); the most recent year available for analysis was 2022 for all nations, apart from Venezuela which was 2014. Additionally, the United Kingdom was analyzed for England.
[7] England, France, Germany, Italy, Japan, the Netherlands, Switzerland, and the United States
[8] Angola, Brazil, Cape Verde, China, India, Mexico, Portugal, Ukraine, and Venezuela

Brazil	38	Collectivist	8,917	Low
Cape Verde	20	Collectivist	3,754	Low
China	43	Collectivist	12,720	Low
England	76	Individualist	46,125	High
France	74	Individualist	40,886	High
Germany	79	Individualist	48,718	High
India	24	Collectivist	24,10	Low
Italy	53	Neutral	34,776	High
Japan	62	Individualist	33,823	High
Mexico	34	Collectivist	11,496	Low
Netherlands	100	Individualist	57,025	High
Portugal	59	Individualist	24,515	Low
Switzerland	79	Individualist	93,259	High
Ukraine	55	Individualist	4,534	Low
United States	60	Individualist	76,319	High
Venezuela	26	Collectivist	15,975	Low

Note. According to Hofstede's dimensions (2023), Italy is neither individualist nor collectivist. GDPpc is displayed in thousands (of US Dollars).

General Discussion and Conclusion

This pretest successfully examined the manner in which Portuguese individuals may conceptualize individuals from other nations by ascribing to generalized stereotypes. Although similar projects have been produced (e.g., Eagly & Kite, 1987; Hofstede, 1980; Hofstede, 2011; Lee & Fiske, 2006), the current study focuses on the conceptualization of nations, extending prior findings regarding the perceived masculinity and economic status of immigrants while introducing a unique measure which examined the perceived percentage of gay or lesbian individuals from each target group. Importantly, we wanted to examine whether or not participants' evaluations of individuals from different nationalities might be affected by objective, but not explicitly measured, categorizations of those nations. That is, if asked to estimate the economic status of individuals, would participants use the objective value of GDPpc to anchor their evaluations, although this measure was not presented to them? Results generally supported the main hypotheses, suggesting national conceptualizations may be anchored not only to the men of each nation, but to the objective conceptualizations of each nation (i.e., individualism/collectivism and GDPpc), raising concern for the perpetuation of global stereotyping (e.g., perceiving Indian individuals as poorer than German individuals based on the external knowledge of each nation's GDPpc).

First, minimal differences in the relationships between men and women of the same nationality provided support that national categorizations are highly salient. In line with the social dominance theory (e.g., Sidanius & Pratto, 1999; Sidanius, 1993), the lens theory (e.g., Petsko et al., 2022) and exemplifying prior findings (e.g., Eagly & Kite, 1987; Pratto et al., 2006; Purdie-Vaughns & Eibach, 2008), ratings of male targets were slightly more polarized than those of female targets (meaning more distinctions between nations), indicating participants may have blurred their conceptualizations of women across nationalities, suggesting the gender category might have been more salient than nationality for women (e.g., *Anonymized for Peer Review, 2023*; Bem, 1994). Moreover, the generalization and stereotyping of outgroup members tends to be guided by the most visible examples within each group (Purdie-Vaughns & Eibach, 2008); as men traditionally hold power in global patriarchal societies (Pratto et al., 2006), it is understandable (yet, dangerous) that the categorizations of immigrants may be stronger for men than it is of women. At the same time, the majority of the sample was male (68%), which might

have not only influenced the heterogeneity of female targets, but also affected the low correlation for masculinity scores when considering individual, rather than group, differences (see Lowe et al., 2021). However, these conclusions require further testing to fully identify stereotype saliency. Nonetheless, we argue the current project continues the debate on gender invisibility at an international scale and propose greater gender equality within sociopolitical and academic spheres.

Continuing the theme of individual versus group differences, Hypotheses 2a was first tested using regression modeling when accounting for each individual's scores across all target groups. Results suggested that economic status and PGL scores were likely to predict each nation's individualism score, but masculinity did not. In line with this analysis, it was expected that individualist-oriented nations would be perceived higher in masculinity, PGL ratings, and economic status when compared to collectivist-oriented nations. While the latter two statements were confirmed, both orientations were perceived similarly in masculinity. As Bain and Bongiorno (2015) and Hofstede (2010) found, there was a nonsignificant correlation between masculinity and individualism, in addition to a nonsignificant difference between individualist and collectivist-oriented nations on the dimension of masculinity. Given assumptions of masculinity are similar to positive traits of capitalism, notions of national masculinity or femininity may be inherently flawed; furthermore, if the conceptualizations of nations are anchored to the conceptualizations of men (from those nations), there should be no difference in perceptions of masculinity across individualist or collectivist-oriented cultures (e.g., Eagly & Kite, 1987). However, participants may not have understood what was meant by masculinity and femininity, and instead estimated this measure as a function of gender, rather than nationality.

Participants' individualized scored were also used to examine whether or not GDPpc acted as a function of participant evaluations. Importantly, a regression model found that GDPpc significantly predicted a nation's individualism score, suggesting the two variables are correlated with one another and supporting past literature regarding individualist- and collectivist-oriented nations in regard to economic status (e.g., Gorodnichenko & Roland, 2011; Tang & Koveos, 2008). Economic status and PGL scores were again significant predictors (as a function of GDPpc), but masculinity was not. Results were further

confirmed in the grouped testing, in which repeated measures ANOVAs revealed the men and women from high GDPpc countries were perceived as having higher economic statuses and higher PGL scores than those from low GDPpc countries but were not different in evaluations of masculinity, supporting arguments from past literature (e.g., Brewer, 2014; Cuddy et al., 2015; Greif, 1994; Hofstede, 2011; Jetten et al., 2002; Lowe et al., 2021; Triandis, 1989; van Hoorn, 2014) in which participants might have transposed international standards toward their evaluations (e.g., Haider-Markel & Joslyn, 2018; Ham et al., 2024; Landy, 2017; Newport, 2015).

Particularly, individualist nationalities appreciate individual differences more than collectivist nationalities which put more emphasis on group cohesion (e.g., Greif, 1994; Hofstede, 2011; Jetten et al., 2002; Triandis, 1989; van Hoorn, 2014). In a world in which gay and lesbian individuals are increasingly visible (and in some instances, politicized), the propensity to keep gay and lesbian identities hidden may be greater in collectivist-oriented nations where social deviation is not accepted (e.g., Brewer, 2014; Lowe et al., 2021). Supporting this statement, 86% of the individualist-oriented nations have national-level marriage equality, while only 36% of the collectivist-oriented nations have protective national laws (HRC, 2023). Interestingly, however, participants' evaluations reflected real-world applications, suggesting international assumptions may have influenced PGL judgements (e.g., Haider-Markel & Joslyn, 2018; Ham et al., 2024; Landy, 2017; Newport, 2015) Additionally, as individualist-oriented nations value personal achievements, capitalism has taken hold – arguably more here than in other nations (e.g., Gorodnichenko & Roland, 2011; Tang & Koveos, 2008). Moreover, the individualistic nationalities included all hold high global economic power (World Bank, 2024). As such, it is entirely plausible that participants have conflated the ideations of nationalities based on media to the ideations of immigrants from those nationalities.

As with any study, the current one is not without certain methodological limitations which should be mentioned. Specifically, results were bound to one of the three main measures (i.e., masculinity, PGL, and economic status), and the measures alone, particularly the masculinity measure, might have been misinterpreted by participants. For instance, while the concepts of masculinity and femininity are not

abstract ideas, they are nonetheless affected by external variables such as the setting, time, and space, in which these ideas are measures. We argue however, that results were not largely affected by this ambiguity as the measure itself was presented in a straightforward manner (i.e., "How masculine or feminine are [*target group*]?"), and strong correlations were found between male and female target groups from the same nationality. Importantly, the main goal of the pretest was to give additional support toward the generalization of individuals from specific nations and nation groupings; a database of the perceptions of men and women across nationalities offers a unique solution to researchers from cultures similar in proximity to Portugal who might not have adequate resources to conduct pretests. However, due to funding limitations, we were unable to capture a large sample size. Given the low participant count (<100), and the fact that the majority of participants were men (68%), results might have been significantly influenced from not only inadvertently obtaining a specific subsection of the Portuguese population, but also from gender differences regarding the perceptions of outgroup members (see Lowe et al., 2021). Of course, this limitation would be solved by obtaining a larger sample size. Moreover, the findings presented in this project are bound by their positioning in both society and time, bringing into question the long-term applicability of participants' evaluations; future studies should capitalize on these limitations, using the current project as a starting point of which additional ideas may be realized and the current data may be updated periodically to account for societal shifts.

Findings from this study provide unique insights into the perceptions of individualist and collectivist-oriented nationalities in a Portuguese context, which generalize prior research and may prove beneficial for future researchers conducting studies in similar cultures. It is important to realize interpersonal differences are abundant, and the generalization of nationalities or cultures may bring inherent overgeneralization; therefore, results should not be regarded as entirely representative of the individuals of the selected nations, but rather, the perception of Portuguese individuals toward these nations. Because we belong in an increasingly globalized world, a fully-realized understanding of inter- and intranationality perceptions is critical to create a society in which prejudice is minimalized.

2.3: INTERSECTIONAL INVISIBILITY

Intersectional invisibility is a more recent theory created by Purdie-Vaughns and Eibach (2008) which states that individuals belonging to multiple minorities may be rendered "invisible", rather than double prejudiced, due to their contradicting identities and/or stereotypes associated with each social group. The authors built the theory on three social concepts to explain how individuals with intersecting identities may be viewed as less stereotypical of their constituent groups. The first of which, androcentrism, refers to the definition of any social group based on the men of each group, effectively eliminating the experiences of women (see Bem, 1994; Eagly & Kite, 1987). Second, ethnocentrism is similar in nature, but instead refers to the majority group's ethnic group as the most dominant social group (which in most Western contexts, refers to white individuals (Sue, 1999)). Finally, heterocentrism refers to the notion that heterosexuality is the biological and societal "norm", with any other sexuality being perceived as socially deviant (Bem, 1994). A model of prototypicality using these three concepts can then be created, allowing for the categorization of intersectional individuals. For instance, a white straight woman may fit nicely into the concepts of ethnocentrism and heterocentrism, but not androcentrism, while a white lesbian woman only fits into the concept of ethnocentrism (and may be viewed as less stereotypical of women) (Purdie-Vaughns & Eibach, 2008). Moreover, Hispanic men are not perceived as stereotypically similar to white men, and gay Hispanic men are perceived as stereotypically different from (i.e., not prototypical of) Hispanic and gay men, separately, thus creating a unique identity and experience (Remedios & Snyder, 2018; Sykes, 2015). Of course, this diminishing effect on multiple minority members' identities creates ideal conditions for harmful stereotyping and prejudice to be perpetuated by those considered prototypical, or more prototypical, of the majority group (Crenshaw, 1989; Purdie-Vaughns & Eibach, 2008).

2.3.1: A CASE OF 'DE-IMMIGRANTIZATION': WHEN SEXUAL MINORITY MEMBERS LOSE IMMIGRANT STATUS[9]

Abstract

Individuals generally hold multiple, and sometimes stereotypically contrasted, group memberships which may change depending on uncontrollable contextual factors. For instance, if someone is a foreigner, there exist certain social stereotypes regarding their nationality which may influence others' conceptualizations. However, how might an intersection of memberships, such as being both foreign *and* gay, affect natives' perceptions of them when these stereotypes may not converge? Across four experiments, the stereotypes attributed to generalized and specific groups were examined to better understand intersectional prototypicalities. Results indicated certain cases in which immigrants may be "de-immigrantized", or, perceived as less stereotypically immigrant. More specifically, Portuguese participants viewed gay immigrants as less prototypically immigrant, but did not view lesbian immigrants as less prototypically immigrant, bringing into question the complexity of double minority conceptualizations. Additionally, individuals from nationalities with a higher perceived percentage of gays or lesbians in their population (e.g., Brazil and France) were generally viewed as less prototypically immigrant than individuals from nationalities with a lower perceived percentage of gays or lesbians in their population (e.g., India and Japan). Conclusions provide support for intersectional theories and yield additional insights into the categorization of multiple minority groups on the basis of sexuality and nationality.

Keywords: Stereotypes, National Stereotypes, Immigration, Social Categorization, Intersectionality, LGBT Studies

[9] Reese, J., Santos, A. S., & Palma, T. A. (2023). A case of 'de-immigrantization': When sexual minority members lose immigrant status. *Current Psychology, 43,* 10217-10236

From portrayals of black women in Hollywood to our collection of thoughts walking down a street, stereotypes exist within most facets of the human experience; as such, stereotyping plays a predominant role in how we categorize others into meaningful social groups, inherently influencing behavior (Brewer, 1988; Fiske & Neuberg, 1990; Macrae et al., 1997; Macrae & Bodenhausen, 2000). This process of conceptualization may be a psychological adaptation which aids our propensity to assess the world around us (Hamilton & Trolier, 1986; Taylor, 1981), but it has the danger of morphing into discrimination against individuals in society based on seemingly arbitrary identifiers such as immigrant status or sexual orientation (Fiske & Neuberg, 1990; Kang & Bodenhausen, 2015; Tajfel et al., 1971). For example, lesbians are generally perceived as more masculine or aggressive than straight women (Cunningham, 2019), and immigrants from Hispanic/Latin American countries are often regarded as less intelligent when compared to immigrants from East Asian countries in Western contexts (Appel et al., 2015). Because individuals might view stereotypes as unique, streamlined entities, they may be socially reduced to align with one dimension of categorization; however, personal analyses toward a target are not always limited to a single axis of activation, and are often fluid (Fiske, 2017; Stolier & Freeman, 2016).

Individuals commonly hold multiple (sometimes, contrasting) group memberships which change depending on contextual or temporal factors (e.g., location or time of day), complicating the stereotyping process and adding new levels required for conceptualization (Nicolas et al., 2017; Song & Zuo, 2016). For instance, a foreign student may simultaneously belong to the groups of women, immigrants, students, and within the classroom, a member of the class – thus, creating a unique identity to which general stereotypes may be attributed, based on relevancy (e.g., Petsko & Bodenhausen, 2022). Moreover, the saliency of personal identifiers (and, the implied activation of stereotypes) has been examined to be a product of intersectional experiences in the confounds of the context, or societal lens, in which they exist, suggesting stereotypical perceptions may be altered by the simultaneous conceptualization of discrete categories (e.g., Cole, 2009; Petsko & Bodenhausen, 2022; Ryan et al., 2011; Wittenbrink et al., 2001).

For example, Wilson et al., (2017) found participants perceived gay black men as more masculine than both gay and straight white men in a neutral setting; simultaneously, gay black men were perceived as better leaders in a workplace setting when compared to gay white men. As workplaces are often male-dominated institutions, and black men have historically been perceived as more domineering than white men (Calabrese et al., 2018; Crenshaw, 1989), masculinity showed greater saliency than gayness; activation of stereotypes related to gayness was not prevalent in this specific context. Furthermore, in comparison to white Western women, stereotypes attributed to womanhood are often more salient for Muslim women with the latter portrayed as more oppressed (van Es, 2019) perhaps due to Western conceptions of androcentrism in Muslim-majority nations, although contradictorily, white Western women have historically been assigned to housewifery roles which only perpetuate patriarchal structures (de Lemus et al., 2013; Ghani et al., 2023; van Es, 2019). Here, clear effects of intergroup relations have materialized, in which individuals emphasize their own group's positive traits although the outgroup may be more similar than originally perceived (e.g., Sherif et al., 1988; Tajfel et al., 1971; Tajfel & Turner, 1986).

Therefore, stereotypes cannot be described as "one size fits all", even to the same individuals passing through different contexts; experiences faced by an individual or group may not align with other individuals or groups in the same context, despite a shared overlap of stereotypes or tendencies (Petsko & Bodenhausen, 2019; Petsko & Bodenhausen, 2022; Purdie-Vaughns & Eibach, 2008; Remedios & Snyder, 2018), again, complicating the stereotyping process. Furthermore, the theory of intersectional invisibility (Purdie-Vaughns & Eibach, 2008) states that individuals belonging to multiple minority groups may be rendered "invisible", since the intersection of multiple groups negates the prototypicalities of their constituent groups. For instance, the existence of heterocentrism, and, categorical assumptions of whiteness as related to heteronormativity, may cause individuals to perceive certain groups (e.g., Hispanic gay men) as prototypical of neither Hispanic, nor gay men (e.g., Purdie-Vaughns & Eibach, 2008;

Remedios & Snyder, 2015; Sykes, 2015). Of course, this creates suitable environments for prejudice to be perpetuated by those considered prototypical of the majority group (e.g., Crenshaw, 1989).

The Case of the Intersection Between Sexual Orientation and Immigrant Status

Unfortunately, inequality is apparent in research regarding lesbian, gay, bisexual, or transgender (LGBT) individuals; namely, it is common to focus on gay white men, excluding narratives from other LGBT members (Rehman et al., 2020; Wright, 2016). Moreover, although some research has found decreases in negative perceptions toward LGBT members upon engaging in parasocial interactions with LGBT characters in media (Hoffarth & Hodson, 2018; Riggle et al., 1996; Schiappa et al., 2006), most characters are white (GLAAD, 2021) and generally portray behaviors which accentuate negative stereotypes (Sink & Mastro, 2017). As such, negative, and unique, consequences may arise in social and academic spheres for people belonging to underrepresented LGBT categories (e.g., Hispanic lesbians, black transgender men) who do not align with prototypical gayness (Levy et al., 2017). For instance, perceived incompatibility of these social categories may require more effort for cognitive conceptualization, resulting in states of confusion for those previously unfamiliar with the group (Roth et al., 2018).

Before considering immigrant status, it is necessary to first acknowledge lexical disparities when describing mobile individuals to calibrate readers for future sections of this paper. Most commonly, the terms ‘expatriate’, ‘[im]migrant’, and ‘refugee’ are found within social, political, and academic settings, but are understood to signify differentiated individuals. However, policymakers tend to combine refugees and immigrants into a single group under the assumption that both groups share work-related intentions of movement, although migrants are not involuntarily forced to move (Long, 2015). Interestingly, expatriates are often left out of policy debates and media coverage, perhaps because this group self-administers their status in an attempt to subconsciously differentiate themselves from immigrants, generally based on race and/or privilege (Benson, 2015; Kunz, 2020). For the purposes of this article, the

terms ‘expatriate’ and ‘immigrant’ are combined as ‘immigrant’, meaning an individual that has moved from one location to another.

Perhaps the contested denotations of terminologies has, combined with the status of emergent group, led to a scarcity of experimental quantitative research which focuses on LGBT immigrants as a whole. Instead, prior research on this group tends to fall into one of three categories [generally] along the post-migration axis (Fournier et al., 2018; Sadika et al., 2020) such as: qualitative interpersonal experiences (e.g., McPhail et al., 2014; Oren & Gorshkov, 2021); mental and physical health (e.g., Keuroghlian et al., 2017; Organista et al., 2015); or asylum/refugee statuses as related to policymaking (e.g., DeFilippis, 2016; Ruckstuhl, 2016). To our knowledge, there is not a prior study examining the specific stereotypes attributed to gay and lesbian immigrants, quantitatively. Similar to the current research, Savaş et al., (2021) recently published a work regarding the intersectionality of immigrant groups in the United States. Their methodology utilized a characteristic ranking system (based on applicable stereotypes for each group) and were able to conclude that LGBT immigrants were, overall, perceived as more vulnerable than straight immigrants; contrastingly, LGBT immigrants were also perceived as a greater asset than straight immigrants. Nonetheless, the report ultimately did not include specific stereotypes attributed to LGBT immigrants, nor did they differentiate between subordinate LGBT groups.

Furthermore, some research has examined assumed immigration status by including ethnic or racial groups. For instance, Petsko and Bodenhausen (2019) found evidence of de-racialization when participants chose stereotypical attributes for gay men of certain minorities. Results indicated underlying assumptions of femininity and affluency among gay men; all groups (i.e., white, black, Hispanic, Asian) experienced a de-racialization effect, but it was weakest for gay white men, followed by gay Asian men. As Sykes (2015) notes, the notion of heteronormativity is centered around whiteness and masculinity and therefore, simply being white, or an ethnicity which hold similar stereotypes to white people, may also account for the weaker de-racialization effect among gay men of differing backgrounds. In a similar vein,

prior research has focused on specific regions or countries from which LGBT immigrants have arrived, rather than their status as an immigrant. For example, in a Western context, Asian gay men have been stereotyped as submissive (Giwa & Greensmith, 2012), Brazilian gay men may be sought out for their perceived sexuality, while simultaneously barred as less intelligent (Jarrin & Pitts, 2020), and as Chen and Vollick (2013) argue, LGBT immigrants may often face conflicting internal and external identities and must select the most prevalent one, particularly those immigrating from collectivist cultures – a topic central to the theme of this paper.

While the majority of research has focused on gay immigrants, there are some papers which touch on the experiences of lesbian immigrants, usually in a post-migratory manner and/or a focus on policy (Acosta, 2008; Fuks et al., 2018; Giwa & Chaze, 2018; Vargas, 2020). These papers generally do not provide in-depth psychological analysis, but rather highlight the struggles of lesbian immigrants in their destination country and provide valuable information about their experiences; for example, Acosta (2008) detailed the fluid lifestyle of lesbian Latina immigrants in the United States in a series of interviews which may be useful for the current hypotheses. The author highlights the existence of the borderland – a safe space in which lesbian immigrants may be their true self, while hiding aspects (e.g., sexual orientation) when outside of the borderland. Additionally, lesbian Latina immigrants gain membership into a new category they were previously not (people of color) which may facilitate the competition of identities.

The Current Studies

The studies presented in this paper draw inspiration from Petsko and Bodenhausen (2019), in which de-racialization effects were found for gay men of certain minorities. First, as immigrants are perceived as different than expats to the general public (e.g., Benson, 2015; Kunz, 2020; Long, 2015), we investigated whether participants could conceptualize this generalized group, attributing common stereotypes to immigrants. Furthermore, as gay or lesbian immigrants may not be perceived as prototypically immigrant, potential differences in stereotype attributions between straight and gay or

lesbian immigrants were analyzed. Finally, the attribution of stereotypes toward straight, gay, and lesbian immigrants from specific nations was examined to provide a deeper understanding of stereotype salience when belonging to multiple categories. Our findings bring important knowledge regarding intersectional stereotypes to a Portuguese context; however, results are equally valuable for general social psychology, providing evidence supporting the conceptualization of multiple minority groups. Data and experimental materials can be found on the Open Science Framework (https://osf.io/bg2um/?view_only=6aae9f6051954ad9adbf14c82dea9018). All data measures and ethical guidelines are thoroughly reported in this manuscript and supplemental materials. Data was analyzed using JASP v0.16.4.0 software.

Experiment 1a

In Experiment 1a, we examined potential differences in trait attributions between generalized groups in Portuguese society (e.g., Portuguese men, gay Portuguese men, immigrant men, and gay immigrant men). Generally, Portuguese men are expected to take on stereotypically masculine roles such as workers, leaders, and metaphorical rocks – reminiscent of stereotypical expectations of men in Western society (e.g., Fernandes & Cabral-Cardoso, 2006; Johnson & Repta, 2012; Thompson & Pleck, 1986; Wall et al., 2017), although this ideation of gender has recently been challenged in Portugal (Wall et al., 2017). Similarly, stereotypes regarding gay men in Portugal may be similar to those commonly found in other Western contexts, stemming from perceived femininity and counter-existence with straight men (e.g., Garrido et al., 2009; Kite & Deaux, 1987; Madon, 1997; Nascimento & Bianchi, 2021).

Due in part to complex post-colonial attitudes, immigrants to Portugal are viewed as dangerous, uneducated, or socioeconomic drains, although, they are simultaneously regarded as indispensable to the economy (Casquilo-Martins et al., 2022; Eaton, 1998; Guerra et al., 2015); however, this assumption only concerns immigrants from nations with lower socioeconomic statuses than Portugal (e.g., Brazil or Angola). In contrast, immigrants from northern European nations (e.g., France or Sweden) generally relocate to Portugal for a cheaper cost of living and do not make substantial effort to integrate into

Portuguese society which contributes to overall negativity or discomfort, but not necessarily xenophobia (Rauhut & Esteves, 2020; Sardinha, 2013). Not much research has been developed on the general category of gay immigrant men (e.g., Savaş et al, 2021), although there has been substantial research on gay immigrant men from specific regions (e.g., Fournier et al., 2018; Jarrin & Pitts, 2020; Petsko & Bodenhausen, 2019). Nonetheless, findings suggest gay immigrant men may not be attributed the same stereotypes as immigrant men, comparable to gay and straight minority men.

To examine the generalization of stereotypes, participants were asked to evaluate one group on a list of pre-defined personal traits, which were then descriptively rank-ordered and analyzed across the four groups for any similarities, or dissimilarities. Particularly, we were interested in the de-immigrantization effect, in which gay immigrants might be perceived as less prototypically immigrant than straight immigrants. To test this, we developed anchors based on each group's most prototypical attributes. From prior literature and theoretical assumptions, we developed several hypotheses. First, Hypothesis 1 theorized straight target groups (Portuguese and immigrant men) will be rated similar on the anchors of Portugueseness and gayness, but not immigrantness; in this case, it was expected that shared sexual orientation (i.e., shared perceived masculinity) will influence alikeness on the first two anchors, but not on the anchor of immigrantness, as Portuguese men were ingroup members. Hypothesis 2 stated both gay target groups (gay Portuguese and gay immigrant men) will be perceived similarly on the anchors of Portugueseness, gayness, and immigrantness. Finally, Hypothesis 3 expected straight target groups to not be rated similarly to gay target groups; it was expected that straight target groups will be rated higher in Portugueseness and lower in gayness than gay groups (but, differently on immigrantness), while gay target groups will be rated higher in gayness and lower in both Portugueseness and immigrantness when compared to straight target groups.

Method

Participants

In total, 353 participants from a large university partook in this study in exchange for a voucher to a local retailer. A priori power analysis was not conducted to determine sample size; rather, we intended to recruit as many participants as possible over the course of one academic semester. After data was cleaned for incomplete or repetitive response (n = 33), and inclusion criteria were met, 250 responses were validated. All participants that were below the age of 18 (n = 6) and answered "No" to: "Did you answer this questionnaire truthfully?" (n = 12) or "Were you born in Portugal, having Portuguese citizenship?" (n = 52) were excluded. Of the analyzed responses, 178 were women, 62 were men, and 10 did not specify their gender. Ages of participants ranged from 18-65 (M = 21.82, SD = 7.74), but an explicit demographics question regarding job status (i.e., student or worker) was not asked. All participants were Portuguese nationals, so the sample was not assumed to be culturally diverse. This study was approved by the ethics committee of the author's institution, and all participants gave their informed consent before participation. Finally, none of the studies included within this project were pre-registered.

Materials

Participants viewed a list of 128 pre-determined personal characteristics which may be applicable toward individuals from each condition. Of these attributes, 99 were adapted from Petsko and Bodenhausen (2019), and 29 attributes were taken from Garrido et al., (2009) to increase relevance within the Portuguese context. One trait, *ignorante/ignorant*, was duplicated upon translation to English, and was therefore averaged in the final score; as such, 127 traits were included in the final analyses. For a list of all attributes used (English and Portuguese), please refer to the online supplemental materials.

To translate the 99 English traits from Petsko and Bodenhausen (2019) to Portuguese, four Portuguese natives with English fluency were asked to provide translations for each of the traits. Translations were not accepted if the group did not reach a majority consensus, and if this occurred, the traits were then examined by the authors. There was a full group consensus on 81 traits, a 75% agreement on 9 traits, and a 50% agreement on the final 9 traits (which were subsequently reviewed and accepted by

the authors). All remaining traits used in Experiments 1a and 2a were previously translated into Portuguese by Garrido et al., (2009).

Procedure

After viewing the project's information and their rights to participate, participants then gave their full, informed consent and provided demographic details. The following prompt was then presented: "In this study, we are interested in understanding the cultural stereotypes that are shared within Portuguese society about these groups. Following, there will be a list of personality traits and you will be asked to rate each trait as typical of [condition], on a scale ranging from 1 = Not at all typical to 7 = Very typical. For example, if you consider [condition] to be very joyful, please select '7'. Please note we are not interested in your personal beliefs; rather, we would like you to tell us how stereotypical, people, in general, consider these traits to be for this group." Importantly, in the original Portuguese document, emphasis was put on a generalized point of view; participants were asked to give their opinion about Portuguese society's point of view regarding each target group. After reading the prompt, participants were then randomly assigned to one of the four main conditions for Experiment 1a (Portuguese men, gay Portuguese men, immigrant men, and gay immigrant men). Because participants completed more than one study in each session, the list of traits for each group was halved to avoid fatigue resulting in eight total conditions. Upon evaluating one target group on Likert-type scales for each attribute, participants were then given the option to report any concerns or questions before being rewarded for their effort.

Results 1a

Descriptive Results

Trait averages were calculated and rank-ordered to provide an insight into the most prevalent stereotypes of the four target groups. Table A shows the correlations between ratings (see supplemental materials), while Table 1 highlights the five most and least stereotypical traits attributed to each group (see supplemental materials for a full list of attributes). Notably, trait attributions followed societal

assumptions of gendered norms in Western contexts; for instance, Portuguese and immigrant men were conceptualized as masculine (e.g., traditional, stubborn, industrious), and both gay target groups were perceived as feminine (e.g., creative, emotional, talkative), although all groups received unique traits which painted a deeper picture of independent prototypicalities.

Table 1

Most and Least Stereotypical Attributes for Portuguese Men, Gay Portuguese Men, Immigrant Men, and Gay Immigrant Men

Most Stereotypical Attributes

Portuguese Men (n_{total} = 64)

Attribute	Mean	SD	95% C.I.
Tradition-Loving	5.66	1.18	[5.25, 6.07]
Boastful	5.63	1.31	[5.17, 6.08]
Stubborn	5.59	1.07	[5.22, 5.97]
Gluttonous	5.47	1.48	[4.96, 5.98]
Sociable	5.44	1.29	[4.99, 5.89]

Gay Portuguese Men (n_{total} = 68)

Attribute	Mean	SD	95% C.I.
Humane	6.05	1.25	[5.65, 6.46]
Creative	5.73	0.87	[5.45, 6.01]
Emotional	5.71	1.13	[5.31, 6.11]
Witty	5.68	0.79	[5.40, 5.96]
Sociable	5.65	1.05	[5.28, 6.01]

Immigrant Men (n_{total} = 58)

Attribute	Mean	SD	95% C.I.
Humane	5.80	1.40	[5.30, 6.30]
Industrious	5.79	1.29	[5.31, 6.26]

Gay Immigrant Men (n_{total} = 60)

Attribute	Mean	SD	95% C.I.
Humane	5.93	1.44	[5.42, 6.45]
Extroverted	5.90	1.06	[5.52, 6.28]

Persistent	5.50	1.26	[5.03, 5.97]	Talkative	5.90	1.06	[5.52, 6.28]
Practical	5.43	1.07	[5.03, 5.82]	Progressive	5.72	1.31	[5.26, 6.19]
Loyal to Family	5.40	1.00	[5.04, 5.76]	Liberal	5.67	1.42	[5.16, 6.18]

Least Stereotypical Attributes

Portuguese Men (n_{total} = 64)

Attribute	Mean	SD	95% C.I.
Effeminate	2.09	1.00	[1.75, 2.44]
Physically Dirty	2.31	1.33	[1.85, 2.77]
Criminal	2.56	1.34	[2.10, 3.03]
Weak	2.75	1.65	[2.18, 3.32]
Cowardly	2.81	1.20	[2.40, 3.23]

Gay Portuguese Men (n_{total} = 68)

Attribute	Mean	SD	95% C.I.
Extremely Nationalistic	1.76	0.86	[1.48, 2.03]
Physically Dirty	1.81	1.37	[1.37, 2.25]
Criminal	1.97	1.30	[1.51, 2.43]
Tradition-Loving	2.10	1.83	[1.45, 2.74]
Cruel	2.11	1.31	[1.69, 2.53]

Immigrant Men (n_{total} = 58)

Attribute	Mean	SD	95% C.I.
Refined	2.46	1.23	[2.01, 2.92]
Cowardly	2.53	1.14	[2.13, 2.94]
Exaggerated	2.64	1.52	[2.08, 3.21]

Gay Immigrant Men (n_{total} = 60)

Attribute	Mean	SD	95% C.I.
Very Religious	1.57	0.82	[1.27, 1.86]
Conservative	1.60	1.04	[1.23, 1.97]
Physically Dirty	1.76	1.12	[1.36, 2.16]

Cruel	2.73	1.34	[2.25, 3.21]	Tradition-Loving	1.83	1.12	[1.43, 2.23]
Stupid	2.75	1.73	[2.11, 3.39]	Stolid	2.07	1.08	[1.68, 2.45]

Note. Participants rated half of the characteristics, resulting in eight randomly assigned conditions. Sample Ns indicate the total number of participants for each condition.

Testing the Hypotheses

To create the anchors used in subsequent analyses, the 10 most stereotypic traits for all groups were selected; importantly, traits were selected based on overall ratings and did not receive manipulations. For instance, *tradition-loving*, *humane*, *humane*, and *humane* were the top traits for Portuguese men, gay Portuguese men, immigrant men, and gay immigrant men, respectively. Although *humane* was the top-selected attribute for three of the target groups, each target group received different values for this trait: 6.05 (gay Portuguese men), 5.80 (immigrant men), and 5.93 (gay immigrant men), meaning this term was most strongly related to gay Portuguese men even though it was considered highly prototypical of the three groups. After reviewing the top 10 traits for each group, the values of the same 10 traits were examined across the remaining groups. Specifically, *tradition-loving*, the most prototypical Portuguese male trait, was given a rating of 5.66 for Portuguese men, 2.10 for gay Portuguese men, 4.71 for immigrant men, and 1.83 for gay immigrant men. In this case, a clear distinction between groups appeared; that is, the attribute *tradition-loving* was much less prototypical of gay Portuguese and gay immigrant men than Portuguese and immigrant men. This logic was applied for the remaining 9 traits for Portuguese men, followed by the top 10 traits of the remaining three target groups resulting in 40 trait anchors of which quantitative comparisons could be analyzed.

A one-way ANOVA on the Portuguese anchor was performed to test Hypothesis 1; results showed significant differences in trait ratings between Portuguese men (M = 5.43, SD = .17), gay

Portuguese men (M = 4.10, SD = 1.20), immigrant men (M = 4.59, SD = .50), and gay immigrant men (M = 4.12, SD = 1.33), $F(3, 36) = 4.45$, $p = .009$, $\eta^2 = .27$. First, to test potential differences between overall groups, a planned contrast was conducted. It was revealed that, when combined, straight target groups were evaluated as more prototypically Portuguese than gay target groups, $t(36) = -3.10$, $p = .004$, as expected. A post-hoc Tukey's comparison was implemented to further identify differences across individual target groups. When comparing sexual orientation, post-hoc testing indicated no significant differences between Portuguese and immigrant men ($p_{Tukey} = .205$, d = -.90), or between gay Portuguese and gay immigrant men ($p_{Tukey} = 1.000$, d = .02). Finally, when comparing national or foreign pairs, post-hoc comparisons revealed Portuguese men were perceived as significantly more Portuguese than gay Portuguese men ($p_{Tukey} = .015$, d = -1.43), but no differences between immigrant and gay immigrant men were found ($p_{Tukey} = .673$, d = -.51).

A second one-way ANOVA was conducted on the anchor of immigrant men to further test Hypothesis 1. Results indicated significant differences in trait ratings between Portuguese men (M = 4.81, SD = .49), gay Portuguese men (M = 4.76, SD = .55), immigrant men (M = 5.30, SD = .35), and gay immigrant men (M = 4.66, SD = .55), $F(3, 36) = 3.35$, $p = .030$, $\eta^2 = .22$. A planned contrast revealed differences between target pairings, with straight targets receiving higher ratings of immigrantness than gay targets, $t(36) = -2.20$, $p = .034$. Considering sexual orientation, a post-hoc Tukey's comparison found no significant differences between Portuguese and immigrant men ($p_{Tukey} = .132$, d = 1.00), or between gay Portuguese and gay immigrant men ($p_{Tukey} = .973$, d = -.19). In the final post-hoc comparison, the opposite of the first ANOVA occurred: no significant differences were found between Portuguese and gay Portuguese men ($p_{Tukey} = .996$, d = -.10), but it was revealed that immigrant men were perceived higher in immigrantness than gay immigrant men ($p_{Tukey} = .031$, d = -1.30).

Next, a one-way ANOVA on the anchor of gay Portuguese men was performed to test Hypothesis 2. Results revealed significant differences in ratings between Portuguese men (M = 4.23, SD = .84), gay Portuguese men (M = 5.67, SD = .16), immigrant men (M = 4.23, SD = .68), and gay immigrant men (M =

5.42, *SD* = .29), $F(3, 36) = 18.38$, $p < .001$, $\eta^2 = .61$. A planned contrast suggested gay target groups were rated higher in gayness than straight target groups, $t(36) = -7.36$, $p < .001$. Moreover, a post-hoc Tukey's test regarding sexual orientation indicated no significant differences between Portuguese and immigrant men ($p_{Tukey} = 1.000$, d = .01), or between gay Portuguese and gay immigrant men ($p_{Tukey} = .753$, d = -.45). When considering national or foreign targets, it was revealed gay Portuguese men were perceived as more prototypically gay than Portuguese men ($p_{Tukey} < .001$, d = 2.55), while the same effect was found for gay immigrant versus immigrant men ($p_{Tukey} < .001$, d = 2.10).

A final one-way ANOVA conducted on the anchor of gay immigrant men revealed significant differences in trait ratings between Portuguese men (*M* = 4.17, *SD* = .85), gay Portuguese men (*M* = 5.38, *SD* = .37), immigrant men (*M* = 4.10, *SD* = .79), and gay immigrant men (*M* = 5.70, *SD* = .17), $F(3, 36) = 17.90$, $p < .001$, $\eta^2 = .60$. Again, a planned contrast suggested gay target groups were perceived higher in gayness (gay immigrantness) than straight target groups, $t(36) = -7.23$, $p < .001$. Furthermore, a post-hoc Tukey's comparison on sexual orientation found no significant differences between Portuguese and immigrant men ($p_{Tukey} = .994$, d = -.11), or between gay Portuguese and gay immigrant men ($p_{Tukey} = .656$, d = .52). Finally, it was suggested gay Portuguese men were viewed as more prototypically gay [immigrant] than Portuguese men ($p_{Tukey} < .001$, d = 1.97), while the same effect was found for gay immigrant versus immigrant men ($p_{Tukey} < .001$, d = 2.60).

Discussion 1a

Results largely supported the first two hypotheses which focused on shared conceptualizations across sexual orientation. Specifically, Portuguese and immigrant men were perceived similarly in Portugueseness and on both gayness anchors, as expected; unexpectedly, Portuguese men and immigrant men were not evaluated significantly different on the anchor of immigrantness, but this may be explained by the perceived heterosexuality of each group. That is, prototypical traits of heterosexuality were shared across these two groups, perhaps muddling conceptualizations. Additionally, no differences in ratings were found between gay Portuguese and gay immigrant men across all anchors, further suggesting

targets' implied or explicit sexual orientation status may have influenced participants' ratings. Additionally, Hypothesis 3 was supported by planned contrasts which revealed that, in fact, straight target groups were rated higher in prototypical Portugueseness and immigrantness, and lower in prototypical gayness, than gay target groups. Most importantly, it was found in separate post-hoc Tukey's tests that gay Portuguese and gay immigrant men were viewed as less prototypical of Portuguese and immigrant men, respectively. Here, explicit gayness shifted the ideation of what is prototypical of the constituent, straight group, exemplifying past literature regarding intersectionality and minorities (e.g., Hall et al., 2015; Petsko & Bodenhausen, 2019; Purdie-Vaughns & Eibach, 2008; Savaş et al., 2021; Wilson et al., 2017).

Experiment 1b

While Experiment 1a explored generality, Experiment 1b examined the conceptualizations of individuals from specific nations. Brazil, France, India, and Japan were chosen based on their prevalence in Portuguese society and the perceived percentages of gay or lesbian individuals in their populations. To determine percentages, a pretest (n = 43) conducted by the authors regarding the perceptions of nationalities on three scales was conducted prior to Experiment 1b; data from this pretest will be published in a forthcoming paper. In the pretest, participants were asked to move a slider scale to represent the estimated proportion of each nationality's population that was either gay or lesbian. From this procedure, Brazil and France were considered "high gay" and "high lesbian" countries, while India and Japan were considered "low gay" and "low lesbian" countries.

Coincidentally, a cultural divide appeared in the national pairings whereas culturally Western nations received high estimates of gays or lesbians, and culturally Eastern nations received low estimates of gays or lesbians, which may be explained by the acceptance of LGBT members in Western and Eastern societies. In fact, only one Eastern nation has legalized same-sex marriage as of 2023, and both high gay/lesbian nations selected in this project have legalized same-sex marriage (HRC, 2023). Because [inter]national stereotypes are commonly attributed to the most prevalent members in society (Eagly &

Kite, 1987), it is plausible that individuals may conflate national-level LGBT acceptance with the number of LGBT individuals present in each country's population. In turn, nationalities with a higher perceived percentage of gays or lesbians could be viewed as more feminine, considering gay men are the stereotypical face of LGBT groups worldwide (e.g., Rehman et al., 2020; Wright, 2016) and gay men are conceptualized as more feminine than straight men (e.g., Garrido et al., 2009; Kite & Deaux, 1987; Madon, 1997; Nascimento & Bianchi, 2021). However, past findings may complicate assumptions as, for instance, Hall et al., (2015) found that perceived femininity of Asian men correlated with the attribution of feminine-coded jobs, while Schug and colleagues, (2015) demonstrated that perceived femininity of Asian men deemed them less prototypical of men in general. Nonetheless, this discrepancy deserves further examination and participant ratings of individuals from certain nationalities may very likely be influenced by the overall perceived level of gayness, or lesbianness, in a nationality given the nature of intergroup relations.

Each of the nationalities has unique stereotypes in Portuguese society, with Brazilians being the largest immigrant group in the country. This results in perpetuated stereotypes from colonial times, typically perceiving Brazilians as less educated, poorer, more sexual, or beneath Portuguese citizens (Carvalho & Duarte, 2020; Guerra et al., 2015; Santos, 2013). Similarly, a large number of Indians live in Portugal, but unlike Brazilians, have an entirely different culture than that of Portuguese people. Because of this, Indian diaspora has been categorized in Portugal by unique foods, religions, and clothing, resulting in strong ethnic identities (Lourenço, 2011; Lourenço, 2017; Neto & Neto, 2023) which may inadvertently increase negative disparities between cultures. Individuals from Japan experience similar disparities, but a less xenophobic experience – perhaps due to a higher perceived economic status than India (World Bank, 2023), or because of the historical fascination with orientalism in Portugal (da Câmara, 2007). Finally, France is a more socioeconomically powerful country than Portugal and French people commonly view Portugal as less-developed; this causes negative sentiment from the Portuguese who may subsequently view the French with jealousy and contempt (Koven, 2004).

In the current experiment, we asked participants to evaluate how accurate certain personality traits were of straight and gay men from each nationality. Traits were taken from the most stereotypical attributes of gay Portuguese men and immigrant men in Experiment 1a to provide accurate comparisons across categories. Based on assumptions generated from prior literature, we developed several hypotheses. Hypothesis 1 expected gay men will be rated higher on the gay anchor when compared to straight men from the same nation. Next, Hypothesis 2 theorized gay men will experience de-immigrantization, in which they will be perceived as prototypically less immigrant than straight men from the same country. Finally, Hypothesis 3 stated the cultural divide will influence ratings; specifically, individuals from [perceived] high gay nations will be rated higher in gayness and lower in immigrantness when compared to individuals from [perceived] low gay nations, given the LGBT acceptance in each national group and the assumptions of masculine or feminine demographics groups.

Method

Participants

Participants were recruited through a large university in exchange for course credit, with 153 online responses recorded and 141 deemed appropriate upon data checks. Again, a priori analysis was not conducted to determine sample size. When checking the data, 5 participants were excluded from analyses for incomplete responses, 4 were not Portuguese, and 2 answered "No" to the question, "Did you answer this questionnaire truthfully?". From the 141 responses, there were 122 women, 16 men, and 3 who did not specify their gender (M = 20.75, SD = 5.72) but an explicit demographics question regarding job status (i.e., student or worker) was not asked. Of these, 99 participants were straight, 10 were gay or lesbian, 33 marked 'other sexual orientation' and 5 did not specify their sexual orientation. Participants gave their full, informed consent to participate and the study was approved by the ethics committee of the authors' institution.

Procedure & Materials

After agreeing to partake in the study, participants were randomly assigned to either the straight or gay condition in which male targets from the four nationalities were randomly presented. Importantly, each nationality was presented as *immigrant [nationality] men* to increase the probability participants conceptualized each target as an immigrant. Similar to Petsko and Bodenhausen (2019), participants were asked to select all applicable attributes for the assigned target from a shortened version of the traits presented in Experiment 1a. The shortened list (n = 77) was developed by selecting the 15 most and least stereotypical attributes of gay Portuguese men and immigrant men (n = 60), and the 15 most neutral characteristics for both groups (n = 30); duplicated traits were removed, resulting in 77 final traits. Participants were required to select at least 10 traits to continue the experiment. Once participants selected 10 or more prototypical traits for each target group, they were then asked to rank the traits from 1 to 10, with 1 being the most stereotypical of the group. Importantly, only 10 traits were ordered; any extra traits were discarded from final analyses. After this process was completed for individuals from all four nationalities, participants were presented with demographic questions and rewarded for their participation.

Results 1b

Descriptive Results

Selected traits were rank-ordered across groups, providing an understanding of the stereotypes attributed to each target nationality based on sexual orientation. To calculate frequency, traits were counted and averaged by the total number of respondents; therefore, frequency equals the percentage of participants which selected a specific trait, respective of condition (see Table 2). Notably, high gay nationalities (Brazil and France) were more likely to be attributed with prototypical gay [Portuguese] traits (45%) than low gay nationalities (India and Japan) (15%), while low gay nationalities were more likely to be attributed prototypically immigrant traits (45%) than high gay nationalities (15%). Coincidentally, the same number of traits was selected across cultural groups, but, the specific traits differed. Furthermore, the number of selected prototypic traits does not necessarily mean a target group is,

or is not, prototypically similar to the anchor group. For instance, flirtatious, talkative, and eccentric were commonly selected for gay Brazilian men; although these traits were not in the top 15 for gay men, they were present upon examining the top 20. Therefore, statistical analyses using the same theoretical principles as Experiment 1a were performed to identify trends in anchored ratings.

Table 2

Frequencies of Selected Attributes for Brazilian, French, Indian, and Japanese Men

Brazilian Men (n = 74)		Gay Brazilian Men (n = 67)		French Men (n = 74)		Gay French Men (n = 67)	
Trait	Frequency	Trait	Frequency	Trait	Frequency	Trait	Frequency
Sociable*	68%	Sociable*	58%	Vain*	57%	Vain*	54%
Talkative†	65%	Loud	57%	Sure	43%	Effeminate*	48%
Loud	58%	Eccentric	52%	Eccentric	39%	Eccentric	40%
Witty*	55%	Flirtatious	51%	Refined	38%	Artistic*	39%
Flirtatious	49%	Talkative†	46%	Fragrant*	36%	Emotional*	37%
Musical	32%	Witty*	46%	Materialistic	32%	Refined	37%
Eccentric	31%	Effeminate*	42%	Pleasure-Loving†	32%	Sociable*	37%
Very Religious†	31%	Exaggerated	42%	Flirtatious	31%	Passionate*	34%
Loyal to Family†	28%	Vain*	42%	Artistic*	30%	Fragrant*	33%
Vain*	28%	Emotional*	36%	Polite†	30%	Sure	30%

Indian Men (*n* = 74)		Gay Indian Men (*n* = 67)		Japanese Men (*n* = 74)		Gay Japanese Men (*n* = 67)	
Trait	Frequency	Trait	Frequency	Trait	Frequency	Trait	Frequency
Loyal to Family†	53%	Loyal to Family†	43%	Industrious†	76%	Peaceful	46%
Tradition-Loving†	51%	Very Religious†	39%	Polite†	57%	Polite†	42%
Very Religious†	51%	Industrious†	34%	Intelligent	55%	Industrious†	40%
Industrious†	49%	Sociable*	32%	Competent†	54%	Intelligent	40%
Unreliable	49%	Unreliable	30%	Methodical	53%	Honest	34%
Physically Dirty	39%	Superstitious	29%	Peaceful	53%	Patient	31%
Superstitious	39%	Humane*†	25%	Tradition-Loving†	51%	Delicate*	30%
Conservative	38%	Loud	25%	Efficient†	49%	Efficient†	30%
Practical†	28%	Effeminate*	24%	Loyal to Family†	42%	Hygienic	30%
Loud	26%	Emotional*	24%	Conservative	41%	Sensitive*	30%

Note. Frequency is the number of selections divided by the total participants for each group. An asterisk (*) represents the trait was included in the top 15 for gay Portuguese men, while a dagger (†) represents the traits was included in the top 15 for immigrant men. Words were ordered according to the original Portuguese translations; as such, English alphabetization may be out of order.

Testing the Hypotheses

To organize and analyze the data, anchors were created for each nationality group based on ratings from Experiment 1a for the same traits. For instance, *sociable* was the most prototypical trait of straight and gay Brazilians; in Experiment 1a, sociable was rated 5.56 for gay Portuguese men and 4.54 for immigrant men, suggesting higher prototypicality for gay men compared to immigrant men. Therefore, each rank-ordered value from Experiment 1b was given a numerical value based on perceived gayness and immigrantness which could be quantitatively analyzed. It should be noted that general gayness was not explicitly tested for in Experiment 1a, but evidence of overlapping conceptualizations between gay Portuguese and gay immigrant men appeared, indicating a sense of general gayness. As such, gay Portuguese men were used as the anchor for gayness.

A 2 (sexual orientation) x 4 (nationality) mixed ANOVA on the anchor of gayness was conducted to test Hypothesis 1. A mixed ANOVA was deemed appropriate as nationalities was a within-subjects factor, while sexual orientation was a between-subjects factor. Results indicated a main effect of nationalities[10], $F(3, 54) = 8.24$, $p < .001$, $\eta^2 = .23$ and sexual orientation, $F(1, 18) = 12.35$, $p = .002$, $\eta^2 = .10$, but no significant interaction was found between variables, $F(3, 54) = .96$, $p = .420$, $\eta^2 = .03$. Moreover, post-hoc Tukey's test found no significant differences in ratings for all nationality pairings[11]; thus, although straight and gay targets were evaluated differently on the anchor of gayness, nationality did not appear to substantially impact those perceptions. Results did not support Hypothesis 1.

A second 2 (sexual orientation) x 4 (nationality) mixed ANOVA on the anchor of immigrantness was performed to test Hypothesis 2. Results revealed a main effect of nationality, $F(3, 54) = 7.113$, $p < .001$, $\eta^2 = .22$, but a nonsignificant difference between sexual orientation, $F(1, 18) = 2.45$, $p = .135$, $\eta^2 = .02$ and no significant interaction between variables, $F(3, 54) = .44$, $p = .725$, $\eta^2 = .01$. Additionally, no significant differences of within-nationality groupings were found in post-hoc comparisons[12], suggesting

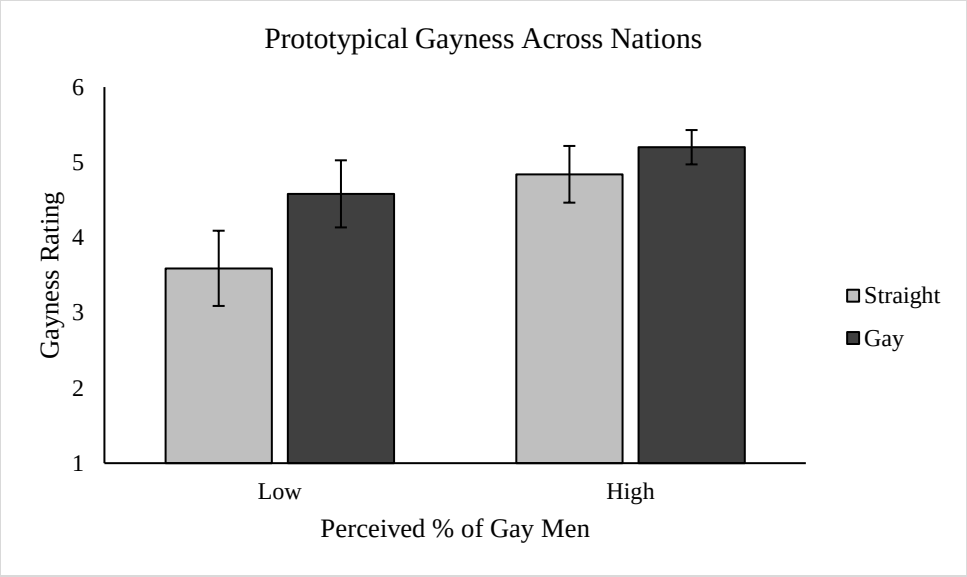
[10] For brevity, means for all conditions and tests in Experiment 1b may be found in supplemental materials.
[11] Straight x gay Brazilians ($p_{Tukey} = .973$, d = .45); straight x gay French ($p_{Tukey} = .994$, d = .35); straight x gay Indians ($p_{Tukey} = .075$, d = 1.33); straight x gay Japanese ($p_{Tukey} = .569$, d = .84)
[12] Straight x gay Brazilians ($p_{Tukey} = .869$, d = -.61); straight x gay French ($p_{Tukey} = .999$, d = -.24); straight x gay Indians ($p_{Tukey} = 1.000$, d = .04); straight x gay Japanese ($p_{Tukey} = .925$, d = -.54)

nationality was the only variable which exerted influence on immigrantness anchor, and rejecting Hypothesis 2.

To test Hypothesis 3, nationalities were grouped according to the perceived percentage of gay individuals in each country (i.e., high or low). A 2 (percentage of gay individuals) x 2 (sexual orientation) mixed ANOVA on the anchor of gayness was conducted, with sexual orientation being the only between-subjects factor. Results indicated a main effect of percentage, $F(1,38) = 25.741$, $p < .001$, $\eta^2 = .19$ and sexual orientation, $F(1, 38) = 9.09$, $p = .005$, $\eta^2 = .10$, as expected, but no interaction between variables was found, $F(1, 38) = 2.87$, $p = .099$, $\eta^2 = .02$ (see Figure 1). A planned contrast qualified the findings, which revealed individuals from high gay nations were rated higher in gayness compared to individuals from low gay nations, $t(38) = 5.07$, $p < .001$. A post-hoc Tukey's test indicated no significant difference between straight or gay individuals from high gay nations ($p_{Tukey} = .603$, d = .39), but did indicate a significant difference between straight or gay men from low gay nations ($p_{Tukey} = .006$, d = 1.10). Moreover, gay individuals from low gay nationalities were perceived similar in gayness to both straight ($p_{Tukey} = .797$, d = .29), and gay individuals ($p_{Tukey} = .096$, d = .68), from high gay nationalities.

Figure 1

Prototypical Gayness of Individuals from High or Low Gay Nations

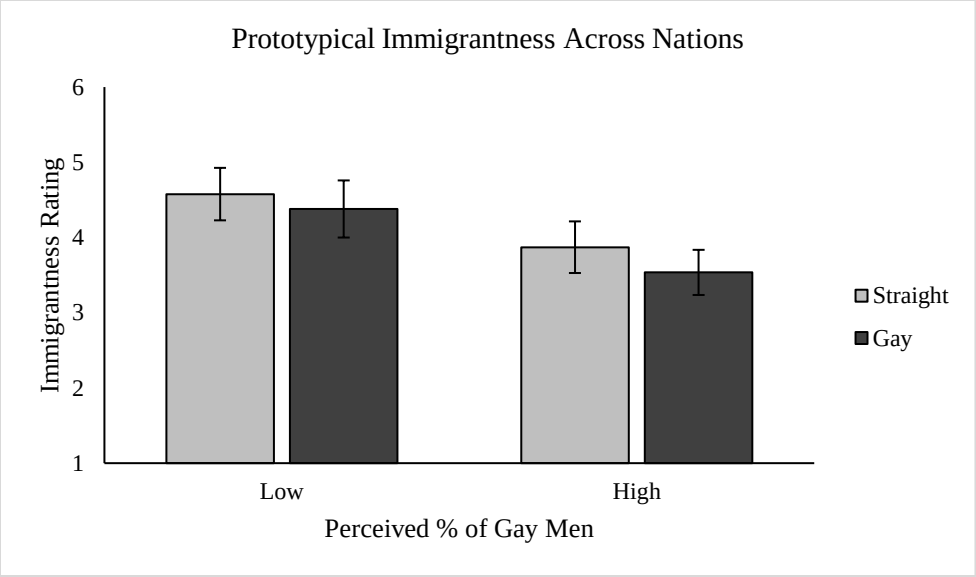


Note. Error bars represent 95% confidence intervals.

A second 2 (percentage of gay individuals) x 2 (sexual orientation) mixed ANOVA on the immigrantness anchor was performed to further test Hypothesis 3. Results revealed a significant main effect between perceived gayness, $F(1, 38) = 17.87$, $p < .001$, $\eta^2 = .20$, but no significant difference between sexual orientation, $F(1, 38) = 2.52$, $p = .120$, $\eta^2 = .02$ and no interaction between variables, $F(1,38) = .14$, $p = .710$, $\eta^2 < .01$, as expected (see Figure 2). First, a planned contrast on nationality suggested individuals from high gay nations were rated lower in immigrantness than individuals from low gay nations, $t(38) = -4.23$, $p < .001$. Moreover, a post-hoc Tukey's test found no significant differences between straight or gay individuals from high gay nations ($p_{Tukey} = .535$, d = -.43), and straight or gay individuals from low gay nations ($p_{Tukey} = .856$, d = -.25). Unexpectedly however, nonsignificant differences between straight men from high gay nations and gay men from low gay nations were revealed ($p_{Tukey} = .180$, d = -.65).

Figure 2

Prototypical Immigrantness of Individuals from High or Low Gay Nations



Note. Error bars represent 95% confidence intervals.

Discussion 1b

Although we largely rejected the first two hypotheses, Hypothesis 3 was supported. Specifically, straight and gay men from the same nationality did not differ on the anchors of gayness or immigrantness and unexpectedly, participants conceptualized each nationality as a whole, although this may be explained by the nature of national stereotyping which dictates national stereotypes are driven by the most prevalent group in each country (e.g., Eagly & Kite, 1987). Nevertheless, cultural differences between nations appeared in which individuals from high gay nations were perceived as more prototypically gay, and less prototypically immigrant, than individuals from low gay nations – supporting suspicions regarding the perceived femininity of high gay countries. Importantly, however, gay individuals from low gay countries were perceived similar in gayness to individuals from high gay countries, and similar in immigrantness to straight men from high gay nations. Therefore, gay men from low gay nationalities may experience de-immigrantization, because stereotypical assumptions of gayness alter, and decrease, the stereotypical assumptions of immigrants.

Experiment 2a

Experiments 2a and 2b extended the methodologies of Experiments 1a and 1b to include women and further understand the process of de-immigrantization. Experiment 2a utilized the same methodology and hypotheses as Experiment 1a, including the groups of Portuguese women, lesbian Portuguese women, immigrant women, and lesbian immigrant women. In Portugal, the stereotypes regarding straight and lesbian women are comparable to stereotypes of women in Western contexts, where straight and immigrant women may be expected to partake in gendered norms and roles (e.g., housewifery), and lesbian women may be viewed as exceptions to this (e.g., Cunningham, 2019; Fernandes & Cabral-Cardoso, 2006; Nascimento & Bianchi, 2021; Wall et al., 2017). Based on prior literature and findings from Experiment 1a, hypotheses were updated accordingly. Specifically, Hypothesis 1 theorized straight target groups (Portuguese and immigrant women) will be rated similar on the anchors of Portugueseness, lesbianness, and immigrantness; that is, perceived heterosexuality will influence alikeness across all anchors, including immigrantness. Moreover, Hypothesis 2 stated lesbian target groups (lesbian Portuguese and lesbian immigrant women) will be evaluated similarly on the anchors of Portugueseness, lesbianness, and immigrantness, with explicit lesbianness driving participants' ideations of the targets. Hypothesis 3 did not expect straight and lesbian target groups to be perceived similarly; rather, we expected that straight target groups will be rated higher in Portugueseness and immigrantness than lesbian target groups, while lesbian target groups were expected to be rated higher in lesbianness than straight targets.

Method

Participants

Participants were recruited through a large university in exchange for either course credit or a voucher to a local retailer. In all, 260 online responses were recorded; again, a priori analysis was not conducted to determine sample size. Of the responses, 217 were deemed valid after data was cleaned for repetitive responses (n = 14) and all participants that answered "No" to "Were you born in Portugal, having Portuguese citizenship?" (n = 9) or "Did you answer this questionnaire truthfully?" (n = 20) were

excluded. In total, 159 participants were women, 57 were men, and 1 did not specify their gender. Ages ranged between 18-72 (M = 26.66, SD = 7.95), but an explicit demographics question regarding job status (i.e., student or worker) was not asked. Participants gave their informed consent to partake, and this study was approved by the ethics committee of the authors' institution.

Materials & Procedure

The materials and procedure used in Experiment 2a were nearly identical to those of Experiment 1a; notably, traits were not halved, meaning participants saw all of the traits for one of the four main conditions. Additionally, as Portuguese is a gendered language, traits were adapted to the feminine versions of each word. For instance, *criativo* was changed to *criativa* to account for masculine and feminine wordage. For more information on the materials and procedure, please refer to Experiment 1a.

Results 2a

Descriptive Results

To accurately determine stereotype attribution, averages from all traits were calculated, providing a rank-ordered list of the most to least representative stereotypes for each condition. Table B indicates the correlation between these ratings (in supplemental materials), while Table 3 highlights the most and least stereotypical traits for each target group. As space is limited, a full list of attributes may be found in the supplemental materials. Again, results appeared to follow general assumptions of straight and lesbian women in Western society, where both straight target groups were prototypically loyal to their family or industrious, while lesbian target groups were prototypically liberal and progressive.

Table 3

Most and Least Stereotypical Attributes for Portuguese Women, Lesbian Portuguese Women, Immigrant Women, and Lesbian Immigrant Women

Most Stereotypical Attributes

Portuguese Women (n = 52)				Lesbian Portuguese Women (n = 50)			
Attribute	Mean	SD	95% C.I.	Attribute	Mean	SD	95% C.I.
Talkative	6.08	0.95	[5.82, 6.33]	Humane	5.66	1.27	[5.31, 6.01]
Loyal to Family	6.04	0.95	[5.78, 6.30]	Liberal	5.66	1.47	[5.25, 6.07]
Sociable	5.90	0.85	[5.67, 6.13]	Progressive	5.46	1.23	[5.12, 5.80]
Industrious	5.80	1.15	[5.49, 6.12]	Straightforward	5.36	1.31	[5.00, 5.72]
Humane	5.77	0.94	[5.51, 6.03]	Artistic	5.34	1.29	[4.98, 5.70]
Immigrant Women (n = 59)				Lesbian Immigrant Women (n = 56)			
Attribute	Mean	SD	95% C.I.	Attribute	Mean	SD	95% C.I.
Loyal to Family	5.73	1.35	[5.38, 6.07]	Liberal	5.56	1.54	[5.16, 5.97]
Persistent	5.44	1.36	[5.09, 5.79]	Progressive	5.48	1.63	[5.06, 5.91]
Industrious	5.42	1.25	[5.11, 5.74]	Sociable	5.46	1.26	[5.13, 5.80]
Practical	5.17	1.42	[4.81, 5.53]	Argumentative	5.46	1.26	[5.13, 5.80]
Superstitious	4.88	1.27	[4.56, 5.21]	Straightforward	5.38	1.06	[5.10, 5.66]

Least Stereotypical Attributes

Portuguese Women (n = 52)				Lesbian Portuguese Women (n = 50)			
Attribute	Mean	SD	95% C.I.	Attribute	Mean	SD	95% C.I.

Criminal	1.60	0.87	[1.36, 1.83]	Very Religious	1.44	0.73	[1.24, 1.64]
Physically Dirty	1.67	0.90	[1.43, 1.92]	Tradition-Loving	1.54	0.81	[1.31, 1.77]
Cowardly	1.88	0.98	[1.62, 2.15]	Conservative	1.72	1.13	[1.41, 2.03]
Cruel	2.17	1.13	[1.87, 2.48]	Extremely Nationalistic	1.84	1.31	[1.48, 2.20]
Violent	2.21	1.04	[1.93, 2.49]	Cowardly	2.18	1.22	[1.84, 2.52]

Immigrant Women (n = 59)				Lesbian Immigrant Women (n = 56)			
Attribute	Mean	SD	95% C.I.	Attribute	Mean	SD	95% C.I.
Cowardly	2.15	1.30	[1.82, 2.48]	Very Religious	1.54	1.17	[1.23, 1.84]
Sexually Perverse	2.24	1.32	[1.90, 2.57]	Conservative	1.57	1.09	[1.29, 1.86]
Cruel	2.25	1.12	[1.97, 2.54]	Tradition-Loving	1.64	1.27	[1.31, 1.98]
Scientifically-Minded	2.59	1.40	[2.24, 2.95]	Extremely Nationalistic	2.00	1.37	[1.64, 2.36]
Physically Dirty	2.60	1.65	[2.18, 3.03]	Cowardly	2.14	1.24	[1.82, 2.47]

Testing the Hypotheses

The same analytical procedure from Experiment 1a was implemented in Experiment 2a. For information on the analysis conducted, please refer to the methodology of Experiment 1a. To test Hypothesis 1, a one-way ANOVA on the Portuguese anchor was performed; significant differences in trait ratings between Portuguese women (M = 5.73, SD = .24), lesbian Portuguese women (M = 4.74, SD = .55), immigrant women (M = 4.84, SD = .58), and lesbian immigrant women (M = 4.83, SD = .55) were found, $F(3, 36) = 8.83$, $p < .001$, $\eta^2 = .42$. A planned contrast testing overall differences between target groups suggested straight target groups were rated as more prototypically Portuguese than lesbian target groups, $t(36) = 3.20$, $p = .003$. Unexpectedly, a post-hoc Tukey's test indicated Portuguese women were rated more prototypically Portuguese than immigrant women ($p_{Tukey} = .002$, d = -1.79); as expected however, no differences were found between lesbian Portuguese and lesbian immigrant women ($p_{Tukey} = .979$, d = .18). When considering national and foreign groups, post-hoc Tukey's comparison indicated Portuguese women were viewed as more Portuguese than lesbian Portuguese women ($p_{Tukey} < .001$, d = -2.00), while no differences were found between immigrant and lesbian immigrant women ($p_{Tukey} = 1.000$, d = .03).

Following the same logic, a second one-way ANOVA on the immigrantness anchor was performed. Significant differences between Portuguese women (M = 5.15, SD = .72), lesbian Portuguese women (M = 4.09, SD = 1.25), immigrant women (M = 5.04, SD = .38), and lesbian immigrant women (M = 4.23, SD = 1.24) were revealed, $F(3, 36) = 3.14$, $p = .037$, $\eta^2 = .21$. An initial planned contrast indicated that, again, straight target groups were considered more prototypically immigrant than lesbian target groups, $t(36) = 3.04$, $p = .004$. As expected, a post-hoc Tukey's test suggested no significant differences between Portuguese and immigrant women ($p_{Tukey} = .994$, d = -.12), or between lesbian Portuguese and lesbian immigrant women ($p_{Tukey} = .990$, d = .14). However, the comparison also found no significant differences between Portuguese and lesbian Portuguese women ($p_{Tukey} = .088$, d = -1.09), or between immigrant and lesbian immigrant women ($p_{Tukey} = .260$, d = .84), suggesting minimal overall differences on the immigrantness anchor.

To test Hypothesis 2, a one-way ANOVA was performed on the lesbianness anchor, which revealed significant differences in trait ratings between Portuguese women (M = 4.90, SD = .76), lesbian Portuguese women (M = 5.37, SD = .17), immigrant women (M = 4.24, SD = .62), and lesbian immigrant women (M = 5.31, SD = .25), $F(3, 36) = 10.42$, $p < .001$, $\eta^2 = .47$. Again, a planned contrast suggested lesbian target groups were, generally, rated as more prototypically lesbian than straight target groups, $t(36) = -4.78$, $p < .001$. A post-hoc Tukey's comparison found that Portuguese women were unexpectedly rated higher in lesbianness than immigrant women ($p_{Tukey} = .032$, d = -2.61), while no differences were found between lesbian Portuguese and lesbian immigrant women ($p_{Tukey} = .993$, d = -.12). Finally, it was suggested that there were no differences in trait ratings between Portuguese and lesbian Portuguese women ($p_{Tukey} = .180$, d = .93), but lesbian immigrant women were perceived as higher in lesbianness than immigrant women ($p_{Tukey} < .001$, d = -2.10).

A final one-way ANOVA on the anchor of lesbian immigrant women revealed significant differences in trait ratings between Portuguese women (M = 5.07, SD = .69), lesbian Portuguese women (M = 5.30, SD = .26), immigrant women (M = 4.43, SD = .60), and lesbian immigrant women (M = 5.39, SD = .11), $F(3, 36) = 8.32$, $p < .001$, $\eta^2 = .41$. As with former results, a planned contrast suggested that lesbian target groups were rated higher in lesbianness (lesbian immigrantness) than straight target groups, $t(36) = -3.97$, $p < .001$. A post-hoc Tukey's test found Portuguese women were perceived as prototypically more lesbian [immigrant] than immigrant women ($p_{Tukey} = .024$, d = -1.34), while no differences between lesbian Portuguese and lesbian immigrant women were indicated ($p_{Tukey} = .979$, d = .18). Finally, no significant differences between Portuguese and lesbian Portuguese women were found ($p_{Tukey} = .684$, d = .50), but lesbian immigrant women were rated higher in lesbianness (lesbian immigrantness) than immigrant women ($p_{Tukey} < .001$, d = -2.02).

Discussion 2a

Unexpectedly, results largely did not support Hypothesis 1 which expected Portuguese and immigrant women to be evaluated similarly on the anchors of Portugueseness, immigrantness, and

lesbianness. Instead, Portuguese women were rated higher in Portugueseness and lesbianness, but not immigrantness, when compared to immigrant women. However, Hypothesis 2 was fully supported as lesbian Portuguese and lesbian immigrant women received statistically similar ratings across all four anchors. Importantly, findings again suggested lesbians were not seen as prototypically different although their nationality or immigrant status was explicitly different. Hypothesis 3 was also supported, suggesting that when combined, straight target groups are perceived higher in prototypical Portugueseness and immigrantness than lesbian groups, while lesbian target groups are perceived higher in lesbianness than straight target groups.

Experiment 2b

Experiment 2b extended themes from Experiment 1b, considering straight and lesbian women from the same four target nationalities (Brazil, France, India, and Japan). The materials and procedure were nearly identical to Experiment 1b, save for the adaptation of traits from masculine to feminine. However, we updated the hypotheses according to the findings from Experiment 1b; specifically, Hypothesis 1 expected that straight and lesbian women from the same nationality will *not* be evaluated differently on the lesbianness or immigrantness anchor. As with Experiment 1b, Hypothesis 2 stated that individuals from high lesbian nations will be rated higher in lesbianness and lower in immigrantness when compared to individuals from low lesbian nations.

Method

Participants

Participants were recruited through a large university in exchange for course credit. In total, 98 responses were recorded, with 23 not meeting inclusion criteria; again, a priori analysis was not conducted. Of the exclusions, 3 participants were under the age of 18, 12 had incomplete data, 5 were not Portuguese, and 3 answered “No” to “Did you answer this questionnaire truthfully?”. Of the 75 included responses, 63 were women, 10 were men, and 2 did not specify their gender. Ages ranged from 18-50 (*M*

= 19.68, *SD* = 4.62), but an explicit demographics question regarding job status (i.e., student or worker) was not asked. Of these, 49 were straight, 5 were gay or lesbian, 20 selected 'other LGBT', and 1 did not specify their sexual orientation. Participants gave their informed consent to participate, and this study was approved by the ethics committee of the authors' institution.

Materials & Procedure

Experiment 2b utilized the same methodology and materials as Experiment 1b. Again, minor changes in wordage were implemented to account for masculine and feminine adjectives in the Portuguese language. Using the same trait selection process, 71 final traits were used for the female target groups; that is, some traits were shared across categories and were omitted to avoid redundancy. For the full procedure, please refer to Experiment 1b, and for the full list of traits, please refer to supplemental materials.

Results 2b

Descriptive Results

Traits were rank-ordered across groups, highlighting the most prototypical attributes of each target group based on sexual orientation (see Table 2). Importantly, high lesbian nationalities (Brazil and France) were more likely to be attributed with prototypical lesbian traits (48%) than low lesbian nationalities (India and Japan) (20%), and low lesbian nationalities were more likely to be attributed with prototypical immigrant traits (50%) than high lesbian nationalities (5%). While distinct differences emerged, the number of selected traits does not necessarily mean a target group is, or is not, prototypically similar to the anchor. To accurately test prototypicality, statistical tests were performed using the same analytical procedures from Experiment 1a.

Table 4

Frequencies of Selected Attributes for Brazilian, French, Indian, and Japanese Women

Brazilian Women (*n* = 35)		Lesbian Brazilian Women (*n* = 40)		French Women (n = 35)		Lesbian French Women (n = 40)	
Trait	Frequency	Trait	Frequency	Trait	Frequency	Trait	Frequency
Loud	74%	Witty*	60%	Stylish	69%	Passionate	45%
Extroverted*	74%	Extroverted*	55%	Beautiful	57%	Stylish	45%
Sociable*	71%	Sociable*	53%	Artistic*	46%	Sociable*	38%
Beautiful	51%	Loud	48%	Fragrant	46%	Intelligent	35%
Witty*	51%	Beautiful	38%	Argumentative*	40%	Liberal*	35%
Straightforward*	34%	Liberal*	35%	Ambitious†	34%	Progressive*	35%
Industrious†	34%	Straightforward*	30%	Passionate	34%	Beautiful	33%
Passionate	29%	Impulsive*	30%	Exuberant	31%	Fragrant	33%
Exuberant	29%	Progressive*	30%	Intelligent	29%	Radical*	33%
Argumentative*	23%	Sexually Perverse	28%	Clever	26%	Argumentative*	30%

Indian Women (n = 35)		Lesbian Indian Women (n = 40)		Japanese Women (n = 35)		Lesbian Japanese Women (n = 40)	
Trait	Frequency	Trait	Frequency	Trait	Frequency	Trait	Frequency
Loyal to Family†	74%	Industrious†	45%	Industrious†	63%	Peaceful	45%
Very Religious†	71%	Progressive*	35%	Loyal to Family†	57%	Shy	38%

Tradition-Loving†	63%	Shy	35%	Intelligent	49%	Passionate	35%
Industrious†	49%	Alert†	33%	Shy	49%	Beautiful	35%
Conservative	46%	Humane*†	33%	Conservative	46%	Intelligent	35%
Peaceful	43%	Loyal to Family†	30%	Tradition-Loving†	46%	Progressive*	35%
Faithful†	34%	Persistent*†	30%	Peaceful	43%	Persistent*	33%
Superstitious†	34%	Liberal*	28%	Efficient†	40%	Ambitious†	30%
Humane*†	31%	Radical*	28%	Alert†	37%	Industrious†	30%
Conventional	29%	Faithful†	25%	Beautiful	37%	Courteous	28%

Note. Frequency is the number of selections divided by the total participants for each group. An asterisk (*) represents the trait was included in the top 15 for lesbian Portuguese women, while a dagger (†) represents the traits was included in the top 15 for immigrant women. Words were ordered according to the original Portuguese translations; as such, English alphabetization may be out of order.

Testing the Hypotheses

To analyze the data, anchors were created for each nationality group based on the ratings from Experiment 2a for the same traits. For instance, *industrious* was the most prototypical trait of Japanese women; in Experiment 2a, industrious was rated 4.38 for lesbian Portuguese women and 5.42, suggesting this trait was higher in prototypicality for immigrant women than lesbian women. With this procedure, each rank-ordered value in Experiment 2b was given a numerical value based on perceived lesbianness and immigrantness which could be quantitatively analyzed. General lesbianness was not explicitly tested

in Experiment 2a, but, findings suggested overall shared conceptualizations between lesbian Portuguese and lesbian immigrant women. Therefore, the anchor of lesbianness was defined by lesbian Portuguese women.

To test Hypothesis 1, a 2 (sexual orientation) x 4 (nationality) mixed ANOVA was performed, albeit, on the anchor of lesbianness. Again, the ANOVA indicated a main effect between nationalities[13], $F(3, 54) = 3.79$, $p = .015$, $\eta^2 = .13$ and sexual orientation, $F(1, 18) = 21.99$, $p < .001$, $\eta^2 = .12$, but no interaction was found, $F(3, 54) = 1.96$, $p = .132$, $\eta^2 = .07$. A post-hoc Tukey's test revealed nonsignificant differences for within-nationality pairings[14], excluding straight and lesbian Indian women ($p_{Tukey} = .008$, d = .1.69). Unexpectedly, participants evaluated Indian women differently on sexual orientation, whereas lesbian Indian women were perceived as higher in lesbianness than straight Indian women. Nonetheless, results generally supported Hypothesis 1.

A second 2 (sexual orientation) x 4 (nationality) mixed ANOVA on the anchor of immigrantness was conducted to test Hypothesis 2. The test revealed a main effect of nationality, $F(3, 54) = 5.25$, $p = .003$, $\eta^2 = .18$, but no effect of sexual orientation, $F(1, 18) = 1.52$, $p = .233$, $\eta^2 = .01$ and no interaction between variables, $F(3, 54) = .19$, $p = .903$, $\eta^2 < .01$. Moreover, no significant differences of within-nationality groupings were found in post-hoc comparisons[15], suggesting nationality was the only variable which influenced ratings of immigrantness and thus supporting Hypothesis 2.

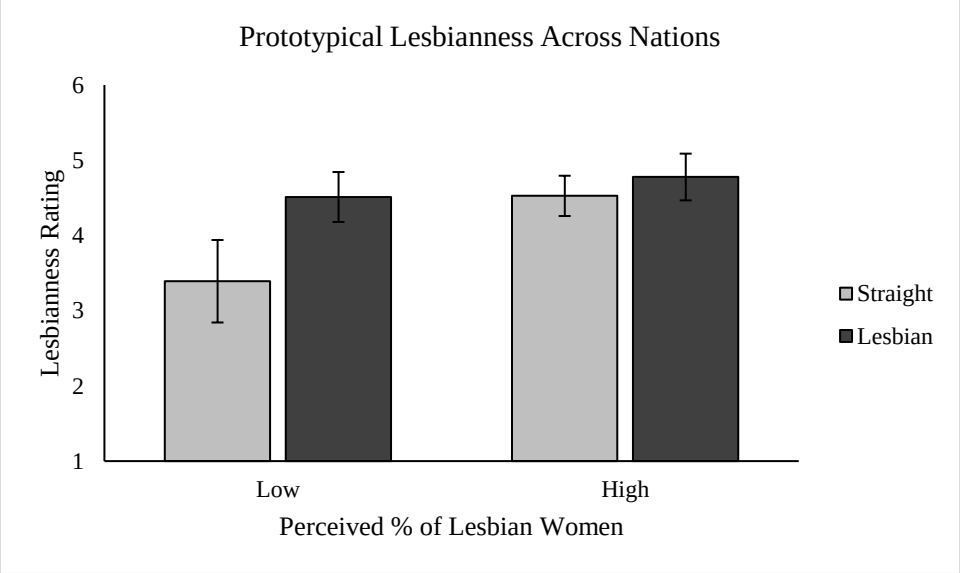
To test Hypothesis 2, nationalities were again grouped by their perceived percentage of lesbian individuals in each country. First, a 2 (percentage of lesbian individuals) x 2 (sexual orientation) mixed ANOVA was performed on the anchor of lesbianness and indicated a main effect of percentage, $F(1, 38) = 10.07$, $p = .003$, $\eta^2 = .12$ and sexual orientation, $F(1, 38) = 17.65$, $p < .001$, $\eta^2 = .12$, but did not indicate an interaction between variables, $F(1, 38) = 3.88$, $p = .056$, $\eta^2 = .05$ (see Figure 3). First, a planned

[13] For brevity, means for all conditions and tests in Experiment 2b may be found in supplemental materials.
[14] Straight x lesbian Brazilians ($p_{Tukey} = 1.000$, d = .17); straight x lesbian French ($p_{Tukey} = .986$, d = .40); straight x lesbian Japanese ($p_{Tukey} = .540$, d = .86)
[15] Straight x lesbian Brazilians ($p_{Tukey} = .931$, d = -.54); straight x lesbian French ($p_{Tukey} = 1.000$, d = -.09); straight x lesbian Indians ($p_{Tukey} = 1.000$, d = -1.00); straight x lesbian Japanese ($p_{Tukey} = .999$, d = -.26)

contrast suggested individuals from high lesbian nations were perceived as more prototypically lesbian than individuals from low lesbian nations, $t(38) = 3.17$, $p = .003$. A post-hoc Tukey's test revealed no significant differences between straight or lesbian individuals from high lesbian nationalities ($p_{Tukey} = .798$, d = .29), but did find significant differences between straight and lesbian individuals from low lesbian nationalities ($p_{Tukey} < .001$, d = 1.29), whereas lesbian individuals from low lesbian nations were evaluated similar in lesbianness when compared to both straight ($p_{Tukey} = .830$, d = .31) and lesbian individuals ($p_{Tukey} = 1.000$, d = .02) from high lesbian nations.

Figure 3

Prototypical Lesbianness of Individuals from High or Low Lesbian Nations



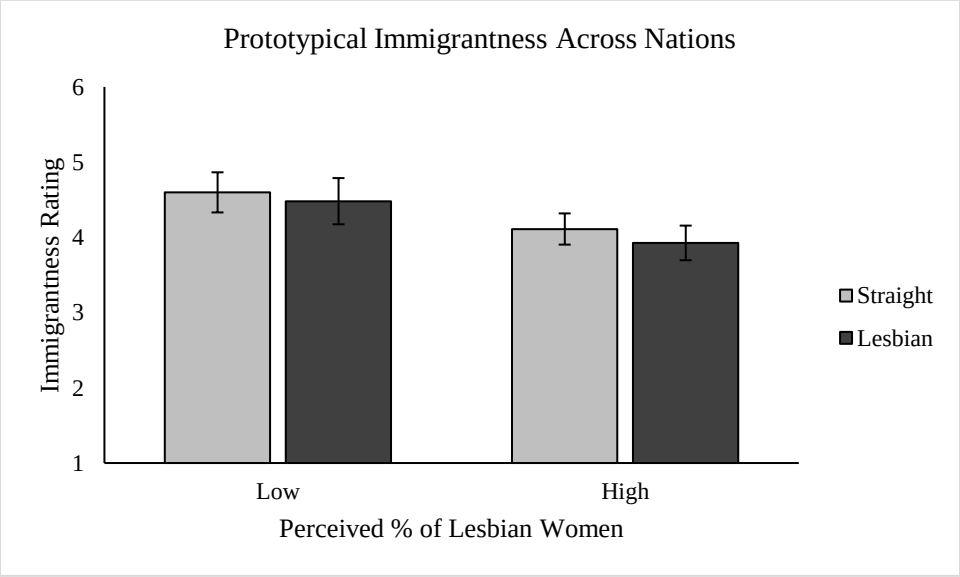
Note. Error bars represent 95% confidence intervals.

A final 2 (percentage of lesbian individuals) x 2 (sexual orientation) mixed ANOVA on the immigrantness anchor was performed to further test Hypothesis 3. Results revealed a significant main

effect of nationality, $F(1, 38) = 15.61$, $p < .001$, $\eta^2 = .17$, but no main effect of sexual orientation, $F(1, 38) = 1.37$, $p = .249$, $\eta^2 = .01$ and no interaction between variables, $F(1, 38) = .07$, $p = .801$, $\eta^2 < .01$ (see Figure 4). A planned contrast suggested individuals from high lesbian nations were rated as less prototypically immigrant than individuals from low lesbian nations, $t(38) = -3.95$, $p < .001$. Moreover, a post-hoc Tukey's comparison found nonsignificant differences between straight or lesbian women from high lesbian nations ($p_{Tukey} = .749$ d = -.32), and separately, nonsignificant differences between straight or lesbian women from low lesbian nations ($p_{Tukey} = .919$, d = -.20). However, significant differences were also found between lesbians from high lesbian nations and lesbians from low lesbian nations ($p_{Tukey} = .025$, d = -.95).

Figure 4

Prototypical Immigrantness of Individuals from High or Low Lesbian Nations



Note. Error bars represent 95% confidence intervals.

Discussion 2b

Findings generally supported the hypotheses, which updated and extended those from Experiment 1b. Straight and lesbian women from each nationality did not receive different ratings on the lesbianness and immigrantness anchors, as expected, except for the case of Indian women. Specifically, lesbian Indian women were perceived as more prototypically lesbian than straight Indian women, going against past findings and assumptions. Here, perhaps an increase in implied traditionalism influenced participants' ratings of straight and lesbian Indian women, although this statement requires further testing. Nonetheless, the other hypotheses were supported which expected individuals from high lesbian nations to be evaluated as more prototypically lesbian and less prototypically immigrant than individuals from low lesbian nations. Importantly, lesbians from low lesbian nations were perceived as prototypically similar to individuals from high lesbian nations in lesbianness, and similar to straight women from high lesbian nations on immigrantness, replicating the findings from Experiment 1b and again suggesting de-immigrantization effects.

General Discussion

We hypothesized gay and lesbian individuals will be perceived as less prototypically Portuguese or immigrant when considering stereotypical personality traits attributed to each group. Moreover, we expected that gay men from specific nationalities would follow suit in which they will be perceived as more gay and less immigrant than straight men, but unexpectedly, straight and gay men from the same nationality were conceptualized similarly and only an effect of perceived national gayness appeared. This effect was extended to female target groups in which straight and lesbian women from the same nationality received similar trait ratings on the anchors of lesbianness and immigrantness, and again, an effect of the perceived percentage of lesbians in the population was found.

In Experiment 1a, gay Portuguese and gay immigrant men were similarly considered as less prototypically Portuguese or immigrant than straight Portuguese and immigrant men, implying participants conceptualized each target group according to explicit or assumed sexual orientation. That is, participants created new conceptualizations of groups when the identifier of sexual orientation was added

to nationality or immigrant status, attributing different traits based on sexual orientation. Importantly, assumed sexual orientation appeared to drive the conceptualizations of Portuguese and immigrant men, whereas both straight target groups were evaluated similarly on the anchors of Portugueseness, gayness, and unexpectedly, immigrantness. It was expected that outgroup membership will result in immigrant men being rated as more prototypically immigrant; however, an underlying assumption of heterosexuality and/or masculinity could explain similarities in trait ratings between these two target groups (e.g., Garrido et al., 2009; Kite & Deaux, 1987; Madon, 1997; Nascimento & Bianchi, 2021; Schug et al., 2015). Experiment 2a attempted to replicate findings from Experiment 1a, but in fact, suggested that women did not follow the same trends as men. While lesbian women were perceived as generally less prototypically Portuguese and immigrant, differentiations between straight Portuguese and immigrant women arose. Specifically, straight Portuguese women were perceived as more prototypically Portuguese and lesbian than immigrant women were, rejecting the same theoretical assumptions of implied sexual orientation.

Nonetheless, it is uncertain to us as to why this effect differs across genders, but answers may be explained by ambiguous social categories; for instance, individuals may draw conclusions about others based on their own stereotypical perception of the other's group, even when the group or context may be ambiguous (Dunning & Sherman, 1997; Remedios et al., 2011; Thayer & Pronko, 1959). Here, stereotypes of women could have been diluted, given the fact that national stereotypes may be driven by men (Eagly & Kite, 1987), resulting in differences in conceptualizations between men and women on the anchor of immigrantness. This difference nevertheless brings more questions to the issue at hand and requires further experimentation.

To shift conclusions from generic to specific, four nationalities (Brazil, France, India, and Japan) were introduced in Experiments 1b and 2b. Originally, we hypothesized that national conceptualizations will be differentiated by sexual orientation, but gay men will be perceived differently due to perceived femininity (e.g., Nascimento & Bianchi, 2021; Petsko & Bodenhausen, 2019; Savaş et al., 2021). However, this effect was not found across all nationalities regarding gayness or immigrantness anchors

and was replicated by the female target groups (except for Indian women). Instead, national conceptualizations seem to dominate, in which participants conceptualized individuals from the same nationality as largely similar, independent of sexual orientation; undoubtedly, this harkens back to Eagly and Kite's (1987) work on the nature of national stereotypes. The authors argue that, as nations are viewed as inherently androcentric, the stereotypes of nations may be anchored to the men within the population. As such, there may not be much differentiation between the men and women from a certain nationality, disregarding the sexual orientation of the targets if it is not explicitly primed (see Petsko & Bodenhausen's (2022) lens theory). Furthermore, individuals from high gay or lesbian nations were perceived as prototypically more gay or lesbian and prototypically less immigrant than individuals from low gay or lesbian nations, suggesting that the national identities themselves may be a product of [inter]national perceptions. That is, heightened LGBT acceptance may influence international perceptions of liberalism or femininity within the nation itself, resulting in de-immigrantization effects (e.g., Eagly & Kite, 1987; Hall et al., 2015; Rehman et al., 2020; Schug et al., 2015; Wright, 2016). Importantly, gays and lesbians from low gay nations were also de-immigrantized, suggesting positive attributes of sexual orientation may actually outweigh negative attributes of immigration (see Savaş et al., 2022).

Herein lies the importance of exploring perceptions of groups which may have been previously overlooked. It is imperative, as researchers, to include and incorporate marginalized and/or vulnerable groups so their unique experiences may become better realized. Intersectional research must go beyond common group memberships and begin to examine underrepresented or complex categories which not only increase inclusivity in the literature, but also aids future research on stereotype function. Moreover, as results strayed from hypotheses derived from prior theoretical considerations, it appears that intersectional research may, itself, be contradictory in nature, begging for the contextualization of effects across societies and structures.

Beyond the theoretical implications of the findings, it is equally important to note the limitations. First, although the goal of the project was to gather a generalized viewpoint from Portuguese society, a

substantially diverse sample was not produced. Instructions presented to participants attempted to generalize results from individual to societal, but, some of the instructions may have been misinterpreted by the participants (who gave their own perceptions). Nonetheless, as Portugal is an ethnically homogenous country with a large middle class, it is plausible that results could be replicated when using a more diverse sample.

Second, the studies did not account for potential ambiguities in the design. Specifically, most of the translated terms were undisputed, but for instance, *humano* was contested by the translators; in Portuguese, this term could be understood as being humane (empathetic) toward others, or that they are human (i.e., all humans are equal). As such, it is unclear which connotation of this word was more applied by participants, and it remains unclear if other terms experienced similar ambiguities. Furthermore, sexual orientation was not explicitly stated for straight target groups, increasing the probability that participants may have not been able to accurately categorize these target groups. However, we argue that, as Sykes (2015) notes, heteronormativity is focused on the perceived masculinity of individuals and therefore, the absence of explicit sexual orientation should not substantially influence results. Nonetheless, further testing is required to test a potential difference in conceptualization between straight Portuguese men and Portuguese men, for instance.

Finally, it is debatable whether or not participants understood the meaning of all presented attributes, as some are more common than others. A mixed methodological design utilizing both top-down and bottom-up processing in which participants both selected and generated attributes for each target group could have alleviated this concern. While the closed design of the studies has certain advantages, an open-ended design may have led to a more diverse dataset, highlighting terms which were previously unaware to the researchers – particularly since the same traits were used for different groups in society (see Ghavami & Peplau, 2013 for an example).

Future researchers in this line could benefit from the strengths and limitations of this project, creating works which further encompass various intersectional target groups while reducing limitations.

For example, bisexual or transgender men and women were not included in this project; as two underrepresented LGBT groups in media and research, their inclusion is increasingly important. Based on the findings of the current studies, it is plausible that sexual orientation would still be a more salient social category than immigrant status, but this statement undoubtedly requires testing to be concretely assumed. Moreover, it is unclear to what extent sexual orientation or nationality is a dominant identifier for intersectional target groups and there remains work to be done in the line of intersectional stereotypes.

Conclusion

This project built upon findings and assumptions related to intersectional target groups and stereotype attribution in a unique manner. Specifically, a quantitative methodology including individuals at the intersection of nationality, immigrant status, and sexual orientation suggested sexual orientation remained a salient social category, generally surpassing nationality or immigrant status. That is, straight Portuguese and immigrant men and women were typically conceptualized similarly across the anchors of Portugueseness, immigrantness, and gayness, with a few notable exceptions. Simultaneously, gay or lesbian Portuguese and immigrant individuals were evaluated similarly across all anchors with no exceptions. Furthermore, individuals from high gay and lesbian nationalities were, overall, perceived as less prototypically immigrant than individuals from low gay and lesbian nationalities presenting important considerations for the diversification of individuals from certain nations. Findings from this research extend the diversification of psychological research, while simultaneously building upon the ideas of stereotype saliency and intersectionality, particularly of gay or lesbian immigrants. We, the authors, look forward to the continuous development of this line of research, as well as the future of diversified intersectional studies.

CHAPTER 3

EXTENDING INTERSECTIONAL STEREOTYPING TO THE OCCUPATIONAL SETTING

The goal of the article presented in Chapter 3 is to extend the effects of intersectional stereotyping from a theoretical, to a realized, point of view in a Portuguese context by using straight or gay Portuguese and Brazilian candidates, by adopting an approach similar to Everly and colleagues (2016), Pedulla (2014), Strinić and colleagues (2021), and Wilson and colleagues (2017). We wanted to test whether or not the same de-immigrantization effects examined in Chapter 2 would also arise in the current project for intersectional members (i.e., gay Brazilians), particularly when participants had to make stereotypical based evaluations of candidates, rather than simply identifying which stereotype contents were most typical of a specific target group. This was tested using the stereotype content model (SCM) and behavior from intergroup affect and stereotypes (BIAS) map to develop questions of stereotypical judgement and intent; measures of warmth and competence were used to detect the overall evaluations of the candidates, while a salary proposal task was used to detect potential differences in behavioral intent. These themes were explored through two studies which potentially would introduce more, and less, cognitive complexity for the participants to make decisions, in order to better understand the specific scenarios in which an immigrant in Portugal may, or may not be, be discriminated against within the hiring process.

To better frame the goal of the work developed in this chapter, we first address empirical evidence regarding occupational stereotyping against intersectional individuals (Chapter 3.1) and contextualize such research to the Portuguese context (Chapter 3.1.1). Further, we address the SCM and BIAS Map and their limitations (Chapters 3.2 and 3.2.1), as many stereotypes contain specific expectations about the warmth and competence of group members (e.g., Cuddy et al., 2011; Fiske et al., 2002; Fiske et al., 2007). The SCM has seen consistent support since its conception, mostly with unipolar stereotyping generally falling into the dimensions of either warmth or competence (Cheryanet et al., 2015), however, less is known about its application to multiple minority social targets. Finally, studies 1 and 2 of the featured paper not only focus on the attitudes that participants have toward straight or gay Portuguese or Brazilian candidates, but also included a hidden measure of task complexity to see whether or not heuristic processes would be allowed to come forth (e.g., Bodenhausen & Wyer, 1985; Macrae et al., 1994; Nisbett & Ross, 1980; Wyer & Carlston, 1979). Such conceptualization on task and judgment

complexity matters, and previous research relating to the application of stereotypes, is addressed in Chapter 3.3.

3.1: Occupational Stereotyping Against Intersectional Individuals

Although most modern societies have some form(s) of anti-discrimination laws (e.g., Neto et al., 2017), there may yet be some individuals that experience the effects of stereotyping in occupational settings, particularly those who do not conform with the traditional male-oriented and whitened workplace (Pedulla, 2014; Purdie-Vaughns & Eibach, 2008). As an institution with a long-standing history of androcentrism, ethnocentrism, and heterocentrism (see Chapter 1.3.2 or Purdie-Vaughns & Eibach, 2008 for further definitions), the typical workplace does not foster an environment in which diverse individuals are celebrated, although notable efforts have been made over the past few decades, especially in Portugal (Guerra et al., 2015; Pereira, 2013; Neto et al., 2017). Because of the perpetuation of traditional stereotypes and notions, for instance, men may be considered as more suitable than women for certain managerial positions within STEM (i.e., science, technology, engineering, and math) fields (Cheryan et al., 2015), black men may be regarded as less competent than gay black men, and white men, when reviewing CVs (Pedulla, 2014), lesbian women may be perceived as better colleagues than straight women in certain business contexts (Sterkens et al., 2022), and male immigrants received more positive evaluations of their CVs than their female counterparts (from the same region) (Derous & Pepermans, 2019). In all of the examples above, it appeared that the targets' stereotypical proximity, or distance, from the traditional straight white male (i.e., the "typical" boss) influenced how they were perceived by others. For instance, as Pedulla (2014) argues, although black men share only one degree of separation from white men (on the basis of race), they may nonetheless be perceived as prototypically farther than gay black men because being gay may de-racialize black men in certain scenarios (see also Petsko & Bodenhausen, 2019). In fact, being gay brought increased the positive evaluations of black men so much, there was no significant difference between the judgements of gay black men and white men. This does not mean that straight, white men are always on top of the metaphorical ladder of hierarchy, but, this is

what may be perceived by individuals who have been exposed to the traditional institutional setting for a long duration of time.

It is important to note that individuals who work in female-dominated jobs may also face occupational stereotyping based on their proximity to the typical woman. For instance, men showing interest in female-dominated jobs may be viewed as, and may self-report themselves as, more feminine (which may produce negative consequences of being counterstereotypical man) (Fox & Barth, 2017), and immigrant women may be viewed as less trustworthy nurses, leading to discriminatory behaviors by patients (Opara et al., 2020). In conjunction, the presentation and consequences of stereotypes in both male- and female-dominated occupations highlights one of the running themes of this thesis – not only are stereotypes not static, but they may also be shifted (in meaning, or to a different target) depending on context, adding to the complexity of understanding stereotypes.

3.1.1: Occupational Stereotyping in Portugal

The situation in the Portuguese context is similar to that of other Western nations, but has some nuances and complexities unique to itself, stemming from Portugal's colonial history and relation with other European nations. Similar to other European nations, there is not a large amount of negative sentiments toward workers from high-income countries such as Germany or France. While these individuals typically do not make substantial effort to integrate into Portuguese society, a large portion of them work remotely from their home countries for any period of time which leads to overall discomfort between locals and teleworkers, but not necessarily xenophobic occupational stereotyping (since their jobs are generally outside of Portugal) (Rauhut & Esteves, 2020; Sardinha, 2013). However, as commonly observed in other European nations, individuals from countries with lower socioeconomic statuses are generally the targets of occupational stereotyping and discrimination (e.g., Carvalho & Duarte, 2020; Guerra et al., 2015; Pereira, 2013; Santos, 2013). Being the largest immigrant group in Portugal, Brazilians are the most-often reported on minority group and may be negatively stereotyped in occupational settings due to assumptions of their intelligence, competence, or trustworthiness (Casquilo-

Martins et al., 2022; Guerra et al., 2015; Jarrin & Pitts, 2020). Because Brazilians are the most abundant group in Portugal, Chapter 3 focuses on the treatment of straight and gay Brazilians in the Portuguese setting, because, although participants might have never met a gay Brazilian, they are likely to have experience with Brazilians, and gay individuals, separately, thus increasing the strength of the paradigm. Pedulla (2014) conducted a similar experiment within the context of the United States in which he used straight or gay white or black men; because white individuals compose the majority in the United States, and black individuals compose the largest minority, again, it was likely that participants were able to conceptualize these individuals in real life, without much cognitive effort.

3.2: The Stereotype Content Model and BIAS Map

Stereotypes exist in nearly all facets of the human experience, and as the stereotype content model (SCM) argues, the process of stereotyping outgroup members may be understood by comparing the differences between their perceived warmth and competence (e.g., Cuddy et al., 2011; Fiske et al., 2002; Fiske et al., 2007). Historically, humans have had to make rapid decisions to ensure their survival against the forces of nature, animals, and, other humans, resulting in the judgement of outgroup members based on their potentiality of causing harm (i.e., warmth, or lack thereof) and the capability of causing harm (i.e., competence, or lack thereof). Each of the dimensions contains several subcategories of stereotype content emerging from intergroup relationships (Fiske et al., 2002; Fiske et al., 2007) in which different attributes may correlate with warmth and competence; for instance, measures of trustworthiness and friendliness may reflect one's perceived warmth, while measures of intelligence and aptness may reflect one's perceived competence (Fiske, 2018; Wojciske et al., 1998). These measures are related to the notions of communion and agency developed by Bakan (1956) who argued that communion is comparable to collectivist-oriented mentalities and agency is comparable to individualist-oriented mentalities but are theoretically different given the vastness of the dimensions of warmth and competence, which include numerous subcategories (Cuddy et al., 2008; Cuddy et al., 2011; Fiske et al., 2002; Fiske et al., 2007; Wojciske et al., 1998). That is not to say both notions are incompatible, but

actually, quite the opposite; when used in conjunction, the four measures may provide a deeper understanding of the perceptions ingroup members give to certain outgroups (but of course, it depends on the methodological aims of each project).

The SCM has seen constant support since its conception with numerous large-scale replications of consistently-categorized social groups across both time and space (Cuddy et al., 2011). Women are often considered as more nurturing than men (i.e., having higher perceived warmth) (Ellemers, 2018), black men may be regarded as more threatening than white men (i.e., having lower perceived warmth) (Pedulla, 2014), men may be perceived as better candidates for STEM-related fields (e.g., engineering) than women (i.e., having higher perceived competence) (Cheryan et al., 2015), and physically disabled individuals may be viewed as less suitable parents than physically abled individuals (i.e., having lower competence) (Nario-Redmond, 2010).

The stereotype content model was extended by the proposal of the behavior from intergroup affect and stereotypes (BIAS) map (see Cuddy et al., 2007; Cuddy et al., 2008; Cuddy et al., 2009), which hypothesizes that, because ingroup members have the tendency to evaluate outgroup members on their perceived warmth and competence, certain sentiments may be predicted based on the levels of warmth and competence. In other words, outgroup members may be further categorized based on how warm or competent they appear to be, simultaneously, adding complexity to the process of stereotyping outgroup members. The BIAS map allows us to better understand and categorize the fluid nature of stereotypes by examining the unique patterns of high versus low warmth versus competence in a more open-ended manner. The predicted sentiments and/or behaviors may, like the SCM, be categorized into main groups with several subgroups of correlated items based on the perceived activeness or passiveness of each dimension (Cuddy et al., 2007). Specifically, high warmth may activate active facilitation (i.e., assisting another individual), low warmth may activate active harm (i.e., hurting another individual), high competence may activate passive facilitation (i.e., cooperating with another individual), and low competence may active passive harm (i.e., neglecting another individual) (Cuddy et al., 2007; Cuddy et al., 2008; Cuddy et al., 2009). For example, wealthy individuals may be perceived high in warmth and

competence, producing feelings of admiration and acts of cooperation from ingroup members (Cuddy et al., 2008), but elderly individuals, by comparison, may be viewed as having high levels of warmth, but low levels of competence, resulting in sentiments of pity or acts of neglect from ingroup members (Cuddy et al., 2008).

3.2.1: Limitations of the SCM and BIAS Map

As with the majority of theoretical frameworks within the field of psychology, the SCM is not without its own limitations and drawbacks. First, the idea that an individual is warm, but not as warm as others, is a subjective measure meaning these dimensions exist on an ambiguous scale that does not clearly categorize feelings of warmth or competence. Akin to the feeling of pain (which varies from person to person), the feelings of warmth and competence are not able to be entirely objectively measured, although as previously mentioned, there are general observations of social groups. Second, the SCM also does not account for the fluidity of stereotypes, given stereotypes generally shift over time and are not static, or unidimensional, in nature, and subsequently, it does not consider external sociopolitical factors such as war (i.e., competition) (Aktan, 2012). Similar to the SCM, the BIAS map does not account for situational factors which may or may not influence participants', and society's, judgements of outgroup members. If asked to consider a woman in an office meeting, hypothetically, individuals may be primed by the assumed competence of the traditionally male-dominated scenario, acting in manners which discriminate against her, and alternatively, if asked to consider a man in a meeting at their children's school, individuals may be primed by the assumed warmth of the school setting, acting in ways that discriminate against him (Cuddy, 2007). Both the stereotype content model and the behavior from intergroup affect and stereotypes map make strong and consistent arguments for their overall value to psychological science, but limitations such as these call for the continued replication and exploration of these theories to test generalizability over time and context – one of the aims of this thesis.

3.3: Task and Judgement Complexity

Studies 1 and 2 of the subsequent paper not only focus on the attitudes that participants have toward straight or gay Portuguese or Brazilian candidates, but also included a hidden measure of task complexity to see whether or not heuristic processes would be allowed to come forth (e.g., Bodenhausen & Wyer, 1985; Macrae et al., 1994; Nisbett & Ross, 1980; Wyer & Carlston, 1979). Specifically, Study 1 triggered more competence than Study 2 by providing participants with extra information regarding the candidates, and the candidates had higher skill levels than those in Study 2, which we hypothesized would decrease the overall difficulty of making judgements about the candidates as participants could anchor their evaluations to objective information (see Bodenhausen & Lichtenstein, 1987; Bodenhausen & Wyer, 1985; Correll et al., 2015; Locksley et al., 1982; Macrae et al., 1994). In Study 2, however, we triggered implicit competence by introducing less information on each candidates' CV, driving task complexity. In the absence of straightforward information, judgements may be more theory- or stereotypically-driven in a way for participants to ease their cognitive load (Bodenhausen & Wyer, 1985). In theory, if heuristic processes were allowed to come forth, participants would evaluate candidates with a more stereotypical (instead of objective) point of view.

3.4: TRIGGERING COMPETENCE MAY PROTECT MULTIPLE MINORITY MEMBERS FROM HIRING DISCRIMINATION[16]

Abstract

Hiring managers may consider hundreds of applicants for one position, leading to rapid decisions based on minimal information which may discriminate against certain individuals. However, past research shows that individuals belonging to multiple minority groups may, in fact, benefit from their intersectional status in certain contexts. First, to identify possible types of prejudice, the Attitudes Toward Gay Men (ATG) and Attitudes Toward Brazilian Men (ATB) explicit measures were created and paired with implicit association tests (IATs). Whereas participants did not show signs of explicit negative attitudes toward outgroup members, they did exhibit implicit preferences toward ingroup members. Using another sample from the same sociocultural context, potential discrimination faced by straight or gay Brazilian applicants in Portugal was examined in high or low competence scenarios, drawing inspiration from the stereotype content model. Results indicated, compared to ingroup applicants, straight and gay outgroup members were perceived alike in competence and were offered statistically similar salaries when competence was triggered; in contrast, only straight outgroup members were perceived as less competent and were offered statistically lower salaries when competence was not triggered. Findings suggest that multiple minority status may protect certain individuals from hiring discrimination, particularly in contexts where competence is not assumed.

Keywords: Hiring Discrimination, Intersectionality, Stereotypes

[16] Reese, J., Santos, A. S., Palma, T. A., & Roberto, M. S. (2023). Triggering competence may protect multiple minority members from hiring discrimination. *Humanities and Social Sciences Communications,* Advance online publication

In an increasingly capitalistic world, immigration to regions with greater socioeconomic status remains one of the most cited determinants of international migration (e.g., Valdez et al., 2013; Winchie & Carment, 1989). Therefore, successful integration into the host country's work culture (e.g., providing a curriculum vitae (CV), partaking in interviews, donning specific outfits, etc.) is essential to secure financial prosperity. Yet, due to external factors such as xenophobic policies restricting access to resources (Valdez et al., 2013), a lack of recognition for qualifications (Pereira, 2013), or certain phenotypical features which elicit racist responses (Polavieja et al., 2023), immigrants may be forced to accept low-paying positions without room for growth although, contradictorily, anti-discriminatory laws are typically present (Neto et al., 2017). Because of this, and our globalized society, a deeper understanding of stereotypes' influences on hiring discrimination is crucial.

The Stereotype Content Model

Stereotypes exist everywhere in the world around us, and as the stereotype content model (SCM) exhibits, the stereotyping of outgroup members converges onto one of two broad dimensions: warmth or competence (e.g., Cuddy et al., 2007; Cuddy et al., 2011; Fiske et al., 2002; Fiske et al., 2007). As humans have historically made rapid decisions to ensure survival, the propensity to judge others on the potentiality of causing harm (i.e., warmth) and the capability of causing harm (i.e., competence) to the group remains an important function of psychological processes. Additionally, each dimension contains several subdimensions of stereotype content emerging from intergroup relationships (Fiske et al., 2002) whereas measures of trustworthiness or friendliness may reflect warmth, and measures of intelligence or aptness may reflect competence (Fiske, 2018). From this logic, members of specific outgroups may be categorized based on combined levels of warmth and competence. For instance, middle-class individuals may be considered high in warmth and competence (resulting in feelings of admiration from outgroup

members), while immigrants may be regarded as low in warmth and competence (resulting in feelings of disgust from outgroup members) (Cuddy et al., 2009; Fiske et al., 2018; Lee & Fiske, 2006). The SCM has seen consistent support since its conception, with unipolar stereotyping generally falling into the dimensions of either warmth or competence; e.g., men are typically perceived as more suitable than women for certain disciplines such as engineering (i.e., higher competence) (Cheryan et al., 2015), black men may be regarded as more threatening than white men (i.e., lower warmth) (Pedulla, 2014), and physically disabled individuals may be considered as less adequate parents than physically abled individuals (i.e., lower competence) (Nario-Redmond, 2010). However, humans rarely belong to one social category, adding further complexity to the theoretical approaches of stereotyping. So, how might individuals belonging to multiple (and sometimes, conflicting) social categories be perceived?

Intersectional Individuals

Intersectionality is the phenomenon in which unique experiences and stereotypes may be attributed to individuals belonging to multiple minorities, consistently examined across contexts and categories (e.g., Bergstrom et al., 2023; Crenshaw, 1989; Cole, 2009; Ghavami & Peplau, 2012; Jarrin & Pitts, 2020; Petsko et al., 2022). Such as, gay Hispanic men were described as behaving more prototypically "white" than straight Hispanic men (Petsko & Bodenhausen, 2019), both gay and old Arab men were regarded as less hostile than straight and young Arab men (Bergstrom et al., 2023), and immigrant women in STEM reported fewer opportunities than native women in STEM, namely due to organizational or social barriers such as assumptions of low competence due to their accents (Bolzani et al., 2021). To add more dimensions to the processes at hand, the nature of intersectional stereotyping is arguably as variable as it appears to be. For instance, although black women share social categories with black men and white women, the experiences had by black women are not representative of the two other groups and instead may influenced by overlapping stereotypes (Crenshaw, 1989; Ghavami & Peplau, 2013). However, this does not mean that experiences had by black women are parallel for all black

women; as Wilkins (2012) highlights, economic status influenced the identities of black female students, whereas middle-class individuals adopted more "racially-neutral" behaviors and identities, sometimes excluding other black female students of lower socioeconomic status. Undoubtedly, intersectional research must not focus solely on phenotypical attributes of individuals, but rather, a mixture of traits which shape individuals' experiences.

Because of its fluidity, several explanations for intersectional stereotyping have been proposed. Specifically, intricate interactions between contrasting social categories (e.g., Crenshaw, 1989; Pedulla, 2014; Purdie-Vaughns & Eibach, 2008; Wilson et al., 2017) has catalyzed conflicting results in the literature, fueling discussions between dominance (e.g., Kurzban, 2001) and integrative (e.g., Wojnowicz et al., 2009) ideations of stereotyping, whereas individuals tend to perceive either singular categories or merge relevant salient categories, respectively. For instance, gay black men may be regarded as more competent business leaders (Wilson et al., 2017) or more suitable job candidates (Pedulla, 2014) than straight black men, but in either case, gay white men were not viewed as more competent than their straight counterparts. In this specific contextual framing, it appears integrative stereotyping benefitted gay black men (i.e., stereotypes of gay mitigated the stereotypes of being black), but not gay white men. However, when participants were asked to evaluate crimes, negative affirmations toward black men were not diminished upon learning the target was gay (Petsko & Bodenhausen, 2019), favoring dominant stereotyping where stereotypes of black men may be concrete. As a result of these contradictions, the proposal of cognitive compartmentalization has also gained traction within intersectional research (e.g., Petsko & Bodenhausen, 2022; Turner et al., 1987). This point of view argues that individuals may pay more attention to a singular categorization *or* create unique perceptions of an intersectional target dependent on contextual fit (i.e., stereotyping based on what a specific context allows). For example, Petsko and colleagues (2022) found evidence that participants quickly associated men with science (and women with liberal arts) *only* when the identifier of gender was activated (and, not when age was made salient), and Veit and colleagues (2022) found that triggering competence correlated with higher

evaluations of candidates across both sex and ethnic origin. That is, the experience of stereotyping intersectional individuals may be a function of the most salient category in a given context.

Occupational Stereotyping Against Intersectional Individuals

In the traditional workplace context where prototypicalities of masculinity and whiteness are favored, some multiple minority members benefit from their intersectional status, while others experience more negative experiences than their counterparts with only one salient minority (e.g., Bowleg, 2008; Purdie-Vaughns & Eibach, 2008). That is, implied prototypical proximity to masculinity and/or whiteness may assist certain individuals, while implied prototypical distance to those dimensions may cause harm (Pedulla, 2014; Purdie-Vaughns & Eibach, 2008). For instance, female Maghreb individuals applying for a fictional managerial position experienced more negative evaluations than did their male Maghreb counterparts (Derous & Pepermans, 2019), gay black men received larger salary offers than straight black men for the same position (Pedulla, 2014), women with a non-native accent were perceived as more competent than women with native accents during an interview (Hideg et al., 2023), and lesbian women were perceived as better collaborators than straight women in a business context (Sterkens et al., 2022). In these specific cases, it can be argued that closer proximity to white men appeared to influence participants' ratings of intersectional individuals in the male-oriented workplace setting.

Nonetheless, contradictory findings aligning more closely with theory of double-jeopardy (e.g., Beale, 1970) form the argument that double minority status may harm certain individuals in the workplace through additive stereotyping (Pierné, 2013). Notably, black women commonly report feelings of [intersectional] invisibility or biased microaggressions in the workplace, separate than the experiences had by black men (Holder et al., 2015), and similar to findings from experimental research. Moreover, while lesbian Arab applicants were rated as more competent than straight Arab women, gay Arab applicants were rated as equally competent as straight Arab men (Strinić et al., 2021), older women were

evaluated as less hirable when they portrayed stereotypically masculine behaviors (e.g., self-promotion) in interviews (Krings et al., 2022), and men (but not women) evaluated lesbian women as less desirable employees when compared to straight women (Everly et al., 2016). Although the presented social categorizations are different (albeit, with some overlap), the variability of past findings in the same workplace context (e.g., male-oriented fields) begs for further experimental attempts to test the generalizability of psychological processes related to stereotyping different social categories, with the field of intersectionality in mind.

The Current Studies

As much of the available literature has been conducted in a North American setting, it is imperative to test the generalization of aforementioned psychological processes when evaluating candidates in cultures with certain historical backgrounds; these settings might offer optimal contexts to further explore these effects, providing nuanced, yet comparable, outcomes. In Portugal, there exists a complicated post-colonial relationship between Portuguese and Brazilian natives whereas cultural proximity presents economic opportunities to workers from both nations, but the perpetuation of old stereotypes (e.g., Brazilian promiscuity or incompetence) hinders the creation of positive relationships (Carvalho & Duarte, 2020; Guerra et al., 2015; Pereira, 2013; Santos, 2013). Because of this, workplace discrimination is common amongst [underqualified] Brazilian applicants (e.g., Figueiredo et al., 2018; Malheiros & Padilla, 2015; Pereira, 2013), although Brazilian workers are simultaneously perceived as indispensable to the Portuguese economy (Guerra et al., 2015). Arguably, gay individuals in Portugal receive less social discrimination than Brazilians, perhaps due to a multitude of sociopolitical movements since the end of the dictatorship in 1974 (Cascais, 2009; Santos, 2004). Currently, lesbian, gay, bisexual, and transgender (LGBT) individuals enjoy legal protections which consistently rank as some of the most inclusive in Europe (Hines & Santos, 2017; ILGA, 2022). Of course, that is not to say Portugal is without anti-gay prejudices; discrimination against LGBT individuals in Portugal typically begins during pre-

adolescent years in which individual differences may appear (i.e., bullying) (Gato et al., 2020), leading to future difficulty obtaining social and occupational achievements such as adopting children or earning promotions (Beatriz & Pereira, 2022; Costa et al., 2014).

Importantly, literature regarding the intersection of Brazilian and gay men has focused primarily on the targets' sexualities (suggesting a multiplicative effect of national and sexual stereotyping) (e.g., Jarrin & Pitts, 2020; Parker, 1998; Pereira, 2021), but ignores gay Brazilians in other contexts – namely, the workplace. To identify potential manners of discrimination against straight and/or gay Brazilians, adapted versions of the Attitudes Toward Lesbians and Gay Men (ATLG) scale (Herek, 1984; Herek, 1998) were developed. Additionally, new versions of the Implicit Association Test (IAT) (Greenwald et al., 1998) were concurrently implemented with the explicit measures given the different theoretical scopes of both procedures (Gawronski & de Houwer, 2014). Based on results from the pilot study, Experiments 1 and 2 were created to investigate stereotypical perceptions toward national or foreign applicants with the same qualifications, using participants from the same sociocultural context. Specifically, CVs with high or low explicit competence were generated to test participants' evaluations toward four target groups: straight Portuguese, gay Portuguese, straight Brazilian, and gay Brazilian men with hypotheses derived from past literature regarding conceptualizations of multiple minorities in business contexts (e.g., Pedulla, 2014; Everly et al., 2016; Strinić et al., 2021; Wilson et al., 2017), keeping the SCM in mind (e.g., Cuddy et al., 2007; Cuddy et al., 2011; Fiske et al., 2002; Fiske et al., 2007; Veit et al., 2021). All data and original materials may be found in online supplemental materials (OSF; https://osf.io/ycn3f/?view_only=752cc5acd7ac4a28a9abede9e45a15c1).

Pilot Study

While discrimination exists in Portugal, it may be more discreet than other countries such as the United States where explicit conservatism has materialized. For instance, while qualified Brazilians may

not experience occupational discrimination at an organizational level (e.g., hiring practices), personal experiences paint stories of unfair treatments within the workplace upon employment (Diego-Cordero et al., 2022; Santos, 2013). Moreover, hearing Brazilian (versus Portuguese) accents may lead to prejudiced practices against immigrants by individuals with higher levels of prejudice (Souza et al., 2016). As such, a pilot study (N = 118) was developed to test preferences toward straight, gay, Portuguese, and Brazilian targets, providing a deeper understanding of the explicit and implicit preferences in Portugal toward these social groups, thus framing this project. From prior research which argues minimal correlations between implicit and explicit measures (e.g., Brauer & Er-rafiy, 2011; Gawronsky & de Houwer, 2014; Hofmann et al., 2005), it was hypothesized that implicit, not explicit, measures would suggest preferences against gay and Brazilian men.

Method

Participants

Participants were recruited from a large university in exchange for course credit or a voucher to a local retailer. In total, 135 responses were recorded, with 118 meeting the inclusion criteria, aged between 18 and 56 (M = 21.02, SD = 5.71). Specifically, 10 responses had incomplete data, 3 were not Portuguese natives, and 4 indicated that they were not truthful when answering questions. The sample consisted mostly of women, with 16 men and 2 who did not specify their gender. Additionally, the sample was largely heterosexual, with 8 identifying as gay or lesbian, 28 reporting an unspecified sexuality, and 5 preferring not to answer[1], and all participants were students. Participants were presented with this study without risk, and this study obtained ethical approval from the authors' institution.

Materials

Explicit measures were adapted from the Attitudes Toward Lesbians and Gay Men (ATLG) scale (Herek, 1984; Herek, 1998) to better fit our targets. The Attitudes Toward Gay Men (ATG) scale

implemented was a subset of 10 original items, as defined by Rosik (2007), while the Attitudes Toward Brazilian Men (ATB) scale was the same subscale as the ATG, but wording was changed to reference Brazilian individuals. Across both scales, a total of 20 items were analyzed (see Tables 1 and 2).

Adapted versions of the implicit association test (IAT) (e.g., Carpenter et al., 2019; Greenwald et al., 1998) were utilized to test implicit preferences of the participants. As sexuality and nationality are separate categorical measures, two IATs were created in the Portuguese language. To test preference toward sexual orientation, the targets *straight* and *gay* appeared alongside the identifiers of *good* or *bad*; participants were required to accurately categorize neutral words regarding sexuality (e.g., *heterosexual*) and good or bad traits (e.g., *beautiful*) according to instructions. The same logic was applied to test preference toward nationality, whereas the targets *Portugal* and *Brazil* were paired with neutral words such as *South America* or *Europe* and participants were asked to repeat categorization measures with good or bad traits. IATs were designed using the iatgen software developed by Carpenter et al. (2019).

Procedure

Participants were asked to take part in a study regarding the perceptions of certain groups in Portuguese society. All participants read their rights and gave full informed consent before commencing the study, which took less than 15 minutes to complete. After reading instructions, participants were randomly shown either the ATG or ATB first, with randomized items to reduce response bias. In each measure, participants were instructed to rate each statement on a Likert-type scale from 1 (Completely Disagree) to 7 (Completely Agree). Upon completion, participants were given the option to take a short break before continuing. Next, participants were randomly shown either the sexuality or nationality IAT first, which were further randomized to account for permutations, and were asked to correctly categorize each word as quickly as possible. Correct answers were required before the participant was allowed to continue and if the participant responded too quickly, their answers were nullified. To increase statistical power, each IAT included 7 trials, some of which were counted as practice and not recorded for analysis.

After completing both IATs, participants were thanked for their time and were awarded either course credit or a voucher to a local retailer.

Results

Explicit Measures

Confirmatory factor analysis (CFA) was performed to verify each scale's structure and models adjustment analyzed using a combination of the models' chi-square, the Tucker–Lewis fit index (TLI > 0.90; Tucker & Lewis, 1973; Hu & Bentler, 1998), the comparative fit index (CFI > 0.90; Bentler, 1990; Hu & Bentler, 1998), the root mean square error of approximation (RMSEA < 0.08; Browne & Cudeck, 1992; Hu & Bentler, 1998) with 90% confidence interval (*CI*), and the standardized root mean square residual (SRMR < 0.08, Hu & Bentler, 1998). Models were specified following theoretically supported modification indices (> 5; correlated residuals between items 10 and 5 and items 4 and 2 for ATG and ATB scales). The CFAs were acceptable for a unifactorial solution (ATG: χ^2 (33) = 123.201, p <.001, CFI = 0.89, TLI = 0.85, RMSEA = 0.15, 90% CI [0.12, 0.18], SRMR = 0.07, factor loadings p <.001; ATB: $\chi^2(33) = 46.175$, p = .064, CFI = 0.97, TLI = 0.96, RMSEA = 0.06, 90% *CI* [0.00, 0.10], SRMR = 0.06, factor loadings p < .001, except for items ATB5 and ATB10 (p = .001) and item ATB7 (p = .002). Reliability was good (Nunnally & Bernstein, 1994) and performed using coefficient omega (McDonald, 1999; ω_{ATG} = 0.88, *CI* [0.85, 0.91]; ω_{ATB} = 0.80, CI [0.74, 0.85]). Please refer to Tables 1 and 2 for a visual representation of the scales' data.

Table 1

Items in the Attitudes Toward Gay Men (ATG) Scale

Item	Mean	SD	Variance	Item-Total Correlation
1. Gay couples should be able to adopt children in the same manner as heterosexual couples*	1.59	1.19	1.41	0.68
2. I think gay men are disgusting	1.25	0.78	0.60	0.75
3. Gay men should not be allowed to teach school	1.27	0.98	0.95	0.48
4. Homosexuality is a perversion	1.26	0.90	0.82	0.66
5. Just as in other species, homosexuality is a natural expression of sexuality in human men*	1.82	1.49	2.23	0.62
6. If a man has homosexual feelings, he should do everything he can to get rid of them	1.29	0.86	0.73	0.85
7. I would not be too upset to learn if my son were a homosexual*	2.02	1.63	2.66	0.57
8. Homosexual behavior between two men is just plain wrong	1.31	0.95	0.90	0.83

9. The idea of homosexual marriage seems ridiculous to me	1.34	1.01	1.01	0.83
10. Homosexuality is merely a different kind of lifestyle that should not be condemned*	2.00	1.63	2.64	0.42

Note. Items with an asterisk (*) were reverse-coded.

Table 2

Items in the Attitudes Toward Brazilian Men (ATB) Scale

Item	Mean	Std. Deviation	Variance	Item-rest Correlation
1. Brazilian couples should be able to adopt Portuguese children in the same manner as Portuguese couples*	1.88	1.41	1.98	0.33
2. I think Brazilians are disgusting	1.39	0.88	0.78	0.69
3. Brazilians should not be allowed to teach school	1.81	1.30	1.68	0.48
4. Brazilians are perverse	1.97	1.39	1.93	0.56

5. Just as in other cultures, Brazilian culture is a natural expression of human lifestyle*	1.63	1.270	1.61	0.54
6. If a person is attracted to a Brazilian, they should try to overcome the feelings	1.38	1.14	1.30	0.43
7. I would not be too upset if my child dated a Brazilian*	1.86	1.68	2.83	0.42
8. Relationships between Brazilians and Portugueses are just plain wrong	1.14	0.58	0.33	0.67
9. The idea of intermarriage between Brazilians and Portugueses seems ridiculous to me	1.20	0.71	0.51	0.71
10. Brazilian lifestyle is merely a different kind of cultures that should not be condemned*	1.79	1.23	1.51	0.49

Note. Items with an asterisk (*) were reverse-coded.

Individual items across both explicit measures generally received means of less than 2, indicating low explicit prejudice toward each target group (i.e., gay men and Brazilian men). Because of this, high levels of skewness were common upon examining each item, however due to the explicit and bipolar nature of the scale, this is not a cause for concern. Rather, the levels of skewness confirm typical assumptions of prejudicing, where individuals may not be willing to explicitly express controversial opinions.

Potential differences in evaluations across sexual orientations were examined by conducting a series of independent samples *t*-tests with all straight participants grouped and all participants marking either gay/lesbian or other LGBT grouped. Results indicated largely no differences between sexual orientations (*p*-values > .05), with the exception of ATG1 and ATG7. Specifically, straight participants showed greater signs of explicit prejudice toward only these two items, when compared to gay, lesbian, and other LGBT participants. Importantly, however, the overwhelming majority of items (90%) received similar ratings across participants.

Implicit Measures

The sexuality IAT indicated weak preferences for straight individuals over gay individuals (M = .11, SD = .40), $t(116) = 3.14$, $p = .002$, $d = .29$. The timeout rate was <.001, and one participant was dropped due to excessive speed. Importantly, the error rate for the first IAT was good (.08), as IAT measures typically produce error rates of less than .10 (Rudman, 2011). Additionally, the reliability score was acceptable (Cronbach's $\alpha = .75$), as an alpha score of greater than .70 is generally sustainable (Greenwald et al., 2009). Therefore, it can be concluded that the first IAT was reliable. The second IAT (nationality) revealed moderate implicit preferences for Portuguese nationals over Brazilian nationals (M = .40, SD = .36), $t(117) = 12.03$, p <.001, $d = 1.11$. The timeout rate of participants was <.001, and no participants were excluded due to excessive speed. Again, the error rate was revealed to be .08, and reliability was found to be suitable (.73). As such, the second IAT may also be considered reliable.

To compare potential differences in sexual orientation, a second round of independent samples *t*-tests were performed using the same demographic categories as the explicit measures. An initial t-test comparing sexuality *d*-scores revealed that straight participants (M = .26, SD = .31) were more likely to show preference for straight individuals, while LGBT participants (M = -.16, D = .43) were more likely to show preference for gay individuals, $t(52.66) = -5.24$, p <.001, $d = -1.12$. Additionally, straight participants were found to show greater preferences for Portuguese individuals (M = .47, SD = .35) than LGBT participants were (M = .28, SD = .35).

Finally, correlations between explicit and implicit measures were examined. Expectedly, there were no relationships indicated between explicit and implicit measures (*p*-values >.05), given prior findings of minimal correlations between these types of measures in psychology (e.g., Brauer & Er-rafiy, 2011; Gawronsky & de Houwer, 2014; Gawronsky & Hahn, 2019; Hofmann et al., 2005; McConahay, 1986). Specifically, due to factor such as participant biases (or social obligations), differences between unconscious and conscious judgement, or slight differences in what each test actually measures, low correlations are common in behavioral testing. However, a strong positive correlation between the ATG and ATB scales (Pearson's $r = .65$, $p < .001$) was found, suggesting that individuals higher in explicit prejudice toward gay men were also higher in explicit prejudice toward Brazilian men. Moreover, there was a weak positive correlation found between participants' individual IAT d-scores ($r = .19$, $p = .04$), indicating a relationship between preferences toward straight and Portuguese individuals. In other words, as d-scores for the implicit preferences toward straight individuals increased, so did those toward Portuguese individuals, suggesting preferences for ingroup members.

As expected, results from the pilot study suggested minimal negative explicit attitudes against gay or Brazilian men and weak to moderate implicit preferences for straight and Portuguese men, mirroring trends of prejudice and discrimination found in Portuguese society (e.g., Hines & Santos, 2017; Mendes & Candeias, 2013; Santos, 2013). Additionally, differences between sexual orientations arose, where straight participants showed more implicit preferences toward straight and Portuguese individuals than LGBT participants; furthermore, it is important to note that the sample included mostly women and results should be considered carefully. Specifically, women may hold different opinions than men of foreigners and/or gay men, which might have influenced findings. Yet, prejudice is not always a result of stereotypes; that is, stereotyping may be described as comparisons between groups while prejudice is the manifestation of negative affect toward a specific group (Brauer & Er-rafiy, 2011). Therefore, while results provide interesting insights into purported attitudes, it may not be indicative of actual behaviors. Further, while prejudice does exist in Portugal, it may be inconspicuously executed; importantly, this

rejects trends found in other Western countries, bringing into question past research's generalizability across similar cultures. As such, Experiments 1 and 2 were created to explore this assumption of discreet prejudice while simultaneously exploring the dimensions of warmth and competence in hiring decisions.

Experiment 1

As highlighted, Portuguese participants did not show negative explicit attitudes toward either minority group, separately (gay or Brazilian). Experiment 1 was developed to test the assumption that explicit competence in a CV will result in equal perceptions across majority and minority groups, with two theories in mind. First, as triggering competence may influence participants' evaluations for the better (e.g., Veit et al., 2022), and providing extra information signaling competence may decrease judgment complexity by allowing participants to anchor their judgements to objective information (e.g., Bodenhausen & Lichtenstein, 1987; Bodenhausen & Wyer, 1985; Correll et al., 2015; Locksley et al., 1982; Macrae et al., 1994), it was hypothesized that Portuguese and Brazilian candidates would be evaluated similarly in both warmth and competence. Second, when combining Portugal's anti-discrimination rhetoric (IGLA, 2022; Santos, 2013) with the fact that higher skill levels may reduce negative attitudes toward Portuguese gay members (Bayrakdar & King, 2023), it was hypothesized that gay targets would also be rated similar in warmth and competence when compared to straight targets. In other words, straight Portuguese men, gay Portuguese men, straight Brazilian men, and gay Brazilian men would all be conceptualized similarly, going against predictions of the SCM and favoring the compartmentalized view of stereotyping (e.g., Fiske et al., 2002; Petsko et al., 2022).

Method

Participants

Participants were recruited through two large universities in exchange for course credit or a voucher to a local retailer. Upon data collection, 90 responses were considered, with 12 excluded due to

failed stimuli checks and 1 thrown out due to an extreme, outlying salary proposal. To pass the checks, participants were required to correctly answer which year the candidate graduated university and the role of the candidate in their selected organization; importantly, we did not ask participants to recall candidates' sexual orientation or nationality so as not to accidentally instill priming effects. A power analysis was not conducted to determine sample size, but rather, we aimed to include as many participants as resources allowed. Of the 77 analyzed responses, 47 were men, 29 were women, and 1 did not specify their gender. Ages ranged from 19 to 29 (M = 22.13, SD = 1.87), consisting of mostly heterosexual (N = 67) individuals. Participants gave their informed consent to participate, and this study was approved by the ethics committee of the authors' institution.

Materials

CVs and measures were adapted from prior research on hiring discrimination (e.g., Cotton et al., 2008; Granberg et al., 2020; Everly et al., 2016; Pedulla, 2014; Strinić et al., 2021; Veit et al., 2022). Specifically, CVs were developed with past publications in mind, while considering generic CV formatting in Portugal (see Appendices A/B). To manipulate the nationality of the candidates, well-known Portuguese or Brazilian universities were chosen; furthermore, names of the candidates were taken from common names in each respective country (e.g., IBGE, 2016; Nós Portugueses, 2023), and the personal statement explicitly indicated nationality. Sexual orientation was manipulated by selecting stereotypically straight or gay activities (e.g., football or gymnastics) and neutral or stereotypical organizations (e.g., tourism or LGBT rights) in which the candidates engaged, in line with Pedulla (2014). Finally, all candidates had substantial previous experience, indicating high explicit competence. Fifteen items were used as measures in this study, which were consolidated for analyses. Specifically, three items related to friendliness (e.g., Pedulla, 2014; Strinić et al., 2021), and three related to perceived threat (e.g., Pedulla, 2014) were combined to test the dimension of warmth. Additionally, three items regarding competence (e.g., Pedulla, 2014; Strinić et al., 2021), and three more related to hirability (Everly et al.,

2016; Veit et al., 2022) were combined to test overall competence. Masculinity and femininity were tested in two bipolar scales, while a salary proposal task sought to find potential discriminatory intents.

Procedure

After agreeing to participate, participants were given the instruction to roleplay as a human resource manager in charge of hiring decisions for a large company in an attempt to increase external validity and mimic real-life scenarios (see Cotton et al., 2008; Pedulla, 2014; Wulff & Villadsen, 2020). Next, participants were instructed to evaluate one candidate's CV based on several qualities expected of a successful manager, which were listed before the commencement of the study[2]. Importantly, participants only viewed one CV and were randomly assigned to one of the four conditions. Following, participants were asked to read the CV carefully before evaluating the candidate on 14 items from 1 (Completely Disagree) to 7 (Completely Agree), then proposing a starting salary for the candidate based on their qualifications, if they were to be hired. Finally, participants reported their demographic information and received payment/credit for their time; participants did not receive traditional incentivization common in economics studies (e.g., Cox et al., 2018; Croson, 2006; Hertwig & Ortmann, 2001) as they received payment at the end of the study and some research suggests incentivization alone is not enough to greatly change final results (e.g., Hascher et al., 2021).

Results

To test the main hypotheses, the two consolidated measures (warmth and competence) were analyzed using a series of 2 (nationality) x 2 (sexual orientation) analysis of variance tests (ANOVAS) across conditions to provide a deeper understanding of participants' evaluations (refer to Table 3 for the reliability of these measures). All measures received adequate reliability scores and were deemed suitable for further analysis (Peters, 2014). Simultaneously, there was a moderately strong positive correlation between masculinity and femininity ratings, $r = .55$, $p < .001$ (femininity was reverse-coded).

Table 3

Reliability of Items in Experiment 1

Dimension	Consolidated Measure	Cronbach's α	Item	Item-Rest Correlation
Warmth	Friendliness	0.74	It is probable that the candidate will get along with colleagues	0.61
			The candidate seems friendly	0.60
			The candidate would care more about themselves than other colleagues*	0.55
	Threat	0.73	The candidate is not likely to challenge company rules*	0.46
			It is probable that the candidate engages in illegal activities	0.49
			The candidate may be rude to customers	0.75
Competence	Competence	0.79	The candidate does not have the qualifications for the job*	0.56
			The candidate seems competent	0.78
			It is probable that the candidate would be a good manager	0.65
	Hirability	0.68	I would not recommend the candidate for a final interview*	0.36
			I would hire the candidate	0.66
			The candidate would be a bad team player*	0.50

Note. Items with an asterisk (*) were reverse-coded.

Warmth scores were created by averaging the scores of friendliness and threat measures, while competence scores were created by averaging the scores of competence and hirability measures, resulting in two overall averages. Before examining each measure, potential gender differences were first examined; participants' sexual orientation was not adequate for analysis, as not every condition contained a suitable number of participants (<5). A 2 (participant gender) x 2 (target nationality) x 2 (target sexual orientation) ANOVA was conducted for each measure. Statistical significant interactions between all three variables were obtained in both warmth scores, $F(1, 68) = 7.05$, $p = .010$, $\eta^2 = .09$, and on salary proposals, $F(1, 68) = 7.23$, $p = .009$, $\eta^2 = .08$, but post-hoc Tukey's comparisons revealed no between-gender differences for each specific target. Two no significant interactions were found between variables when considering targets' perceived competency, $F(1, 68) = 3.87$ $p = .053$, $\eta^2 = 05$, and perceived masculinity of candidates, $F(1, 68) = .18$, $p = .676$, $\eta^2 < .01$. Next, same measures were examined with all participants.

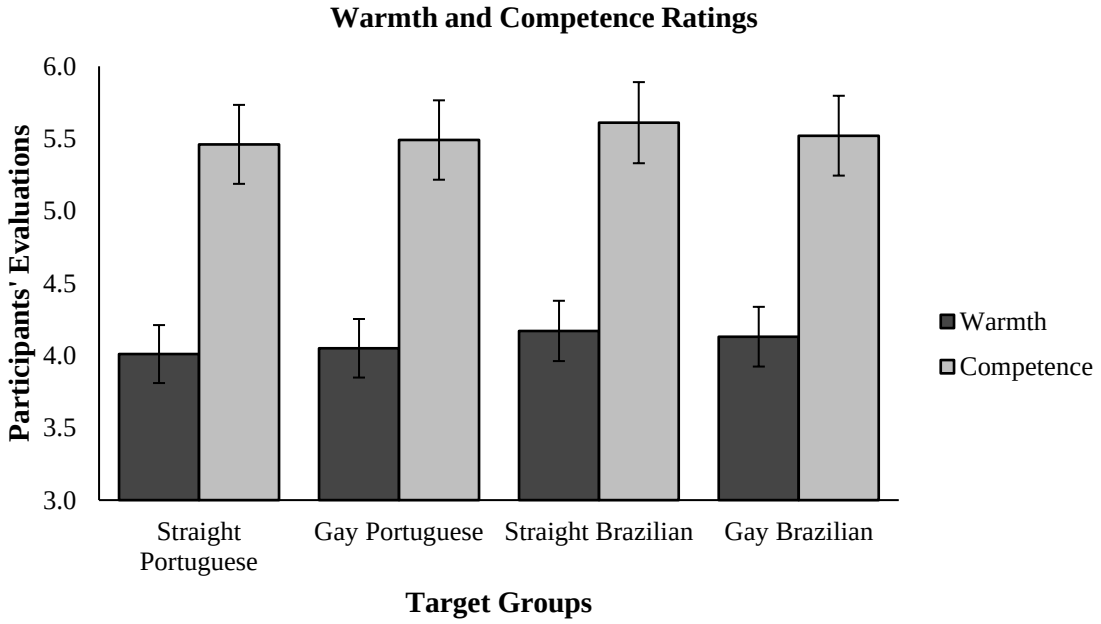
An initial 2x2 ANOVA on the dimension of warmth did not indicate a significant main effect of nationality; that is, participants did not evaluate Portuguese candidates ($M = 4.03$, $SD = .31$) as statistically less warm than Brazilian candidates ($M = 4.15$, $SD = .40$), $F(1, 73) = 2.00$, $p = .161$, $\eta^2 = .027$. Additionally, no main effect of sexual orientation was found, whereas straight ($M = 4.09$, $SD = .31$) and gay ($M = 4.09$, $SD = .42$) candidates were not perceived differently in warmth, $F(1, 73) < .01$, $p = .980$, $\eta^2 < .01$. Moreover, the analysis did not reveal a significant interaction between straight Portuguese ($M = 4.01$, $SD = .31$), gay Portuguese ($M = 4.05$, $SD = .33$), straight Brazilian ($M = 4.17$, $SD = .29$), or gay Brazilian ($M = 4.13$, $SD = .50$) candidates on warmth evaluations, $F(1, 73) = .23$, $p = .637$, $\eta^2 = <.01$ (see Figure 1).

When considering the dimension of competence, a second 2x2 ANOVA did not indicate a significant main effect of nationality; Portuguese ($M = 5.29$, $SD = 1.00$) and Brazilian candidates ($M = 5.32$, $SD = .94$) were not evaluated differently on perceived competence, $F(1, 73) = .01$, $p = .908$, $\eta^2 < .01$. Further, no significant main effect of sexual orientation was revealed, meaning straight ($M = 5.30$, $SD =$

.91) and gay (*M* = 5.32, *SD* = 1.02) candidates were not perceived differently in competence, *F*(1, 73) = .01, *p* = .921, η^2 <.01. Importantly, the ANOVA did not reveal a significant interaction between straight Portuguese (*M* = 5.21, *SD* = .96), gay Portuguese (*M* = 5.38, *SD* = 1.06), straight Brazilian (*M* = 5.38, *SD* = .89), or gay Brazilian (*M* = 5.26, *SD* = 1.01) candidates on evaluations of competence, *F*(1, 73) = .44, *p* = .511, η^2 = .01 (see Figure 1).

Figure 1

Evaluations of Warmth and Competence for Targets in Experiment 1



Note. Error bars represent 95% confidence intervals. No significant differences in the perceived warmth or competence of groups were found.

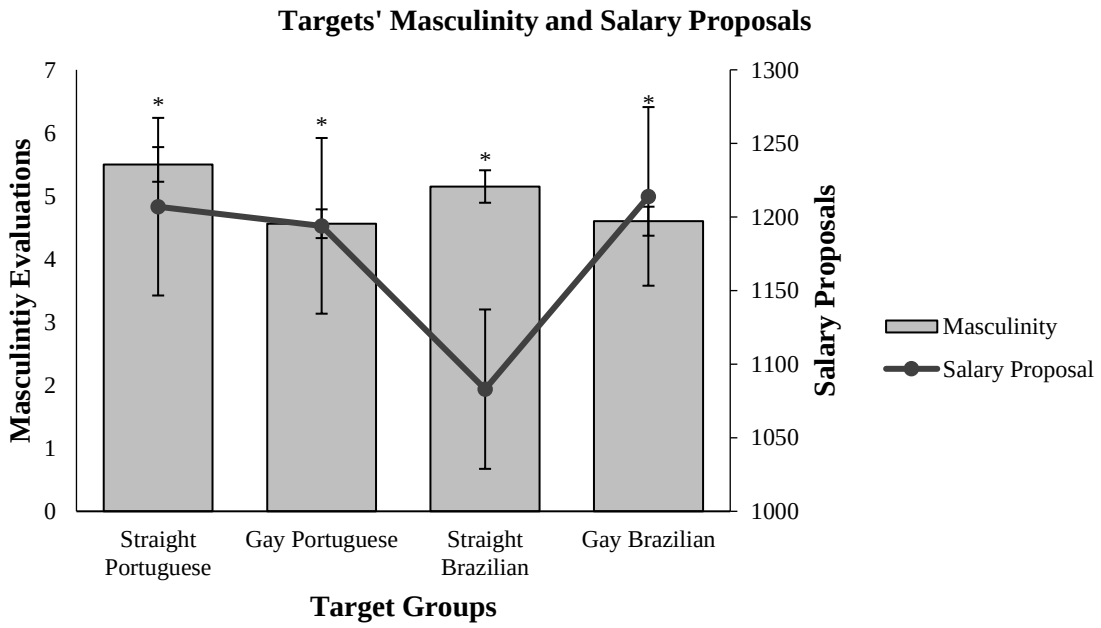
Considering masculinity, a 2x2 ANOVA found no significant main effect of nationality (*F*(1, 73) = .28, *p* = .597, η^2 <.01) and no significant interaction between nationality and sexual orientation (*F*(1, 73) = .47, *p* = .495, η^2 = .01). However, a significant main effect for sexual orientation was revealed, as

gay candidates (M = 4.58, SD = 1.27) were perceived as more feminine than straight candidates (M = 5.32, SD = 1.23), $F(1, 73) = 6.76$, $p = .011$, $\eta^2 = .08$, suggesting participants accurately guessed targets' sexual orientations (lower scores represent greater femininity) (see Figure 2).

A final 2x2 ANOVA indicated no significant main effects of nationality ($F(1, 73) = 1.89$, $p = .173$, $\eta^2 = .02$), indicating no differences in salary proposals for Portuguese (M = 1201.08, SD = 168.85) or Brazilian targets (M = 1148.60, SD = 173.60). Moreover, no significant main effect on sexual orientation ($F(1, 73) = 2.40$, $p = .126$, $\eta^2 = .03$) was found between straight (M = 1143.69, SD = 179.22) and gay targets (M = 1204.74, SD = 161.27). Finally, no interaction between straight Portuguese (M = 1207.37, SD = 185.08), gay Portuguese (M = 1194.44, SD = 154.96), straight Brazilian (M = 1083.20, SD = 154.55), and gay Brazilian (M = 1214.00, SD = 170.21) candidates was found ($F(1, 73) = 3.57$, $p = .063$, $\eta^2 = .04$), although, notably, straight Brazilian candidates received the lowest proposals (see Figure 2).

Figure 2

Evaluations of Masculinity and Salary Proposals for Targets in Experiment 1



Note. Asterisks represent statistical significance in comparison to other groups across measures. Specifically, straight targets were rated as significantly more masculine than gay targets, $F(1, 73) = 6.76$, $p = .011$, $\eta^2 = .08$. No significant differences were found when considering salary. Error bars represent 95% confidence intervals.

First, to examine correlations between warmth and competence versus salary proposals, Pearson's *r* was calculated. Expectedly, aligned with past organizational research, warmth and salary proposals were negatively correlated ($r = -.25$, $p = .030$) and competence and salary proposals were positively correlated ($r = .43$, $p < .001$). To consider potential relationships between separated variables (i.e., warmth, friendliness, competence, and threat), Pearson's *r* was examined for each pair. Hirability and friendliness were positively correlated with competence ($r = .76$, $p < .001$, $r = .55$, $p < .001$, respectively), and were moderately correlated with each other, $r = .59$, $p < .001$. As expected, hirability, friendliness, and competence were all negatively correlated with perceived threat level ($r = -.63$, $p < .001$, $r = -.76$, $p < .001$, $r = -.56$, $p < .001$, respectively).

Notably, eta squared indicated low effect sizes for some of the analyses in Experiment 1 (likely due to a small sample produced by resource constraints), increasing the probability of false claims and non-applicable findings – two important statistical considerations (e.g., Anderson et al., 2017; Sommet et al., 2023). However, results were similar in nature to those of Veit et al. (2022), which found that triggering competence did not significantly affect the response rates of native versus immigrant targets' CVs, and to those of Locksley et al. (1982) which found that, when presented with individuating information, participants were less likely to rely on stereotypic beliefs to form judgements.

Nevertheless, results from Experiment 1 supported the main hypotheses. That is, Portuguese, Brazilian, straight, and gay participants were all evaluated similarly on the dimensions of warmth and competence when explicit competence was triggered. Participants did not consider Brazilian applicants as

less desirable, perhaps partly explained by the context in which candidates were presented (i.e., high explicit competence), which could have extinguished stereotypical assumptions related to [low-skilled] Brazilian workers, comparable to results from Veit et al., (2022). Furthermore, providing objective information may have provided psychological anchors by which room for social stereotypes to influence judgements was decreased (e.g., Locksley et al., 1982; Wilson, 1978).

Experiment 2

Experiment 1 included objective information for highly-skilled candidates from which participants could draw conclusions based on the adequateness of the candidate's CV, but in reality, such pertinent information is not always available, increasing uncertainty and complexity when considering characteristics of a candidate. Therefore, Experiment 2 sought to create uncertainty (and, more difficulty) in participant judgements by introducing candidates with a lower skill level, without changing the nature of the task at hand. In the absence of straightforward evidence, judgements may be more theory-driven (Bodenhausen & Wyer, 1985); that is, stereotypes may be used as an instrument of cognitive simplification, particularly when faced with tasks including complex judgements (e.g., Tajfel, 1981). Moreover, based on the nature of heuristic processing, stereotypes are more likely to be applied when information processing demands are complex (e.g., Bodenhausen & Wyer, 1985; Macrae et al., 1994; Nisbett & Ross, 1980; Wyer & Carlston, 1979), and additionally, in investigations of highly complex decision tasks, stereotypic influences typically predominate over that of relevant nonstereotypic information (Dipboye et al., 1975; Grant & Holmes, 1981; Heneman, 1977). In this case, complexity was perceived as a function of providing less objective information to participants in the experimental design as a byproduct of triggering less explicit competence of the candidates. According to previous literature regarding the probability of using stereotype-based judgements when less objective information is provided, two main hypotheses were developed according to intersectional assumptions. First, it was predicted that Portuguese applicants would be evaluated similarly in both warmth and competence, while

straight Brazilians be rated as less competent and less warm than gay Brazilians who would "benefit" due to their multiple minority status; that is, stereotypical associations of being gay would outweigh those of Brazilians (see Pedulla, 2014; Petsko & Bodenhausen, 2019; Strinić et al., 2021). Second, it was hypothesized that straight Brazilians would be offered lower starting salaries than all other groups.

Method

Participants

Participants were recruited through a large university in exchange for course credit. Of the original responses, 11 were excluded due to missing data and were recuperated using another sample of students from the same university to reach a total of 120 responses. A power analysis was not conducted to determine sample size, but rather, we aimed to include as many participants as resources allowed. Participants were aged between 19 and 59 (M = 25.15, SD = 6.03), with 65 men, 52 women, and 3 who did not clarify their gender. Participants were mostly heterosexual, with only 4 indicating gay or 'other' as their sexual orientation, and all were students. As results from Experiment 1 indicated no differences in occupational status, it was decided to include only students in Experiment 2, for feasibility. Participants gave their full consent to partake in this study, and this study was approved by the ethical committee of the authors' institution.

Materials and Procedure

Measures were roughly the same as those from Experiment 1, but masculinity and femininity were consolidated into a single Likert-type scale. CVs maintained the same nationality and sexuality manipulations as Experiment 1, but instead, provided less objective information regarding managerial success and were adapted to include less-experienced applicants, which indicated a lack of explicit competence (see Appendices C/D). The procedure was identical to that of Experiment 1, except the qualities expected of a successful manager were not presented to participants before evaluating the CVs. Again, participants were randomly assigned to one condition and were asked to rate the 13 measures on a

Likert-type scale ranging from 1 (Totally Disagree) to 7 (Totally Agree). Afterwards, participants were asked to complete the salary proposal task and upon completion of the study, participants were awarded course credit.

Results

Again, a series of 2x2 ANOVAs were conducted to test the main hypotheses. For the reliability of items and measures used in ANOVA testing, please refer to Table 4. Reliability scores were lower than those in Experiment 1, with friendliness receiving poor reliability. However, analysis continued as planned since α scores were suitable for the same measures in Experiment 1, and, lower α scores may be a product of increased ambiguity from the less objective information presented (e.g., Peters, 2014). Masculinity and femininity were combined into one Likert-type scale and was analyzed using ANOVA tests instead of correlations.

Table 4

Reliability of Items in Experiment 2

Dimension	**Consolidated Measure**	**Cronbach's α**	**Item**	**Item-Rest Correlation**
Warmth	Friendliness	0.25	It is probable that the candidate will get along with colleagues	0.09
			The candidate seems friendly	0.15
			The candidate would care more about themselves than other colleagues*	0.17
	Threat	0.63	The candidate is not likely to challenge company rules*	0.35

			It is probable that the candidate engages in illegal activities	0.53
			The candidate may be rude to customers	0.45
Competence	Competence	0.57	The candidate does not have the qualifications for the job*	0.42
			The candidate seems competent	0.33
			It is probable that the candidate would be a good manager	0.42
	Hirability	0.65	I would not recommend the candidate for a final interview*	0.44
			I would hire the candidate	0.49
			The candidate would be a bad team player*	0.45

Note. Items with an asterisk (*) were reverse-coded.

Warmth scores were again created by averaging the scores of friendliness and threat, while competence scores were created by averaging the scores of competence and hirability. Potential gender differences were again examined before conducting the main analyses; participants' sexual orientation was not adequate for analysis, as not every condition contained a suitable number of participants (<5). A 2 (participant gender) x 2 (target nationality) x 2 (target sexual orientation) ANOVA was conducted for each measure and indicated no significant interactions when considering warmth, $F(1, 109) = .01$, $p = 922$, $\eta^2 < .01$, competence, $F(1, 109) = .01$, $p = .937$, $\eta^2 < .01$, salary proposals, $F(1, 109) = .36$, $p = .548$, $\eta^2 < .01$, or masculinity, $F(1, 109) = .14$, $p = .714$, $\eta^2 < .01$.

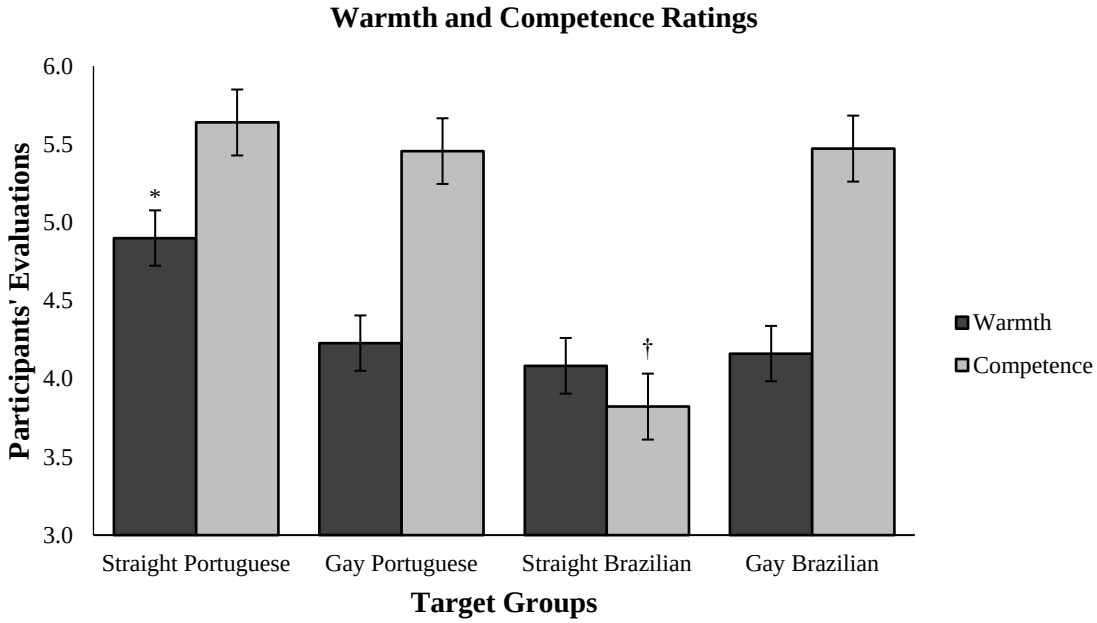
To test all participants' evaluations of warmth, a 2x2 ANOVA was first conducted. The ANOVA revealed a significant main effect of nationality on warmth ratings, where Portuguese candidates ($M = 4.56$, $SD = .59$) were perceived as warmer than Brazilian candidates ($M = 4.12$, $SD = .49$), $F(1, 116) = 24.33$, $p < .001$, $\eta^2 = .14$. Additionally, a significant main effect of sexual orientation on warmth ratings

was found, indicating straight candidates (M = 4.49, SD = .59) were evaluated as warmer than gay candidates (M = 4.19, SD = .54), $F(1, 116) = 11.02$, p = .001, η^2 = .07. Importantly, a significant interaction between nationality and sexual orientation was found ($F(1, 116) = 17.54$, p <.001, η^2 = .10), while a post-hoc Tukey's test indicated that straight Portuguese candidates (M = 4.90, SD = .41) were perceived as statistically warmer than gay Portuguese (M = 4.23, SD = .55), straight Brazilian (M = 4.08, SD = .45), and gay Brazilian candidates (M = 4.16, SD = .54) (p-values <.001), while all other groups were not significantly different from each other (see Figure 3).

A second 2x2 ANOVA on the dimension of competence again found a significant main effect of nationality on competence ratings, where Portuguese candidates (M = 5.55, SD = .58) were perceived as more competent than Brazilian candidates (M = 4.65, SD = 1.02), $F(1, 116) = 71.56$, p <.001, η^2 = .23. Moreover, a significant main effect on sexual orientation indicated gay candidates (M = 5.46, SD = .62) were, on average, rated as more competent than straight candidates (M = 4.73, SD = 1.06), $F(1, 116)$ = 47.51, p <.001, η^2 = .15. Importantly, a significant interaction between variables was found ($F(1, 116)$ = 74.24, p <.001, η^2 = .24), with a post-hoc Tukey's test indicating that straight Brazilians (M = 3.82, SD = .67) were evaluated as significantly less competent than straight Portuguese (M = 5.64, SD = .35), gay Portuguese (M = 5.45, SD = .74), and gay Brazilian candidates (M = 5.47, SD = .49) (p-values <.001), while all other groups were not significantly different from each other (see Figure 3).

Figure 3

Evaluations of Warmth and Competence for Targets in Experiment 2



Note. Asterisks and daggers represent statistical significance in comparison to other groups across measures. Specifically, straight Portuguese men were perceived as warmer than all other targets (which were similar in ratings), ($F(1, 116) = 17.54$, $p < .001$, $\eta^2 = .10$), and straight Brazilian men were perceived as less competent than all other groups (which were similar in ratings), $F(1, 116) = 74.24$, $p < .001$, $\eta^2 = .24$. Error bars represent 95% confidence intervals.

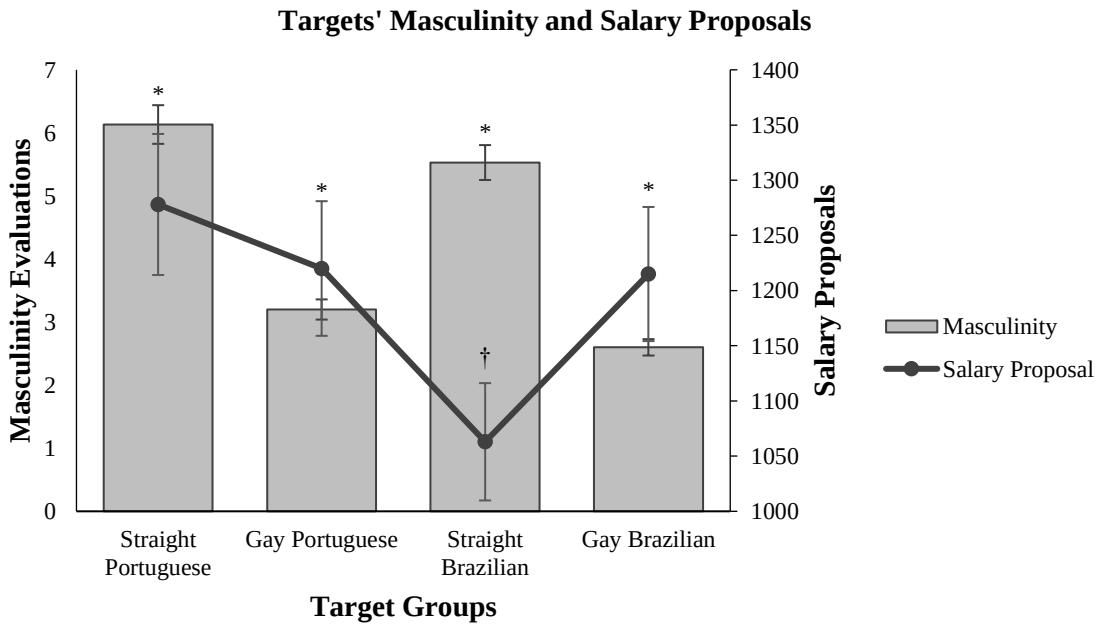
A third 2x2 ANOVA found significant main effects of nationality on masculinity, where Brazilian candidates ($M = 4.07$, $SD = 1.83$) were perceived as more feminine than Portuguese candidates ($M = 4.67$, $SD = 1.76$), $F(1, 116) = 10.19$, $p = .002$, $\eta^2 = .03$. Additionally, a significant main effect of sexual orientation was found, indicating gay candidates ($M = 2.90$, $SD = 1.07$) were viewed as more feminine than straight candidates ($M = 5.83$, $SD = 1.06$), $F(1, 116) = 243.13$, $p < .001$, $\eta^2 = .66$. No statistically significant interaction between variables was found ($p > .999$, but post-hoc Tukey's test revealed that both gay Portuguese ($M = 3.20$, $SD = 1.06$) and gay Brazilian candidates ($M = 2.60$, $SD =$

1.00) were statistically more feminine than both straight Portuguese (M = 6.13, SD = .86) and straight Brazilian candidates (M = 5.53, SD = 1.17), respectively (p-values <.001) (see Figure 4).

A final 2x2 ANOVA indicated significant main effects of nationality on salary proposals, with Brazilian candidates (M = 1139.00, SD = 153.19) being offered less than Portuguese candidates (M = 1249.17, SD = 122.30), $F(1, 116) = 22.59$, p <.001, $\eta^2 = .14$. Moreover, the analysis indicated a significant main effect of sexual orientation on salary proposals, where gay candidates (M = 1217.50, SD = 116.38) were offered, on average, more than straight candidates (M = 1170.67, SD = 173.02), $F(1, 116) = 4.08$, p = .046, $\eta^2 = .03$. Importantly, an interaction between variables was found ($F(1, 116) = 20.59$, p <.001, $\eta^2 = .13$), and a post-hoc Tukey's test found that straight Brazilian candidates (M = 1063.00, SD = 137.37) were offered statistically less starting salaries than straight Portuguese (M = 1278.33, SD = 134.35), gay Portuguese (M = 1220.00, SD = 103.06), and gay Brazilian candidates (M = 1215.00, SD = 130.09) (p-values <.001), while all other groups were not significantly different (see Figure 4).

Figure 4

Evaluations of Masculinity and Salary Proposals for Targets in Experiment 1



Note. Asterisks and daggers represent statistical significance in comparison to other groups across measures. Specifically, straight targets were rated as significantly more masculine than gay targets ($F(1, 116) = 243.13$, $p < .001$, $\eta^2 = .66$), and separately, straight Brazilians were offered the lowest starting salary when compared to all other groups (which were similar in proposals), $F(1, 116) = 20.59$, $p < .001$, $\eta^2 = .13$. Error bars represent 95% confidence intervals.

Correlative tests regarding warmth and competence versus salary proposals revealed a deviation from the results in Experiment 1. While competence and salary proposals were positively correlated ($r = .26$, $p = .004$), warmth and salary proposals were also positively correlated ($r = .45$, $p < .001$), likely due to the heightened warmth scores of straight Portuguese candidates (explained in full below). To consider potential relationships between separated variables (i.e., warmth, friendliness, competence, and threat), Pearson's r was examined for each pair. Notably, relationships differed from those in Experiment 1. Specifically, hirability was negatively correlated with friendliness ($r = -.27$, $p = .003$), positively correlated with competence ($r = .51$, $p < .001$), and positively correlated with threat rating ($r = .28$, $p = .002$). Friendliness was not correlated with competence ($r = -.10$, $p = .258$), but was negatively correlated with perceived threat ($r = -.35$, $p < .001$). Finally, competence and threat rating were not correlated ($r = .15$, $p = .098$).

Unexpectedly, straight Portuguese men were regarded as warmer than all other target groups although this makes sense due to assumptions from the SCM (Fiske et al., 2002) in which dimensions are attributed to outgroup members; that is, it is plausible that the male-majority sample rated other male Portuguese targets as high in warmth in an ambiguous scenario. As expected, however, straight Brazilian applicants were perceived as less competent than gay Brazilian, straight Portuguese, and gay Portuguese applicants when explicit competence was not triggered. Furthermore, straight Brazilians were offered the lowest starting salary of any group, indicating the possibility of harmful real-world discrimination. As such, Experiment 2 offered findings similar to that of Pedulla (2014), in which explicit competence was

also not triggered and straight minority members were viewed negatively. As competence was not triggered Experiment 2, increased judgement complexity influenced the role of social stereotypes when making evaluations. That is, when participants were not presented with individuating information, "easy" stereotypical judgements appeared which might have been participants' response to dealing with increased complexity (Bodenhausen & Lichtenstein, 1987; Bodenhausen & Wyer, 1985; Correll et al., 2015; Locksley et al., 1982; Macrae et al., 1994). Finally, and importantly, eta squared indicated higher effect sizes in Experiment 2, providing support for the statistical strength and relevance of the findings from this project.

Mega-Analysis Between Experiments

Finally, a mega-analysis between experiments was conducted to determine the effect, if any, of the type of CV on the evaluations of targets. To do so, a 2 (type of CV) x 2 (nationality) x 2 (sexual orientation) three-way ANOVA was conducted across the four main measures and compared with post-hoc Tukey's comparisons. First, a statistically significant interaction between variables was revealed on warmth ratings, $F(1, 189) = 10.10$, $p = .002$, $\eta^2 = .04$. Post-hoc Tukey's comparisons indicated an effect of CV type on straight Portuguese candidates only, in which straight Portuguese candidates in the low competence scenario ($M = 4.90$, $SD = .41$) were perceived as warmer than those in the high competence scenario ($M = 4.01$, $SD = .31$). A second 2x2x2 ANOVA found a significant interaction between variables when considering competence scores, $F(1, 189) = 22.96$, $p < .001$, $\eta^2 = .08$. Expectedly, only straight Brazilian candidates received statistically different ratings based on levels of competence, where straight Brazilians in the high competence scenario ($M = 5.38$, $SD = .89$) were perceived as more competent than those in the low competence scenario ($M = 3.82$, $SD = .67$).

Additional three-way ANOVAs examining targets' masculinity and salary proposals were also conducted. A nonsignificant interaction was revealed when considering targets' masculinity scores, $F(1, 189) = .36$, $p = .549$, $\eta^2 < .01$, but post-hoc differences arose for gay targets. Specifically, gay Portuguese and gay Brazilians in the low competence scenario ($M = 3.20$, $SD = 1.06$, $M = 2.60$, $SD = 1.00$,

respectively) were perceived as more feminine than gay Portuguese and gay Brazilians in the high competence scenario (M = 4.56, SD = 1.43, M = 4.60, SD = 1.24, respectively). Finally, a nonsignificant interaction between variables was found when examining participants' salary proposals, $F(1, 189) = .63$, $p = .428$, $\eta^2 < .01$, and post-hoc Tukey's comparisons revealed no significant differences between targets.

Generally results were not outstanding, but some interesting findings arose. Specifically, straight Portuguese men were perceived as warmer when the CV did not trigger competence, both gay target groups were perceived as more feminine when competence was not triggered, and straight Brazilians were perceived as more competent when competence was triggered. Additionally, it is important to note that while there were no statistically significant differences in salary proposals across CV types, straight Brazilians did receive a statistically lower salary offer in Experiment 2 (but not Experiment 1) which may be due in part to decreased variance in Experiment 2; nevertheless, the starting salary was still lower in Experiment 2 than in Experiment 1, suggesting discrimination effects. Here, it seems that the ambiguity of the low competence CV allowed for more stereotyped views of candidates to permeate; that is, greater variability within participants' answers, coupled with the activation of stereotypes, may explain the plausible differences between CVs based on triggered competence.

General Discussion

While the negative or positive consequences of intersectionality has been methodologically examined across contexts (e.g., Bergstrom et al., 2023; Ghavami & Peplau, 2012; Jarrin & Pitts, 2020; Pedulla, 2014; Petsko & Bodenhausen, 2019; Strinić et al., 2021; Veit et al., 2022), contradicting results have fueled discussions on the generalizability of the findings. Herein lies the importance of the current project; stereotyping against Brazilians was analyzed across three experiments derived from theoretical assumptions regarding multiple (and, intersecting) identities. Results followed trends in Portuguese society in which prejudice tends to act implicitly, perhaps due in part to the country's anti-discrimination

attitude (e.g., Diego-Cordero et al., 2022; ILGA, 2022; Santos, 2013; Souza et al., 2016). Notably, it was revealed that participants expressed implicit, but not explicit, preferences against Brazilian targets, and occupational prejudice was detected against straight Brazilians only when participants were presented with CVs that did not explicitly trigger competence.

An understanding of several combined processes may further assist with data interpretation – namely, the perception of intersectional individuals, the application of stereotypical assumptions, and the conceptualization of individuals with varying implied competence. As exhibited, individuals belonging to multiple minorities (gay Brazilians) may be protected by their double minority status, given the contextual assumptions of stereotyping (e.g., Kurzban et al., 2011; Petsko & Bodenhausen, 2019; Petsko & Bodenhausen 2020; Turner et al., 1987; Wojnowicz et al., 2009). Within the context of the current project, cognitive compartmentalization appears to have influenced participants' perceptions of applicants when competence was not triggered; that is, assumptions regarding Brazilian men might have been the stereotypical baseline while sexual orientation shifted focus. More specifically, negative stereotypes of Brazilian men may have been mitigated by sexual orientation, bringing gay Brazilians closer to the stereotypicalities of Portuguese men and increasing assimilation into the Portuguese workplace (i.e., increasing conceptual whiteness, or perhaps, Europeanness in this case) (e.g., Pedulla, 2014; Purdie-Vaughns & Eibach, 2008). Furthermore, implicit preferences against Brazilian men, and to a far lesser degree, gay men, provide additional support for this effect, referencing back to the type of prejudice and discrimination typically faced in Portuguese society (Diego-Cordero et al., 2022; Santos, 2013).

Of course, this effect was found only for applicants with lower implied competence, suggesting that higher qualifications may have protected minority members from receiving prejudiced judgements (e.g., Bayrakdar & King, 2023; Veit et al., 2022). Additionally, an increase of cognitive complexity involved in judgement tasks between Experiments 1 and 2 seemed to have driven stereotypic judgements toward straight Brazilians, similar to past findings (e.g., Bodenhausen & Lichtenstein, 1987; Bodenhausen & Wyer, 1985; Macrae et al., 1994; Wilson, 1978). In Experiment 2, where less objective

information and implied competence was provided, heuristic processes anchored by stereotypic information may have been adopted by the participants to ease the task at hand. We argue that a lack of information eliminated the opportunity for judgment anchoring to occur, eliciting the use of stereotypical assumptions and promoting prejudiced evaluations (Locksley et al., 1982). In other words, participants were unable to judge applicants based on objective informational cues, and instead, were tasked with providing subjectively biased decisions. We also speculate that implicit anti-Brazilian sentiments were allowed to come forth, driving responses in Experiment 2, but not Experiment 1. However, this does not mean participants ignored informational cues presented in Experiment 1; for instance, participants accurately assumed sexual orientation (based on ratings of masculinity). Moreover, participants could have simply deciphered the information on the CV to complete the task at hand (e.g., providing evaluations), without considering the possibility of other differently-skilled (fictional) candidates. Future experimental designs would benefit from the introduction of information recall paradigms in which the consistency of information interpretation could be considered, giving valuable insight into the details encoded into memory. Nevertheless, findings from these studies provide an important glimpse into the generalizability of intersectionality and the SCM in a Portuguese context.

Naturally, some limitations arose which are worth mentioning. First and foremost, there were inconsistent effect sizes across Experiments 1 and 2, although both included similar sample sizes. The low effect sizes in Experiment 1 may understandably be scrutinized, as the possibility of false conclusions and insignificant applications are undoubtedly increased (e.g., Anderson et al., 2017; Sommet et al., 2023). However, results from both experiments corroborate past findings (e.g., Locksley et al., 1982; Pedulla, 2014; Veit et al., 2022), yielding optimism for the overall conclusions. Additionally, the conflicting nature of Experiment 1 (i.e., triggering competence despite the existence of stereotypic beliefs) may have resulted in the high variability shown, producing statistical outliers which could be reduced if the sample sizer were larger (André, 2022; Bakker & Wicherts, 2014). Due to resource constraints, it was not feasible to collect more responses; however, future researchers should consider

achieving a larger sample size if examining similar target groups. Secondly, while main hypotheses were driven by conclusions made in the SCM, warmth was not triggered in the same manner as competence was in this paradigm; therefore, the entire picture was not developed. However, as male-dominated workplaces do not typically value warmth (e.g., Bowleg, 2008; Purdie-Vaughns & Eibach, 2008), and measures which evaluated warmth were nonetheless included, we argue that the decision to trigger only competence is valid in this context.

Thirdly, the use of a largely heterogeneous sample in such a paradigm may bring inherent biases or results not indicative of real-world behaviors. Specifically, most of the participants were straight and analyses regarding sexual orientation were not suitable in Experiments 1 and 2; while it is presumable that there might be differences between straight and gay participants, we were unable to test for this and future researchers should consider including an ample number of participants from various demographic backgrounds. Additionally, although other CV research (e.g., Granberg et al., 2020; Everly et al., 2016; Strinić et al., 2020) employed methodologies using real-world professionals (which undoubtedly earned high external validity), financial constraints limited the feasibility of employing this specific methodology; yet, potential lower external validity does not mean current findings should not be discredited, but rather, examined within this specific methodological context (Wulff & Villadsen, 2020). This methodological concern was addressed in Experiments 1 and 2 by instructing student participants to roleplay as hiring managers, but of course, recruiting professionals tasked with making daily hiring decisions might be a desirable route for future researchers to undertake. For instance, this paradigm could comfortably be translated into an audit study or an interview vignette (see Granberg et al., 2020; Mobasseri, 2019; Sterkens et al., 2022; Tilcsik, 2011; Wulff & Villadsen, 2020).

Finally, in an attempt to mimic real-life scenarios in which hiring managers must first consider one's qualifications before proposing a starting salary, we asked participants to provide a starting salary at the end of the questionnaire; doing so may have activated particular stereotypes which might not have yet been activated if the salary proposal was asked at the beginning of the questionnaire. However,

stereotypical activations do not necessarily lead to stereotypical judgements (e.g., Gilbert & Hixon, 1991; Macrae et al., 1994). While we do not think there would have been a substantial difference in results, further paradigms should randomize the positioning of the salary proposal question to account for this doubt.

Constraints on Generality

It should be noted that the aim of this project is not to say that prejudice is absent for gay Portuguese, straight Brazilian, and gay Brazilian men in Portugal, or even in cross-cultural business contexts. Of course, within the scope of this paradigm, this was the case; however, the addition or absence of stereotyping in experimental designs is not always indicative of prejudiced attitudes and discriminatory behaviors, and vice-versa (Brauer & Er-rafiy, 2011; Gawronsky & Houwer, 2014). Furthermore, external factors may incite prejudiced behaviors in real-world settings such as: employers' or colleagues' personal prejudices against gay and/or Brazilian men, stereotypical assumptions generated from the target's race, and the socioeconomic status of the targets, among numerous other examples. Finally, as both participant and target groups included specific groups of individuals based on nationality (and not race), results may be more strongly generalized to societies with similar sociocultural backgrounds (e.g., Spain or Italy) than those with different sociocultural backgrounds (e.g., Japan or Turkey). Therefore, results should be accepted with consideration of varying interpersonal or social experiences and should be adapted by future researchers which expands upon possible conditions of prejudice within different contexts and cultures.

Concluding Remarks

Findings present important considerations for real-world applications, while simultaneously replicating results from prior literature. Notably, gay Portuguese and gay Brazilian men were not perceived as more or less warm or competent than straight Portuguese and straight Brazilian when

competence was triggered, contradicting some literature regarding the adequateness of LGBT workers. That being said, straight Brazilian applicants were considered less competent than all other groups when competence was not triggered; unfortunately, this may hinder straight Brazilians' social advancement if employment opportunities remain limited to low-paying positions although their qualifications are equal to other candidates. Optimistically, results may assist in the development of certain occupational training aimed at reducing implicit stereotyping based on one's identifying features – a promising translation from theoretical conclusions to real-world applications in spite of low effect sizes found in some analyses. The authors of this project are enthusiastic to see where the future of intersectional research continues, looking at increased equality in the workplace and beyond.

CHAPTER 4

VOCAL STEREOTYPING OF INTERSECTIONAL TARGETS

Chapter 4 dives deeper into the understanding of vocal stereotyping, categorization, and the theories of intersectionality while considering the findings of Chapters 2 and 3. To better frame this set of studies, we first address previous research in vocal stereotyping (Chapter 4.1). Then, based on a prior pretest regarding the judgment of stereotypical behaviors of social group members (presented in Chapter 4.4.3), the next set of studies were created (Chapter 4.2 and Chapter 4.3.1). In Chapter 4.2 instead of delving into extra social categories, we wanted to maintain the most common categories used throughout this thesis – Portuguese and Brazilian individuals.

As so, in Chapter 4.2, we tested whether or not participants would be able to accurately categorize and conceptualize not only common targets, but also intersectional targets, based on their voices when uttering phrases with behavioral descriptions. The studies from Chapter 4.2 were created as a pilot study for studies in Chapter 4.3.1 and focused on the stereotypical judgement of speakers' voices, particularly related to perceived masculinity and femininity. First, in Study 1, participants were asked to categorize each of the speakers' voices as either Portuguese or Brazilian, and straight or gay, to test the idea that we, as individuals, are better at identifying national versus foreign accents than we are at identifying gay accents through gaydar (see Dragojevic & Goatley-Soan, 2022; Fasoli et al., 2023; Giles & Rakić, 2014; Montgomery & Moore, 2018; Śliwa et al., 2023). The most prototypical voices of each category identified in this Study 1 were then used in Chapter 4.3.1 as stimuli. Next, in Study 2, we wanted to test the perceived masculinity or femininity of speakers of the same target groups by asking participants to select which behaviors each speaker would be likely to engage in.

Subsequently, in Chapter 4.3.1, and throughout two studies, we examined how participants would evaluate and conceptualize straight Portuguese and Brazilian men, when speaking in either Portuguese or English – a unique pairing of stimuli that, to our knowledge, has not yet been tested. The first study again used the SCM to examine participants' evaluative judgements of the speakers' perceived warmth and competence, as well as their economic status in a separate measure. The next study included a Who Said What? paradigm which enabled us to detect memory recall differences between speakers; that is, the more recall errors there were, the less that participants were able to accurately remember what they said. We

tested these two paradigms with both double jeopardy and intersectional invisibility in mind, where double jeopardy might accentuate the minority group status of Brazilians speaking English, resulting in worse overall judgements and recall.

Finally, in Chapter 4.4.3, we frame and present the pretest, temporally developed first, aimed at identifying behaviors that were considered most stereotypical of certain social groups which were then used to create the materials used in the subsequent set of studies included in Chapter 4.2 and Chapter 4.3.1. Because that same pretested material created the opportunity of developing a parallel side research line, for the sake of maintaining the clarity of the main focus of the thesis, we decided to defer the frame and presentation of the paper produced to the end of this chapter (Chapter 4.4.3).

4.1: VOCAL STEREOTYPING

Everyone who speaks a language has an accent – Americans from Atlanta might have a "Southern drawl", Brazilians from Rio de Janeiro might speak in a "Carioca" accent, and posh Brits might speak using the RP accent. While we may not know exactly where these individuals are from (Dragojevic & Goatley-Soan, 2022), we can make educated guesses from vocal cues such as pitch, tone, or the way some words are spoken in an attempt to accurately classify and categorize other individuals (Fasoli et al., 2023; Giles & Rakić, 2014; Montgomery & Moore, 2018; Śliwa et al., 2023). Interestingly, similar to the process of stereotyping an individual based on physical attributes, stereotyping others based on voice may occur from as little as a single sentence (Baus et al., 2019). For instance, stereotypical ideations of accents may influence the recall of certain individuals where German speakers in a sausage commercial were more recalled than German speakers in an olive oil commercial, thus perpetuating traditional voice-based stereotypes based on preconceived notions (Rakić et al., 2011), and separately, when speaking Portuguese, Portuguese individuals can quickly detect the accents of people from Lusophone (Portuguese-speaking) nations which may result in voice-based xenophobic behavior (Souza et al., 2016). Expanding upon the latter example, the stereotyping of foreign accents is nuanced phenomenon in which, paradoxically, learning a second language may simultaneously be perceived as indicators of both highly

and lowly educated individuals resulting in positive and negative stereotypes (Fuertes et al., 2012; Gluszek & Dovidio, 2010; Montgomery & Zhang, 2017; Souza et al., 2016; Stocker et al., 2017). Specifically, native English speakers may be praised for learning a second language (e.g., Spanish), but native Spanish speakers, especially those with a heavy accent in English, are perceived as less educated, in comparison, highlighting a stereotypical hypocrisy that only affects minority members (Fuertes et al., 2012; Gluszek & Dovidio, 2010). Due in part to voice-based stereotyping, foreign individuals who are unable to learn the native accent may be subject to higher rates of discrimination than foreigners who sound more native or neutral (e.g., Fuertes et al., 2012; Gluszek & Dovidio, 2010; Park et al., 2020; Sultana et al., 2023).

In addition to determining where one is from, we may also use vocal cues to make inferences about others such as their social class, sexual orientation, or age, based on the most prototypical (or salient) features of their accent (see Fuertes et al., 2012 for a review). Although guessing one's sexual orientation through 'gaydar' is generally not as accurate as guessing one's nationality (Cox et al., 2016; Nicholas, 2004; Reese et al., *In Press*), it remains a highly contested and research topic within the topics of vocal stereotyping and categorization. Being gay is an emotionally, mentally, and physically ambiguous category which does not come with a strict set of rules or expectations, making it more difficult for individuals to determine whether or not someone is straight or gay, particularly as some individuals may be reluctant to assume one's sexual orientation to avoid the negative consequences of miscategorization (e.g., Alt et al., 2020; Fasoli et al., 2023; Kachel et al., 2018; Lick & Johnson, 2016; Munson, 2007; Smyth et al., 2023; Sulpizio et al., 2015). However, having a stereotypically gay-sounding accent (i.e., misarticulating or mispronouncing the /*s*/ sound) (see Mack & Munson, 2012) may still have negative consequences, even if listeners are unsure about the speakers' sexual orientation. For instance, Knöfler and Imhof (2007) found that, when speaking to a gay man (as opposed to a straight men), straight men displayed different nonverbal behaviors (e.g., making less direct eye contact or touching the face more), which may indicate signs of uncomfortableness, while Fasoli and colleagues (2017) found evidence that not only were gay and lesbian speakers perceived as not prototypical of their genders, but

they were also viewed as less suitable leaders than their straight counterparts. At the same time, sounding gay may present positive consequences to the individual, where gay-sounding men may be perceived as having a higher social status (Campbell-Kibler, 2007), having more competence (Campbell-Kibler, 2007), or being more sociable (Levon, 2004).

4.2: Does voice signal sexual orientation? Testing the gaydar accuracy, masculinity, and femininity of Portuguese and Brazilian men based on vocal stimuli[17]

Abstract

This project examined the categorizations of individuals based on their voices. Specifically, we recorded the voices of 24 men belonging to the intersecting social categories of nationality (i.e., Portuguese and Brazilian) and sexual orientation (i.e., straight or gay). In Study 1, Portuguese and Brazilian listeners (n = 75) evaluated speakers on the strength of their perceived nationality and sexual orientation. Results indicated participants were more accurate at guessing nationality (when compared to sexual orientation) and had slightly higher accuracy with Portuguese speakers. Study 2 extended these findings, investigating participants' perceptions of prototypical masculinity or femininity for each of the speakers' groups. As predicted, listeners perceived straight speakers as more likely to engage in masculine behaviors, while gay and Brazilian speakers as more likely to engage in feminine behaviors. Findings provide valuable insight to the advancement and generalization of intersectional research, particularly within the Portuguese language.

Keywords: Voice, Vocal Stereotypes, Gaydar, Masculinity, Femininity

[17] Reese, J., Santos, A. S., Palma, T. A., & Fasoli, F. (202X). Does voice signal sexual orientation? Testing the gaydar accuracy, masculinity, and femininity of Portuguese and Brazilian men based on vocal stimuli. *Under Review in the International Journal of Social Psychology*

Vocal cues such as pitch, tone, or other phonetic features used may be strong identifiers of one's social category (Fasoli et al., 2023; Giles & Rakić, 2014; Montgomery & Moore, 2018; Śliwa et al., 2023). In fact, one's foreign accent may be a predominant factor when placing an individual into a specific national social category, even if one's physical appearance does not match their accent (Paladino & Mazzurega, 2020; Rakić et al., 2011). Similarly, voice is considered a signal of sexual orientation that guides categorization of speakers as either straight or gay (Fasoli et al., 2016). However, individuals belong to intersecting social categories (e.g., being both gay and foreign) which may create unique and under-researched experiences. As such, understanding more about how vocal cues may influence the categorization and perceptions of intersectional individuals is imperative to unraveling the stereotypes and consequences faced by them.

Categorization by Vocal Cues

In general, one may gather a lot of information about another individual's background based on their voice and/or accent. Particularly as the world is becoming more globalized, the determination of a native or a foreign accent is an increasingly simple task, and is typically quite accurate (e.g., Dragojevic et al., 2018; Flege et al., 1995; Rakić et al., 2011). Although individuals are accurate in correctly guessing a foreign accent, they are less accurate in guessing the exact nationality of which the accent originates, however (Dragojevic & Goatley-Soan, 2022). Nonetheless, prior research has consistently shown that stereotypes associated with foreign accents persist which hinder universal equality, especially in nations with high foreign populations (see Fuertes et al., 2012 for a review); for instance, individuals with foreign accents may be perceived by native speakers as less credible (Stocker, 2017), less competent (Fuertes et al., 2012), or socially less attractive (Montgomery & Zhang, 2017) than other speakers with a native accent. Because of this, those who are unable to mimic native accents may report perceived stigmatization

(Gluszek & Dovidio, 2010) such as being hindered in the advancement of their career (Sultana et al., 2023) or encountering difficulties with completing their studies (Park et al., 2020).

Although accents are consistently guessed with overwhelming accuracy, 'gaydar' (accuracy of guessing one's gay status (Cox et al., 2016; Nicholas, 2004)) is not always accurately guessed from voice (e.g., Fasoli et al., 2023; Kachel et al., 2018; Munson, 2007; Smyth et al., 2023; Suplizio et al., 2015) because of the ambiguousness of the category itself. That is, typical methods of categorizing individuals from highly salient or external features may not apply when evaluating one's sexual orientation. Additionally, since gaydar itself may be a product of overlapping (and more often than not, negative) stereotypical assumptions about gay men (Barton, 2015; Miller, 2018), individuals may be cautious when labelling others as stereotypically gay. Therefore, straight individuals may be considered normative, and gay individuals deviant, from the social norm (Bem, 1993), perceivers tend to over-estimate the probability that someone is straight as explained by the straight categorization bias (e.g., Alt et al., 2020; Lick & Johnson, 2016). This effect has been observed across various contexts (see Alt et al., 2020), including voice-based cross-cultural categorizations (Sulpizio et al., 2015); that is, even when targets were not from the same nationality as the participants, they were still more likely to be categorized as straight.

Voices and Intersectionality

Research on intersectionality communicated via vocal cues is scarcer, but sociolinguistic work has shown that the manipulation of vocal cues to signal regional accent, sexual orientation, and social class may interact with one another. For instance, judgements of sexual orientation are influenced by vocal cues which communicate low social class or urban living (Campbell-Kibler, 2007; 2011). For instance, sounding gay, and high class, was associated with higher competence (Campbell-Kibler, 2007) while straight-sounding speakers with working-class accents were perceived as less sociable than gay-sounding speakers with a working-class accent (Levon, 2014). Additionally, gay individuals with a foreign accent were perceived as less gender-typical, suggesting stronger deviance from the

prototypicality of being male. Although informative, the work has certain limitations; indeed, it only considers the categorization of listeners belonging to the majority group and focuses on only the English language.

More recently, Fasoli et al., (2023) have tested the categorization of speakers whose voices conveyed information about their nationality (i.e., British or Italian) and sexual orientation (straight or gay) in the United Kingdom. Accent influenced straight British listeners to accurately categorize the speakers as either national or foreign, whilst highlighting a straight categorization bias favoring the categorization of speakers as straight (rather than gay). Moreover, the majority and reference groups for each social category (i.e., British speakers and straight speakers), were more likely to be judged as straight and national, respectively. This suggested that each category brings certain categorical 'gains' to one another and supports the notion that intersectional categories uniquely play on one another, for positive or negative outcomes.

The Present Studies

The goal of the present work was twofold: to evaluate the accuracy of nationality and sexual orientation, and to examine the prototypical masculinity and femininity of speakers across nationality and sexual orientation. Specifically, we asked participants to categorize and evaluate the voices of straight Portuguese, gay Portuguese, straight Brazilian, and gay Brazilian men across two studies. We focused on the Portuguese language, as this offers an ideal situation for testing voice categorization and stereotyping in this cultural context. Within the language however, there exists vast differences between Portuguese and Brazilian pronunciation, sounds, and wordage used; therefore, differentiation is mostly triggered by vocal cues and not the difficulty of learning a second language (e.g., Italians speaking in English, Fasoli e tal., 2023), minimizing issues regarding lingual fluency. Additionally, Brazilians are by far the largest migrant group in Portugal (GEE, 2023), allowing us to accurately compare the categorization of two groups of different status in Portugal in a post-colonial context (Śliwa et al., 2023).

In line with findings from Dragojevic et al. (2018), Flege et al. (1995), and Rakić et al. (2011) we expected that speakers' nationalities would be guessed with high accuracy. But, participants would exhibit greater overall accuracy for the categorizations of Portuguese speakers as all participants lived in Portugal, and Portuguese speakers represent the majority group. Moreover, we expected that straight speakers would benefit from the straight categorization bias, meaning participants would be more accurate when guessing the sexual orientation of straight men compared to gay men. Most importantly, the present studies aim to extend the findings of prior research by not only testing the effects of categorization on single-minority categories (e.g., Brazilian or gay), but also examining these effects regarding intersectional minorities (e.g., Brazilian *and* gay). To conserve space, the full database of findings and extra analyses may be found in the online supporting materials.

Study 1

Study 1 explored the accuracy of nationality and sexual orientation categorization across 24 Portuguese-speaking participants. Several hypotheses were developed and tested based on prior work regarding the accuracy of nationality and sexual orientation categorizations (e.g., Dragojevic et al., 2018; Fasoli et al., 2023; Rakić et al., 2011). First, it was hypothesized that participants would have better overall accuracy regarding target nationality compared to target sexual orientation (Hypothesis 1a). Moreover, participants would have higher accuracy for Portuguese speakers compared to Brazilian speakers regarding both nationality and sexual orientation (Hypothesis 1b) because Portuguese speakers were the reference and majority groups in this study. Additionally, it was expected that straight target speakers would receive more correct guesses only when regarding sexual orientation (Hypothesis 1c). It was also hypothesized that participants would be more confident in their responses for Portuguese and straight speakers, when compared to Brazilian and gay speakers (Hypothesis 2). Finally, it was expected that Portuguese speakers would be evaluated as prototypically Portuguese and Brazilian speakers would be evaluated as prototypically Brazilian, regardless of sexual orientation (Hypothesis 3). We also explored whether intersectionality communicated via voice played a role in categorization, confidence, and prototypicality judgements.

Method

Participants

Portuguese and Brazilian participants were recruited online through Prolific and paid £1.50 (€1.74) for their time. A priori analysis based on similar studies was conducted to determine sample size and revealed that 72 participants was a suitable number to achieve .80 power. In total, there were 76 participants (42 Portuguese and 34 Brazilians) with a combined age range of 19-60 (M = 28.01, SD = 8.42)[1]. Across both sets of participants, there were 39 men, 36 women, and 1 participant who did not disclose their gender**,** with 49 straight participants and 27 lesbian, gay, or bisexual participants[2]. Although demographic details are not tested fully in this manuscript, please refer to the online supplemental materials for further analyses (OSF: https://osf.io/jhvay/?view_only=5fd9d3136a7949878cd0cb7456025db7). All participants gave their full informed consent to participate, and this study was approved by the ethics committee of the lead author's institution.

Materials

Speakers

Speakers were recruited through the lead author's university, utilizing snowball and convenience sampling once contacts in the main subject pool had run out. In total, twenty-four men aged 20 to 35 (M = 25.88, SD = 4.26) recorded their voice in 30-minute sessions and were offered €10 for their time. The speakers were asked to read 48 pretested neutral phrases in their native language (Portuguese), followed by materials for other studies by the same authors. Speakers were not restricted to a specific region or accent, as the overall national accent was deemed more important for the study. To be included within the study, speakers were required to self-identify as a cisgender male, and either exclusively straight or exclusively gay. Individuals who self-identified as any other social category (e.g., nonbinary, bisexual, etc.) were excluded from participation to ensure a straightforward methodological approach. Finally,

speakers were separated into constituent categories for recruitment and analyses. In the end, 6 straight Portuguese men, 6 gay Portuguese men, 6 straight Brazilian men, and 6 gay Brazilian men were included.

Sentences

Seventy-five sentences were generated from prior work which already pretested items for neutrality (regarding masculinity) (i.e., Cipriano et al., 2021; McDermott et al., 2019; Plaza et al., 2017). For instance, the pretested neutral activity, *rock climbing*, was transformed into, "*Went rock climbing every month with friends last summer*". Sentences were evaluated in a pretest by 48 Portuguese participants (M = 20.33, SD = 5.31), of which 41 were female. Participants were asked to rate each sentence on how stereotypical each behavior was on a bipolar Likert-type scale ranging from 1 (*Typical of straight men*) to 7 (*Typical of gay men*). Neutral sentences situated around the midpoint of the scale were selected and used in the study, and a full list of neutral sentences may be found in the online supplemental materials.

Procedure

Participants were asked to complete this online study in a location without distractions, while using headphones of good quality. Upon giving their full informed consent, participants were asked to indicate their nationality and age; participants were required to be either Portuguese or Brazilian, and at least 18 years or older to participate. Following this brief demographic check, participants were presented with the main instructions of the study which explained, in short[3], "…Every day, we form impressions about other people and their personal characteristics. In this project, we are interested in better understanding how we perceive other people's voices… There are no right or wrong answers – we are interested in the first answer that comes to mind." Importantly, participants were advised not to refresh the webpage if there was a technical difficulty with any of the voices, as this might have restarted the survey. If there was a problem, participants were asked to answer "Yes" to the question, "Were there any technical difficulties with this voice?" and continue onward with the study. By presenting this question

under each voice, the remainder of the participants' [valid] responses were able to be used in subsequent analyses.

After reading the instructions, participants were randomly presented with audio recordings of the 24 speakers. Each speaker spoke 3 phrases in Portuguese (translated: "This morning, I watched a series online", "I spent the afternoon in the garden", "I swim in the pool near my apartment") which provided at least 5 seconds of vocal information in an attempt to increase overall gaydar accuracy (see Painter et al., 2021). Participants were allowed to repeat the recordings as many times as necessary and were asked to evaluate each speaker on three bipolar scales on sexual orientation (1 = Exclusively straight, 7 = Exclusively gay), nationality (1 = Exclusively Portuguese, 7 = Exclusively Brazilian), and accent (1 = Exclusively Portuguese, 7 = Exclusively Brazilian), with a dichotomous choice presented under each scale (i.e., sexual orientation: straight vs. gay; nationality: Portuguese vs. Brazilian; accent: Portuguese vs. Brazilian). That is, participants first provided a more 'fluid' answer, followed by a concrete answer for each speaker – a type of methodology used in studies regarding sexual orientation and intersectionality (see Fasoli et al., 2022; Fasoli et al., 2023). Afterwards, participants were asked to estimate the speakers' ages and how certain they were that each speaker was either Portuguese or Brazilian and straight or gay on a slider scale ranging from 0 to 100. Finally, participants reported their personal demographics and were paid for their time.

Results and Discussion

Nationality and Sexual Orientation Accuracy (Dichotomous Choice)

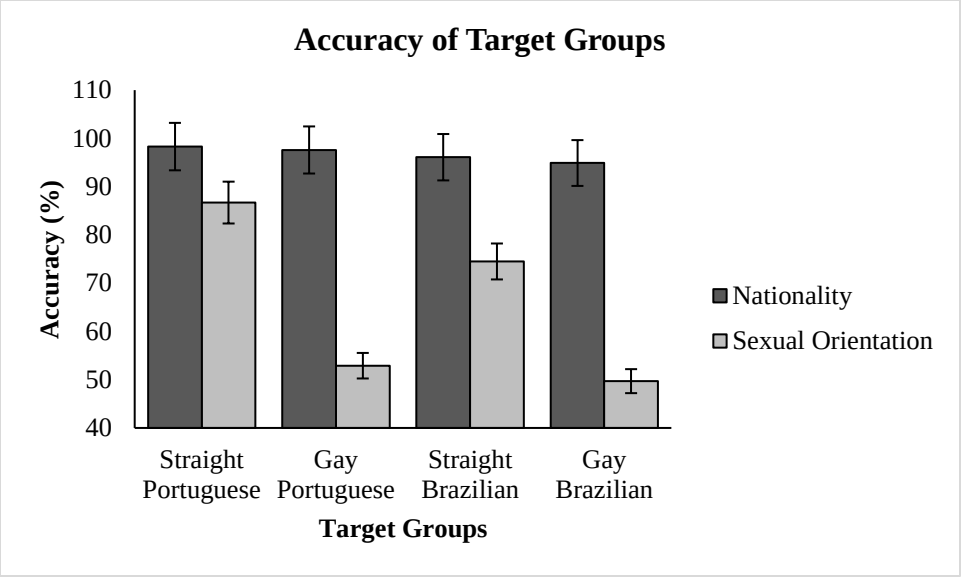
Accuracy of nationality and sexual orientation was calculated as the percentage of correct guesses across all speakers on the dichotomous choices, with a *hit* (i.e., correct guess) valued at 100 and a *miss* (i.e., incorrect guess) valued at 0. For instance, if a participant had 20 hits and 4 misses, their average accuracy would be 83.33%. With this procedure, accuracy across targets groups may be easily compared, as shown in Figure 1. As expected, the accuracy of speakers' nationality received more correct guesses than speakers' sexual orientation; however, straight target groups also received more correct guesses than gay target groups. To determine which target groups were guessed at, or below, chance (i.e., 50%), a

series of one-sample *t*-tests versus chance percentage were conducted. Expectedly, nationality was guessed at an above-chance rate for straight Portuguese, ($t(74) = 68.60$, $p < .001$), gay Portuguese, ($t(75) = 55.83$, $p < .001$), straight Brazilian, ($t(74) = 39.93$, $p < .001$), and gay Brazilian speakers, $t(75) = 37.31$, $p < .001$. Moreover, the speakers' sexual orientation was correctly guessed at an above-chance rate for straight Portuguese, ($t(74) = 16.29$, $p < .001$), and straight Brazilian speakers, $t(74) = 10.21$, $p < .001$ while sexual orientation was guessed at chance for gay Portuguese ($t(75) = .87$, $p = .193$) and gay Brazilian speakers ($t(75) = -.11$, $p = .545$). Importantly, none of the target groups were guessed at a below-chance rate.

A series of independent samples *t*-tests found Portuguese and Brazilian participants guessed all speakers' nationalities with similar accuracy (*p*s >.05) except Portuguese participants ($M = .99$, $SD = .03$) had a slightly higher accuracy than Brazilian participants ($M = .97$, $SD = .08$) for straight Portuguese speakers (although, both had very high accuracy). Interestingly, Portuguese participants were better at guessing the sexual orientation of straight Portuguese speakers ($M = 93.30$, $SD = 1.26$, $t(73) = -3.56$, $p < .001$, $d = -.83$) and straight Brazilian speakers ($M = 79.30$, $SD = 1.96$, $t(73) = -2.27$, $p = .026$, $d = -.53$) than Brazilian participants ($M = 68.70$, $SD = 2.09$; $M = 78.30$, $SD = 2.34$, respectively). Alternatively, Brazilian participants were better at guessing the sexual orientation of gay Portuguese speakers ($M = 66.80$, $SD = 2.63$, $t(74) = 2.36$, $p = .021$, $d = .54$) and gay Brazilian speakers ($M = 57.10$, $SD = 2.23$, $t(74) = 4.16$, $p < .001$, $d = .96$) than Portuguese participants ($M = 41.60$, $SD = 2.62$; $M = 43.70$, $SD = 2.63$, respectively).

Figure 1

Accuracy of Nationality and Sexual Orientation Across Speakers' Groups



Note. Error bars represent 95% confidence interval.

Finally, a series of 2 (Target nationality) x 2 (Target sexual orientation) repeated measures analysis of variance (ANOVA) tests were performed to determine if participants were statistically more, or less, accurate for any specific group. An initial repeated measures ANOVA regarding the accuracy of nationality revealed a significant main effect of target nationality, ($F(1, 73) = 4.93$, $p = .029$, $\eta^2p = .06$) suggesting participants guessed the nationality of Portuguese speakers ($M = 97.94$, $SD = 6.79$) at a higher accuracy than Brazilian speakers ($M = 95.46$, $SD = 10.23$). There was no significant main effect of target sexual orientation, ($F(1, 73) = 1.97$, $p = .165$, $\eta^2p = .03$), and no interaction between variables, ($F(1, 73) = .24$, $p = .626$, $\eta^2p = .001$).

A second repeated measures ANOVA regarding the accuracy of sexual orientation found a significant main effect of target nationality, ($F(1, 73) = 12.52$, $p < .001$, $\eta^2p = .15$) indicating participants were more likely to correctly categorize the sexual orientation of Portuguese ($M = 69.68$, $SD = 29.91$) than Brazilian speakers ($M = 62.00$, $SD = 26.24$). A main effect of target sexual orientation, ($F(1, 73) = 54.86$, $p < .001$, $\eta^2p = .43$) revealed the sexual orientation of straight speakers ($M = 80.59$, $SD = 20.99$) was guessed at a higher rate than gay speakers ($M = 51.28$, $SD = 27.16$). There was no interaction between variables, ($F(1, 73) = 3.64$, $p = .060$, $\eta^2p = .05$).

Next, the confidence levels of participants' responses were examined when the guess was correct (i.e., selecting 'Portuguese' for a Portuguese speaker). A 2 (Target nationality) x 2 (Target sexual orientation) repeated measures ANOVA regarding the confidence of selecting the correct nationality indicated a significant main effect of target nationality, ($F(1, 73) = 5.27$, $p = .025$, $\eta^2p = .07$) revealing participants were more confident when choosing the nationality of Portuguese speakers ($M = 93.80$, $SD = 7.84$) compared to Brazilian speakers ($M = 92.20$, $SD = 9.03$). There was no significant effect of target sexual orientation, ($F(1, 73) = .31$, $p = .578$, $\eta^2p = .001$), and no interaction between variables, ($F(1, 73) = .72$, $p = .399$, $\eta^2p = .001$). Unexpectedly, a final 2 (Target nationality) x 2 (Target sexual orientation) repeated measures ANOVA regarding the confidence of selecting the correct sexual orientation did not reveal a significant main effect of target nationality, ($F(1, 63) = 3.29$, $p = .074$, $\eta^2p = .05$), target sexual orientation, ($F(1, 63) = .07$, $p = .787$, $\eta^2p = .001$), or an interaction between variables, ($F(1, 63) = .45$, $p = .505$, $\eta^2p = .01$).

Perceived Nationality and Sexual Orientation (Likert Scales)

First, a potential overlap between perceived nationality and perceived accent was examined; specifically, averages from the Likert-type measures of nationality and accent were compared using Pearson's *r*. Very strong positive correlations were found for straight Portuguese speakers ($r = .83$, $p < .001$), gay Portuguese speakers ($r = .93$, $p < .001$), straight Brazilian speakers ($r = .93$, $p < .001$), and gay Brazilian speakers ($r = .94$, $p < .001$), suggesting perceived nationality is highly correlated with perceived accent. As such, subsequent analyses include *only* values of perceived nationality to avoid repetition; please refer to supplemental materials for accent-related analyses.

To examine the evaluations of targets' perceived nationality and sexual orientation, a series of 2 (Target nationality) x 2 (Target sexual orientation) repeated measures ANOVAs were performed. An initial repeated measures ANOVA regarding perceived nationality revealed a significant main effect of speakers' nationality, ($F(1, 73) = 2091.41$, $p < .001$, $\eta^2p = .97$); that is, Portuguese targets were perceived as prototypically Portuguese ($M = 1.41$, $SD = .51$), while Brazilian targets were perceived as

prototypically Brazilian, (M = 6.35, SD = .66). There was no main effect of speakers' sexual orientation, (F(1, 73) = .36, p = .362, η^2p = .01), and no interaction between variables, (F(1, 73) = 2.02, p = .160, η^2p = .03).

Using the same procedure, a subsequent repeated measures ANOVA regarding targets' perceived sexual orientation indicated a significant main effect of speakers' nationality, (F(1, 73) = 5.93, p = .017, η^2p = .08) and speakers' sexual orientation, (F(1, 73) = 174.66, p <.001, η^2p = .71) indicating that that Portuguese speakers (M = 3.57, SD = 1.21), in general, were perceived as more straight than Brazilian speakers (M = 3.79, SD = .98) and straight targets (M = 3.10, SD = .95) were perceived as more prototypically straight than gay targets (M = 4.25, SD = .93), while the opposite was also true. Interestingly, a significant interaction between nationality and sexual orientation, (F(1, 73) = 27.89, p <.001, η^2p = .28) found straight Portuguese speakers (M = 2.78, SD = 1.03) were perceived as significantly more straight than straight Brazilian speakers (M = 3.34, SD = .90) (p <.001), but, gay Portuguese (M = 4.28, SD = .90) and gay Brazilian (M = 4.16, SD = .94) speakers were not significantly different (p = .232), suggesting intersectional stereotyping influenced participants' evaluations.

Results largely supported the main hypotheses. Specifically, findings suggested that participants were, in fact, more accurate at guessing speakers' nationality compared to their sexual orientation. Furthermore, participants were slightly more accurate at guessing Portuguese speakers' nationality and sexual orientation compared to Brazilian speakers, and when considering sexual orientation, participants were more accurate when guessing straight targets' sexual orientation compared to gay targets, in line with the straight categorization bias (Lick & Johnson, 2016). Unexpectedly however, while participants were more confident in their responses for Portuguese speakers, they were not more confident when choosing the sexual orientation of straight speakers. Finally, as expected, Portuguese speakers were categorized as prototypically Portuguese, and Brazilian speakers were categorized as prototypically Brazilian. Interestingly, speakers who belonged to a 'double majority' (i.e., straight Portuguese speakers) were more likely than those belonging to a single majority (i.e., straight Brazilian speakers) to be judged as straight when a Likert scale was used to assess sexual orientation.

Study 2

While Study 1 evaluated the accuracy of nationality and sexual orientation for 24 male speakers, Study 2 sought to extend findings by introducing measures related to prototypical masculinity or femininity. Historically, gender stereotypes have been concreted into society whereas men are typically perceived as more assertive, independent, or intelligent than women, while women are generally viewed as more caring, communal, or warm than men (e.g., Bye et al., 2022; Eagly & Steffen, 1984; Ellemers, 2018; Levy, 2000). However, according to the gender inversion theory, gay men may be conceptualized as stereotypically closer to women than straight men (Katz, 2007; Kite & Deaux, 1987) and hence attributed more feminine, but less masculine, traits, behaviors, and interests. At the same time, individuals from certain nationalities may be assumed to be more masculine or feminine, depending on various sociopolitical factors; for instance, individuals from Portugal may be viewed as more masculine (or, individualistic) compared to individuals from Brazil, as shown in Hofstede's (1980, 2011) cultural dimensions and a separate, working paper by the same first author. Moreover, since Portuguese speakers are ingroup members, it is plausible that the perceived prototypicality of masculinity may be strengthened in participants' minds.

According to past findings, several hypotheses were developed. First, it was hypothesized Portuguese speakers would be perceived as more masculine than Brazilian speakers (Hypothesis 1a), while straight speakers would be evaluated as more masculine than gay speakers (Hypothesis 1b). The opposite was also expected for femininity; it was hypothesized Brazilian speakers would be rated higher in femininity than Portuguese speakers (Hypothesis 2a), while gay speakers would be perceived as more feminine than straight speakers (Hypothesis 2b). We explored any possible effects of the intersection between nationality and sexual orientation on masculinity and femininity.

Method

Participants

Portuguese and Brazilian participants were recruited online through Prolific and paid £1.50 (€1.74) for their time. A priori analysis based on similar studies was conducted to determine sample size

and revealed that 72 participants was a suitable number to achieve .80 power, although this number was not reached. A sensitivity analysis found that n=62 would provide similar effect sizes, and in total, there were 62 participants (44 Portuguese and 18 Brazilians) ranging from 19-59 (M = 26.69, SD = 7.43)[4]. Across both sets of participants there were 32 men and 30 women, with 46 straight participants and 15 lesbian, gay, or bisexual participants, with 1 participant who marked 'other sexual orientation'[5]. All participants gave their full informed consent to participate, and this study was approved by the ethics committee of the lead author's institution.

Procedure

Study 2 included stereotypical behaviors of men and women which were pretested and reported in a different working paper by the same authors. In total, 15 sentences were used (5 neutral, 5 stereotypical of men, and 5 stereotypical of women). Participant instructions were identical to those of Study 1. After reading the instructions, participants were asked to listen to the same speakers uttering the same sentences from Study 1. Upon listening to each speaker as many times as necessary, participants were tasked with evaluation how probable, or improbable, it was that each speaker would participate in a stereotypically masculine or feminine behavior ranging from 1 (*Very unlikely*) to 7 (*Very likely*). Next, participants were asked to evaluate each speaker's perceived masculinity ranging from 1 (*Exclusively masculine*) to 7 (*Exclusively feminine*). Finally, participants reported how many Portuguese, Brazilian, straight, and gay speakers were in the study before reporting their personal demographics.

Results and Discussion

Categorical Estimations

Participants were asked to estimate how many Portuguese, Brazilian, straight, and gay speakers were presented throughout the study. Nationality and sexual orientation were consolidated, and participants' answers were required to equal the total number of speakers possible (n = 8). For instance, if a participant estimated there were 3 Portuguese speakers, the automatic estimation for Brazilian speakers

would be 5. A paired samples *t*-test revealed no significant differences between the estimated number of Portuguese (M = 4.00, SD = 1.01) and Brazilian (M = 4.00, SD = 1.01) speakers $t(61) = 0.00$, $p = 1.00$. In fact, participants guessed nationality with accuracy, and, when comparing all responses, both nationalities received the same statistics due to the nature of the methodology. Sexual orientation was guessed at a lower accuracy; a paired samples *t*-test found participants guessed there were more straight (M = 4.69, SD = 1.15) than gay speakers (M = 3.31, SD = 1.15), $t(61) = 4.73$, $p < .001$. Separate independent samples *t*-tests did not suggest the presence of demographic differences across participant nationality or gender (*p*-values >.05). Findings corroborated those of Study 1, suggesting sexual orientation is more difficult to detect from voice than nationality.

Attribution of Stereotypical Behaviors

To test gender stereotyping, we considered the likelihood speakers were perceived as engaging in stereotypically masculine and feminine behaviors for each target group (i.e., Portuguese straight/gay and Brazilian straight/gay), a series of 2 (Target nationality) x 2 (Target sexual orientation) repeated measures analysis of variance (ANOVA) tests were performed. It is important to note each of the types of behaviors were averaged; in other words, all five masculine behaviors were consolidated to create one score, and so on.

An initial repeated measures ANOVA regarding masculine behaviors revealed no significant main effect of nationality, ($F(1, 61) = 3.61$, $p = .062$, $\eta^2p = .06$). However, a significant main effect of sexual orientation, ($F(1, 61) = 155.33$, $p < .001$, $\eta^2p = .72$) revealed straight speakers (M = 3.70, SD = 1.01) were perceived as more likely to engage in masculine behaviors than gay speakers (M = 2.38, SD = .87), as expected.

A subsequent 2 (Target nationality) x (Target sexual orientation) 2 repeated measures ANOVA regarding feminine behaviors revealed a significant main effect of nationality, ($F(1, 61) = 11.50$, $p = .001$, $\eta^2p = .16$) suggesting Brazilian speakers were perceived as more likely to engage in feminine behaviors (M = 3.76, SD = .99) than Portuguese speakers (M = 3.49, SD = .87). A significant main effect of sexual

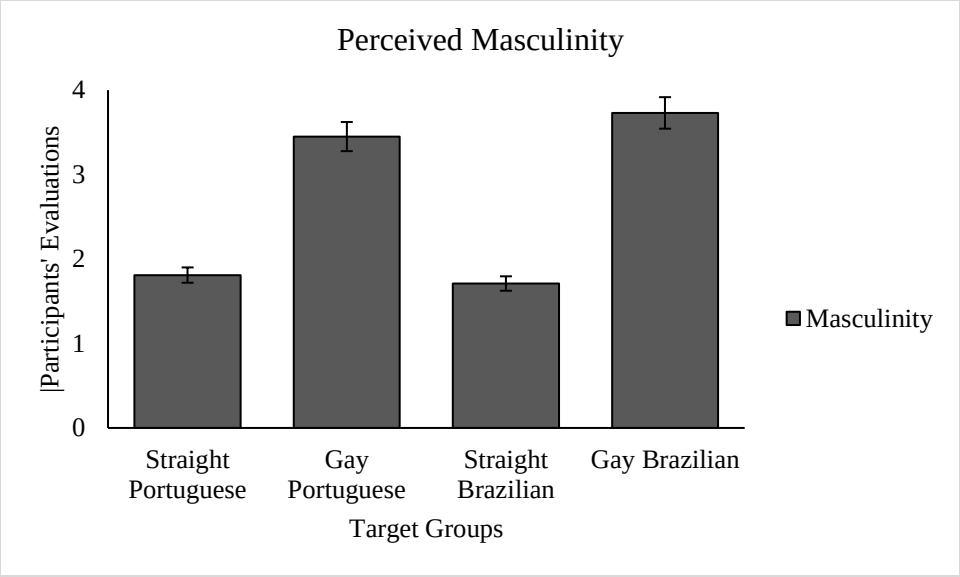
orientation, ($F(1, 61) = 158.40$, $p < .001$, $\eta^2p = .73$) found expected differences between sexual orientation where gay speakers ($M = 4.42$, $SD = .97$) were perceived as more likely to engage in feminine behaviors than straight speakers ($M = 2.82$, $SD = .89$). There was no significant interaction between variables, $F(1, 61) = .61$, $p = .437$, $\eta^2p = .01$.

Perceived Masculinity and Femininity

A final 2 (Target nationality) x 2 (Target sexual orientation) repeated measures ANOVA considering the bipolar scale on masculinity and femininity found no significant main effect of nationality, ($F(1, 61) = 1.25$, $p = .267$, $\eta^2p = .02$), but a significant main effect of sexual orientation, ($F(1, 61) = 205.70$, $p < .001$, $\eta^2p = .77$). As expected, straight targets ($M = 1.76$, $SD = .62$) were perceived as more masculine than gay speakers ($M = 3.59$, $SD = 1.26$), $t(61) = 14.35$, $p < .001$. However, this effect was qualified by a significant interaction with nationality, $F(1, 61) = 5.93$, $p = .018$, $\eta^2p = .09$. A post-hoc Bonferroni tests showed straight Portuguese speakers ($M = 1.82$, $SD = .69$) were not significantly different than straight Brazilian speakers ($M = 1.70$, $SD = .56$) ($p = 1.00$), and separately, gay Portuguese speakers ($M = 3.45$, $SD = 1.28$) were not significantly different than gay Brazilian speakers ($M = 3.73$, $SD = 1.24$) ($p = .073$) (see Figure 2).

Figure 2

Perceived Masculinity of Speakers' Groups



Note. A *lower* score represents higher perceived masculinity, while a *higher* score represents higher femininity. Error bars represent 95% confidence intervals.

Findings generally supported the main hypotheses and extended results from Study 1. While straight speakers were perceived as more likely to engage in masculine behaviors than gay speakers, Portuguese speakers were not perceived as more likely to engage in masculine behaviors than Brazilian speakers. However, both Brazilian and gay speakers were evaluated as more likely to engage in feminine behaviors compared to Portuguese and straight speakers, respectively. Additionally, straight speakers were viewed as more prototypically masculine than were gay speakers, fully supporting Hypotheses 1b and 2b. Unexpectedly, there was no significant main effect found for nationality when considering prototypical masculinity, suggesting that Portuguese targets, respective of sexual orientation, are perceived as masculine as Brazilians; but, Brazilians were nonetheless more likely to engage in feminine behaviors bringing the importance of intersectionality into play.

General Discussion and Conclusion

Findings in Study 1 and Study 2 generally supported the main hypotheses which tested the accuracy of guessing social categories and the stereotypical assumptions about the voices of straight or

gay Portuguese and Brazilian individuals in a Portuguese context. Importantly, results corroborated the findings from prior research (e.g., Dragojevic et al., 2018; Fasoli et al., 2023; Flege et al., 1995; Kachel et al., 2018; Rakić et al., 2011; Rule et al., 2008; Rule et al., 2011) and extended past results further into the Portuguese context. Specifically, across both studies, majority groups (i.e., Portuguese and straight) received more accurate guesses than minority groups (i.e., Brazilian and gay) although both received stereotypical evaluations in line with our predictions.

Firstly, findings from Study 1 were largely aligned with our hypotheses and past related research. The accuracy of national categories was found to be highly accurate across all four target groups, reminiscent of findings presented by Dragojevic and colleagues (2018) and Flege and colleagues (1995), but, participants were statistically better at guessing the nationality of Portuguese speakers than Brazilian speakers. Although plausible that both groups might have received similar accuracy, the study was presented in a Portuguese context where the Brazilian participants were extremely familiar with the Portuguese accent, and the Portuguese accent referred to the majority group. While the opposite may be true, it is more likely that Brazilian accents were confused due to the amount of accents within the country itself, or perhaps because there are more Brazilian Portuguese speakers worldwide than Portuguese from Portugal; participants might have confused a Brazilian native with an individual from another nationality who speaks Brazilian Portuguese, for instance.

When considering sexual orientation, the same trend was found. That is, Portuguese speakers received higher overall accuracy of sexual orientation than Brazilian speakers which harkens back to prior findings regarding intersectionality whereas minority groups are less likely to receive accurate categorizations (e.g., Fasoli et al., 2023). As expected, due in part to the straight categorization bias, straight targets were more likely to be perceived as straight than gay targets were to be perceived as gay. Specifically, straight targets were guessed at an above-chance rate, while gay targets, although higher than some previous studies (e.g., Fasoli et al., 2023; Kachel et al., 2018) were guessed at-chance (around 50%). Importantly, both straight and gay target groups were perceived as straight, just at differing levels. Finally, participants' self-reported measures of confidence suggested they were highly confident when

selecting the nationality of targets, and more so when selecting the nationality of Portuguese targets. Unexpectedly however, although straight targets were guessed at an above-chance rate, participants were *not* more confident when choosing the sexual orientation of straight speakers compared to gay speakers, but this might be explained by the nature in which sexual orientation is categorized. Typically, individuals rely on negative cues (e.g., mannerisms or appearances) (Barton, 2015; Miller, 2018) to make a decision on one's sexual orientation; although the straight categorization bias hypothesis states individuals may be perceived as inherently straight, the act of selecting one's sexual orientation may have brought participants closer to the midpoint (50%) to avoid personal biases. Importantly, the results of Study 1 compliment prior findings of intersectional research regarding national and sexual orientation categorization, extending findings into the Portuguese context.

Instead of examining the categorizations of target groups, Study 2 explored the perceived masculinity and femininity to test the gender inversion hypothesis. As we predicted, straight speakers were perceived as more likely to engage in masculine behaviors, and were more masculine, than gay speakers, supporting the gender inversion hypothesis (e.g., Katz, 2007; Kite & Deaux, 1987). Importantly, gay Portuguese and gay Brazilian speakers were *not* evaluated as explicitly feminine (e.g., not above the midpoint); perhaps the straight categorization bias influenced participants to perceive and evaluate gay speakers as inherently more masculine despite knowing they were gay. When considering national groups, participants did not evaluate Portuguese speakers as more likely to engage in masculine behaviors, but interestingly, evaluated Brazilian speakers as more likely to engage in feminine behaviors. Because Brazilians may be viewed as prototypically more feminine than the Portuguese (e.g., Hofstede 1980, 2011; the Authors, manuscript in preparation), it is plausible that Brazilians men would be expected to engage in more feminine behaviors than Portuguese men, regardless of sexual orientation, but this does not explain why Portuguese men were not perceived as more masculine than Brazilian men and more testing on perceived masculinity is required.

A main limitation of this study was the small voice sample, meaning we cannot fully generalize results to other contexts or situations; however, this limitation is true of most psychological studies.

Rather, we focused on the perceptions of masculinity and femininity in a Portuguese context using native and foreign individuals who all speak the Portuguese language. Our findings supported prior psychological research regarding the accuracy of nations and sexual orientation (i.e., gaydar), and the gender inversion hypothesis within a Portuguese context. For instance, Sulpizio et al., (2020) recently examined the effects of auditory gaydar when using women speaking Portuguese which produced similar conclusions regarding the straight categorization bias and the miscategorization of lesbian speakers. Therefore, future researchers, particularly those studying the intersections between nationality and sexual orientation, might use the findings of the current project to better understand whether or not categorization and stereotyping might be similar in similar contexts, using Portuguese and Angolan speakers or Portuguese and Spanish speakers, for example. We, the authors, would like to see these findings extended to compare other genders, sexual orientations, and nationalities to better understand the effects of intersectional stereotyping regarding vocal cues.

4.3: DOUBLE JEOPARDY

The idea of intersectionality is somewhat intertwined with the theory of double jeopardy, which posits that individuals belonging to multiple minority categories may be subject to the effects of both, resulting in a "double hit" of prejudice (Beale, 1970; Blakemore & Boneham, 1994). As aforementioned, the original theory of intersectionality began by examining the experiences of black women, who may receive negative judgements because they are both black and female (Crenshaw, 1989; Ghavami & Peplau, 2012; Beale, 1970). The theory has an additive aspect to it, positing that individuals with a single minority (such as white women) should not experience as much discrimination as black women, and both should experience more discrimination than the majority group (e.g., white men in this case). Research has since moved past the categories of race and gender, and double jeopardy now refers to the negative effects of belonging to any combination of multiple minority groups (Browne & Misra, 2003), with the purpose of identifying how multiple identities may affect personal experiences (Hancock, 2007). Following this logic, for example, women with a physical disability were evaluated more negatively than men with a physical disability when considering their romantic potential (Timmons et al., 2023). Here, individuals with a double minority status (i.e., women with a disability) received more negatively-charged perceptions compared to individuals with a single minority (i.e., men with a disability), and both were perceived more negatively than the majority group (i.e., men and women with no disability). Additionally, Bowleg and colleagues (2003) found that black lesbian women were subject to experiences related to racism, homophobia, and sexism, resulting in what they called "triple jeopardy"; as such, there may be no limit to the additive effects of double jeopardy. However, the effects of double jeopardy are nuanced, typically qualitative in nature (focusing on subjective experiences), and have largely not received universal empirical support as results are generally subject to the context in which they are created (Sidanius et al., 2018).

4.3.1: THE NEGATIVE EFFECTS OF ENGLISH PROFICIENCY: INVESTIGATING THE VOCAL CROSS-CATEGORIZATIONS AND EVALUATIONS OF MAJORITY AND MINORITY MEMBERS ACROSS LANGUAGE AND ACCENT[18]

Abstract

Individuals are quickly organized into various social categories based on tangible group memberships (e.g., race or age) or intangible group memberships (e.g., immigrant status or language spoken). Social categorizations have been widely researched across contexts, but there lacks specific research regarding the categorizations that might occur when individuals speak their second language. In this project, we tested whether speaking in Portuguese or English would influence Portuguese participants' evaluations and recall of Portuguese and Brazilian speakers. In Study 1, we investigated the perceived warmth and competence, the potentiality of forming relationships, and the assumed economic status of Portuguese and Brazilian men speaking in their native (Portuguese) or non-native language (English). Results indicated that Brazilians speaking English received the worst judgements compared to all other categories by Portuguese listeners, suggesting speaking English exacerbated negative perceptions. Study 2 used a Who Said What paradigm to test memory and predicted Portuguese participants would be more likely to make errors when recalling Brazilian men speaking in English. However, Portuguese men speaking in English received the most errors. Overall results from this project provide insight into the effects of social categorization and evaluations of minority and majority individuals speaking in their native and non-native languages.

Keywords: Social Categorization, Vocal Categorization, Voice, Language, Immigration

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Everyone has accents – Brits speak English with a British accent, Venezuelans speak Spanish with a Venezuelan accent, Germans speak Mandarin with a German accent, and so on. Accents give unique characteristics and personalities to individuals and groups of people that may be used to make inferences about others such as their native language, social class, sexual orientation, or age based on the most prototypical features of the accent (see [1] for a review). For instance, Portuguese individuals can quickly detect the accents of people from Lusophone (Portuguese-speaking post-colonial) countries with relative ease, leading to the rapid categorization of these individuals as minority members and facilitating voice-based discrimination. However, what happens when immigrants, and Portuguese individuals alike, speak English instead of Portuguese? Are the perceptions that people have about majority or minority members mitigated by the language spoken, or is nationality-based categorization strong even when speaking a second language? The goal of this project was to examine whether or not national categorizations, stereotyping, and interaction intentions may be influenced by minority individuals speaking English in a Portuguese-speaking country, exemplifying their non-prototypicality, or, bringing them closer to their constituent group (i.e., immigrants speaking Portuguese).

Social Categorizations

Categorization is a vital part of the human experience [1], [2], defined as a process in which we may organize tangible (e.g., physical objects such as people) and intangible objects (e.g., ideas such as politics) into meaningful categories with the underlying cognitive goal of simplifying the complexity of the world around us (Brewer, 1988; Hamilton & Trolier, 1986; Macrae & Bodenhausen, 2000; Macrae et al., 1997; Tajfel et al., 1971; Taylor, 1981). This process occurs rapidly and frequently in an automatic manner for physical (e.g., age) and non-physical (e.g., accent) characteristics alike, signifying that social categorization is not bound to solely clear physical markers or attributes, thus allowing us to attain membership in a number of social groups – particularly those sharing similar emotions, thoughts, or ideologies as us (Dovidio & Gaertner, 2010; Tajfel et al., 1971). The development of social categories,

however, quickly leads to an “us versus them” mentality which may facilitate the preservation of harmful stereotypes leading to prejudice and discrimination against minority members (Dovidio & Gaertner, 2010; Fiske & Neuberg, 1990; Kang & Bodenhausen, 2015; Macrae et al., 1997; Tajfel et al., 1971; Taylor, 1981; Turner, 1987). One of the most notable social categories, one’s racial/ethnic background (commonly referred as race in past literature which focuses on the physical attributes in which individuals may be racialized), for example, has been widely examined in both society and literature to incite social comparisons between groups resulting in negative consequences such as occupational discrimination based on expected competency (Pedulla, 2014) or perceiving a specific group as more threatening than others (e.g., Correll et al., 2002).

Social categories and stereotypes are somewhat fluid in nature, however, (Fiske, 2017; Stolier & Freeman, 2016), reacting to shifts across time and context (Garcia-Marques et al., 2006; Macrae & Bodenhausen, 2000), and therefore adding another layer of complexity to this process. Imagine a doctor who works in general practice with a number of other doctors. In the context of the workplace, the doctor might be perceived by their partner to be highly competent, friendly, or professional. If the doctor’s partner saw them interacting with the other doctors at a bar for the first time, , it is likely the perceptions surrounding the individual will shift in this specific context due to differences in perceived categorization (i.e., doctor versus bar-goer). Therefore, social categorization and perception are less related to the individual (or, individual group), but rather, more related to the most prevalent characteristic of the individual (or, individual group) in any given time or context (Fiske & Neuberg, 1990; Macrae & Bodenhausen, 2000; Moore-Berg & Karpinski, 2018); without meaningful characteristic features, there would be no categorization.

In fact, individuals have the tendency to evaluate and/or react to the most prevalent social category as a method of attempting to efficiently categorize others (Fiske & Neuberg, 1990), but things quickly become complicated as individuals rarely belong to only one social category (Fiske, 2017; Moore-Berg & Kapinski, 2018). Several theories have been proposed in an attempt to explain why and

how we may perceive others with differing group memberships (i.e., cross-categorization), namely the additive model of social categorization (e.g., Crisp & Hewstone, 2000; Singh et al., 1997). The additive model posits that ingroup (or, majority) members may regard others based on their proximity to their group, with each additional layer bringing more negative evaluations; in other words, each category acts as a sum of the whole. For instance, if a group of individuals partaking in the same competition were told to organize themselves according to the color of their shirt (e.g., red or blue), and red was the majority color, normal intergroup relationships should develop. However, if letters were also placed on the shirts, with A being the majority letter and Z being the minority letter, majority members (i.e., individuals wearing red shirts with the letter A) may perceive single-majority members (i.e., individuals wearing red shirts with the letter Z) as more positively than individuals with blue shirts, with double-minority members (i.e., individuals wearing blue shirts with the letter Z) viewed with the most negative sentiments (e.g., Crisp & Hewstone, 2000; Nicolas et al., 2017; Singh et al., 1997).

Although the additive model of social categorization may explain how majority members categorize one another, the concept of double jeopardy (Beale, 1970; Blakemore & Boneham, 1994) adds a further layer of analyze to consider which states that individuals belonging to two minorities (in this case, Brazilian and English-speaking) may be subject to a "double hit" of prejudice. The original theory began by examining the experiences of black women, who seemed to be perceived more negatively than both white women and black men because of the intersection of racism and sexism (e.g., Beale, 1970; Blakemore & Boneham, 1994; Settles, 2006). However, since psychological research has advanced past the categorizations of solely race and gender, the notion of double jeopardy has been broadened to include any combination of multiple minority statuses (Browne & Misra, 2003) with the purpose of identifying how multiple identities may affect subjective, or objective, experiences (Hancock, 2007). The effects of double jeopardy have been examined across a multitude of categories, for instance, younger black men appeared to be less friendly than older black men when compared with white men (Kang & Chasteen, 2009), women with a physical disability were evaluated more negatively than men with a physical

disability regarding romantic potential (Timmons et al., 2023), and black lesbian women valuably detailed their negative experiences with not only racism and sexism, but also, sexual prejudice (triggering "triple jeopardy") (Bowleg et al., 2003). However, the effects of double jeopardy are nuanced and have not received universal support, largely depending on the context or experimental design presented. For example, while it was true younger black men were perceived as less friendly in the aforementioned study by Kang and Chasteen (2009), it was also true that older white men were perceived as angrier than their younger [white] counterparts, suggesting that this process might be more complex than a simple equation.

Vocal Categorizations

One's voice and accent may give us more insight into where someone is (roughly) from (Dragojevic & Goatley-Sloan, 2022; Rakić et al., 2011), their gender (Freeman & Ambady, 2011), or their race (Kurinec & Weaver, 2021) and sometimes, intangible attributes such as their sexual orientation (Fasoli et al., 2023), social class (Campbell-Kibler, 2007), or attractiveness (Zuckerman & Driver, 1989). However, in a multilingual society, such perceptions could be changed by the language individuals speak as the language can activate different social categories or group representations. Imagine an individual might speak Portuguese at home with their partner and English at work with their colleagues; if their partner were to view them speaking English at work for the first time, it is possible that the perceptions surrounding the individual will shift in this specific context due to differences in perceived categorization (i.e., language spoken). One may argue this perception shift may occur due to a shift in the speaker's personality when speaking English compared to Portuguese (e.g., Chen et al., 2014; Dewaele, 2016), but importantly, the individual remains the same. This is particularly important as the second language is less associated with majority categories and therefore influences the categorization process (e.g., Paladino & Mazzurega, 2020; Rakić et al., 2011). As such, languages, and the accents we hold, are not solely vessels in which information may be passed, but rather provide a breadth of categorical information in their own right (Giles & Powesland, 1975; Pietraszewski & Shwartz, 2014).

These categorizations obtained through vocal information may, akin to the process of dissecting physical categories, result in the stereotyping and/or discrimination of others based on the stereotypical assumptions of their voice (Aronovitch, 1976; Fuertes et al., 2012; Kramer, 1964; Kurinec & Weaver, 2021; Stocker, 2017; Stoller et al., 2014), from as little as single-word utterances such as "Hello" (Baus et al., 2019). For instance, Kurinec and Weaver (2021) found that "sounding black" (i.e., having an accent stereotypical of black Americans) was associated with the attribution of negative characteristics (e.g., aggressive or uneducated) toward speakers, which mimics real-world effects of racially-coded accents that prompt some minority members to use more racially-neutral accents when speaking on the phone (and in other scenarios) to avoid potential discrimination (Gluszek & Dovidio, 2010). However, past research has shown that individuals are more prone to remember stereotypically-congruent accents which trigger stereotypical ideations of certain individuals (e.g., a German speaker narrating a sausage commercial) than stereotypically-incongruent accents which do not trigger these ideations (e.g., a German speaker narrating an olive oil commercial), perpetuating stereotypical categorizations and increasing the difficulty of individuals' ability to forsake vocally-triggered stereotypes (e.g., Cartei et al., 2019; Fuertes et al., 2012; Hendriks et al., 2015; Rakić et al., 2011). This negativity toward counter-stereotypical individuals affects those who speak more than one language with an accent (and are unable to lose the accent of their native language). Paradoxically, learning a second language is both a sign of both highly, and lowly, educated individuals (Fuertes et al., 2012) where, for instance, native English speakers are praised by other English speakers for learning Spanish, but native Spanish speakers who speak English (with an accent) are generally perceived as uneducated, in comparison (e.g., Fuertes et al., 2012; Gluszek & Dovidio, 2010).

The Current Studies

Portugal and Brazil share a complex post-colonial history driven, in part, by overlapping aspects between cultures. In the Portuguese context, stereotypes and sentiments attributed to immigrants are

generally aligned with the global [negative] perception of immigrants in which they may be more threatening, uneducated, or poorer than the nationals (Casquilo-Martins et al., 2022; Eaton, 1998; Guerra et al., 2015), and as Brazilians are the largest immigrant group in Portugal, these stereotypes are often attributed to them. Because of this, the Brazilian accent has not only become extremely salient to the Portuguese listener, but it has also been branded as a "less-educated" accent with numerous grammatical deviations which may facilitate discrimination against Brazilians living in Portugal (Casquilo-Martins et al., 2022). This implies that Portuguese listeners likely engage in stereotyping and prejudice when listening to Brazilian-accented speakers. The language attitude literature clearly shows that non-standard-accented speakers (e.g., foreign-sounding speakers) are perceived as less competent than standard-accented speakers (see Dragojevic et al., 2020).

Study 1 explored whether participants would hold negative evaluations of double-minority individuals (and to a lesser degree, single-minority individuals) compared to other majority members (e.g., Beale, 1970; Blakemore & Boneham, 1994; Brewer, 1999; Crisp & Hewstone, 2000; Nicolas et al., 2017; Singh et al., 1997; Zhong et al., 2008) based on the concept of double jeopardy (e.g., .g., Beale, 1970; Blakemore & Boneham). We tested this question when voice was the only cue providing information about nationality in a context-absent scenario, and additionally, assessed whether the language spoken (first vs second language) played a role in the impressions majority group listeners formed of speakers belonging to their group and to the minority group. Indeed, speaking a second language may activate the idea of a less prototypical of their own group and emphasize the differences with the minority group. We considered four groups of speakers defined by their accent and language spoken: Portuguese men speaking Portuguese, Portuguese men speaking English, Brazilian men speaking Portuguese, and Brazilian men speaking English. In other words, Portuguese speaking Portuguese are the most prototypical group in Portuguese society (i.e., double majority members), followed by Portuguese speaking English (i.e., single majority members), Brazilians speaking Portuguese (i.e., single minority members), and Brazilians speaking English (i.e., double minority members). Because majority members

(Portuguese individuals, in this case) may have more motivation to maintain positive majority identities than minority members (Leonardelli & Brewer, 2001; Moscatelli et al., 2017), and group differences may be made more salient than individual differences in the current paradigm (see Turner, 1987), we predicted Portuguese participants would be more likely to evaluate the [prototypically] farthest group (i.e., Brazilians speaking English) negatively based purely on their accents (see de Sousa, 2016; Dragojevic et al., 2018; Rakić et al., 2011), supporting the theory of double jeopardy.

Study 2 sought to extend the findings of Study 1 by introducing a Who Said What paradigm (WSW) (Taylor et al., 1978) focusing on the recall of intersecting majority and minority group members. Although, fundamentally, the WSW procedure examines a different psychological process (i.e., memory recall) than the one in Study 1 (i.e., attitudes), including it allows us to test assumptions regarding both the additive model of categorization and the theory of double jeopardy using the same target groups in an attempt to better understand the effects of cross-categorization toward single or multiple minority members. The WSW paradigm may influence different results as the paradigm itself is more sensitive to intergroup categorizations. Nonetheless, similar to prior research on double-minority members (e.g., Brewer, 1999; Crisp & Hewstone, 2000; Nicolas et al., 2017; Rakić et al., 2011; Sesko & Biernat, 2010; Singh et al., 1997; Zhong et al., 2008) the base assumption is that individuals are more likely to correctly recall those from the same majority (Portuguese men speaking Portuguese, in this case), while at the same time, making more errors for those from double-minorities (i.e., Brazilian men speaking English). As such, the recall of individuals is expected to follow the manner in which individuals are categorized. Indeed, double-minority targets have been associated to an invisibility effect (Fryberg & Townsend, 2008; Purdie-Vaughns & Eibach, 2008), typically defined, in terms of the experiences of those targets, as an erroneous representation of oppressed groups and/or individuals (Fryberg & Townsend, 2008), but some authors (Sesko & Biernat, 2010) have define it as a lack of individuation of or lack of differentiation between group members, as an outcome related to invisibility. Embedded in this analysis is the assumption that double-minority targets are poorly recognized by others and misattributed to others,

relative to other target group members. While this paradigm has traditionally been used to study the cross-sections of various physical attributes (see Bor, 2016; Klauer & Wegener, 1998), less work has been completed on intangible features, such as differences in vocal cues (e.g., Rakić et al., 2011).

Study 1

In addition to investigating potential effects of double jeopardy, Study 1 also examined assumptions proposed by the stereotype content model (Cuddy et al., 2011; Fiske et al., 2002; Fiske et al., 2007), which states that stereotypes of minority members generally converge onto the dimensions of perceived warmth (i.e., ability to harm the group) and competence (i.e., capability to harm the group). The stereotype content model has seen consistent support for its depiction of intergroup relations, with minority individuals generally attributed more negative stereotypes than majority members. Based on prior research regarding the categorization and attribution of stereotypical attributes toward both majority and minority members, several hypotheses were developed. We first predicted Brazilians speaking English (i.e., double-minority members) would be evaluated as less warm (Hypothesis 1a: H1a), less competent (H1b), and less in potential closeness to participants (H1c) by Portuguese individuals when compared to all other groups, positing that participants would accurately categorize group members and use this to discriminate against double minority individuals. Additionally, as Brazil is, and is socially perceived, as a poorer country than Portugal (In Press*;* Durante et al., 2013), we predicted that Portuguese participants would evaluate Brazilians, and specifically Brazilians speaking English, as having worse economic statuses than Portuguese speakers (H2).

Method

Participants

Portuguese students were recruited through their university in exchange for course credit. We intended to recruit as many participants as possible and a G*Power sensitivity analysis (Faul et al., 2009) confirmed our sample size consisting of 51 individuals was sufficient to detect an effect (η^2p) as small as .03 with 80% power when $\alpha = 0.05$ in a 2x2 repeated measures ANOVA. There were 44 women, and the majority of the participants identified as straight (n = 38, 67%) with an age range between 18 and 53 (M = 20.43, SD = 5.63). Participants were asked to self-report their English fluency (i.e., A1, A2, B1, B2, C1, C2); 24 participants held fluent English knowledge, 22 participants held intermediate English knowledge, and 5 participants held beginner English knowledge. Although it was asked, English fluency was not analyzed as a predictor of results since the majority spoke English. All participants gave their full informed consent to participate, and this study was approved by the ethics committee of the lead author's institution.

Materials

Speakers

Speakers and phrases were pretested in a separate, working paper by the same authors. In the pretest (n = 72), 24 self-reported straight and gay men from either Portugal or Brazil were recorded in person in the lead author's city, resulting in 6 straight Portuguese speakers, 6 straight Brazilian speakers, 6 gay Portuguese speakers, and 6 gay Brazilian speakers. Participants were tasked with evaluating how prototypical each speaker sounded of Portuguese, Brazilian, straight, and gay men. However, as the current project does not examine sexual orientation, 2 of the most prototypically-sounding straight Portuguese speakers and 2 of the most prototypically-sounding straight Brazilian speakers (M = 22.25, SD = 2.63) were selected. Each of the speakers uttered phrases in the Portuguese and English languages, resulting in 8 total speakers, and importantly, none of the participants realized the speakers were the same across languages.

Sentences

All speakers recorded 48 neutral phrases adapted from previously pretested neutral items regarding masculinity from Cipriano et al., 2021, McDermott et al., 2019, and Plaza et al., 2017. Speakers recorded all of the 48 phrases in both Portuguese and English, of which 3 were shown to participants in the current project. The phrases were selected to keep the focus on the speaker, rather than the sentences' meanings by including common daily activities unrelated to stereotypes associated with any social group. Specifically, "I did some online shopping", "I spent the afternoon at home", and, "I visited a new restaurant last weekend", and were shown to participants in both Portuguese and English.

Procedure and Measures

Before the online experiment began, participants were urged to complete the study with headphones of good quality in a room without distractions. Following, participants were asked to form impressions about the personal characteristics of various speakers' voices in different languages (i.e., Portuguese and English). Participants were told to give the first impression that came to mind, but, they were allowed to listen to the voice as many times as necessary. To avoid the possibility of guessing the intent of the study, either all English or all Portuguese speakers were randomly presented first to participants with a one-minute break separating each language. Within each language block, all speakers were randomized to account for any further issues.

Participants were given the option to report any technical difficulties in replaying the sound underneath each speaker's recording; most participants did not report any technical difficulties, and if there was a technical difficulty, that specific response was removed. Two separate Likert-type scales were presented to participants after listening to each speaker ranging from 1 (*Completely Disagree*) to 7 (*Completely Agree*) adapted from prior research including warmth and competence measures (i.e., Cuddy et al., 2007; Fiske et al., 2002; Pedulla, 2014; Strinić et al., 2021). The first Likert-type scale included

items related to warmth (i.e., “This person seems friendly”, “This person seems empathetic”, “This person doesn’t seem nice”, and “This person never helps their neighbors”), with the latter 2 being reverse-scored; the 4 items were combined to create the overall warmth measure and high reliability between items was found (Cronbach’s $\alpha = .78$). The next scale included items related to competence (i.e., “This person seems capable of learning new things”, “This person would be a good leader”, “This person does not seem intelligent”, and “This person seems lazy”) with the latter 2 being reverse-scored; the 4 items were combined to create the overall competence measure and high reliability between items was found (Cronbach’s $\alpha = .82$).

Next, participants were asked to estimate each speaker’s monthly salary (by writing) and complete a Likert-type scale of the speakers’ economic status ranging from 1 (*Extremely low economic status*) to 7 (*Extremely high economic status*). Following, participants were asked to evaluate how probable it was they would engage in certain relationship-oriented activities with each speaker on a Likert-type scale ranging from 1 (*Not probable at all*) to 5 (*Very probable*). Instead of analyzing measures of closeness together, we argue that the dimension of competence may relate to the dimension of work closeness while the dimension of warmth may relate to the dimension of personal closeness. Specifically, work relationship formation was created by merging 3 items related to work competence (i.e., “How likely are you to…: work on an important project with this person?”, “…ask this person for advice?”, and “…trust this person to fulfill your tasks at work?”); high reliability between items was found (Cronbach’s $\alpha = .86$). Personal relationship formation was created by merging 3 additional items related to interpersonal warmth (i.e., “How likely are you to…: try to be friends with this person?”, “…talk to this person about your life?”, and “…invite this person to dinner at your house?”); high reliability between items was found (Cronbach’s $\alpha = .83$). Finally, participants were asked to report their demographics.

Results

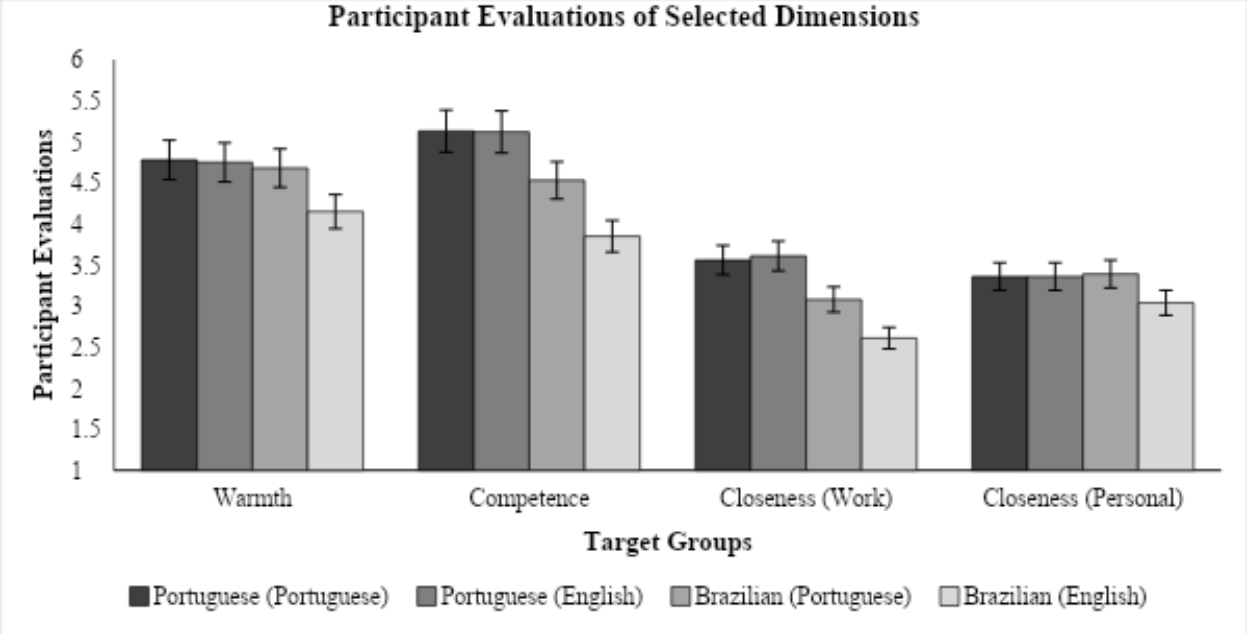
Warmth and Competence

To evaluate measures of warmth and competence, a series of 2 (Target nationality: Portuguese or Brazilian) x 2 (Target language: Portuguese or English) repeated measures analysis of variance (ANOVA) tests were performed. An initial repeated measures ANOVA regarding perceptions of warmth revealed a significant main effect of target nationality, ($F(1, 50) = 8.61$, $p = .005$, $\eta^2p = .15$), a significant main effect of target language, ($F(1,50) = 10.41$, $p = .002$, $\eta^2p = .17$), and a significant interaction between variables, $F(1,50) = 9.38$, $p = .004$, $\eta^2p = .16$ (see Figure 1). As predicted, Brazilians speaking English ($M = 4.15$, $SD = .80$) were evaluated lower in warmth than Brazilians speaking Portuguese ($M = 4.68$, $SD = .92$), Portuguese speaking Portuguese ($M = 4.78$, $SD = .85$), and Portuguese speaking English ($M = 4.75$, $SD = .68$), all of which were statistically higher in warmth when implementing a three versus one planned contrast, $t(133.68) = -5.22$, $p < .001$, $d = .45$. Results fully supported H1a.

A second 2 x 2 repeated measures ANOVA regarding perceptions of competence indicated a significant main effect of target nationality, ($F(1,50) = 74.31$, $p < .001$, $\eta^2p = .60$), a significant main effect of target language, ($F(1,50) = 24.40$, $p < .001$, $\eta^2p = .33$), and a significant interaction between variables, $F(1,50) = 23.85$, $p < .001$, $\eta^2p = .32$ (see Figure 1). Again, Brazilians speaking English ($M = 3.85$, $SD = .95$) were perceived lower in competence than Brazilians speaking Portuguese ($M = 4.53$, $SD = .89$), Portuguese speaking Portuguese ($M = 5.13$, $SD = .66$), and Portuguese speaking English ($M = 5.12$, $SD = .69$), all of which were statistically higher in competence when considering a three versus one planned contrast, $t(70.88) = -5.01$, $p < .001$, $d = .60$. Results fully supported H1b.

Figure 1

Evaluations of Warmth, Competence, and Closeness for Target Groups



Note. Speakers' nationality is presented first with the spoken language in parentheses. Error bars represent 95% confidence intervals.

Closeness

The probability that participants would form either work or personal relationships with the speakers was evaluated in a 2 (Target nationality) x 2 (Target language) repeated measures ANOVA. An initial repeated measures ANOVA regarding the likelihood of forming work relationships with the speakers revealed a significant main effect of nationality, ($F(1,50) = 50.75$, $p < .001$, $\eta^2p = .50$), a significant main effect of language, ($F(1,50) = 7.55$, $p = .008$, $\eta^2p = .13$), and a significant interaction between variables, ($F(1,50) = 14.22$, $p < .001$, $\eta^2p = .22$) (see Figure 1). Participants were less likely to form work relationships with Brazilians speaking English ($M = 2.61$, $SD = .93$) than Brazilians speaking Portuguese ($M = 3.08$, $SD = .83$), Portuguese than Portuguese speaking Portuguese ($M = 3.56$, $SD = .67$), and Portuguese speaking English ($M = 3.61$, $SD = .68$), all of which were statistically higher in work closeness upon implementing a three versus one planned contrast, $t(132.36) = -8.28$, $p < .001$, $d = .72$.

Following, a 2 x 2 repeated measures ANOVA regarding the likelihood of forming personal relationships with the speakers indicated no significant main effect of nationality, ($F(1,50) = 2.18$, $p = .146$, $\eta^2p = .04$), a significant main effect of language, ($F(1,50) = 6.90$, $p = .011$, $\eta^2p = .12$), and a significant interaction between variables, $F(1,50) = 8.55$, $p = .005$, $\eta^2p = .15$ (see Figure 1). Participants were less likely to form personal relationships with Brazilians speaking English ($M = 3.04$) than Brazilians speaking Portuguese ($M = 3.39$, $SD = .95$), Portuguese speaking Portuguese ($M = 3.36$, $SD = .94$), and Portuguese speaking English ($M = 3.36$, $SD = .90$), all of which were statistically higher in personal closeness when considering a three versus one planned contrast, $t(124.91) = -3.73$, $p < .001$, $d = .33$. Results fully supported H1c.

Correlations Between Warmth, Competence, and Closeness

We examined whether warmth would be correlated with personal closeness (probability of forming friendships) and competence would be correlated with work closeness (probability of forming work relationships). In fact, nearly all warmth x personal closeness correlations were moderately strong for Portuguese speaking Portuguese (Pearson's $r = .53$, $p < .001$), Portuguese speaking English ($r = .50$, $p < .001$), Brazilians speaking Portuguese ($r = .49$, $p < .001$), and Brazilians speaking English ($r = .39$, $p = .006$). Alternatively, nearly all competence x work closeness correlations were moderately strong for Portuguese speaking Portuguese ($r = .37$, $p = .007$), Portuguese speaking English ($r = .46$, $p = .001$), Brazilians speaking Portuguese ($r = .49$, $p < .001$), and Brazilians speaking English ($r = .48$, $p < .001$).

Economic Measures

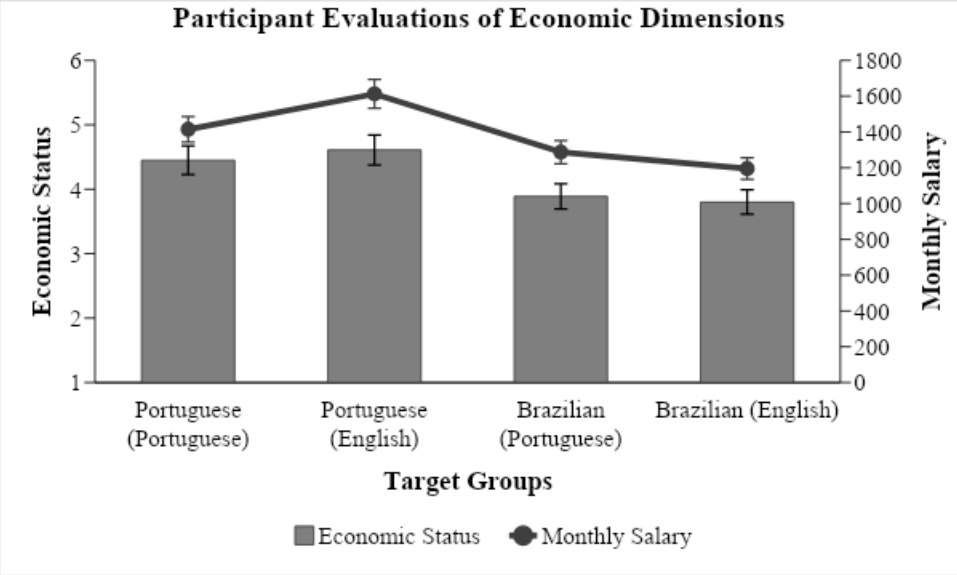
Again, a series of 2 (Target nationality) x 2 (Target language) repeated measures ANOVAs were conducted; an initial repeated measures ANOVA regarding perceived economic status found a significant main effect of nationality, ($F(1,50) = 75.12$, $p < .001$, $\eta^2p = .60$), with Portuguese speakers ($M = 4.53$, SD

= .65) perceived as more economically strong than Brazilian speakers (M = 3.85, SD = .84). However, no significant main effect of target language, ($F(1,50) = .16$, $p = .690$, $\eta^2p = .003$), and no significant interaction, ($F(1,50) = 3.51$, $p = .067$, $\eta^2p = .07$) were obtained.

Lastly, a repeated measures ANOVA on estimated monthly salary found a significant main effect of nationality, ($F(1,50) = 12.95$, $p < .001$, $\eta^2p = .21$), with Portuguese speakers (M = 1513.46, SD = 627.79) perceived as having higher average salaries than Brazilian speakers (M = 1241.32, SD = 685.15). No significant main effect of language, ($F(1,50) = .42$, $p = .520$, $\eta^2p = .01$) was found, but there was a significant interaction between variables, $F(1,50) = 4.71$, $p = .035$, $\eta^2p = .09$. A planned contrast confirmed that Brazilians speaking English (M = 1195.10, SD = 522.86) received significantly lower salaries than Brazilians speaking Portuguese (M = 1287.55, SD = 847.44), Portuguese speaking Portuguese (M = 1414.46, SD = 497.70), and Portuguese speaking English (M = 1612.45, SD = 757.88), all of which were statistically higher in personal closeness when considering a three versus one planned contrast, $t(124.91) = -3.73$, $p < .001$, $d = .33$. Results supported Hypothesis 2.

Figure 2

Evaluations of Economic Dimensions for Target Groups



Note. Economic status is situated on the primary (left) axis, while monthly salary is situated on the secondary (right) axis. Speakers' nationality is presented first with the spoken language in parentheses. Error bars represent 95% confidence intervals.

Discussion

The main hypotheses were supported by the findings. Brazilians speaking English received the most negative impressions and attitudes from participants, supporting both the additive model of cross-categorization and double jeopardy in which negative attributes are attributed to double minority members (e.g., Beale, 1970; Blakemore & Boneham, 1994; Crisp & Hewstone, 2000; Purdie-Vaugns & Eibach, 2008; Singh et al., 1997). Specifically, Brazilians speaking English were perceived, when compared to all other groups, the least warm, the least competent, and the least likely to benefit from work or personal relationships with participants. Moreover, Brazilians (in general) were viewed as less economically apt when compared to Portuguese speakers but Brazilians speaking English received the lowest salary scores. Importantly, speaking English did not act as a buffer against negative affects toward Brazilians, particularly toward measures regarding warmth; in this paradigm, where participants were

asked to evaluate speakers separately, effects of multiple minority status appeared to drive perceptions of Brazilians speaking English. That is, Brazilians speaking in English were penalized, compared to their native-speaking counterparts, where stereotypes regarding Brazilians' perceived friendliness and extroversion (e.g., Sardinha, 2011) were no longer applicable. Perhaps sentiments of closeness (or lack, thereof) to the majority group (i.e., Portuguese speaking in Portuguese) influenced this effect, suggesting Brazilians speaking in English may be exemplified by their status as minority members more so than Brazilians speaking Portuguese (whom only have one layer of separation from the majority group). This effect was detected to a lesser degree regarding competence measures where Brazilians speaking in Portuguese were evaluated as less competent and less likely to benefit from work relationships than both Portuguese groups, although still more competent and more likely to benefit from work than Brazilians speaking in English. However, no interaction between Brazilian speakers was found when considering perceived economic status but it occurs when attributing salaries. While a Brazilin accent may have activated an overall impression of the minority's economic status (e.g., Duarte et al., 2013), salary was a more subtle measure allowing us to detect nuances of economic status and double jeopardy.

Study 2

Study 1 confirmed suspicions that Portuguese participants would evaluate double-minority members (i.e., Brazilians speaking English) more negatively than other groups because of their voices. Study 2 attempted to expand upon these findings by again using the same theories of categorization and double jeopardy, but making additional assumptions based on the non-prototypicality hypothesis. That is, when introducing a memory recall paradigm, individuals may perceive multiple minorities based on the combination of their social categories which may make them more, or less, prototypical to their main category and more, or less, susceptible to recall errors (e.g., Purdie-Vaughns & Eibach, 2008; Rosch, 1975). For instance, in a Who Said What paradigm focused on memory, being a less prototypical member of a group may lead to being more likely to be miscategorized (Rakić et al., 2011) or less likely to be

recalled (Sesko & Biernat, 2010). In the case of the original theory of double jeopardy, if we analyze it in terms of the prototypicality, black women were seen as prototypical of neither black people, nor women, while at the same time, being the prototypically farthest minority group from the typical majority group (i.e., white men) (Beale, 1970; Purdie-Vaughns & Eibach, 2008). In another example of previous evidence mentioned above, the participants included in Kang and Chasteen (2009) were non-black students meaning that all categories apart from young white men were technically non-prototypical categories in relation to the respondent's group. This might explain why older white men and young black men both were perceived more negatively than their counterparts; young black men were subject to the effects of double jeopardy, while older white men were prototypically distant from the majority group (although, not the prototypically farthest group). In our case, we wanted to test whether this theory held when examining the same social groups from Study 1 in a new paradigm.

Based on the findings of Study 1 and assumptions from the Who Said What paradigm (e.g., Bor, 2016; Klauer & Wegener, 1998; Rakić et al., 2011; Sesko & Biernat, 2010; Taylor et al., 1978), several hypotheses were developed. First, we predicted participants would have better accuracy toward targets speaking Portuguese than targets speaking English when guessing each target's nationality; as Portuguese is the first language of both target groups, we expected speaking English (i.e., increasing prototypical distance from the main groups) to worsen the overall hits, misses, and false alarms (Hypothesis 1: H1). Next, we expected national and language categorizations to materialize, resulting in more within-nation and within-language errors than between-nation and between-language errors, respectively (H2). We also predicted that Brazilians speaking English would receive the greatest amount of errors, being subject to the effects of multiple minority categorizations similar to the results obtained previously regarding multiple minority impression formation in Study 1 (H3).

Method

Participants

Portuguese students were recruited through their university in exchange for course credit. In total, there were 113 participants between 18 and 50 years old (M = 21.46, SD = 6.68), and a G*Power sensitivity analysis (Faul et al., 2009) confirmed our sample size consisting of 113 individuals was sufficient to detect an effect (η^2p) as small as .01 with 80% power when $\alpha = 0.05$ in a repeated measures ANOVA. There were 94 women, 16 men, and 3 individuals that did not disclose their gender, and the majority of the sample identified as straight (n = 75, 66%). Participants were also asked to self-report their English fluency (i.e., A1, A2, B1, B2, C1, C2); 52 participants held fluent English knowledge, 42 participants held intermediate English knowledge, and 19 participants held beginner English knowledge. Although it was asked, English fluency was not analyzed as a predictor of results since the majority spoke English. All participants gave their full informed consent to participate, and this study was approved by the ethics committee of the lead author's institution.

Materials

The speakers in Study 2 were the same as those included in Study 1. However, each speaker spoke four neutral phrases related to a specific theme (i.e., food or daily activities) to implement the Who Said What procedure and fit the cover story. In total, 24 neutral phrases were used in Study 2. In addition, 28 faces were selected from the Chicago Face Database (CFD; Ma et al., 2015) based on how neutral they appeared to be of both Portuguese and Brazilian men and were examined in a pretest including 12 Portuguese and Brazilian natives (M = 32.17, SD = 11.11, 6 men and 6 women), with the 8 most neutral faces used in the main experiment. Each face was then paired with one of the speakers for the entirety of the experiment.

Procedure

Before the experiment began, participants were urged to complete the study with headphones of good quality in a room without distractions. Following, participants were told they would hear parts of a conversation between 8 individuals and a researcher (whose aim of their study was to understand more about locals' daily activities); the individuals in the conversation would respond in the language they use most often at work (i.e., Portuguese or English), producing the four target groups. Participants were asked to form impressions about the group of individuals interviewed, although the real main task was memory recall. Before continuing on to the main experiment, participants were given an opportunity to test their headphones (with a recording of piano music).

Once prepared, participants were asked to listen to the edited conversation with the interviewer in which the interviewer's questions were always written, instead of spoken (i.e., "What did you do yesterday afternoon?"); to avoid contamination, the interviewer also did not have a photo. After each section's question was presented, the paired voices and faces of each speaker were randomly shown to participants to avoid pattern memorization and/or recall. After listening to all 8 speakers respond to all 4 questions), participants were then asked to complete a distractor task to avoid recency effects; specifically, participants were asked to list as many animals as they could within a 90-second time frame. The next section did not appear until the time was finished.

Afterwards, participants were shown either a new or old phrase and were asked to decide if the statement was new or old. Importantly, all of the new phrases were created from the old phrases to increase the overall difficulty of recall; for instance, "I spent the afternoon in the garden" was changed to, "I spent the afternoon at a museum". Additionally, as both Portuguese and English languages were used in this paradigm, new and old sentences were shown in the language it was spoken, or created from, although the instructions were always in Portuguese. If the participant decided the statement was new, the next statement would immediately appear. If the participant decided the statement was old, even if the statement was actually new, the participant would be asked to select which speaker said the phrase, adding multiple levels of cognitive processes.

Results

Hits, Misses, and False Alarms

To frame subsequent results and provide a better picture of the processes at hand, the amount of hits (i.e., correct [speaker] guesses), misses (i.e., selecting an old phrase as new), and false alarms (i.e., selecting a new phrase as old, then selecting a speaker) were used as separate dependent variables in a series of 2 (Target nationality) x 2 (Target language) repeated measures analysis of variance (ANOVA) tests. An initial 2 x 2 repeated measures ANOVA regarding the total number of hits (i.e., selecting the correct speaker for each statement) revealed a significant main effect of nationality, ($F(1,112) = 5.77$, $p = .018$, $\eta^2p = .05$), indicating that participants were more likely to correctly guess Portuguese speakers ($M = 2.45$, $SD = 1.52$) than Brazilian speakers ($M = 2.17$, $SD = 1.59$). Moreover, a significant main effect of language, ($F(1,112) = 55.11$, $p < .001$, $\eta^2p = .33$) found participants were more likely to correctly guess targets speaking Portuguese ($M = 2.78$, $SD = 1.71$) than targets speaking English ($M = 1.84$, $SD = 1.40$). An interaction was also detected, ($F(1,112) = 97.26$, $p < .001$, $\eta^2p = .47$) but unexpectedly, Brazilians speaking English ($M = 2.26$, $SD = 1.63$) did not receive less correct guesses than Brazilians speaking Portuguese ($M = 2.09$, $SD = 1.56$) in a planned contrast, $t(220.89) = .99$, $p = .321$, $d = .07$. Instead, as predicted, Portuguese speaking English ($M = 1.43$, $SD = 1.16$) did receive less correct guesses than Portuguese speaking Portuguese ($M = 3.47$, $SD = 1.87$) in a planned contrast, $t(220.89) = -12.10$, $p < .001$, $d = .81$.

A second 2 x 2 repeated measures ANOVA regarding misses revealed a significant main effect of nationality, ($F(1,112) = 27.07$, $p < .001$, $\eta^2p = .20$), indicating Portuguese speakers ($M = 2.74$, $SD = 1.60$) received less misses than Brazilian speakers ($M = 3.39$, $SD = 1.58$). Moreover, a significant main effect of language, ($F(1,112) = 12.22$, $p < .001$, $\eta^2p = .10$) found targets speaking Portuguese ($M = 2.84$, $SD = 1.46$) also received less misses than targets speaking English ($M = 3.29$, $SD = 1.71$). An interaction emerged,

($F(1,112) = 20.26$, $p < .001$, $\eta^2p = .15$), indicated that Brazilians speaking English ($M = 3.35$, $SD = 1.68$) did not receive more misses than Brazilians speaking Portuguese ($M = 3.43$, $SD = 1.47$) in a planned contrast, $t(222.80) = -.50$, $p = .616$, $d = .03$. As predicted, Portuguese speaking English ($M = 3.23$, $SD = 1.74$) did receive more misses than Portuguese speaking Portuguese ($M = 2.24$, $SD = 1.46$) in a planned contrast, $t(222.80) = 5.62$, $p < .001$, $d = .38$.

A final 2 x 2 repeated measures ANOVA regarding the false alarms found no significant main effect of nationality, ($F(1,112) = 1.72$, $p = .193$, $\eta^2p = .02$) but a significant main effect of language, ($F(1,112) = 19.95$, $p < .001$, $\eta^2p = .15$), suggesting targets speaking English ($M = .60$, $SD = .58$) received more false alarms than targets speaking Portuguese ($M = .43$, $SD = .52$). There was no interaction between variables, ($F(1,112) = 1.71$, $p = .194$, $\eta^2p = .02$), but a planned contrast revealed, again, Brazilians speaking English ($M = .60$, $SD = .57$) did not receive statistically more false alarms than Brazilians speaking Portuguese ($M = .50$, $SD = .57$), $t(211.14) = 1.71$, $p = .089$, $d = .12$. However, Portuguese speaking English ($M = .61$, $SD = .58$) did receive more false alarms than Portuguese speaking Portuguese ($M = .37$, $SD = .46$) in a planned contrast, $t(211.14) = 3.77$, $p < .001$, $d = .26$. Overall results somewhat supported H1, but this was driven by Portuguese individuals, not Brazilians.

Within- versus Between-Errors

Categorization based on nationality and language was first examined by evaluating all four error types (i.e., within-nation/within-language, within-nation/between-language, between-nation/within-language, and between-nation/between-language) in a 2 (Nationality error: within or between) x 2 (Language error: within or between) repeated measures ANOVA. Importantly, the responses for within-nation/within-language errors were multiplied by two for all targets as there was only one incorrect target for this type of error; in contrast, all other errors had two incorrect targets. The repeated measures ANOVA found a significant main effect of nationality error, ($F(1,112) = 4.11$, $p = .045$, $\eta^2p = .04$),

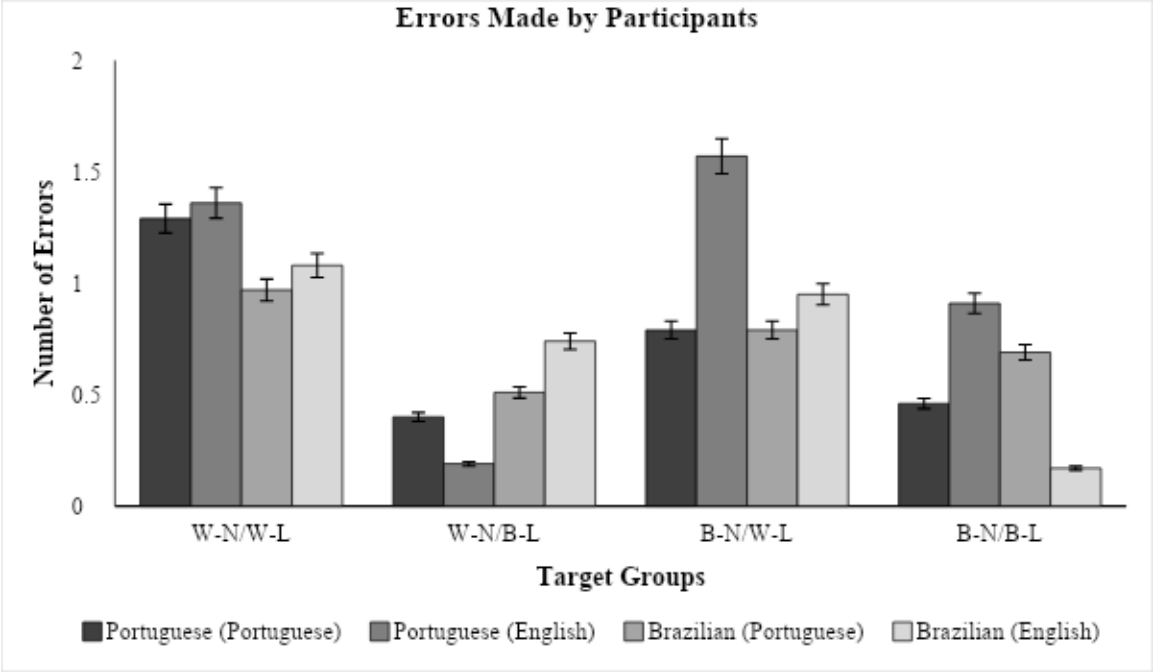
meaning participants were more likely to make within-nation errors (M = .89, SD = .61) than between-nation errors (M = .73, SD = .79). A significant main effect of language error, (F(1,112) = 87.76, p <.001, η^2p = .44) indicated participants were more likely to make within-language errors (M = 1.06, SD = .64) than between-language errors (M = .62, SD = .36). There was an interaction between variables, (F(1,112) = 10.44, p = .002, η^2p = .09) and a planned contrast found participants made significantly more within-nation/within-language errors (M = 1.18, SD = .85) compared to between-nation/within-language errors (M = .94, SD = .43), between-nation/between-language errors (M = .63, SD = .40) and within-nation/between-language errors (M = .60, SD = .36) in a three versus one comparison, t(326.50) = 8.36, p <.001, d = .93. Simultaneously, a planned contrast revealed between-nation/between-language and within-nation/between-language errors were not significantly different, t(214.60) = -.46, p = .649, d = -.06. Results supported H2.

Errors Involving Brazilians Speaking English

As Brazilians who spoke in English consistently received the worse evaluations in Study 1, similar findings were predicted to unfold when comparing Brazilians speaking English versus all other target groups; specifically, all four error types were compared with each target group in a 2 (Nationality error: within or between) x 2 (Language error: within or between) x 4 (Target group) repeated measures ANOVA, although the focus of analysis was the interaction between all three variables. As predicted, there was a significant interaction between all three variables, (F(3,336) = 5.64, p <.001, η^2p = .05), which was used as the foundation of subsequent error-related analyses in a series of planned contrasts (see Figure 3 for a visualization of results).

Figure 3

Types of Errors Within Each Target Group



Note. Speakers' nationality is presented first with the spoken language in parentheses. Types of errors are represented by the following abbreviations: within-nation/within-language (W-N/W-L), within-nation/between-language (W-N/B-L), between-nation/within-language (B-N/W-L), and between-nation/between-language (B-N/B-L). Error bars represent 95% confidence intervals.

Within-Nation/Within-Language Errors

A planned contrast found participants were more likely to confuse Portuguese speakers with one another (M = 1.33, SD = 1.80) than Brazilian speakers with one another (M = 1.03, SD = 1.41), t(1330.53) = -3.04, p = .002, , d = .17. Against predictions, Brazilians speaking English (M = 1.08, SD = 1.54) did not receive the most within-nation/within-language errors compared to all other groups in a three versus one comparison, t(1330.53) = -1.14, p = .256, d = .03. In fact, Portuguese speaking English (M = 1.36, SD = 1.78) received the most within-nation/within-language errors when compared to all other groups in a three versus one comparison, t(1330.53) = 2.17, p = .030, d = .06.

Within-Nation/Between-Language Errors

An additional planned contrast supported the main hypothesis, indicating participants were more likely to confuse Brazilians speaking Portuguese with Brazilians speaking English (M = .63, SD = .82) than Portuguese speaking Portuguese with Portuguese speaking English (M = .30, SD = .57), t(1330.53) = 3.40, p <.001, d = .19. Moreover, a three versus one planned contrast found Brazilians speaking English (M = .74, SD = .87) had significantly more within-nation/between-language errors than all other groups, combined, t(1330.53) = 3.31, p <.001, d = .18.

Between-Nation/Within-Language Errors

Participants were more likely to confuse Portuguese and Brazilian targets speaking English (M = 1.26, SD = 1.02) than Portuguese and Brazilian targets speaking Portuguese (M = .79, SD = .86), t(1330.53) = 4.74, p <.001, , d = .25. Unexpectedly however, Brazilians speaking English (M = .95, SD = .84) did not receive the most between-nation/within-language errors compared to all other groups in a three versus one comparison, t(1330.53) = -.88, p = .380, d = .02; instead, Portuguese speaking English (M = 1.57, SD = 1.19) received statistically more errors than all other groups in a three versus on comparison t(1330.53) = 6.35, p <.001, d = .17.

Between-Nation/Between-Language Errors

A final planned contrast found participants were less likely to confuse Portuguese speaking Portuguese with Brazilians speaking English (M = .32, SD = .68) than confusing Portuguese speaking English with Brazilians speaking Portuguese (M = .80, SD = .90), t(1330.53) = -2.60, p = .010, d = .14. In fact, Brazilians speaking English (M = .17, SD = .48) actually received the least errors compared to all other groups in a three versus one comparison, t(1330.53) = -4.55, p <.001, d = .13, while Portuguese

speaking English (M = .91, SD = .99) again received the most errors compared to all other groups in a three versus one comparison, $t(1330.53) = 4.13$, $p < .001$, $d = .23$. Results from all error types largely did not support H3.

Discussion

Study 2 provided information on memory of majority and minority members depending on their accent and language spoken. First, Portuguese speaking Portuguese (i.e., the majority group) received the most accurate responses when considering hits, misses, and false alarms, meaning participants made more errors for English speakers which was predicted by the additive model and past findings of the WSW paradigm. Importantly, more within-nation errors were made (compared to between-nation errors), signaling that the categorization of speakers' nationalities was used even when nationality was not explicitly triggered (as in Study 1). However, this effect appeared to be stronger when targets spoke in Portuguese (i.e., participants' native language) considering participants were better at correctly guessing Portuguese-speaking targets than English-speaking targets, and as a result, targets speaking in a non-native language (i.e., English) were typically subject to higher error rates, supporting the hypothesis that being prototypically farther from a group influences greater recall errors. Brazilians speaking English received more within-nation/between-language errors than all other groups, meaning participants were likely to confuse Brazilians speaking English with Brazilians speaking Portuguese. Portuguese speaking English received the highest between-nation/within-language and between-nation/between-language errors, meaning participants were more likely to confuse them with Brazilians speaking English and Brazilians speaking Portuguese, respectively. At the same time, Portuguese speakers speaking English were less likely to be correctly guessed than Brazilians speaking English. Therefore, while Brazilians did not fully lose their categorization as Brazilian when speaking English, Portuguese did appear to lose their categorization as Portuguese when speaking English, becoming also vulnerable to poorer recognition and miscategorization. These results are not that unexpected if we consider that, according to the non-

prototypicality hypothesis (Goff, Thomas, & Jackson, 2008; Purdie-Vaughns & Eibach, 2008; Sesko & Biernat, 2010), Portuguese speaking English become also less prototypical of its constituent group, bringing into question the underlying cognitive processes of intersectional categorization, within this paradigm.

General Discussion

Social and vocal categorizations are generally quick in everyday life and drive the attitudes we may have toward individuals from certain social groups. Due in part to the complex nature of cross-categorization, there have been several models proposed aimed at better understanding this process, namely, the additive model (Crisp & Hewstone, 2000; Singh et al., 1997). In this project, we explored the assumptions of this model regarding the extent to which voice-based categorizations may have on double and single majority or minority members, crossing the intersections of language and accent in a unique set of studies using Portuguese and Brazilian men speaking in the Portuguese and English languages. Simultaneously, we explored the potential effects of double jeopardy on double minority members (e.g., Beale, 1970; Blakemore & Boneham, 1994), predicting that members with two minority statuses would receive the most negative evaluations (e.g., Purdie-Vaughns & Eibach, 2008; Rosch, 1975).

Study 1 first looked at the stereotypical assumptions a majority group might hold toward other majority group members (i.e., Portuguese speaking Portuguese), single majority group members (i.e., Portuguese speaking English), single minority members (i.e., Brazilians speaking Portuguese), and double minority members (i.e., Brazilians speaking English) in accordance with the stereotype content model (e.g., Cuddy et al., 2011; Fiske et al., 2002; Fiske et al., 2007), past research on double minority members (e.g., Beale, 1970; Blakemore & Boneham, 1994), and predictions of the additive model of cross-categorization (Crisp & Hewstone, 2000; Singh et al., 1997). Importantly, Study 1 was performed in a context-absent scenario in which participants were simply told to evaluate each speaker based on their

voice where no contextual information was provided. We found that Brazilians speaking English were evaluated more negatively than all other target groups (apart from the general economic measure), supporting predictions made by the additive model of cross-categorization and the effects of double jeopardy.

More specifically, Portuguese participants viewed Brazilians speaking in English as the least warm, least competent, and least likely to form work or personal relationships (with themselves) compared to all other groups, including Brazilians who spoke Portuguese. In line with the additive model and double jeopardy, it appears that speaking English did not buffer negative stereotypical attitudes participants held toward Brazilians and instead acted as the opposite, driving participants' negative perceptions. Participants seemed to be aware of the targets' intersected majority/minority statuses, resulting in the negative evaluation of the prototypically farthest group from the majority group (i.e., Portuguese individuals). This effect did not, however, predict participants' evaluations of the general economic statuses of each group; Portuguese speakers were perceived as having higher economic statuses than Brazilian speakers, regardless of language spoken. As argued by Duarte and colleagues (2013), individuals may internalize the objective economic statuses of nations and apply these perceptions to the citizens of those nations (although, these perceptions will never be true as each nationality has wealthy and non-wealthy citizens). For instance, while Germans may be perceived as wealthier than Indians (In Press), one may of course encounter wealthier Indians and poorer Germans. This psychological bias was evident in Study 1 suggesting that language does not affect majority members' ideations of minority members when considering the general economic statuses of individuals (although, language does affect other outlets). Still, when asking about salaries, the double jeopardy effect was observed suggesting that salaries may capture stereotyping and biases that take into consideration the nationality and language intersection. This may indeed relate to assumptions on types of jobs people do like, for instance, that Brazilians speaking English may work in low-paying jobs where speaking English is required (e.g., tourism industry or domestic work).

Study 2 implemented a Who Said What? paradigm (e.g., e.g., Bor, 2016; Klauer & Wegener, 1998; Rakić et al., 2011; Sesko & Biernat, 2010; Taylor et al., 1978) thus adding contextual triggers to the experimental design and further exploring the possibility of double minority discrimination in a memory-focused experiment. Specifically, participants were told each speaker was asked to respond in the language they most often use at work, both signaling and increasing the saliency of the language spoken (i.e., Portuguese or English). We posited that participants would again be able to accurately detect each speakers' category, but, that national categories would be made less salient since language, rather than nationality, was explicitly triggered. Portuguese participants were more likely to correctly guess other Portuguese speakers (resulting in less misses and false alarms) than all other groups *only when* Portuguese speakers spoke in Portuguese; this was expected, as majority group members should be more likely to detect and recall other majority group members according to past WSW and prototypicality research on categorization effects (Rosch, 1975). At the same time, more within-nation errors than between-nation errors were made, suggesting participants accurately categorized not only the majority groups, but also the minority groups, as well (although this effect was lessened when targets spoke in English).

Interestingly, and against initial predictions, Portuguese speaking English received more errors and less correct guesses than Brazilians speaking English, suggesting that while Brazilians somewhat lost their national categorization when speaking English, Portuguese individuals largely lost their national categorization when speaking English, pointing away from the additive model's expectations, but more in accordance to the non-prototypicality hypothesis (Goff, Thomas, & Jackson, 2008; Purdie-Vaughns & Eibach, 2008; Sesko & Biernat, 2010), as Portuguese speaking English became also less prototypical of its constituent group.

Since language was explicitly triggered, and national categorization was implicitly triggered by accent, we argue that Brazilians were perhaps made more similar (to one another), while Portuguese were made less similar (to one another); that is, participants might have conceptualized both Brazilian groups as Brazilian independently of the language spoken, resulting in less overall saliency for these speakers

when considering the group as a whole. The opposite might have occurred for Portuguese individuals who, while speaking English, were viewed as prototypically further than Portuguese individuals speaking Portuguese, resulting in greater saliency for the single majority group and the increase of errors made by participants. In any case, speaking English as a Portuguese or Brazilian individual in a group setting may cause negative impressions toward those members to arise and influence overall memory or attribution errors, suggesting that while English is a "global language", speaking Portuguese may yet be better for individuals from Portuguese-speaking countries. More specifically, when the focus is on negative biases (Study 1), people may scrutinize the double minority group which represents the least prototypical group (i.e., the group deviating the most from the norm). However, when the focus is on group memory/categorization (Study 2), it may be that people look more at the more prototypical group, rather than the nonprototypical group, which may further explain why Brazilians speaking English did not have as strong as an effect as Portuguese speaking English.

Despite the theoretical advancements this project provides, there are a few limitations worth noting. First and foremost, each speakers' language fluency was not explicitly tested, although this may undoubtedly lead to confusing categorizations; instead, each speaker was evaluated on how prototypical their accent appeared to be of either Portuguese or Brazilian speakers. Hypothetically, the results from Study 1 might be justified by the possibility that all of the Brazilians speaking in English had a lower level of English (compared to the Portuguese individuals), rather than the effects of stereotyping related to cross-categorization. Similarly, regional Portuguese and Brazilian accents were also not considered, widening the potentiality of missed categorizations based on specific accents found within each nation (although, in fact, all speakers were pre-tested to have a prototypical accent respective of their nationality). Additionally, specific linguistic nuances may have been weakened or eliminated entirely in the WSW paradigm used as speakers uttered phrases independently of other actors, which may have resulted in specific target groups being perceived as more, or less, warm or competent than others. Future research could better adjust for these discrepancies, recruiting participants from the same level of

language fluency or a specific regional upbringing while at the same time opting for a more natural replication of conversation. Moreover, future conclusions may benefit greatly from a minority versus majority point of view (i.e., Brazilian participants' evaluations of Portuguese and Brazilian speakers).

As the world is becoming yet more globalized, it is increasingly important to understand the effects of one's accent on how they may be perceived by others, especially when speaking in another language. Although plausible that speaking English may benefit certain individuals in an international setting, results suggest the opposite may also be true. Speaking English not only influenced negative stereotypical perceptions of Brazilians, but also lead to greater categorical errors for Portuguese individuals (and to a lesser degree, for Brazilians), highlighting the nuanced effects of cross-categorization triggered by vocal clues. These results may be regarded as disheartening by some, but in fact, they provide valuable information into how majority groups conceptualize individuals from one or more minorities, bringing us closer to the development of anti-discriminatory social training and policies aimed at diminishing this effect.

4.4: The Influence of Stereotypical Incongruency on Judgements of Prototypicality

The set of studies presented in Chapter 4.4.3 continues the theme of evaluative judgements regarding minority, and intersectional, members in Portuguese society, but instead of examining the specific stereotypes attributed to individuals (as in Chapter 2), we examined the behaviors that were considered most stereotypical of certain group members, which was then used to create the materials used in Chapters 4.2 and 4.3.1, as mentioned before. Likewise, although the set of studies presented in Chapter 4.4.3 provides important information regarding the perceived stereotypicality of counterstereotypical group members, the initial intent was, effectively, to develop a pretest for the studies in Chapter 4.2 and in Chapter 4.3.1 included in this thesis, and that was the reason why we defer it to the final section of the present chapter 4. To better frame and present the side line of research developed with the pretest material, in Chapter 4.4.1 we first address the notion of stereotypical and counterstereotypical group members. And, after, discuss the main purposes of the studies developed (Chapter 4.4.2), before presenting the paper in itself (Chapter 4.4.3).

4.4.1: Counterstereotypical Group Members

Because stereotypes are generated and maintained based on [seemingly] common attributes for any certain social group (e.g., Hamilton & Trolier, 1986; Fiske & Neuberg, 1990; Macrae et al., 1997; Tajfel et al., 1971; Taylor, 1981), individuals within a group who do not share, or are perceived not to share, the same attributes as the majority, they may be positively or negatively affected dependent on context (Haines et al., 2016; Kurinec & Weaver, 2021; Pedulla, 2014; Prentice & Carranza, 2002; Reese, 2023; Reese et al., *In Press*). In order for the effects of counterstereotyping to materialize, perceivers must be knowledgeable of the stereotypes of each salient social category, and aware that they do not generally match, such as a construction worker who graduated from Harvard (Hastie et al., 1990). This may occur in virtually any social group or category, since stereotypes, and stereotyping, are as diverse as the human mind (Fiske & Neuberg, 1990); for example, black Americans who do not have a stereotypical accent of their race were evaluated more positively than black Americans who had a stereotypical accent (Kurinec

& Weaver, 2021), which may prompt some black Americans to adopt "racially neutral" accents when speaking on the phone in an attempt to avoid potential discrimination (Gluszek & Dovidio, 2010). However, within the context of this thesis, counterstereotypicality refers mainly to the effects of nonconforming, stereotypically, with the social categories of gender and sexual orientation. For instance, [straight] men may be more reluctant to form close friendships with feminine men, even if the feminine man in question is straight, to avoid the negative consequences of being perceived as more feminine (i.e., gay) himself (Gul & Uskul, 2021), which undoubtedly may cause psychological distress for feminine straight men. At the same time, self-reported masculine women reported greater emotional and psychological stress than feminine women when working in female-dominated fields (Dozier, 2017). Emotional and psychological consequences of counterstereotypicality such as these influence individuals to engage in stereotypical behaviors, limiting the strength of progressive societal shifts (Hentschel et al., 2019) and preserving traditional gender stereotypes.

Counterstereotypicality is generally not as straightforward for gay men and lesbian women as it is for straight men and straight women because gay men and lesbian women are already perceived as acting in nonconforming manners (i.e., nonconforming with stereotypes of men and women, respectively, due to their perceived masculinity or femininity) (e.g., Katz, 2007; Kite & Deaux, 1987; Wong et al., 1999), adding to the complexity of this process. In other words, masculine gay men may be perceived as gender conforming, but sexual orientation nonconforming, while masculine lesbian women may be perceived as gender nonconforming, but sexual orientation conforming. Due to this, masculine gay men may be evaluated more positively than feminine gay men, but masculine lesbian women may be more negatively evaluated when compared to feminine lesbian women (Cohen, 2009).

4.4.2: Main Goal of the Studies Developed

While there has been suitable research on the stereotypes attributed to individuals, far less has been conducted using phrases or behaviors, namely in more complex paradigms such as the Who Said What? paradigm (e.g., Blashill & Powlishta, 2009; Clarke & Arnold, 2017; Clarke & Arnold, 2018;

Geiger et al., 2006; Fingerhut & Peplau, 2006; Kite & Deaux, 1987; McDermott, 2019; Plaza et al., 2017). Instead of simply identifying patterns in stereotypical attributions, the use of more complex phrases creates a more nuanced output, as participants are required to consider each item more carefully (Cipriano et al., 2021). It is true that single-word attributes such as kind or stupid may trigger certain heuristic responses from a lack of information (e.g., Bodenhausen & Wyer, 1985; Macrae et al., 1994; Nisbett & Ross, 1980; Wyer & Carlston, 1979), but tasking participants with judging and evaluating behaviors requires a deeper level of cognitive processing (Cipriano et al., 2021). Not only are the participants required to understand the behavior, they must also consider how likely, or unlikely, it is that each target would partake in each behavior, again drawing from stereotypical thinking to produce a response.

The goal of this research line was twofold: to test the implicit inversion theory, and to test the evaluations of counterstereotypical individuals by shifting their perceived masculinity or femininity. The implicit inversion theory argues that gay men and lesbian women are more similar to opposite-sex straight individuals than same-sex individuals (Blashill & Powlishta, 2009; Katz, 2007; Kite & Deaux, 1987; Wong et al., 1999); in other words, gay men are often perceived as sharing similar traits with straight women, and lesbian women are often perceived as sharing similar traits with straight men, where their perceived masculinity or femininity drives perceptions. Since its conception, there has been adequate support for the theory, although there have been a few divergences in the literature. For instance, Clarke and Arnold (2018) did not find full support for the implicit inversion theory, suggesting that a cultural shift might have been the catalyst to why gay men and lesbian women were not viewed in the dichotomous terms of feminine or masculine, respectively, but were rather viewed in a more androgynous (i.e., fluid) manner.

In the next studies, we were able to manipulate and test the differences between the perceived masculinity and femininity of individuals, indirectly, in a paradigm using occupations. Similar to Fingerhut and Peplau (2006), we assigned male-oriented or female-oriented jobs to the groups of straight men, gay men, straight women, and lesbian women in order to create the categories of stereotypical or

counterstereotypical individuals, based on whether or not their perceived masculinity or femininity matched their constituent group. In that manner, stereotypical individuals were masculine straight men, feminine gay men, feminine straight women, and masculine lesbian women, while counterstereotypical individuals were feminine straight men, masculine gay men, masculine straight women, and feminine lesbian women. To examine if occupation shifted participants' perceptions, we used the responses from the first study on the implicit inversion theory as an anchor for the second study. Results pointed to the fact that counterstereotypical gay men and lesbian women were found to be more stereotypically similar to straight men and straight women, suggesting perceived masculinity or femininity shifted participants' focuses from the targets' sexual orientation to gender. It appears that the perceived level of counterstereotypicality is directly correlated with the perceived level of masculinity or femininity for men and women regardless of gender, but this presents itself in different manners, as described above. Of course, this complex and, sometimes, confusing conceptualization of counterstereotypical individuals begs for the advancement of psychological research to better understand the positive and negative effects of engaging in counterstereotypical behaviors to lessen certain discrimination in society.

4.4.3: "THAT'S SO…!": INFLUENCE OF GENDER AND SEXUAL ORIENTATION INCONGRUENCY ON JUDGEMENTS OF BEHAVIORAL PROTOTYPICALITY[19]

Abstract

Various studies have examined the stereotypes attributed to gay men or lesbian women. However, there are less studies which explore the behaviors considered stereotypical, or counterstereotypical, of gay men and lesbian women, particularly when these individuals might not conform with stereotypes. In this project, we tested the behaviors attributed to straight men, gay men, straight women, and lesbian women across two studies. Study 1 supports the implicit inversion theory suggesting gay men were correlated with straight women, and lesbian women were correlated with straight men. Study 2 extended findings by manipulating the perceived stereotypicality or counterstereotypicality of individuals by attaching masculine or feminine occupations to each group from Study 1. As predicted, individuals with counterstereotypical occupations were perceived as less stereotypical of their original group while gay men and lesbian women with stereotypical occupations were perceived as more stereotypical of the opposite gender and sexual orientation. Importantly, this project highlights how members of certain groups are perceived as more, or less, typical of their group based on the expectations about stereotypical occupations for that group.

Keywords: Stereotypes, Stereotypical Behavior, Masculinity, Femininity, LGBTQ

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"*That's so gay!*": an expression used to describe something, or someone, in a particularly negative manner, is merely one of the microaggressions faced by the LGBTQ (lesbian, gay, bisexual, transgender, and queer) community in the heterocentric world in which we live (Woodford et al., 2013). Although the phrase does not explicitly address all members of the LGBTQ community (e.g., transgender women or nonbinary individuals), it acts as a blanket statement from which any individual engaging in non-heteronormative behaviors may be marginalized (Mathies et al., 2019). Because of this, the assumption that those who act counterstereotypically in regard to their presenting gender's stereotypes (e.g., feminine men or masculine women) are social deviants has persisted. However, what specific behaviors may trigger this categorization of counterstereotypical individuals? Moreover, can one's perceived masculinity or femininity alter these perceptions?

Gender Stereotypes

Social psychologists have focused heavily on stereotypes, a process of human cognition which allows for the shared categorization of individuals (Macrae & Bodenhausen, 1997), over decades of research. Functionally, stereotypes are considered a social adaptation which may reduce the cognitive effort required to conceptualize the surrounding environment, thus simplifying daily decisions and interpretations – for better or worse (Allport, 1954; Tajfel et al., 1971). For instance, men are typically perceived as more assertive, greater risk-takers, and more independent than women across cultures, who are inversely viewed as more communal, caring, and warm than men (Bye et al., 2022; Eagly & Steffen, 1984; Ellemers, 2018; Levy et al., 2000), resulting in profound effects on gender within various social categories. Specifically, women are underrepresented in business, politics, and sports, while men are minimally represented in other fields such as nursing or caretaking which creates unequal assumptions of what is appropriate for men and women (Haines et al., 2016). This overwhelming saliency of gender in various social scenarios allows us to process gender (and gender stereotypes) with relative ease (Cuddy et al., 2004; Lenton et al., 2009), while simultaneously perpetuating traditional notions of gender.

Historically, men and women have been perceived as stereotypical opposites (e.g., Ellemers, 2018; Kite & Deaux, 1987), perhaps as a function of certain societal roles that are traditionally occupied by men and women throughout time (Ellemers, 2018; Haines et al., 2016). In other words, masculinity may be an imagined scale in which there is no overlap between what is considered stereotypically masculine (i.e., male) or feminine (i.e., female). However, it has been argued that because an item is masculine, this does not mean it cannot also be feminine in nature, especially due to the continual blending of gender stereotypes (e.g., Constantinople, 1973; Diekman & Eagly, 1999). For instance, although men have been barred as higher risk-takers than women (Ellemers, 2018), women were found to be statistically as risky as men (but, in a different manner) (Wood & Eagly, 2012), calling for the need for various methodological approaches to further test the relationship between masculinity and femininity. Moreover, masculinity itself may not be easily defined or understood across cultures, particularly those which have different rules and value different societal traits to determine success (Hofstede, 2011).

Nonetheless, gender stereotypes have been widely examined across cultures with high correlations regarding the expectations of men and women from different nationalities (e.g., Deikman et al., 2005; Eagly & Kite, 1987; Moya & Moya-Garófano, 2021). It is important to note however, as men typically acquire the top positions in various sociopolitical institutions, the conceptualization of nationalities may be skewed toward the stereotypes and perceptions of its male citizens, resulting in lower consistency for the stereotypes attributed to its female citizens and promoting both [international] androcentrism and [national] lesbian invisibility (e.g., Deikman, 2005; Eagly & Kite, 1987). Regardless, general stereotypes attributed to either gender are largely accepted to exist, despite minor cultural differences or the strength of the stereotypes.

Gender Inversion

As mentioned, men and women may be perceived to counter-exist; however, when sexual orientation is introduced, the positionality of men and women becomes inversed according to the implicit inversion theory, which argues gay men and lesbian women are conceptualized as more similar to opposite-sex straight individuals than same-sex straight individuals (e.g., Katz, 2007; Kite & Deaux,

1987; Wong et al., 1999). In other words, gay men are often regarded, or portrayed, as stereotypically closer to straight women than straight men (e.g., heightened femininity), while lesbian women are often perceived as stereotypically closer to straight men than straight women (e.g., heightened masculinity).

In response to the original theory, Blashill and Powlishta (2009) proposed an updated methodology which corroborated and extended findings. Specifically, strong correlations between the conceptualizations of gay men and straight women, and separately, straight men and lesbian women were found in relation to stereotypical attributes, highlighting the existence of unwavering perceptions of gay men and lesbian women despite vastly different social and legal situations for LGBTQ members. Similarly, Fingerhut and Peplau (2006) tested the perceived levels of masculinity or femininity of gay men belonging to various social/occupational roles; perceived femininity altered participants' perceptions of men in which gay men in feminine roles were evaluated as more typical of gay men, while membership in masculine roles increased the conceptual distance between the target group and stereotypical gay men. More recent research, however (Clarke & Arnold, 2017; Clarke & Arnold, 2018) did not find full support of the implicit inversion theory when implementing a similar methodology across multiple studies. While straight targets were, in fact, evaluated similarly to past research, gay men and lesbian women were not significantly different in participants' ratings. The authors argued a potential shift in the conceptualization of gay and lesbian people from a dichotomous, to an androgynous, point of view, might have influenced the overall evaluations and called for additional research which may, consequently, alter the theory itself.

While gay men and lesbian women have undoubtedly faced disproportionate levels of discrimination compared to their heterosexual counterparts (Gabriel & Banse, 2006; Handlovsky et al., 2018; Mathies et al., 2019; Mishel, 2020) under the seemingly arbitrary pretense of sexual preference, upon closer examination, a trend in discrimination arises based on the perceived levels of femininity or masculinity of gay men and lesbian women which nearly mirrors the discrimination against straight women. For example, in a masculine-oriented occupational setting, participants showed signs of discrimination against gay white men, but not gay black men, seemingly because of the heightened stereotypical masculinity that black men hold compared to white men (Pedulla, 2014). Furthermore, gay

men were perceived as having better chances at success in female-oriented occupations (Steffens et al., 2018). However, lesbian women may actually benefit from the heightened level of perceived masculinity in workplace settings, perhaps under the pretense that feminine lesbian women may behave similarly to feminine straight women (i.e., stereotypically less suited for work) (Dozier, 2017; Peplau & Fingerhut, 2004). Of course, findings and discussions regarding the implicit inversion theory perpetuate the notion of bipolarity between masculinity and femininity – that is, both cannot exist simultaneously and behaviors that match both are simply viewed as stereotypically neutral. We ascertain this idea, as traditionally, masculinity and femininity are highly salient attributes in cross-cultural contexts. Even though individuals may be perceived as both masculine and feminine depending on the scenario, society, in general, does not typically look at individuals past their presenting gender. As such, individuals who do not conform with gender stereotypes may, or may not, be susceptible to unique experiences.

Gender Nonconformity

Potential consequences may arise for those who do not stereotypically conform to their presenting gender due to ideations of traditional masculinity or femininity. For instance, men who exhibit displays of feminine behaviors (e.g., being nurturing toward others' children) and women who engage in stereotypically masculine behaviors (e.g., deciding to forward their career instead of starting a family), may be societally punished for their failure to engage in traditional behaviors and/or roles (Haines et al., 2016; Prentice & Carranza, 2002; Skočajić, 2019). Men have been found to be reluctant to form close personal relationships (such as friendships) with feminine men, so as to not weaken their own self-identifications as masculine or not to be perceived by others as gay (even if the feminine man in question is not gay himself) (Gul & Uskul, 2021). Moreover, although masculine women report greater workplace satisfaction than feminine women in stereotypically male spaces, women working in female-dominated fields have expressed increased amounts of emotional and psychological stress centered around "fitting in" (Dozier, 2017). Unfortunately, as a consequence, straight men and women tend to self-conform to gendered stereotypes, regardless of the progressive shift in societal ideologies (Hentschel et al., 2019).

This action not only preserves the nature of traditional gender stereotypes, but also limits the extent to which men may be viewed as men and women may be viewed as women based on how masculine or feminine they are perceived to be, respectively.

This effect is not as straightforward for gay men and lesbian women as it is for straight men and women, due to the fact that gay men and lesbian women are already seen as gender nonconforming (i.e., more feminine than the average man, and more masculine than the average woman, respectively). In other words, masculine gay men and feminine lesbian women may be perceived as gender conforming (i.e., traditional), while feminine gay men and masculine lesbian women may be perceived as gender nonconforming (i.e., nontraditional). For instance, masculine gay men may be evaluated more positively than feminine gay men (Cohen, 2009), and separately, men may exhibit negative affect toward feminine gay men, particularly when a self-administered personality test was manipulated to insinuate they were more feminine in nature (Glick et al., 2007). Similarly, masculine lesbian women may be more disliked than feminine lesbian women (Cohen, 2009), and they may receive more negative stereotype attributions than feminine lesbian women (Geiger et al., 2006). Importantly, these results were obtained in neutral settings, contrasting the effects found in masculine-oriented workplaces.

It appears that the level of perceived gender conformity in straight men, gay men, straight women, and lesbian women may be directly linked to the perceived levels of masculinity and femininity of each gender, regardless of sexual orientation. For straight individuals, counterstereotypicality may harm the individual, but for gay or lesbian individuals, counterstereotypicality may actually benefit them. This calls for the continuation of psychological research regarding the intersection of perceived gender nonconformity, in order to provide a deeper understanding of the extent to which masculinity and femininity influences perceivers' evaluations.

The Current Project

While there has been ample research on the specific stereotypic traits attributed to men and women across sexual orientation, less research has examined the stereotypic behaviors of those various

social groups. In fact, similar research tends to focus on a single identifying word or short phrases which may be applicable toward social groups, without considering complex conceptualizations and potential use of materials included in adjacent paradigms (e.g., "Who Said What?") (e.g., Blashill & Powlishta, 2009; Clarke & Arnold, 2017; Clarke & Arnold, 2018; Geiger et al., 2006; Fingerhut & Peplau, 2006; Kite & Deaux, 1987; McDermott, 2019; Plaza et al., 2017). Longer phrases and stereotypical behaviors may be transformed from these single-word or short phrases, of course (e.g., "*Creative*" may transform into, "S/He painted a picture last week"), but these phrases require experimental testing as unexpected results might occur when participants consider the complexity of the behavior and/or phrase, rather than a sole characteristic (Cipriano et al., 2021). At the same time, imagining behavioral outputs (rather than a behavioral descriptor) requires a deeper level of cognitive processing, giving us a more nuanced understanding of the conceptualizations of stereotypical and counterstereotypical individuals. However, this requires valuable time, effort, and resources which may not be readily available to all researchers – a goal of Study 1 in this project.

Despite a lack of materials, advancements have been made regarding the conceptualizations of behaviors, with researchers identifying this process in young children where children appeared to be aware of sociocultural norms at a young age and categorized behaviors (e.g., playing with a stereotypical or counterstereotypical toy) based on traditional notions of masculinity and femininity (Skočajić et al., 2021). This effect continue into adulthood, in which individuals may: perceive certain social groups as more (or less) likely to engage in specific behaviors (e.g., "The soccer fan shouts at the waiter" versus "The nurse shouts at the waiter") (Wigholdus et al., 2003), be more likely to recognize stereotypical or counterstereotypical behaviors upon priming (Sherman et al., 1997), and separately, men reported higher levels of cognitive dissonance (e.g., discomfort) when imagining the act of partaking in feminine behaviors, but not masculine behaviors (Borinca et al., 2021; Bosson, 2005). Finally, Cipriano et al. (2021) constructed a database of behaviors (rather than traits) for men, women, young individuals, and old individuals implementing a comparable methodology to the current one in which participants evaluated of each group's typical behaviors. Although implied be some prior research (e.g., Bosson, 2005;

Fingerhut & Peplau, 2006; Gul & Uskul, 2021) that lower levels of masculinity and femininity is correlated with gay men or lesbian women (respectively), few studies, to our knowledge, use methodologies use behavioral approaches to test the implicit inversion theory.

This project explored the perceived stereotypical and counterstereotypical behaviors of straight men, gay men, straight women, and lesbian women. In the first study, typical behaviors of each group were identified by presenting a large-scale list of masculine or feminine behaviors to participants, who were then asked to evaluate each behavior on a bipolar scale of how typical it was of men and women to test the implicit inversion theory and gender-typical behaviors (see Blashill & Powlishta, 2009; Cipriano et al., 2021; Katz, 2007; Kite & Deaux, 1979; Rule, 2017; Wong et al., 1999). Study 2 extended this methodology to examine whether or not stereotypical (e.g., masculine straight men) and counterstereotypical social groups (e.g., feminine lesbian women) would be: perceived as less stereotypical of their respective target group, and separately, conceptualized in accordance with the implicit inversion theory (see Bosson, 2005; Cipriano et al., 2021; Gul & Uskul, 2021; Katz, 2007; Rule, 2017; Sherman et al., 1997).

Study 1

According to the implicit inversion theory, several hypotheses were developed. We first predicted masculine behaviors would be correlated with straight men and lesbian women (Hypothesis 1a: H:1a), while feminine behaviors would be correlated with gay men and straight women (H:1b). Naturally, we also expected that the behaviors typical of straight men and lesbian women would be significantly correlated with one another (H:2a), and separately, the behaviors typical of gay men and straight women would be significantly correlated with one another (H:2b).

Method

Participants

Portuguese students were recruited through their university in exchange for a voucher to a local retailer or course credit. Participants were required to be Portuguese (i.e., having a Portuguese nationality) and be at least 18 years old. A G*Power priori power analysis revealed that, using a within-subjects

design, we would need at least 84 participants to detect coefficients as small as .2 (Pearson's *r*) at 80% power when α = .05. In total, 94 participants between 18 and 52 (*M* = 21.23, *SD* = 6.65) were recruited. The sample included mostly women (84%), with 13 men and 2 individuals that did not specify their gender, and moreover, the majority of the sample was straight (71%) with 20 participants self-identifying as 'Other LGBTQ', 6 self-identifying as gay/lesbian, and 1 who chose not to specify. This study was approved by the ethics committee of the lead author's institution and was not preregistered.

Materials

Materials were adapted from prior research which analyzed stereotypical traits or behaviors attributed to men (or, masculinity) and women (or, femininity). Importantly, the current project translated these previously-tested materials into Portuguese without changing the connotation of the traits or phrase to maximize the generalizability between languages. All behavioral phrases were roughly similar in length and grammatical difficulty to create methodological consistency and ensure participants understood the denotations of each phrase. The translations were performed by two bilingual judges (in Portuguese and English) who were required to reach a general consensus on each translation. To save time and increase validity, we selected a number of pre-tested behaviors from prior international and national research. Specifically, 142 behaviors were taken from Cipriano et al. (2021), which tested gender stereotypes related to stereotypical or neutral behaviors, 75 behaviors were adapted from the work on gender-stereotypical behavioral norms by McDermott et al. (2019), and 17 final phrases were created from the stereotypically-male and -female behaviors as reported in Plaza et al. (2017), resulting in 234 tested behaviors (74 masculine, 81 feminine, and 79 neutral).

Procedure

Participants were invited to partake in an online study which examined the stereotypical behaviors attributed to certain social groups in Portuguese society. After reading the introduction and giving their informed consent, participants were separated into two conditions (i.e., male or female target groups) and instructed to evaluate each of the 234 behaviors on a Likert-type scale ranging from 1 (*Typical of straight men/straight women*) to 7 (*Typical of gay men/lesbian women*) based on how they

believe society perceives these social groups (4 was *Typical of neither*). Importantly, societal perception was emphasized to minimize possible effects of the sample's demographics, and participants were reminded to report Portuguese society's point of view, rather than their own, to increase the applicability as a measure of cultural stereotypes. As this study's methodology was redundant, behaviors were presented randomly with no structure to the specific order of the behaviors to account for a potential decrease of response quality due to participant fatigue (which was not detected). Upon completion of the study in a single session, participants were asked to answer the demographic questions before being awarded with a voucher to a local retailer, or, course credit in exchange for their effort.

Results

The Database

Each behavior's mean and standard deviation were calculated to provide a theoretical ranking of the behaviors most (and least) typical of each target group, with a lower mean (i.e., closer to 1) representing higher typicality of straight men and women, and a higher mean (i.e., closer to 7) representing higher typicality of gay men and lesbian women. After behaviors were rank-ordered according to their mean, each was subject to a one-sample t-test against the midpoint (i.e., 4) which allowed us to view whether each item was significantly above the midpoint (i.e., more typical of gay men and lesbian women), below the midpoint (i.e., more typical of straight men and women), or not significantly different (i.e., neutral of both groups). This process allowed us to have a straightforward and clear ideation of the most stereotypical behaviors for each of the main groups which are used in Study 2.

The 5 most typical behaviors of each group are shown in Table 1 to provide a general understanding of the types of behaviors attributed to straight men, gay men, straight women, and lesbian women. Due to space limitations, the full list of 234 behaviors may be found in the online supplemental materials (OSF: https://osf.io/hngjw/?view_only=54a3d6193e6e4eb7be0f96843603c3b0). In total, however, 82 behaviors were considered typical of straight men, 92 behaviors were considered typical of gay men, 54 behaviors were considered typical of straight women, and 52 behaviors were considered typical of lesbian women. Specifically, straight men shared 63% of their behaviors with the masculine

behaviors, gay men shared 61% of their behaviors with the feminine behaviors, straight women shared 50% of their behaviors with the feminine behaviors, and lesbian women shared 56% of their behaviors with the masculine behaviors. However, these values are still much greater than the groups' shared behaviors with the counterstereotypical behaviors[20].

Table 1

Stereotypical Behaviors of Straight Men, Gay Men, Straight Women, and Lesbian Women

Straight Men			**Gay Men**		
Behavior	*Mean*	*SD*	Behavior	*Mean*	*SD*
Is against same-sex marriage	1.54	1.13	Watched the runway show last week	5.77	0.92
Hasn't cried in 5 years	1.87	0.95	Went to Fashion Week Lisboa last year	5.81	0.99
Hunted a boar	2.04	1.20	Wore a navy-blue dress at their best friend's wedding	5.87	1.39
Was on the university football team	2.21	0.92	Went to a protest supporting tolerance of LGBT	5.92	1.40
Served in the national army for 5 years	2.23	1.02	Listened to Taylor Swift's last single	5.94	0.94
Straight Women			**Lesbian Women**		
Behavior	*Mean*	*SD*	Behavior	*Mean*	*SD*
Is against same-sex marriage	1.69	1.00	Got in trouble at work for being too direct	4.81	1.37
Went to church last Sunday	2.57	1.23	Rides a skateboard	4.83	1.15

[20] Straight men shared 4% of their behaviors with the feminine behaviors, gay men shared 8% of their behaviors with the masculine behaviors, straight women shared 13% of their behaviors with the masculine behaviors, and lesbian women shared 15% of their behaviors with the feminine behaviors.

Watched the new "50 Shades of Grey" movie	3.00	1.27	Got a nose piercing on the weekend	5.05	1.04
Has long nails	3.00	1.71	Stands up for what they believe in every day	5.14	1.00
Does not leave home without lipstick	3.02	1.41	Accepted their gay friend	5.19	1.19

Testing the Hypotheses

Hypothesis 1 sought to identify a relationship between masculine and feminine behaviors with straight and gay/lesbian behaviors, respectively, in accordance with known stereotypes attributed to men and women on the axis of sexual orientation. To test this transposal of behaviors, all masculine and feminine behaviors were analyzed in a chi-square test of independence. Behaviors that explicitly mentioned either supporting or protesting the LGBTQ community were removed ($N = 5$) to provide a more robust understanding of the behaviors since it is unsurprising that these would be highly affected by the targets' sexual orientations. As a result, 72 masculine and 78 feminine behaviors were considered for analysis. A 2 (Behavior: masculine and feminine) x 4 (Target group: straight men, gay men, straight women, and lesbian women) chi-square test of independence was performed, as the tested groups were merely categorizations of their gender. Results indicated a significant relationship between behavior type and target group, as predicted ($X^2(3, N = 189) = 105.45$, $p < .001$), suggesting masculine behaviors appeared more in the perceptions of straight men and lesbian women, and separately, feminine behaviors appeared more in the perceptions of gay men and straight women. Results supported H:1a and H:1b (see Table 2).

Table 2

Chi-square Frequencies of Masculine and Feminine Behaviors

Group	Behaviors

		Masculine	*Feminine*	*Total*
Straight Men	Count	52	3	55
	% of total	*27.51%*	*1.59%*	*29.10%*
	Pearson Residuals	*4.63*	*-4.66*	
Gay Men	Count	7	56	63
	% of total	*3.70%*	*29.63%*	*33.33%*
	Pearson Residuals	*-4.38*	*4.41*	
Straight Women	Count	7	27	34
	% of total	*3.70%*	*14.29%*	*17.99%*
	Pearson Residuals	*-2.44*	*2.45*	
Lesbian Women	Count	29	8	37
	% of total	*15.34%*	*4.23%*	*19.58%*
	Pearson Residuals	*2.41*	*-2.43*	*0.20*
Total	Count	95	94	189
	% of total	*49.74%*	*50.26%*	*100.000 %*

Next, correlative analyses were performed to examine the strength of the relationship between straight men and lesbian women, and gay men and straight women, separately. In line with the prior analysis, only masculine and feminine behaviors were tested. First, a Spearman's rho correlation test revealed a moderate positive correlation between men and women ($r(148) = .48$, $p < .001$), suggesting that when the combined scores of straight men and lesbian women were compared to the combined scores of gay men and straight women, there was a significant relationship between the two groups. More specifically, behaviors rated as stereotypical of straight men were likely to be rated as stereotypical of lesbian women. Inversely, behaviors perceived as stereotypical of gay men were likely to be perceived as stereotypical of straight women. This effect increased when considering the 50 most masculine and feminine behaviors (of straight and gay men, respectively) ($r(98) = .53$, $p < .001$), the top 30 masculine and feminine behaviors ($r(58) = .63$, $p < .001$), and, the top 10 masculine and feminine behaviors, $r(18) = .94$, $p < .001$. When removing more neutrally-rated, or less typical, behaviors, and thereby decreasing the amount of ambiguity, correlations regarding the implicit inversion theory become stronger. Results supported H:2a and H:2b.

Discussion

Although findings supported the main hypotheses in Study 1, the strength of the results was not as strong as we expected. First, while we found evidence that pretested masculine behaviors may correlate with what is perceived as stereotypical of straight men and lesbian women, and separately, pretested feminine behaviors may correlate with what is perceived as stereotypical of gay men and straight women, the number of behaviors shared was lower than predicted (although, not less than 50%). Moreover, while there were significant correlations between the behavioral evaluations of straight men and lesbian women, and separately, gay men and straight women, the strength of the relationship was not large ($r = .48$, $p < .001$) when all masculine and feminine behaviors were tested. At the same time, participants gave more varied responses for male targets compared to female targets in the sense that female targets had significantly more neutrally-rated behaviors than male targets, which might have influenced the strength of the analyses in Study 1. This effect may be further explained by the bipolar scales implemented in

Study 1, as the nature of the experimental design inherently puts each gender group against one another, thus increasing the potentiality for missed behaviors. Nonetheless, findings did support the main hypotheses and Study 2 was created to examine the idea of counterstereotypicality of members from each of the 4 original social groups used in Study 1.

Study 2

Study 2 sought to extend the findings of Study 1 by examining not only how close stereotypical or counterstereotypical members are evaluated to their main groups, but also the implicit inversion theory. Specifically, we wanted to see whether perceived masculinity would shift participants' perceptions of straight men, gay men, straight women, and lesbian women, meaning that job orientation (i.e., assumed masculinity/femininity) would be a greater predictor of typicality than sexual orientation. From past research, several hypotheses were developed. First, we predicted men perceived as stereotypical of their constituent group (i.e., masculine straight men and feminine gay men[21]) would be evaluated as more typical of the main group (i.e., straight men and gay men, respectively) (Hypothesis 1a: H:1a), while men perceived as counterstereotypical of their constituent group (i.e., feminine straight men and masculine gay men) would be evaluated as more typical of the *opposite* group (i.e., gay men and straight men, respectively) (H:1b). Moreover, we expected female target groups to follow this pattern where women perceived as stereotypical of their constituent group (i.e., feminine straight women and masculine lesbian women) would be evaluated as more typical of the main groups (i.e., straight women and lesbian women, respectively) (H:2a), while women perceived as counterstereotypical (i.e., masculine straight women and feminine lesbian women) would be evaluated as more typical of the opposite group (i.e., lesbian women and straight women, respectively) (H:2b). Next, we predicted straight and gay men with feminine jobs would be typical of straight women (H:3a), and separately, straight and lesbian women with masculine

[21] Masculinity and femininity are used interchangeably with occupation type. For instance, the phrase masculine straight men refers to the group, *straight men with masculine jobs*, feminine straight men refers to the group, *straight men with feminine jobs,* and so on.

jobs would be typical of straight men (H:3b). Finally, we hypothesized that masculine individuals (i.e., groups with masculine jobs, regardless of sexual orientation and gender) would be perceived as more masculine than feminine individuals (H:4a) and counterstereotypical individuals would be more difficult to conceptualize than their stereotypical counterparts (H:4b).

Method

Participants

Portuguese students were recruited through their university in exchange for course credit. Participants were required to be Portuguese (i.e., having a Portuguese nationality) and be at least 18 years old. A G*Power priori power analysis revealed that, using a within-subjects design, we would need at least 62 participants to detect effect sizes as small as .025 (η^2p) at 80% power when $\alpha = .05$. In total, due to invalid responses, 60 participants between 18 and 24 ($M = 19.80$, $SD = .99$) were recruited. The sample included mostly women (85%), with 7 men and 2 individuals that did not specify their gender, and moreover, the majority of the sample was straight (60%) with 17 participants self-identifying as 'Other LGBTQ', 3 self-identifying as gay/lesbian, and 4 who chose not to specify. This study was approved by the ethics committee of the lead author's institution and was not preregistered.

Materials and Stimuli

The 10 most stereotypical behaviors of each group in Study 1 and the 10 most neutral behaviors of all target groups (e.g., "Goes to the cinema") were presented to participants in Study 2, with shared behaviors (e.g., "Puts makeup on to go to a party" was stereotypical of both gay men and straight women) shown once to participants to avoid duplicating the items. In total, 34 stereotypical behaviors and 10 neutral behaviors were presented in the first task; in the second task, participants were shown *only* the behaviors they selected for each group (see Procedure for more information). Importantly, behaviors were adapted from Study 1 to Study 2 to better fit the prompts presented to participants, as Study 1 asked participants to evaluate how typical each behavior was of certain groups and Study 2 asked participants to select all behaviors that each group was likely to engage in. Specifically, words related to temporal aspects were removed (e.g., "Hasn't cried in 5 years" was changed to "Never cries") (N = 4) and verbs

were changed to the infinitive (e.g., “Wrote a post on their blog about fashion” was changed to “Writes posts on their blog about fashion”), but importantly, the behavioral nature of the design was maintained. Additionally, any behavior related to the acceptance, or unacceptance, of the LGBTQ community was again removed to provide a more robust answer.

We manipulated the implied masculinity and femininity of the main groups (i.e., straight men, gay men, straight women, and lesbian women) by including 4 male- or female-dominated jobs in Portugal (INE, 2023); specifically, construction worker, truck driver, miner, and metalworker were used as masculine occupations, and esthetician, secretary, makeup artist, and seamstress were used as feminine occupations[22]. Each group was introduced using the same formula (i.e., [*main group*] + [*occupation*]) to avoid inconsistency between the individuals and their job titles; for instance, participants might be presented with the target “straight male construction worker” to represent the masculine straight male condition, and all masculine and feminine jobs were collapsed for final analyses[23].

Procedure

Participants were invited to take part in an online study regarding the daily behaviors of certain individuals in society. After reading the instruction and giving their informed consent, participants were again asked to provide a societal point of view when evaluating the stereotypical behaviors of individuals to account for potential issues with the demographic makeup of the sample. Participants were randomly shown 8 non-repeating targets and were asked to select *all* of the behaviors that each group of individuals are likely to engage in from a list of 44 behaviors (see *Anonymized for Peer Review (2023)* and Petsko & Bodenhausen (2019) for a similar methodology). After selecting all stereotypical behaviors, participants were required to rank-order the 10 behaviors most stereotypical of each group and were not allowed to select more (or less) than 10 behaviors. Upon completing this procedure for all groups, participants were asked to evaluate how masculine or feminine all groups were (ranging from 1 (*Extremely masculine* to 7

[22] Jobs were originally presented in Portuguese and did not require translations from English; moreover, jobs were masculinized or feminized according to Portuguese gender rules (e.g., mineiro versus mineira).
[23] All of the permutations were found to be nonsignificantly different across groups, allowing us to collapse the jobs for final analyses. See the supplemental materials for more the analysis.

(*Extremely feminine*)) and how difficult it was to imagine each group, ranging from 1 (*Extremely easy*) to 7 (*Extremely difficult*). Finally, participants were asked to report their demographic identifiers before being awarded course credit for their effort.

Results

Descriptive Results

Behaviors were first rank-ordered to provide a better understanding of the specific behaviors evaluated as typical of each target group. To calculate the frequency, behaviors were totaled and averaged by the total number of participants; in other words, frequency equals the percentage of participants who selected a specific behavior (see Table 3 for the top 5 behaviors selected, to conserve space). Most noticeably, all stereotypical groups had higher average frequencies with their constituent group's anchors from Study 1 than counterstereotypical groups, when considering the 10 most representative behaviors of each target group. Specifically, masculine straight men (66%) shared more behaviors with straight men than feminine straight men (50%), feminine gay men (63%) shared more behaviors with gay men than masculine gay men (44%), feminine straight women (66%) shared more behaviors with straight women than masculine straight women (44%), and masculine lesbian women (59%) shared more behaviors with lesbian women than masculine lesbian women (54%), suggesting participants' perceptions of each target group were shifted by assumptions of masculinity and femininity dependent on job type.

Table 3

Frequency of Most Selected Behaviors

Straight Men			
Masculine Jobs	*Frequency*	Feminine Jobs	*Frequency*
Never cries *	80%	Wears a tie to weddings ††	73%
Invites friends to a football game *	78%	Goes to the cinema	60%

Serves in the army *	75%	Watches the runway show **	57%
Talks about their experience in the army *	73%	Always says yes to plans with friends	52%
Does military service *	73%	Takes an hour to get ready †	47%

Gay Men

Masculine Jobs	*Frequency*	Feminine Jobs	*Frequency*
Wears a tie to weddings ††	55%	Puts make up on to go to a party **†	78%
Stands up for what they believe in every day ††	55%	Watches the runway show **†	77%
Gets nose piercings ††	50%	Takes an hour to get ready †	73%
Listens to Taylor Swift's music **	45%	Listens to Taylor Swift's music **	67%
Goes to the restaurant beneath their home	42%	Stands up for what they believe in every day ††	65%

Straight Women

Masculine Jobs	*Frequency*	Feminine Jobs	*Frequency*
Goes to the restaurant beneath their home	57%	Puts make up on to go to a party **†	92%

Never cries *	50%	Does not leave home without lipstick **†	80%
Gets in trouble at work for being too direct ††	50%	Takes an hour to get ready †	77%
Does military service *	43%	Has long hair †	75%
Stands up for what they believe in every day ††	43%	Has long nails **†	70%

Lesbian Women

Masculine Jobs	*Frequency*	Feminine Jobs	*Frequency*
Gets nose piercings ††	73%	Participates in feminist marches ††	83%
Gets in trouble at work for being too direct ††	72%	Stands up for what they believe in every day ††	68%
Stands up for what they believe in every day ††	70%	Gets nose piercings ††	67%
Wears a tie to weddings ††	68%	Puts make up on to go to a party **†	60%
Participates in feminist marches ††	63%	Takes an hour to get ready †	50%

Note. Behaviors are translated into English. For the original behaviors in Portuguese, please refer to the online supplemental materials. An asterisk indicates the behavior was typical of straight men, two asterisks indicate the behavior was typical of gay men, a dagger indicates the behavior was typical of straight women, and two draggers indicate the behavior was typical of lesbian women. Combined

symbols indicate the behavior was representative of two groups (e.g., “Buys Vogue magazines **†” is typical of gay men and straight women in Study 1).

Testing Proximity to the Target Anchors

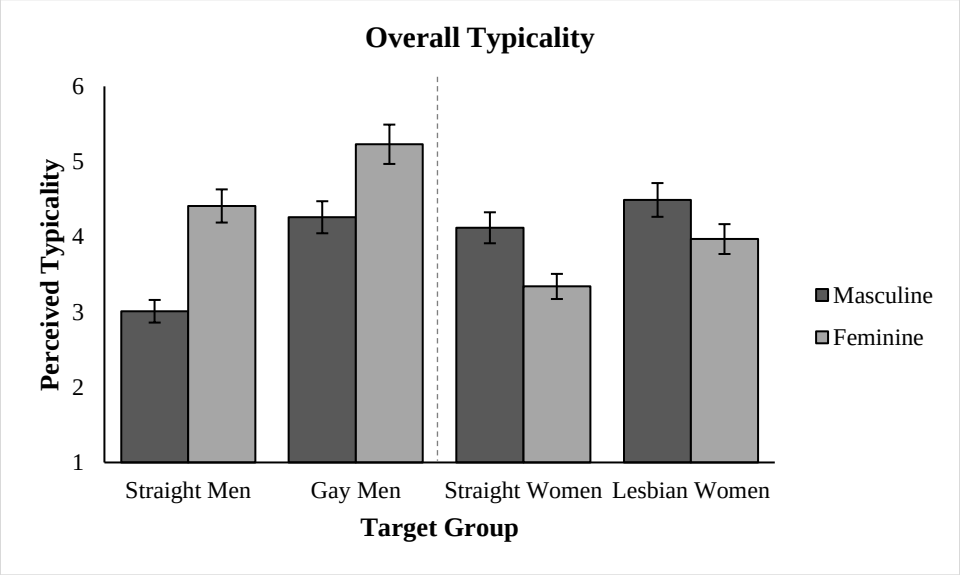
We conducted the subsequent analyses using an anchor system (see *Anonymized for Peer Review (2023)* and Petsko & Bodenhausen (2019) for a similar procedure), in which the 10 behaviors most stereotypical of each of the 8 target groups were anchored to the means found in Study 1 (for the same behaviors). For example, the behavior “Never cries” was the most common behavior selected for straight masculine men in Study 2, and had a mean of 1.87 in Study 1 on the male anchor (i.e., the bipolar Likert-type scale including straight men and gay men), indicating this behavior was highly stereotypical of straight men. Using this procedure allowed us to generate numerical values for rank-ordered behaviors.

A 2 (Job orientation: masculine or feminine) x 2 (Sexual orientation: Straight or gay) repeated measures analysis of variance test (ANOVA) was conducted using the male target groups and anchors. As predicted, men with masculine jobs (M = 3.63, SD = .60) were perceived as more typical of straight men compared to men with feminine jobs (M = 4.82, SD = .58) (F(1, 59) = 241.91, p <.001, η^2p = .80), and separately, straight individuals (M = 3.60, SD = .60) were evaluated as more typical of straight men than gay individuals (M = 4.62, SD = .58), F(1, 59) = 134.30, p <.001, η^2p = .70. Moreover, a significant interaction between variables was found (F(1, 59) = 9.30, p = .003, η^2p = .14) and a series of planned contrasts confirmed straight men with masculine jobs (M = 3.01, SD = .46) were perceived as more typical of straight men than all other groups in a three-versus-one comparison (t(170.40) = 17.78, p <.001), and separately, gay men with feminine jobs (M = 5.23, SD = .41) were viewed as more typical of gay men than all other groups in a three-versus-one comparison, t(170.40) = -14.63, p <.001. Unexpectedly however, straight men with feminine jobs (M = 4.41, SD = .75) were *not* perceived more or less typical of straight or gay men when compared to gay men with masculine jobs (M = 4.26, SD = .75), t(115.33) = -1.33, p = .186, suggesting that, while participant evaluations were shifted by

counterstereotypical groups, this effect was not as strong as expected (see Figure 1). Results largely supported H:1a and H:1b.

Figure 1

Perceptions of Typicality as a Function of Stereotypical and Counterstereotypical Individuals



Note. Men were evaluated on the male anchors and women were evaluated on the female anchors; therefore, each gender should be viewed separately. A lower score represents a higher typicality of straight men and women, while a higher score represents a higher typicality of gay men and lesbian women. Job orientation is represented in the legend under Masculine and Feminine. 95% confidence intervals are shown.

A second 2 (Job orientation: masculine or feminine) x 2 (Sexual orientation: Straight or lesbian) repeated measures ANOVA was performed considering the female target groups and anchors using the same analytical procedure as above, except on the female anchor (i.e., the bipolar Likert-type scale including straight women and lesbian women). Again, as predicted, women with feminine jobs (M = 3.66, SD = .27) were perceived as more stereotypical of straight women compared to women with masculine jobs (M = 4.30, SD = .28) ($F(1, 59) = 322.37$, $p < .001$, $\eta^2p = .85$), and separately, straight individuals (M

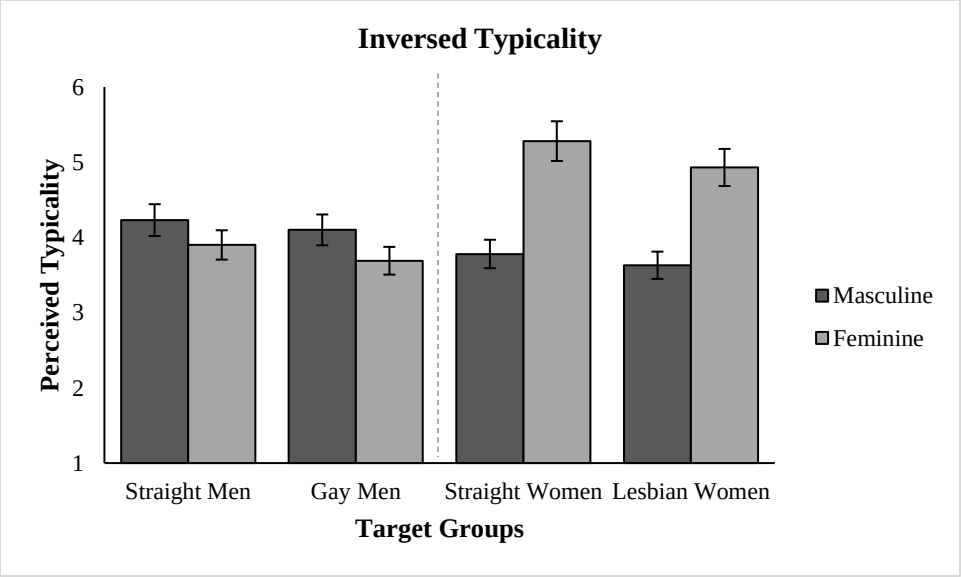
= 3.73, *SD* = .24) were viewed as more stereotypical of straight women than lesbian individuals (*M* = 4.23, *SD* = .31), $F(1, 59) = 200.13$, $p < .001$, $\eta^2 p = .77$. A significant interaction was found ($F(1, 59) = 14.19$, $p < .001$, $\eta^2 p = .19$) and a series of planned contrasts confirmed straight women with feminine jobs (*M* = 3.34, *SD* = .15) were seen as more typical of straight women when compared to all other groups in a three-versus-one comparison ($t(176.94) = 20.80$, $p < .001$), and separately, lesbian women with masculine jobs (*M* = 4.49, *SD* = .23) were perceived as more typical of lesbian women when compared to all other groups in a three-versus-one comparison, $t(176.94) = -16.49$, $p < .001$. Finally, straight women with masculine jobs (*M* = 4.12, *SD* = .32) were evaluated as more typical of lesbian women than lesbian women with feminine jobs (*M* = 3.97, *SD* = .38) (while the opposite is also true), suggesting counterstereotypical groups affected participants' evaluations of female targets (see Figure 1). Results supported H:2a and H:2b.

Testing the Implicit Inversion Theory

The gender inversion hypothesis was tested using the same analytical procedure with the opposite genders' anchors. A 2 (Job orientation: masculine or feminine) x 2 (Sexual orientation: straight or gay) repeated measures ANOVA was performed using the male target groups and the female anchors. As predicted, men with feminine jobs (*M* = 3.80, *SD* = .23) were perceived as more typical of straight women than men with masculine jobs (*M* = 4.17, *SD* = .22) ($F(1, 59) = 221.31$, $p < .001$, $\eta^2 p = .79$), and separately, gay men (*M* = 3.90, *SD* = .24) were viewed as more typical of straight women than straight men (*M* = 4.07, *SD* = .21), $F(1, 59) = 29.45$, $p < .001$, $\eta^2 p = .33$. No significant interaction was found ($F(1, 59) = 1.79$, $p = .186$, $\eta^2 p = .03$), but, post hoc comparisons with a Bonferroni correction revealed all groups were significantly different from one another (*p*-values <.004), with feminine gay men (*M* = 3.69, *SD* = .22) perceived as the most stereotypically similar to straight women, followed by feminine straight men (*M* = 3.90, *SD* = .25), masculine gay men (*M* = 4.10, *SD* = .25), and masculine straight men (*M* = 4.23, *SD* = .18) (see Figure 2). Results supported H:3a and H:3b.

Figure 2

Examining the Gender Inversion Hypothesis



Note. Men were evaluated on the female anchors and women were evaluated on the male anchors; therefore, each gender should be viewed separately. A lower score represents a higher typicality of straight men and women, while a higher score represents a higher typicality of gay men and lesbian women. Job orientation is represented in the legend under Masculine and Feminine. 95% confidence intervals are shown.

The same procedure was used to test the female target groups on the male anchors. A 2 (Job orientation: masculine or feminine) x 2 (Sexual orientation: straight or lesbian) repeated measures ANOVA revealed, as expected, women with masculine jobs (M = 3.71, SD = .61) were viewed as more stereotypical of straight men than women with feminine jobs (M = 5.10, SD = .48) (F(1, 59) = 347.88, p <.001, η^2p = .86), and separately, lesbian women (M = 4.28, SD = .59) were perceived as more typical of straight men than straight women (M = 4.53, SD = .50), F(1, 59) = 14.91, p <.001, η^2p = .20. Again, a nonsignificant interaction between variables was found (F(1, 59) = 2.69, p = .106, η^2p = .04), but, post hoc comparisons with a Bonferroni correction revealed all groups were statistically different from one another (p-values <.001), apart from masculine lesbian women (M = 3.63, SD = .57) and masculine

straight women (M = 3.78, SD = .65) (p = .589, d = .27). In other words, women with masculine jobs were perceived equally stereotypical of straight men (and more so than women with feminine jobs).

Perceived Masculinity, Femininity, and Difficulty

We precited in Hypotheses 4a (H:4a) and H:4b that groups with masculine jobs would be perceived more masculine than groups with feminine jobs (regardless of sexual orientation and gender), and counterstereotypical individuals would be more difficult to conceptualize than their stereotypical counterparts, respectively (see Table 4). A 2 (Job orientation: masculine or feminine) x 2 (Gender: male or female) x 2 (Sexual orientation: straight or gay/lesbian) repeated measures of analysis (ANOVA) test was performed to test the perceived masculinity of the target groups, with emphasis put on the significance of job type and its interactions with the other variables (see Table 4). As predicted, individuals with masculine jobs (M = 2.56, SD = .97) were viewed as more masculine than individuals with feminine jobs (M = 5.38, SD = 1.17) (F(1, 59) = 423.00, p <.001, η^2p = .88) regardless of interactions with gender (F(1, 59) = 20.50, p <.001, η^2p = .26), or interactions with sexual orientation, F(1, 59) = 12.20, p <.001, η^2p = .17. However, an exploratory post hoc comparison with a Bonferroni correction revealed that the least masculine group (masculine gay men, M = 3.50, SD = 1.26) was not significant different from the least feminine group (feminine straight men, M = 4.05, SD = 1.64), p = .268, d = .49. Results nonetheless supported H:4a.

A second 2 (Job orientation: masculine or feminine) x 2 (Gender: male or female) x 2 (Sexual orientation: straight or gay/lesbian) repeated measures ANOVA was performed to examine the difficulty participants had when conceptualizing each group, with special attention paid to the three-way interaction. As predicted, there was a significant interaction between job orientation, gender, and sexual orientation (F(1, 59) = 162.45, p <.001, η^2p = .73), and to test the differences between each paired group (e.g., masculine versus feminine straight men), a series of planned contrasts were performed (see Table 4). Specifically, feminine straight men (M = 3.02, SD = 1.33) were more difficult to imagine than masculine straight men (M = 1.38, SD = .98) (t(232.18) = 8.13, p <.001), masculine gay men (M = 3.68, SD = 1.19) were more difficult to imagine than feminine gay men (M = 1.58, SD = .93) (t(232.18) = -10.21, p <.001),

and masculine straight women (M = 3.38, SD = 1.28) were more difficult to imagine than feminine straight women (M = 1.33, SD = .91) (t(232.18) = -10.46, p <.001). However, feminine lesbian women (M = 2.28, SD = 1.29) were not perceived as more difficult to imagine than masculine lesbian women (M = 2.42, SD = 1.28, t(232.18) = -.66, p = .507. Nonetheless, results largely support H:4b.

Table 4

Perceived Masculinity, Femininity, and Difficulty of Groups

Perceived Masculinity			**Difficulty**		
Group	*Mean*	*SD*	Group	*Mean*	*SD*
Masculine Straight Men	1.18	0.43	Feminine Straight Women	1.33	0.91
Masculine Lesbian Women	2.33	0.97	Masculine Straight Men	1.38	0.98
Masculine Straight Women	3.22	1.20	Feminine Gay Men	1.58	0.93
Masculine Gay Men	3.50	1.26	Feminine Lesbian Women	2.28	1.29
Feminine Straight Men	4.05	1.64	Masculine Lesbian Women	2.42	1.28
Feminine Lesbian Women	5.13	1.31	Feminine Straight Men	3.02	1.33

Feminine Gay Men	5.67	1.12	Masculine Straight Women	3.38	1.28
Feminine Straight Women	6.68	0.57	Masculine Gay Men	3.68	1.19

Note. A lower score on the masculinity scale indicates the group is more masculine (i.e., closer to 1), while a higher score indicates the group is more feminine (i.e., closer to 7). A lower score on the difficult scale indicates the group was easier to conceptualize (i.e., closer to 1), while a higher score indicates the group was more difficult to conceptualize (i.e., closer to 5).

Discussion

Results from Study 2 largely supported the main hypotheses, which, in conjunction, provided evidence that stereotypical and counterstereotypical individuals may be conceptualized based on perceived levels of masculinity and femininity. At the same time, all masculine groups (i.e., groups with masculine jobs) were viewed as more masculine, while all feminine groups (i.e., groups with feminine jobs) were viewed as more feminine, and separately, all counterstereotypical groups (apart from feminine lesbian women) were perceived as more difficult to conceptualize than their stereotypical group pairing.

General Discussion

Prior research has found differences in the stereotypes attributed to men and women, particularly on the axis of sexual orientation (e.g., Blashill & Powlishta, 2009; Kite & Deaux, 1987). Results typically follow common social perceptions where masculinity is correlated with straight men and lesbian women, and separately, femininity is correlated with straight women and gay men. Moreover, research regarding stereotypical and counterstereotypical individuals (e.g., Borinca et al., 2021; Bosson, 2005; Fingerhut & Peplau, 2006; Gul & Uskul, 2021; Skočajić et al., 2021; Wigholdus et al., 2003) has shown participants'

perceptions may shift based on perceived stereotypical proximities to main social groups. The current project aimed to replicate these findings by exploring the relationship between male and female targets at the intersection of sexual orientation – with and without manipulations of implied masculinity and femininity, by using stereotypical behaviors as a measure. Results largely supported the main hypotheses, providing support for the implicit inversion theory, and separately, evidence that counterstereotypical individuals may be perceived as less typical of their constituent groups.

First, it was found that masculine and feminine behaviors (see Cipriano et al., 2021; McDermott et al., 2019; Plaza et al., 2017) were perceived as predicted. Specifically, masculine behaviors were more likely to be attributed to straight men and lesbian women, while feminine behaviors were more likely to be attributed to gay men and straight women, corroborating findings from past research with stereotypical traits (Katz, 2007; Kite & Deaux, 1987; Rule, 2017; Wong et al., 1999). Importantly, results from this study suggest the extension from stereotypical attributes to stereotypical behaviors, providing further understanding of the relationship between sexuality and masculinity or femininity, across genders. At the same time, gay men were found to be correlated with straight women and lesbian women were found to be correlated with straight men, supporting the implicit inversion theory (Blashill & Powlishta, 2009; Katz, 2007; Kite & Deaux, 1987; Wong et al., 1999). More specifically, as the evaluations of stereotypical behaviors decreased on the male anchor (i.e., becoming more typical of straight men), they simultaneously increased on the female anchor (i.e., becoming more typical of lesbian women). Alternatively, as the ratings of stereotypical behaviors increased on the male anchor (i.e., becoming more typical of gay men), the ratings of behaviors decreased on the female anchor (i.e., becoming more typical of straight women). In other words, straight male and female targets were perceived as gender typical, while gay male and lesbian female targets were perceived as gender atypical. However, the behaviors attributed to straight women and lesbian women were less varied than male target groups, suggesting potential ambiguity in conceptualizations. This could be partially explained by weaker consistency in the stereotypes attributed to women, when compared to men (Deikman et al., 2005; Eagly & Kite, 1987), and furthermore, there is a lack of explicit stereotypes for lesbian women (e.g., Klysing, 2023). As women are

viewed as more caring or communal, behaviors (e.g., hugging) which may indicate homosexuality in men may not be translatable to women, posing social and logistical challenges for lesbians in both experimental designs and real-world scenarios, alike (Lewis, 2019). Simultaneously, there is a lack of media representation for lesbian women (especially compared to gay men), making it more difficult for individuals to conceptualize lesbian women (GLAAD, 2021) and promoting the invisibility of them.

Study 2 further examined these findings by manipulating the perceived levels of masculinity and femininity by manipulating occupation type for straight men, gay men, straight women, and lesbian women. First, we found that stereotypically masculine individuals (i.e., masculine straight men and masculine lesbian women) were viewed as stereotypical of straight men and lesbian women, respectively, while stereotypically feminine individuals (i.e., feminine gay men and straight women) were viewed as stereotypical of gay men and straight women, respectively, supporting traditional notions of masculinity and femininity related to sexual orientation and the implicit inversion theory (e.g., Blashill & Powlishta, 2009; Bye et al., 2022; Eagly & Steffen, 1984; Fingerhut & Peplau, 2006; Ellemers, 2018; Katz, 2007; Kite & Deaux, 1987; Levy et al., 2000; Wong et al., 1999). Simultaneously, counterstereotypically masculine individuals (i.e., masculine gay men and straight women) were viewed as less typical of gay men and straight women, respectively, while stereotypically feminine individuals (i.e., feminine straight men and lesbian women) were perceived as less typical of straight men and lesbian women, respectively, providing evidence that perceived masculinity may shift the cognitive judgements we have regarding certain types of individuals toward a more gender conforming point of view (e.g., Bosson, 2005; Brambilla, 2011; Cohen et al., 2009; Fingerhut & Peplau, 2006; Geiger et al., 2006; Glick et al., 2007; Gul & Uskul, 2021).

Moreover, individuals with masculine jobs were found to be, as a whole, perceived as more masculine than individuals with feminine jobs. However, masculine gay men were not statistically more masculine than feminine straight men. When considering the difficulty of conceptualizing each group, all counterstereotypical groups (apart from feminine lesbian women) were significantly more difficult to imagine than their stereotypical counterparts; additionally, both lesbian groups were in the middle of all

other groups, suggesting participants perceived them neutrally-difficult to imagine (compared to the other groups), which may be a result of lesbian invisibility created from societal androcentrism (e.g., Deikman, 2005; Eagly & Kite, 1987). Importantly, the findings from this study highlight the conceptual shifts individuals make when attempting to make sense of counterstereotypical groups. Although not explicitly tested in the current project, certain real-world implications may be implied by the results. For instance, feminine men were found to be more stereotypical of straight women, while participants reported reluctancy to forming close relationships with feminine men (compared to masculine men) (Gul & Uskul, 2021), masculine women may wear metaphorical masks to blend in better at work (Dozier, 2017), and counterstereotypical gay and lesbian individuals may be disliked more than their stereotypical counterparts (e.g., Cohen et al., 2009; Brambilla, 2011). Of course, this may cause individuals to conform with the societal stereotypes attributed to their group, potentially increasing emotional distress and/or personal discomfort (Hentschel et al., 2019).

Despite the theoretical advancements this project provides, there are nonetheless a few limitations worth noting. Perhaps most importantly, there were demographic issues with the samples in Study 1 and Study 2, alike. Specifically, both had unequal gender distributions where the majority of participants were women, which might have influenced overall perceptions since men and women may have different point of views regarding gay individuals (Lowe et al., 2021). Moreover, both samples included a majority of young individuals who might be more open, than not, toward gay or lesbian individuals. Although these admittedly challenge the overall strength and generalizability of the findings, we argue results were largely not affected by a gender or age imbalance, because of the similarities between the findings of this project and prior research. Secondly, as we used a bipolar scale in Study 1, our analyses were limited to correlative tests, and, were limited in their extent to identify behaviors which were typical of both male groups or both female groups, although stereotypical behaviors of both groups were likely evaluated closely to the midpoint (see Constantinople, 1973; Diekman & Eagly, 1999). We argue that this is not a cause of great concern as results followed our predictions and supported past research regarding gender inversion and counterstereotypicality. Regardless of the limitations, we believe this project provides both

theoretical and mechanical utility to psychological literature, advancing the field toward a better understanding of the effects of perceived stereotypicality on individuals.

To conclude, this study found evidence that gay men and lesbian women are conceptualized as more typical of the opposite gender than their own gender, and simultaneously, perceived masculinity or femininity assumed from occupation shifted participants' perceptions of individuals. Results from both studies provide support for the implicit inversion theory regarding stereotypical and counterstereotypical individuals, and moreover, provide support that counterstereotypical individuals may not be viewed as stereotypical of their own gender. Practically, the database provided in Study 1 may be used to further examine stereotypes and discrimination attributed to LGBTQ members, while the implications of Study 2 may be applied to the understanding of real-world relations between individuals. We, the authors, are optimistic that our work may be used to continue the global effort toward the equality of all genders and sexual orientations, particularly for those who may not fit nicely into predefined sociocultural norms.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

5.1: General Discussion

The aim of this thesis was to examine the effects of stereotyping toward intersectional individuals, expanding upon psychological theories tested in different contexts to better understand the Portuguese scenario, and test the generalizability of past findings regarding intersectional stereotyping. In Chapters 2.2 and 2.3.1, the stereotypes attributed to straight or gay men and women from certain nationalities were measured; Chapter 2.2 acted as a pretest for Chapter 2.3.1 and focused on three dimensions (i.e., masculinity, the perceived percentage of gay or lesbians in each nation (PGL), economic status) regarding the stereotypical perceptions Portuguese participants had of men and women from 17 nationalities. The methodological approach was exploratory in nature (since it functioned as a pretest), but we were nonetheless able to draw theoretical predictions and conclusions from past literature related to individualist- or collectivist-oriented nationalities. Chapter 2.3.1 furthered this idea by first detailing the specific stereotypical characteristics attributed to male and female Portuguese or immigrant individuals, separated by sexual orientation, in a methodological recreation of Petsko and Bodenhausen's (2019) project on de-racialization. We then tested the perceived immigrantness of individuals from specific nationalities chosen from the work in Chapter 2.2. Interestingly, both straight and gay men from nationalities with a higher PGL (i.e., Brazil and France) were viewed as less prototypically immigrant than straight men from nationalities with a lower PGL (i.e., India and Japan), but gay men from low PGL nations were perceived similarly to straight men from high PGL nations. Moreover, the same effect was found when considering straight or lesbian women, suggesting that straight and gay men and women from high PGL nations experienced de-immigrantization, while only gay and lesbian men and women from low PGL nations were de-immigrantized.

Next, Chapter 3.4 sought to test the potential discrimination minority members might face. Due to budget and time constraints, we were unable to perform a true audit study, but instead we created a scenario in which participants roleplayed as hiring managers tasked with evaluating candidates for a job. We found that, when explicit competence was triggered, there were no differences between straight or gay Portuguese or Brazilian men on any of the measures. However, when implicit competence was triggered

(e.g., providing less information on the curricula vitae (CVs)), straight Brazilian men received more negative evaluations and salary offers than all other groups, including gay Brazilian men. Interestingly, and in accordance with prior research such as Pedulla (2014), being gay protected minority members during the [fictional] job hiring process.

Finally, we examined whether or not participants would apply the same stereotypic thinking when evaluating straight or gay Portuguese and Brazilian men's voices in Chapter 4.2 and 4.3.1. Chapter 4.2 functioned as a pilot study for Chapter 4.3.1, first examining the strength of each speaker's accent and their perceived masculinity or femininity. We found that, as expected, straight speakers were perceived to be more likely to engage in masculine behaviors, while gay speakers were perceived to be more likely to engage in feminine behaviors. However, Brazilian speakers were also more likely to engage in feminine behaviors compared to Portuguese speakers, suggesting Portuguese participants consider Brazilians to be more stereotypically feminine (producing results similar to Chapter 2.3.1). Lastly, Chapter 4.3.1 used the most stereotypically-sounding voices from Chapter 4.2 (in Portuguese and English) to test participants' stereotypical evaluations and memory recall across two studies. Importantly, Brazilians speaking in English were evaluated the most negatively when individual characteristics were considered, but, when group characteristics were considered, Portuguese men speaking in English received the worst overall recall rates, suggesting different scenarios may trigger different conceptualizations of minority members. Chapter 4.4.3, developed as a pretest of stereotypical behaviors for Chapters 4.2 and 4.3.1, resulted in a parallel research line which examined the stereotypical, and counterstereotypical, behaviors of straight and gay men and women to test assumptions made by both the gender inversion hypothesis. We wanted to use behaviors, rather than attributes, to examine whether or not a more complex task (e.g., considering and conceptualizing a behavior) would produce similar findings to prior research which only used short phrases or single-word attributes, and if it could extend results from literature on gender inversion hypothesis. Importantly, we found that gay men and lesbian women were perceived as more similar to straight women and straight men, respectively, while counterstereotypical individuals (e.g., feminine straight men or feminine lesbian women) were perceived as less prototypical of their constituent group

(e.g., straight men or lesbian women, respectively). Again, we found evidence that additional personal identifiers or social categories may cause individuals to be perceived as less typical of their group.

5.2: Main Findings

Chapter 2.2 acted as a pretest for Chapter 2.3.1 but nonetheless produced interesting results regarding the conceptualization of immigrants and intersectional immigrants from 17 nations. Although there have been similar projects regarding the perceived masculinity and economic status of individuals from certain nations (see Eagly & Kite, 1987; Hofstede, 1980; Hofstede, 2011; Lee & Fiske, 2006), this set of studies introduced a unique measure which measured the perceived percentage of gay or lesbian individuals (PGL) from each target group in an attempt to decipher whether or not participants would use objective measures (e.g., anti-discrimination laws or GDP per capita) to create subjective expectations about the individuals from each nation. The findings have important implications for how we might perceive those from other nationalities, especially those who do not fit into the predetermined notions we have.

Most importantly, there were minimal differences in perceptions between the men and women from the same nationality, providing support that national categorizations are highly salient categories, supporting past findings (e.g., Eagly & Kite, 1987; Pratto et al., 2006; Purdie-Vaughns & Eibach, 2008) and the social dominance theory (e.g., Sidanius & Pratto, 1999; Sidanius, 1993). Correlations were found between the men and women of each nationality across all measures, suggesting participants conceptualized the nationality more than the target's gender. For instance, there was little evidence that participants thought a German woman, for instance, was less economically apt than a German man when compared to all other nationalities. However, there was more variance in participants' responses toward male targets, compared to female targets, implying that participants had stronger conceptualizations of men. The generalization and stereotyping of outgroup members is typically driven by the most visible members of the group (Purdie-Vaughns & Eibach, 2008), so it is plausible that national categorizations may be driven by the men from each nationality given the patriarchal world we live in (Pratto et al.,

2006); while understandable how national categorizations may arise (see Eagly & Kite, 1987), it is dangerous to ignore the experiences had by intersectional, immigrant women as they, too, play an important role in society. Although this project did not test stereotype saliency directly, it nonetheless continues the important debate on gender (in)visibility at an international level.

The unique measure introduced, the perceived percentage of gays or lesbians in each group, brings intriguing results to the idea that we may use objective clues to make subjective evaluations. Importantly, individualist-oriented nationalities such as the United States or Germany were correlated with higher PGL scores than collectivist-oriented nations such as India or Mexico. In the modern world, in which gay and lesbian individuals are becoming increasingly visible in media, politics, and daily life, collectivist-oriented nationalities that value social cohesion may make it more difficult for gays and lesbians to show their identities (Brewer, 2014; Lowe et al., 2021). In fact, the majority of individualist-oriented nationalities (86%) included in this project have national-level marriage equality, while only 36% of the collectivist-oriented nations do (HRC, 2023). Participants' evaluations reflected real-world applications, suggesting international assumptions may have influenced PGL judgements (e.g., Haider-Markel & Joslyn, 2018; Ham et al., 2024; Landy, 2017; Newport, 2015). The idea that individuals from certain nationalities are more, or less, likely to be gay or lesbian is again a dangerous opinion to take, particularly (as we find in the subsequent chapter) that individuals from high-gay nationalities may not be viewed as immigrants, and therefore, may not be subject to harmful stereotyping or discrimination based on their nationality.

Chapter 2.3.1 continued the theme of Chapter 2.2 by identifying the specific stereotypes attributed to individuals from certain groups, or nationalities, in a Portuguese context. The goal of this set of studies was to explore the possibility of a de-immigrantization effect, in which gay or lesbian immigrants would be rendered invisible, or at least, not prototypical of their constituent groups (i.e., immigrants), corroborating the past research of Petsko and Bodenhausen (2019). Studies 1a and 2a examined the conceptualizations of individuals from certain intersectional groups across gender, sexual orientation, and immigrant status. As predicted, we found that gay Portuguese men and gay immigrant

men largely did not differ in the stereotypical attributions of participants, implying that participants conceptualized these categories based on their sexual orientation, rather than their immigrant status. Unexpectedly, straight Portuguese and immigrant men were also perceived similarly in stereotype content, suggesting that participants appeared to have created new conceptualizations of the targets based on their sexual orientation, explaining the similarities in trait ratings between the paired target groups (see Garrido et al., 2009; Kite & Deaux, 1987; Madon, 1997; Nascimento & Bianchi, 2021; Schug et al., 2015). Study 2a attempted to replicate these findings, but instead, female targets showcased a more nuanced story. Lesbian Portuguese and immigrant women were, indeed, perceived similarly in stereotype content, suggesting that a unique category of 'lesbian' was created. However, straight Portuguese women were perceived as more prototypically Portuguese and lesbian than immigrant women were, rejecting the same theoretical assumptions of implied sexual orientation. It remains uncertain to us as to why this effect differs across genders, but answers may be explained by ambiguous social categories; for instance, individuals may draw conclusions about others based on their own stereotypical perception of the other's group, even when the group or context may be ambiguous (Dunning & Sherman, 1997; Remedios et al., 2011; Thayer & Pronko, 1959). Here, stereotypes of women could have been diluted, given the fact that national stereotypes may be driven by men (Eagly & Kite, 1987), resulting in differences in conceptualizations between men and women on the anchor of immigrantness.

Next, Studies 1b and 2b attempted to shift the focus from a more general, to a more specific, point of view by including 4 nationalities from the pretest which were either high or low in the perceived percentage of gays or lesbians. Brazil and France were high gay/lesbian countries, while India and Japan were low gay/lesbian countries, resulting in 16 total groups when accounting for gender and sexual orientation. Initially, we expected that sexual orientation would play a role in the conceptualizations of individuals from these nations, according to the increased perceived femininity or masculinity of gay men and lesbian women (e.g., Nascimento & Bianchi, 2021; Petsko & Bodenhausen, 2019; Savaş et al., 2021).

However, against predictions, national categorizations dominated where individuals from each nation, male or female, straight or gay, were attributed similar stereotype content (apart from straight and lesbian Indian women). Instead of discerning each target by their sexual orientation, as we found in Study 1, participants were more likely to use national categorizations to conceptualize each target, similar to Eagly and Kite's (1987) work on the nature of national stereotypes. The authors argue that, as nations are viewed as inherently androcentric, the stereotypes of nations may be anchored to the men within the population. As such, there may not be much differentiation between the men and women from a certain nationality, disregarding the sexual orientation of the targets if it is not explicitly primed (see Petsko & Bodenhausen's (2022) lens theory). However, importantly, men and women from high gay/lesbian nations (Brazil and France) were perceived as less prototypically immigrant than individuals from low gay/lesbian nations (India and Japan), further suggesting that national identities may be a product of international perceptions. That is, heightened LGBTQ acceptance may influence international perceptions of liberalism or femininity within the nation itself, resulting in de-immigrantization effects (e.g., Eagly & Kite, 1987; Hall et al., 2015; Rehman et al., 2020; Schug et al., 2015; Wright, 2016). Importantly, gays and lesbians from low gay nations were also de-immigrantized, suggesting positive attributes of sexual orientation may actually outweigh negative attributes of immigration (see Savaş et al., 2022).

Herein lies the importance of exploring perceptions of groups which may have been previously overlooked. It is imperative, as researchers, to include and incorporate more unknow and emergent social groups so their unique experiences may become better realized. Intersectional research must go beyond common group memberships and begin to examine underrepresented or complex categories which not only increase inclusivity in the literature, but also aids future research on stereotype function. Moreover, as results strayed from hypotheses derived from prior theoretical considerations, it appears that intersectional research may, itself, be contradictory in nature, begging for the contextualization of effects across societies and structures.

Chapter 3.4 then examined the potentiality of these stereotypes manifesting into harmful discrimination by asking participants to evaluate straight Portuguese, gay Portuguese, straight Brazilian, and gay Brazilian candidates on their fictional career aptitudes. The results are, undoubtedly, theoretical in nature, but the methodology proposed gave space for us to explore the possibility of real-world discrimination, and in reality, results mimicked the type of discrimination traditionally found in Portuguese society (which is more implicit, rather than explicit) (e.g., Hines & Santos, 2017; Mendes & Candeias, 2013; Santos, 2013). Specifically, before the evaluation of candidates' CVs, we first created a pilot study which measured the amount of implicit or explicit prejudice participants had against gay and Brazilian individuals using a mixture of implicit association tests (Carpenter et al., 2019; Greenwald et al., 1998) and a reworked version of the Attitudes Toward Gay Men scale (Herek, 1984; Herek, 1998). We found that, as expected, there was a moderate implicit, but not explicit, preference for Portuguese individuals versus Brazilian individuals, and there was only a small implicit, but not explicit, preference for straight individuals versus gay individuals. Yet, prejudice is not always a result of stereotypes; that is, stereotyping may be described as comparisons between groups while prejudice is the manifestation of negative affect toward a specific group (Brauer & Er-rafiy, 2011). Therefore, while results provide interesting insights into purported attitudes, it may not be indicative of actual behaviors. To test this potentiality of transforming into behaviors, we conducted the next two studies using fictional candidates.

The first study included fictional CVs with high explicit competence, meaning that all candidates were well-qualified for the position. In turn, this influenced the better evaluations of candidates (see Veit et al., 2022) and eased the overall task complexity of the procedure by allowing participants to anchor their decisions to objective information (Bodenhausen & Lichtenstein, 1987; Bodenhausen & Wyer, 1985; Correll et al., 2015; Locksley et al., 1982; Macrae et al., 1994). Results were as expected – there was little to no discrimination or negative evaluations detected for any of the target groups, including the multiple minority group (i.e., gay Brazilians). Study 2, however, increased task and judgement complexity by triggering implicit competence where less information was presented on each CV and allowing heuristic processes to come forth in the evaluation process (Bodenhausen & Lichtenstein, 1987; Bodenhausen &

Wyer, 1985; Correll et al., 2015; Locksley et al., 1982; Macrae et al., 1994). In this study, multiple minority individuals were protected by their double minority status (similar to past research such as Pedulla (2014)), and straight Brazilians were the only group with negative evaluations. Specifically, they were perceived as less warm, competent, and were offered a lower starting salary than any other group, indicating the possibility of real-world discriminatory behaviors, against, ironically, straight individuals. Unfortunately, this may hinder straight Brazilians' social advancement if employment opportunities remain limited to low-paying positions although their qualifications are equal to other candidates.

However, results may be readily explained by the process of stereotyping intersectional, and double minority, individuals, in which double minority statuses may actually offer protection because of de-immigrantization effects (e.g., Kurzban et al., 2011; Petsko & Bodenhausen, 2019; Petsko & Bodenhausen 2020; Reese et al., 2023; Turner et al., 1987; Wojnowicz et al., 2009). In the second study, the negative assumptions regarding Brazilians (i.e., immigrants) was probably the stereotypical baseline in the minds of perceivers, but, the candidate's sexual orientation shifted focus away from these negative ideations. Essentially, because the gay candidates were gay, this might have brought them closer to the stereotypes associated with being Portuguese, resulting in better assimilation into the Portuguese workplace based on stereotypical proximity (e.g., Pedulla, 2014; Purdie-Vaughns & Eibach, 2008). Furthermore, implicit preferences against Brazilian men, and to a far lesser degree, gay men, provide additional support for this effect, referencing back to the type of prejudice and discrimination typically faced in Portuguese society (Diego-Cordero et al., 2022; Santos, 2013). Simultaneously, heuristic processes might have allowed for these stereotypical ideations to come forth, given the lack of objective information in the second study (Locksley et al., 1982). In other words, when there was less information presented to the participants, they were tasked with making subjective decisions based on stereotypical cues; this would further explain why there were no differences in candidate evaluations in the first study, but they were abundant in the second study.

Together, these explanations for the results of Chapter 3.4 provide unique implications for multiple minority members, and straight immigrants, in the job-seeking process. Of course, the goal of

this project is not to say that straight immigrants are always discriminated against, or gay immigrants are never discriminated against, but in the scope of this paradigm and the context of the job applications, this was the case. Importantly, however, results replicated both the de-immigrantization effect (e.g., Petsko & Bodenhausen, 2019; Reese et al., 2023) and the benefits of belonging to multiple minorities (e.g., Pedulla, 2014) found in past literature. Optimistically, results may assist in the development of certain occupational training aimed at reducing implicit stereotyping based on one's identifying features – a promising translation from theoretical conclusions to real-world applications.

Chapter 4.2 was used as a pilot study for Chapter 4.3.1, testing the accuracy of national and sexual orientation categorizations, as well as the perceived masculinity and femininity of straight or gay Portuguese and Brazilian speakers' voices. In line with prior research regarding vocal categorizations (see Dragojevic et al., 2018; Fasoli et al., 2023; Flege et al., 1995; Kachel et al., 2018; Rakić et al., 2011; Rule et al., 2008; Rule et al., 2011), Study 1 found that national categorizations were highly accurate across all four target groups in which participants were generally aware of the accent of the speakers. Participants were better at guessing Portuguese speakers' voices, but the study was presented in a Portuguese context due to time and financial constraints, meaning the majority group was evaluating other majority-group members. Nonetheless, the accuracy rate of guessing Brazilian speakers' nationality was yet substantial. When considering sexual orientation, the same trend was found. That is, Portuguese speakers received higher overall accuracy of sexual orientation than Brazilian speakers which calls back to prior findings regarding intersectionality where minority groups are less likely to receive accurate categorizations (e.g., Fasoli et al., 2023). As expected, due in part to the straight categorization bias, straight targets were more likely to be perceived as straight than gay targets were to be perceived as gay. Specifically, straight targets were guessed at an above-chance rate, while gay targets, although higher than some previous studies (e.g., Fasoli et al., 2023; Kachel et al., 2018) were guessed at-chance (around 50%). Importantly, the results of Study 1 compliment prior findings of intersectional research regarding national and sexual orientation categorization, extending findings into the Portuguese context.

Study 2 in the pilot study examined the perceived masculinity or femininity of the voices to test the gender inversion hypothesis. We predicted, and found, that straight speakers would be more likely to engage in masculine behaviors while gay speakers would be more likely to engage in feminine behaviors, supporting the gender inversion hypothesis (e.g., Katz, 2007; Kite & Deaux, 1987). When considering national groups, participants did not perceive Portuguese speakers to be more likely to engage in masculine behaviors, but they perceived Brazilian speakers as more likely to engage in feminine behaviors, regardless of sexual orientation. Because Brazilians may be viewed as prototypically more feminine than the Portuguese (e.g., Hofstede 1980, 2011; Reese et al., *In Press*), it is plausible that Brazilians men would be expected to engage in more feminine behaviors than Portuguese men, regardless of sexual orientation, but this does not explain why Portuguese men were not perceived as more masculine than Brazilian men and more testing on perceived masculinity is required.

Our findings supported prior psychological research regarding the accuracy of nations and sexual orientation (i.e., gaydar), and the gender inversion hypothesis within a Portuguese context. Most importantly, the perception that individuals have toward either straight or gay speakers was upheld, going back to traditional stereotypes of sexual orientation, even when the speakers were not from the same nationality. Simultaneously, both straight and gay target groups were perceived as straight, just at differing levels, providing evidence that the straight categorization bias is still prevalent in society. If we are unable to accept that straight or gay individuals may be, in fact, either straight or gay, and that these individuals may not behave in stereotypical manners, we will not be able to advance toward a more egalitarian society.

Next, Chapter 4.3.1 used the findings from the other set of studies included within Chapter 4 to test whether or not double minority individuals would receive more negative reactions and worse recall than majority members, or single-majority members. Study 1 tested this assumption by asking participants to provide stereotypical judgements of Portuguese and Brazilian speakers, speaking in either Portuguese or English. We found that Brazilians speaking in the English language received the most negative evaluations from participants, providing evidence of the double jeopardy theory within

intersectionality (e.g., Beale, 1970; Blakemore & Boneham, 1994). Importantly, Brazilians speaking in English were viewed as less warm and less competent than all other groups, while simultaneously, being viewed as less likely to form either personal or work relationships with the participants. It appears that speaking English did not buffer negative stereotypical attitudes participants held toward Brazilians and instead acted as the opposite, driving participants' negative perceptions. Participants seemed to be aware of the targets' intersected majority/minority statuses, resulting in the negative evaluation of the prototypically farthest group from the majority group (i.e., Portuguese individuals). That is, Brazilians speaking in English were penalized, compared to their native-speaking counterparts, where stereotypes regarding Brazilians' perceived friendliness and extroversion (e.g., Sardinha, 2011) were no longer applicable. Perhaps sentiments of closeness (or lack, thereof) to the majority group (i.e., Portuguese speaking in Portuguese) influenced this effect, suggesting Brazilians speaking in English may be exemplified by their status as minority members more so than Brazilians speaking Portuguese (whom only have one layer of separation from the majority group). This effect was detected to a lesser degree regarding competence measures where Brazilians speaking in Portuguese were evaluated as less competent and less likely to benefit from work relationships than both Portuguese groups, although still more competent and more likely to benefit from work than Brazilians speaking in English.

Study 2 explored these findings in a Who Said What? paradigm (Taylor et al., 1978) to see whether or not participants would have worse memory recall for double minority members (i.e., Brazilians speaking in English), again, supporting the idea of double jeopardy. Study 2 also triggered context, as participants were told that the speakers would respond to the interviewer's questions using the language most often spoken at their workplace. We posited that participants would again be able to accurately detect each speakers' category, but, that national categories would be made less salient since language, rather than nationality, was explicitly triggered. Portuguese participants were more likely to correctly guess other Portuguese speakers (resulting in less misses and false alarms) than all other groups *only when* Portuguese speakers spoke in Portuguese; this was expected, as majority group members should be more likely to detect and recall other majority group members according to past WSW and

prototypicality research on categorization effects (Rosch, 1975). Interestingly, however, Portuguese speaking English received more errors and less correct guesses than Brazilians speaking English, suggesting that while Brazilians somewhat lost their national categorization when speaking English, Portuguese individuals largely lost their national categorization when speaking English, pointing away from the expectations of double jeopardy, but more in accordance to the non-prototypicality hypothesis (Goff, Thomas, & Jackson, 2008; Purdie-Vaughns & Eibach, 2008; Sesko & Biernat, 2010), as Portuguese speaking English became also less prototypical of its constituent group. Perhaps Portuguese individuals who, while speaking English, were viewed as prototypically further than Portuguese individuals speaking Portuguese, resulting in greater saliency for the single majority group and the increase of errors made by participants.

In any case, speaking English as a Portuguese or Brazilian individual in a group setting may cause negative impressions toward those members to arise and influence overall memory or attribution errors, suggesting that while English is a "global language", speaking Portuguese may yet be better for individuals from Portuguese-speaking countries. As the world is becoming yet more globalized, it is increasingly important to understand the effects of one's accent on how they may be perceived by others, especially when speaking in another language. Although plausible that speaking English may benefit certain individuals in an international setting, results suggest the opposite may also be true. Speaking English not only influenced negative stereotypical perceptions of Brazilians, but also lead to greater categorical errors for Portuguese individuals (and to a lesser degree, for Brazilians), highlighting the nuanced effects of cross-categorization triggered by vocal clues. These results may be regarded as disheartening by some, but in fact, they provide valuable information into how majority groups conceptualize individuals from one or more minorities, bringing us closer to the development of anti-discriminatory social training and policies aimed at diminishing this effect.

Finally, similar to Chapter 2.2, Chapter 4.4.3 acted as a pretest for Chapters 4.2 and 4.3.1, but nonetheless provided us with prevalent results regarding the perception of behaviors related to how

masculine or feminine an individual, or intersectional individual, appears to be. This set of studies explored the perceived stereotypical and counterstereotypical behaviors of straight men, gay men, straight women, and lesbian women. In the first study, typical behaviors of each group were identified by presenting a large-scale list of masculine or feminine behaviors to participants, who were then asked to evaluate each behavior on a bipolar scale of how typical it was of men and women to test the implicit inversion theory and gender-typical behaviors (see Blashill & Powlishta, 2009; Cipriano et al., 2021; Katz, 2007; Kite & Deaux, 1979; Rule, 2017; Wong et al., 1999). We found that masculine-oriented behaviors (e.g., "Served in the national army for 5 years") were correlated with both straight men and lesbian women, while feminine-oriented behaviors (e.g., "Watched the runway show last week") were correlated with gay men and straight women, supporting the implicit inversion theory and prior findings regarding stereotypical behaviors (e.g., Blashill & Powlishta, 2009; Katz, 2007; Kite & Deaux, 1987; Rule, 2017; Wong et al., 1999). More specifically, as the evaluations of stereotypical behaviors decreased on the male anchor (i.e., becoming more typical of straight men), they simultaneously increased on the female anchor (i.e., becoming more typical of lesbian women). Alternatively, as the ratings of stereotypical behaviors increased on the male anchor (i.e., becoming more typical of gay men), the ratings of behaviors decreased on the female anchor (i.e., becoming more typical of straight women). In other words, straight male and female targets were perceived as gender typical, while gay male and lesbian female targets were perceived as gender atypical.

Study 2 extended this methodology to examine whether or not stereotypical (e.g., masculine straight men) and counterstereotypical social groups (e.g., feminine lesbian women) would be perceived as less stereotypical of their respective target group, and separately, conceptualized in accordance with the implicit inversion theory (see Bosson, 2005; Cipriano et al., 2021; Gul & Uskul, 2021; Katz, 2007; Rule, 2017; Sherman et al., 1997). Again, results supported these notions where stereotypical individuals (i.e., masculine straight men, feminine gay men, feminine straight women, masculine lesbian women) were viewed as stereotypical of their constituent groups from Study 1, supporting traditional notions of

masculinity and femininity related to the implicit inversion theory (e.g., Blashill & Powlishta, 2009; Bye et al., 2022; Eagly & Steffen, 1984; Fingerhut & Peplau, 2006; Ellemers, 2018; Katz, 2007; Kite & Deaux, 1987; Levy et al., 2000; Wong et al., 1999). At the same time, however, counterstereotypical individuals (i.e., feminine straight men, masculine gay men, masculine straight women, feminine lesbian women) were perceived as less prototypical of their constituent groups from Study 1, hearkening back to similar results found in Chapter 2 in which gay immigrants were de-immigrantized. The results of Study 2 provide evidence that perceived masculinity and femininity are not static, even when considering sexual orientation; the type of job given to targets was enough to influence a cognitive shift in the minds of perceivers and away from traditional gender norms (see Bosson, 2005; Brambilla, 2011; Cohen et al., 2009; Fingerhut & Peplau, 2006; Geiger et al., 2006; Glick et al., 2007; Gul & Uskul, 2021). Finally, we asked participants to rate how difficult it was to conceptualize each of the target groups and found that all of the counterstereotypical groups, apart from feminine lesbian women, were statistically more difficult to imagine than their stereotypical pairings.

Importantly, the findings from this study highlight the conceptual shifts individuals make when attempting to make sense of counterstereotypical groups. Although not explicitly tested in the current project, certain real-world implications may be implied by the results. For instance, feminine men were found to be more stereotypical of straight women, while participants reported reluctancy to forming close relationships with feminine men (compared to masculine men) (Gul & Uskul, 2021), masculine women may wear metaphorical masks to blend in better at work (Dozier, 2017), and counterstereotypical gay and lesbian individuals may be disliked more than their stereotypical counterparts (e.g., Cohen et al., 2009; Brambilla, 2011). Of course, this may cause individuals to conform with the societal stereotypes attributed to their group, potentially increasing emotional distress and/or personal discomfort (Hentschel et al., 2019).

5.3: Implications and Relevance

The main findings of this thesis give way for important theoretical implications to be found. The contradictory nature of the findings regarding intersectional stereotyping not only paves the way for more branches of research to grow, but also brings more theoretical questions as to why the processes observed behave as they do. As we slowly begin to uncover the situations in which certain types of intersectional individuals may be stereotyped, or discriminated against, we can piece together the inner mechanisms of the process of intersectional stereotyping, as researchers working with the dominance, integrative, and compartmentalized models have done. The theoretical implications of this thesis support prior findings across a number of theories, processes, and disciplines, driving conclusions into the underrepresented Portuguese context. It is increasingly important to include not only underrepresented target groups, but also underrepresented spheres of research in the global body of literature; in a sense, that is the most important facet of this thesis, and we hope our work inspires other researchers from underrepresented categories to continue their work. The work presented in this thesis is theoretical, in nature, but there is nonetheless the potential that our findings may translate into real-world actions in similar settings to the ones created in our studies. Importantly, we do not argue that our findings are relevant for all real-world agents or contexts, but instead, we argue that our data may correlate with the discriminatory behaviors found in society, particularly as shown in Chapter 3.

5.4: Limitations and Future Directions

As with all research, there are a few important limitations of the work included in this thesis worth mentioning. First and foremost, the samples in most of the studies are not as diverse as they should be to ensure a societal, rather than generalized, point of view. Specifically, due to time and budget limitations, most of the samples include psychology students; while this is not inherently a bad thing, and it is a common recruiting tactic in psychological research, it does provide a small sub-sample of the [Portuguese] population which might have influenced some of the surprising findings. We attempted to diminish this possibility by (generally) asking for society's point of view toward each target group, but we

are aware that participants might have conflated society's point of view for their own. Future researchers, whether in small counties such as Portugal, or large countries such as the United States, should make every attempt to include representative sub-sets of society in their research (unless, of course, their hypotheses call for a specific sample). Doing so will not only enhance the overall quality of the research but will also provide greater generalizability of the findings to populations as a whole.

A second limitation of this thesis is the target groups included throughout the presented studies. As research in the United States might focus on white and black individuals, as these are the two most prevalent races in the country, the majority of our research used Portuguese and Brazilian individuals – the two most prevalent nationalities in Portugal. Brazilians make up the majority of the immigrants in Portugal and have had a complex history with Portuguese citizens, but this limits the overall generalizability of the findings, particularly as Brazilians are a culturally and ethnically diverse group of individuals. The work included within this thesis would be strengthened if either common groups were used across all studies, or, there were replications of the findings using different demographic groups. However, because we did not use common groups and did not perform replications within the Portuguese context, our ability to draw general conclusions about the data is limited. Instead of making a single conclusion about a specific group or process, we are bound by our methodology to make inferences about each of the papers' results, separately, while identifying common themes. The work in this thesis is undoubtedly expansive, in nature, but future research may benefit from a more straightforward thread.

Next, to study stereotypes, we must somehow bring attention to stereotypes through the experimental materials generated. We do acknowledge the difference in stimuli preparation presented to participants make it more difficult to draw specific conclusions across projects. For instance, descriptions of individuals were shown to participants in the majority of studies, but some studies included visual and/or vocal stimuli, which trigger different processes of conceptualization. So, simply asking participants to imagine a French man does assure that they are providing an objective representation of the target individual; instead, it is expectable that the participant creates a subjective representation of what it means to be both French and a man – a subjective representation that is likely to be different

between participants. At the same time, the use of visual stimuli (i.e., faces) presents another problem; we used neutral-looking faces in terms of nationality and skin color, but this does not accurately represent the nationalities themselves (particularly in the case of Brazil, which is seen as a mixture of many cultures and ethnicities). Therefore, this ambiguity hailing from the subjectivity of participants' perceptions of the targets may also account for some of the variations in results, and future research might consider this to produce more clear-cut and straightforward, rather than ambiguous, stimuli in an attempt to accurately examine the processes of intersectional stereotyping.

Finally, the results presented throughout this thesis are theoretical in nature and did not utilize real-world agents in any of the methodologies, which limits the overall validity of the findings. Of course, some of the methodologies, particularly those included in Chapter 2, are not easily transferrable to real-world contexts. The CV and vocal studies, however, could have been conducted in a real-world setting if time and resources allowed. For instance, future CV studies might send fictional CVs to recruiters, agencies, and managers to test the response rate of successful candidates, similar to Granberg and colleagues (2020), Mobasseri (2019), Tilcsik, (2011), and Wulff and Villadsen (2020), because external factors may incite prejudiced behaviors in real-world scenarios, such as: employers' or colleagues' personal prejudices against gay and/or Brazilian men, stereotypical assumptions generated from the target's race, and the socioeconomic status of the targets. Additionally, the Who Said What? study included in Chapter 4 could have been recorded as a group interview, allowing for more realistic group dynamics and interactions between speakers to emerge. As such, some of the results should be accepted with careful consideration of the context in which they are presented, while future research should capitalize on bridging the gap between theoretical and real-world findings.

Despite these limitations, we are proud of the work completed, and believe that the findings nonetheless provide an excellent observation into the effects of intersectional stereotyping.

5.5: Conclusion

This thesis has presented substantial evidence of the sometimes-contradictory effects of intersectional stereotyping, particularly in the Portuguese context – an underrepresented group in psychological literature worldwide. Across six papers, we were able to not only replicate the patterns found in prior research using different social categories, but we also uncovered unique cases in which our predictions were not initially correct. However, although the work presented here is valuable, there is yet a lot of work to be done in the field of intersectionality; with the globalization of the world, and the advancement of psychological literature, there remains a multitude of underrepresented social categories to be included, and a number of psychological processes that we do not yet understand fully. It is my hope that this thesis, and the work included within, may be a point of reference for future research and policy work, so that we may move closer toward a more equal society.

REFERENCES

Acosta, K. L. (2008). Lesbians in the borderlands: Shifting identities and imagined communities. *Gender & Society, 22,* 639-659

Aktan, T. (2012). A contextual approach to stereotype content model: Stereotype contents in context. *Social and Behavioral Sciences, 82,* 440-444

Alt, N. P., Lick, D. J., & Johnson, K. L. (2020). The straight categorization bias: A motivated and altruistic reasoning account. *Journal of Personality and Social Psychology, 119,* 1266-1289

Allport, G. W. (1954). *The Nature of Prejudice.* Addison-Wesley

André, Q. (2022). Outlier exclusion procedures must be blind to the researcher's hypothesis. *Journal of Experimental Psychology: General, 151*, 213-223

Anthias, F. (1998). Evaluating 'diaspora': Beyond ethnicity? Sociology, 32, 557-580

Anthias, F. (2012). Transnational mobilities, migration research and intersectionality. Nordic Journal of Migration Research, 2, 102-110

Appel, M., Weber, S., & Kronberger, N. (2015). The influence of stereotype threat on immigrants: Review and meta-analysis. *Frontiers in Psychology, 6*

Aronovitch, C. D. (1976). The voice of personality: Stereotyped judgements and their relation to voice quality and sex of speaker. *Journal of Social Psychology, 99,* 207-220

Bain, P. G., & Bongiorno, R. (2015). Are individualism and "masculinity" related when controlling for regional proximity? A reappraisal of Barry (2015). *Journal of Cross-Cultural Psychology, 46,* 1226-1231

Bakan, D. (1956). *The Duality of Human Experience: An essay on Psychology and Religion.* Rand McNally

Bakker, M., & Wicherts, J. M. (2014). Outlier removal sum scores and the inflation of the type I error rate in independent samples t tests: The power of alternatives and recommendations. *Psychological Methods, 19,* 409-427

Barry, H. (2015). Proximity of paired nations reveals correlation of masculinity with individualism. *Journal of Cross-Cultural Psychology, 46,* 290-295

Barton, B. (2015). How like perceives like: Gay people on "gaydar". *Journal of Homosexuality, 62,* 1615-1637

Baus, C., McAleer, P., Marcoux, K., Belin, P., & Costa, A. (2019). Forming social impressions from voices in native and foreign languages. *Scientific Reports, 9,* 1-14

Bayrakdar, S., & King, A. (2023). LGBT discrimination harassment and violence in Germany Portugal and the UK: A quantitative comparative approach. *Current Sociology, 71,* 152-172

Beale, F. (1970). Double jeopardy: To be black and female. In T. Cade (Ed.), *The Black Woman* (pp. 90-100). New American Library

Beatriz, C., & Pereira, H. (2022). Workplace experiences of LGBTQIA+ individuals in Portugal. *Employee Responsibilities and Rights Journal,* 1-23

Bem, S. L. (1994). *The lenses of gender: Transforming the debate on sexual inequality.* Yale University Press

Benson, M. C. (2015). Class, race, privilege: Structuring the lifestyle migrant experience in Boquete, Panama. *Journal of Latin American Geography, 14,* 19-37

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107,* 238-246

Bergstrom, V. N., Cadieux, J., Thakkar, D., & Chasteen, A. L. (2023). Same view, different lens: How intersectional identities reduce Americans' stereotypes of threat regarding Arab and black men. *Group Processes & Intergroup Relations, 27,* 348-365

Bettinsoli, M. L., Suppes, A., & Napier, J. L. (2019). Predictors of attitudes toward gay men and lesbian women in 23 countries. *Social Psychological and Personality Science, 11,* 697-708

Blakemore, K., & Boneham, M. (1994). *Age, Race, and Ethnicity*. Open University Press

Blashill, A. J., Powlishta, K. K. (2009). Gay stereotypes: The use of sexual orientation as a cue for gender-related attributes. *Sex Roles, 61,* 783-793

Bor, A. (2018). Correcting for base rates in multidimensional "Who said what?" experiments. *Evolution and Human Behavior, 39,* 473-478

Bodenhausen, G. V., & Lichtenstein, M. (1987). Social stereotypes and information-processing strategies: The impact of task complexity. *Journal of Personality and Social Psychology, 52,* 871-880

Bodenhausen, G. V., Macrae, C. N., & Garst, J. (1998). Stereotypes in thought and deed: Social-cognitive origins of intergroup discrimination. In C. Sedikides, J. Schopler, C. A. Insko, & C. Insko (Eds.), *Intergroup Cognition and Intergroup Behavior* (pp. 331-334). Psychology Press

Bodenhausen, G. V., & Wyer, R. S. (1985). Effects of stereotypes on decision making and information-processing strategies. *Journal of Personality and Social Psychology, 48,* 267-282

Bolzani, D. Crivellaro F., & Grimaldi, R. (2021). Highly skilled yet invisible The potential of migrant women with a STEMM background in Italy between intersectional barriers and resources. *Gender Work & Organization, 28,* 2132-2157

Borinca, I., Iacoviello, V., & Valsecchi, G. (2021). Men's discomfort and anticipated sexual misclassification due to counter-stereotypical behaviors: The interplay between traditional masculinity norms and perceived men's feminization. *Sex Roles, 85,* 128-141

Bosson, J. K., Taylor, J. N., & Prewitt-Freilino, J. L. (2006). Gender role violations and identity misclassification: The roles of audience and actor variables. *Sex Roles, 55,* 13-24

Bowleg, L., Huang, J., Brooks, K., Black, A., & Burkholder, G. (2003). Triple jeopardy and beyond: Multiple minority stress and resilience among black lesbians. *Journal of Lesbian Studies, 7,* 8-18

Brambilla, M., Carnaghi, A., & Ravenna, M. (2011). Status and cooperation shape lesbian stereotypes: Testing predictions from the stereotype content model. *Social Psychology, 42*, 101-110

Brauer, M., & Er-rafiy, A. (2011). Increasing perceived variability reduces prejudice and discrimination. *Journal of Experimental Psychology, 47,* 871-881

Brewer, M. B. (1988). A dual process model of impression formation. In R. S. Wyer, & T. K. Srull (Eds.), *Advances in Social Cognition, Volume 1* (pp.1-36). Psychology Press

Brewer, M. B. (1999). The psychology of prejudice: Majority love and minority hate? *Journal of Social Issues, 55,* 429-444

Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research, 21*, 230-258

Browne, I., & Misra, J. (2003). The intersection of gender and race in the labor market. *Annual Review of Sociology, 29,* 487-513

Brubaker, R., & Cooper, F. (2000). Beyond "identity". *Theory and Society, 29,* 1-47

Bruner, J. S. (1957). On perceptual readiness. *Psychological Review, 64,* 123-152

Bye, H. H., Solianik, V. V., Five, M., & Agai, M. S. (2022). Stereotypes of men and women across gender subgroups. *Frontiers in Psychology, 13*, 1-12

Calabrese, S., Earnshaw, V., Magnus, M., Hansen, N., Krakower, D., Underhill, K., Mayer, K., Kershaw, T., Betancourt, J., & Dovidio, J. (2018). Sexual stereotypes ascribed to black men who have sex with men: An intersectional analysis. Archives of Sex Behavior, 47, 143-156

Campbell-Kibler, K. (2007). Accent, (ing), and the social logic of listener perceptions. *American Speech, 82,* 32-64

Campbell-Kibler, K. (2011). Intersecting variables and perceived sexual orientation in men. *American Speech, 86,* 52-68

Carpenter, T. P., Pogacar, R., Pullig, C., Kouril, M., Aguilar, S., LaBouff, J., Isenberg, N., & Chakroff, A. (2019). Survey-software implicit association test: A methodological and empirical analysis. *Behavior Research Methods, 51,* 2194-2208

Cartei, V., Banerjee, R., Hardouin, L., & Reby, D. (2019). The role of sex-related voice variation in children's gender-role stereotype attributions. *British Journal of Developmental Psychology, 37,* 396-409

Carvalho, J., & Duarte, M. C. (2020). The politicization of immigration in Portugal between 1995 and 2014: A European exception? *Journal of Common Market Studies, 58,* 1470-1487

Cascais, A. F. (2009). Different as only we can be. Portuguese LGBT associations in three movements. *Revista Crítica de Ciências Socias,* 155-173

Case, L., & Smith, T. B. (2000). Ethnic representation in a sample of the literature of applied psychology. *Journal of Consulting and Clinical Psychology, 68,* 1107-1110

Casquilo-Martins, I., Belchior-Rocha, H., & Alves, D. R. (2022). Racial and ethnic discrimination in Portugal in times of pandemic crisis. *Social Sciences, 11,* 1-19

Chen, C. P., & Vollick, S. (2013). Multiple identities and career development of GLB immigrants. *Counselling Psychology Quarterly, 26,* 208-224

Chen, S. X., Benet-Martínez, V., & Ng, J. C. (2014). Does language affect personality perception? A functional approach to testing the Whorfian hypothesis. *Journal of Personality, 82,* 130-143

Cheryan, S., & Bodenhausen, G. V. (2000). When positive stereotypes threaten intellectual performance: The psychological hazards of "model minority" status. *Psychological Science, 11,* 399-402

Cheryan, S., Master, A., Meltzoff, A. N. (2015). Cultural stereotypes as gatekeepers: Increasing girls' interest in computer science and engineering by diversifying stereotypes. *Frontiers in Psychology, 6*, 1-8

Cipriano, M., Vaz, A. R., Rolho, J., Santos, A. S., & Carneiro, P. (2021). Behavior as a stereotype cue: A European Portuguese pretest on age and gender stereotypes. *Análise Psicológica, 1,* 133-170

Clarke, H., & Arnold, K. (2017). Diversity in gender stereotypes? A comparison of heterosexual, gay and lesbian perspectives. *Canadian Journal of Administrative Sciences, 34,* 149-158

Clarke, H. M., & Arnold, K. A. (2018). The influence of sexual orientation on the perceived fit of male applicants for both male- and female-types jobs. *Frontiers in Psychology, 9,* 1-10

Cohen, T. R., Hall, D. L., & Tuttle, J. (2009). Attitudes toward stereotypical versus counterstereotypical gay men and lesbians. *Journal of Sex Research, 46,* 274-281

Cole, E. R. (2009). Intersectionality and research in psychology. *American Psychologist, 64,* 179-180

Cole, J. E. (2006). People on the move in Europe. *Identities: Global Studies in Culture and Power, 13,* 309-325

Correll, J., Park, B., Judd, C. M., & Wittenbrink, B. (2002). The police officer's dilemma: Using ethnicity to disambiguate potentially threatening individuals. *Journal of Personality and Social Psychology, 83,* 1314-1329

Costa, P. A., Almeida, R., Anselmo, C., Ferreira, A., Pereira, H., & Leal, I. (2014). University students' attitudes toward same-sex parenting and gay and lesbian rights in Portugal. *Journal of Homosexuality, 61*, 1667-1686

Cotton, J. L., O'Neill, B. S., & Griffin, A. (2008). The "name game": Affective and hiring reactions to first names. *Journal of Management Psychology, 23*, 18-39

Cox, W. T. L., Devine, P. G., Bischmann, A. A., & Hyde, J. S. (2016). Inferences about sexual orientation: The roles of stereotypes, faces, and the gaydar myth. *Journal of Sex Research, 53,* 157-171

Crenshaw, K. W. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum, 140,* 139-167

Crisp, R., & Hewstone, M. (2000). Crossed categorization and intergroup bias: The moderating roles of intergroup and affective context. *Journal of Experimental Social Psychology, 36,* 357-383

Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review, 96,* 608-630

Croson, R. (2006). Contrasting methods and comparative findings in psychology and economics. *Social Psychology and Economics, 1*, 301-317

Cuddy, A. J., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology, 92,* 631-648

Cuddy, A. J., 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

Cuddy, A. J., Fiske, S. T., Kwan, V. S., Glick, P., Demoulin, S., Leyens, J., Bond, M. H., Croizet, J., Ellemers, N., Sleebos, E., Htun, T. T., Kim, H., Maio, G., Perry, J., Petkova, K., Todorov, V., Rodríguez-Bailón, R., Morales, E., Moya, M., Palacios, M., Smith, V., Perez, R., Vala, J., & Ziegler, R. (2009). Stereotype content model across cultures: Toward universal similarities and some differences. *British Journal of Social Psychology, 48,* 1-33

Cuddy, A. J., Glick, P., & Beninger, A. (2011). The dynamics of warmth and competence judgements and their outcomes in organizations. *Research in Organizational Behavior, 31,* 73-98

Cunningham, G. B. (2019). Understanding the experiences of lgbt athletes in sport: A multilevel model. In M. H. Anshel (Ed.), APA Handbook of Sport and Exercise Psychology (pp. 367-383). American Psychological Association

Czopp, A. M., Kay, A. C., & Cheryan, S. (2015). Positive stereotypes are pervasive and powerful. *Perspectives on Psychological Science, 10,* 451-463

Czopp, A. M., & Monteith, M. J. (2006). Thinking well of African Americans: Measuring complimentary stereotypes & negative prejudice. *Basic and Applied Social Psychology, 28,* 233-250

da Câmara, M. A. T. G. (2007). Exoticism and imagination in 18th century Portuguese tiles: Some examples in the Lisbon area. In M. N. Harris (Ed.). *Sights and Insights: Interactive Images of Europe and the Wider World.* Plus Publications

Dados, N., & Connell, R. (2012). The global south. *Contexts, 11,* 12-13

Davis, L. S., & Williamson, C. R. (2019). Does individualism promote gender equality? *World Development, 123,* 1-16

Dawaele, J. (2016). Why do so many bi- and multilinguals feel different when switching languages? *International Journal of Multilingualism, 13,* 92-105

Deikman, A. B., Eagly, A. H., Mladinic, A., & Ferreira, M. C. (2005). Dynamic stereotypes about women and men in Latin America and the United States. *Journal of Cross-Cultural Psychology, 36,* 209-226

DeFilippis, J. N. (2016). "What about the rest of us?" An overview of LGBT poverty issues and a call to action. *Journal of Progressive Human Services, 27,* 143-174

de Lemus, S., Spears, R., Bukowski, M., Moya, M., & Lupiáñez, J. (2013). Reversing implicit gender stereotype activation as a function of exposure to traditional gender roles. *Social Psychology, 44,* 109-116

Derous, E., & Pepermans, R. (2019). Gender discrimination in hiring: Intersectional effects with ethnicity and cognitive job demands. *Archives of Scientific Psychology, 7,* 40-49

de Sousa, A. N. (2019). Tensions rise as Lisbon's immigrants take to the street. Retrieved from: https://www.irishtimes.com/news/world/europe/tensions-rise-as-lisbon-s-immigrants-take-to-the-streets-1.3777790

Diego-Cordero, R., Borges, E. M. N., Da Silva, C. G. V., Muñoz, M. A. G., Hermoso, I. M. A., & Tarriño-Concejero, L. (2022). "The COVID 19 pandemic worsened my living and working conditions" A qualitative research study of female Brazilian immigrants in Oporto. *Women & Health, 62,* 753-763

Dipboye, R. L., Fromkin, H. L., & Wiback, K. (1975). Relative importance of applicant sex attractiveness and scholastic standing in evaluation of job applicant resumes. *Journal of Applied Psychology, 60,* 39-43

Dovidio, J. F., & Gaertner, S. L. (2010). Intergroup bias. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of Social Psychology* (pp. 1084-1121). John Wiley & Sons

Dozier, R. (2017). Female masculinity at work: Managing stigma on the job. *Psychology of Women Quarterly, 41,* 197-209

Dragojevic, M., Berglund, C., & Blauvelt, T. K. (2018). Figuring out who's who: The role of social categorization in the language attitudes process. *Journal of Language and Social Psychology, 37,* 28-50

Dragojevic, M., & Goatley-Soan, S. (2022). American's attitudes toward foreign accents: Evaluative hierarchies and underlying processes. *Journal of Multilingual and Multicultural Development, 43,* 167-181

Dunning, D., & Sherman, D. A. (1997). Stereotypes and tacit interference. *Journal of Personality and Social Psychology, 73,* 459-471

Durante, F., Fiske, S. T., Kervyn, N., Cuddy, A. J. C., Akande, A., Adetoun, B. E., Adewuyi, M. F., Tserere, M. M., Ramiah, A. A., Mastor, K. A., Barlow, F. K., Bonn, G., Tafarodi, R. W., Boask, J., Carins, E., Doherty, C., Capozza, D., Chandran, A., Chryssochoou, X., … Storari, C. C. (2013). Nations' income inequality predicts ambivalence in stereotype content: How societies mind the gap. *British Journal of Social Psychology, 52,* 726-746

Eagly, A. H., & Diekman, A. B. (2005). What is the problem? Prejudice as an attitude-in-context. In Dovidio, J. F., Glick, P., & Rudman, L. A. (Eds.), *On the Nature of Prejudice: Fifty Years after Allport* (pp. 19-35). Blackwell Publishing

Eagly, A. H., & Kite, M. E. (1987). Are stereotypes of nationalities applied to both men and women? *Journal of Personality and Social Psychology, 53,* 451-462

Eagly, A. H., & Steffen, V. J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal of Personality and Social Psychology, 46*, 735-754

Eaton, M. (1998). Foreign residents and illegal immigrants in Portugal. *International Journal of Intercultural Relations, 22,* 49-66

Ellemers, N. (2018). Gender stereotypes. *Annual Review of Psychology, 69,* 275-298

Everly, B. A., Unzueta, M. M., & Shih, M. J. (2016). Can being gay provide a boost in the hiring process? Maybe if the boss is female. *Journal of Business and Psychology, 31*, 293-306

Fasoli, F., Dragojevic, M., Rakić, T., & Johnson, S. (2023). Voice matters: Social categorization and stereotyping of speakers based on sexual orientation and nationality categories. *Language & Communication, 90,* 114-128

Fasoli, F., Maass, A., & Bergella, L. (2022). Who has better auditory gayder? Sexual orientation categorization by heterosexual and lesbian, gay, and bisexual people. *Journal of Homosexuality, 70,* 876-899

Fasoli, F., Maass, A., Paladino, M. P., & Sulpizio, S. (2017). Gay- and lesbian-sounding auditory cues elicit stereotyping and discrimination. *Archives of Sex Behavior, 46,* 1261-1277

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analysis using G*Power 3.1: Tests for correlation and regression analyses. Behavior Research Methods, 41, 1149-1160

Fernandes, E., & Cabral-Cardoso, C. (2006). The social stereotypes of the Portuguese female and male manager. *Women in Management Review, 21,* 99-112

Figueiredo, M. C., Suleman, F., & Botelho, M. C. (2018). Workplace abuse and harassment: The vulnerability of informal and migrant domestic workers in Portugal. *Social Policy and Society, 17*, 65-85

Fingerhut, A. W., & Peplau, L. A. (2006). The impact of social roles on stereotypes of gay men. *Sex Roles, 55,* 273-278

Fiske, S. T. (2017). Prejudices in cultural contexts: Shared stereotypes (gender, age) versus variable stereotypes (race, ethnicity, religion). *Perspectives on Psychological Science, 12,* 791-799

Fiske, S. T. (2018). Stereotype content: Warmth and competence endure. *Current Directions in Psychological Science, 27,* 67-73

Fiske, S. T., Cuddy, A. J., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Science, 11,* 77-83

Fiske, S. T., Cuddy, A. J., 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,* 878-902

Fiske, S. T., & Neuberg, S. L. (1990). A continuum of impression formation, from category based to individuating processes: Influences of information and motivation attention and interpretation. *Advances in Experimental Social Psychology, 23,* 1-74

Flege, J .E., Munro, M. J., & MacKay, I. R. A. (1995). Factors affecting strength of perceived foreign accent in a second language. *Journal of the Acoustical Society of America, 97*, 3125-3134

Fournier, C., Brabant, L. H., Dupéré, S., & Chamberland, L. (2018). Lesbian and gay immigrants' post-migration experiences: An integrative literature review. *Journal of Immigrant & Refugee Studies, 16,* 331-350

Fox, L. B., & Barth, J. M. (2016). The effect of occupational gender stereotypes on men's interest in female-dominated occupations. *Sex Roles, 76,* 460-472

Freeman, J. B., & Ambady, N. (2011). When two become one: Temporally dynamic integration of the face and voice. *Journal of Experimental Social Psychology, 47,* 259-263

Fuertes, J. N., Gottdiener, W. H., Martin, H., Gilbert, T. C., & Giles, H. (2012). A meta-analysis of the effects of speakers' accents on interpersonal evaluations. *European Journal of Social Psychology, 42,* 120-133

Fuks, N., Smith, N. G., Peláez, S., de Stefano, J., & Brown, T. L. (2018). Acculturation experiences among lesbian, gay, bisexual, and transgender immigrants in Canada. *The Counseling Psychologist, 46,* 296-332

Garcia-Marques, L., Santos, A. S. C., & Mackie, D. M. (2006). Stereotypes: Static abstractions or dynamic knowledge structures? *Journal of Personality and Social Psychology, 91,* 814-831

Gardner, R. C., Macintyre, P. D., & Lalonde, R. N. (1995). The effects of multiple social categories on stereotyping. *Canadian Journal of Behavioural Science, 27,* 466-483

Garrido, M. V., Palma, T., Carrega, A., Padeiro, C., Barrileiro, F., Castelo, F. Figueiredo, L. Raposo, M., Feliciano, R., Santos, S., Rodrigues, S., Silva, S., Casaleiro, S., & Lory, S. (2009). O que pensamos sobre estes grupos? Um pré-teste de características estereotípicas de homossexuais e heterossexuais masculinos e de árabes e americanos. *Instituto Superior de Psicologia Aplicada, 7,* 101-131

Gato, J., Henriques, M. R., & Leal, D. (2021). Adoption by lesbian women and gay men: Perceived challenges and training needs for professionals in Portugal. *Adoption Quarterly, 24,* 152-175

Gawronski, B., & de Houwer, J. (2014). Implicit Measures in Social and Personality Psychology. In Reis, H. T., & Judd, C. M. (Eds.), *Handbook of Research Methods in Social and Personality Psychology* (pp. 283-310). Cambridge University Press

Gawronski, B., & Hahn, A. (2019). Implicit measures: Procedures, use, and interpretation. In H., Blanton, J. M., LaCroix, & G. D., Webster (Eds.), *Measurement in social psychology* (pp. 29-55). Routledge

GEE. (2020). População Estrangeira Residente em Portugal – TOTAL. Retrieved from: https://www.gee.gov.pt/pt/listapublicacoes/estatisticas-de-imigrantes-em-portugal-por-nacionalidade/regioes-domundo/GEE%20-%20Popula%C3%A7%C3%A3o%20estrangeira%20residente%20em%20Portugal%20-%20Mundo.pdf/9129-populacao-estrangeira-residente-em-portugal-mundo/file

Geiger, W. L., Harwood, J., & Hummert, M. L. (2006). College students' multiple stereotypes of lesbians. *Journal of Homosexuality, 51,* 165-182

Gelade, G. A., Dobson, P., & Auer, K. (2008). Individualism, masculinity, and the sources of organizational commitment. *Journal of Cross-Cultural Psychology, 39,* 599-617

Ghani, A., Hudson, S. T. J., Rumaney, H., & Sidanius, J. (2023). Of Christians, Jews, and Muslims: When gender is unspecified, the default is men. *Psychology of Religion and Spirituality,* advance online publication

Ghavami, N., Katsiaficas, D., & Rogers, L. O. (2016). Toward an intersectional approach in developmental science. *Advances in Child Development and Behavior, 50,* 31-73

Ghavami, N., & Peplau, L. A. (2012). An intersectional analysis of gender and ethnic stereotypes: Testing three hypotheses. *Psychology of Women Quarterly, 37,* 113-127

Gilbert, D. T., & Hixon, J. G. (1991). The trouble of thinking activation and application of stereotypic beliefs. *Journal of Personality and Social Psychology, 60,* 509-517

Giles, H., & Rakić, T. (2014*). Language attitudes: Social determinants and consequences of language variation.* In T. M. Hotgraves (Ed.), The Oxford Handbook of Language and Social Psychology (pp. 11-26). Oxford University Press

Giwa, S. & Chaze, F. (2018). Positive enough? A content analysis of settlement service organizations' inclusivity of LGBTQ immigrants. Journal of Gay & Lesbian Social Services, 30, 220-243

Giwa, S., & Greensmith, C. (2012). Race relations and racism in the LGBTQ community of Toronto: Perceptions of gay and queer social service providers of color. Journal of Homosexuality, 59, 149-185

Gkioukela, A., & Hujits, T. (2020). Intersectional migration-related health inequalities in Europe: Exploring the role of migrant generation, occupational status & gender. *Social Science & Medicine, 267*

GLAAD. (2021). Where We Are on TV (2020-2021). Retrieved from: https://www.glaad.org/sites/default/files/GLAAD%20-%20202021%20WHERE%20WE%20ARE%20ON%20TV.pdf

Glick, P., Gangl, C., Gibb, C., Klumpner, S., & Weinberg, E. (2007). Defensive reactions to masculinity threat: More negative affect toward effeminate (but not masculine) gay men. *Sex Roles, 57,* 55-59

Gluszek, A., & Dovidio, J. F. (2010). Speaking with a nonnative accent: Perceptions of bias, communication difficulties, and belonging in the United States. *Journal of Language and Social Psychology, 29,* 224-234

Gorodnichenko, Y., & Roland, G. (2011). Individualism, innovation, and long-run growth. *Proceedings of the National Academy of Sciences, 108*

Granberg, M., Andersson, P. A., & Ahmed, A. (2020). Hiring discrimination against transgender people: Evidence from a field experiment. *Labour Economics, 65*

Grant, P. R., & Holmes, J. G. (1981), The integration of implicit personality theory schemas and stereotype images. *Social Psychology Quarterly, 44,* 107-115

Grapin, S. L., Bocanegra, J. O., Green, T. D., Lee, E. T., & Jaafar, D. (2016). Increasing diversity in school psychology: Uniting the efforts of institutions, faculty, students, and practitioners. *Contemporary School Psychology, 20,* 345-355

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74,* 1464-1480

Greenwald, A. G., Uhlmann, E. L., Poehlman, T. A., Banaji, M. R. (2009). Understanding and using the implicit association test: II Meta-analysis of predictive validity. *Journal of Personality and Social Psychology, 97,* 17-41

Greif, A. (1994). Cultural beliefs and the organization of society: A historical and theoretical reflection on collectivist and individualist societies. *Journal of Political Economy, 2,* 912-950

Guerra, R., Gaertnert, S. L., António, R., & Deegan, M. (2015). Do we need them? When immigrant communities are perceived as indispensable to national identity or functioning of the host society. *European Journal of Social Psychology, 45,* 868-879

Gul, P., & Uskul, A. K. (2021). An alternative account of anti-effeminacy bias: Reputation concerns and lack of coalitional value explain honor-oriented men's reluctance to befriend feminine men. *Personality and Social Psychology Bulletin, 47,* 1223-1248

Gupta, A., Szymanski, D. M., & Leong, F. T. L. (2011). The "model minority myth": Internalized racism of positive stereotypes as correlated of psychological distress, and attitudes toward-help seeking. *Asian American Journal of Psychology, 2,* 101-114

Haider-Markel, D. P., & Joslyn, M. R. (2018). Not threat, but threatening: Potential causes and consequences of gay innumeracy. *Journal of Homosexuality, 65,* 1527-1542

Haines, E. L., Deaux, K., & Lofaro, N. (2016). The time they are a-changing… or are they not? A comparison of gender stereotypes, 1983-2014. *Psychology of Women Quarterly, 40,* 1-11

Hall, E. V., Galinsky, A. D., & Phillips, K. W. (2015). Gender profiling: A gendered race perspective on person-position fit. *Personality and Social Psychology Bulletin, 41,* 853-868

Hall, E. V., Hall, A. V., Galinsky, A. D., & Phillips, K. W. (2019). MOSAIC: A model of stereotyping through associated and intersectional categories. *Academy of Management Review, 44,* 643-672

Ham, A., Guarín, A., & Ruiz, J. (2024). How accurately are household surveys measuring the LGBT population in Colombia? Evidence from a list experiment. *Labour Economics, 87*

Hamilton, D. L., & Trolier, T. K. (1986). Stereotypes and stereotyping: An overview of the cognitive approach. In S. L. Gaertner, & J. F. Dovidio (Eds.), *Prejudice, Discrimination, and Racism* (pp. 127-157. Academic Press

Hancock, A. M. (2007). When multiplication doesn't equal quick addition: Examining intersectionality as a research paradigm. *Perspectives on Politics, 5,* 63-79

Harrison, K. D. (2008). *The extinction of the world's languages and the erosion of human knowledge.* Oxford University Press

Hascher, J., Desai, N., & Krajbich, I. (2021). Incentivized and non-incentivized liking ratings outperform willingness-to-pay in predicting choice. *Judgement and Decision Making, 16,* 1464-1484

Hastie, R., Schroeder, C., & Weber, R. (1990). Creating complex social conjunction categories from simple categories. *Bulletin of the Psychonomic Society, 28,* 242-247

Hendriks, B., van Meurs, F., & van der Meij, E. (2015). Does a foreign accent sell? The effect of foreign accents in radio commercials for congruent and non-congruent products. *Multilingua, 34,* 119-130

Heneman, H. G. (1977). Impact of test information and applicant sex on applicant evaluations in a selection simulation. *Journal of Applied Psychology, 62,* 524-526

Hentschel, T., Heilman, M. E., & Peus, C. V. (2019). The multiple dimensions of gender stereotypes: A current look at men's and women's characterizations of others and themselves. *Frontiers in Psychology, 10,* 1-19

Herek, G. M. (1984). Attitudes toward lesbians and gay men: A factor-analytic study. *Journal of Homosexuality, 10,* 39-51

Herek, G. M. (1998). Attitudes Toward Lesbians and Gay Men Scale. In Davis, C. M. (Ed.), *Handbook of Sexuality-Related Measures* (pp. 206-208). Sage Publications

Hertwig, R., & Ortmann, A. (2001). Experimental practices in economics: A methodological challenge for psychologists? *Behavioral and Brain Sciences, 24,* 383-403

Hideg, I., Hancock, S., & Shen, W. (2023). Women with Mandarin accent in the Canadian English-speaking hiring context: Can evaluations of warmth undermine gender equity? *Psychology of Women Quarterly,* 1-25

Hines, S., & Santos, A. C. (2017). Trans* policy, politics and research: The UK and Portugal. *Critical Social Policy, 38,* 35-56

Hoffarth, M. R., & Hodson, G. (2018). When intergroup contact is uncommon and bias is strong: The case of anti-transgender bias. *Psychology & Sexuality, 9,* 237-250

Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., & Scmitt, M. (2005). A meta-analysis on the correlation between the implicit association test and explicit self-report measure. *Personality and Social Psychology Bulletin, 31,* 1369-1385

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values.* SAGE Publications

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture, 2,* 1-26

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organizations: Software of the Mind.* McGraw-Hill

Hofstede, G. (2023). Country Comparison Tool. *https://www.hofstede-insights.com/country-comparison-tool*

Hogg, M. A. (2007). Uncertainty-identity theory. *Advances in Experimental Social Psychology, 39,* 69-126

Holder, A. M. B., Jackson, M. A., & Ponterotto, J. G. (2015). Racial microaggression experiences and coping strategies of black women in corporate leadership. *Qualitative Psychology, 2,* 164-180

Hollis, L. P., & McCalla, S. A. (2013). Bullied back in the closet: Disengagement of LGBT employees facing workplace bullying. *Journal of Psychological Issues in Organizational Culture, 4,* 6-16

HRC. (2023). *Marriage Equality Around the World.* https://www.hrc.org/resources/marriage-equality-around-the-world

Hrebíčková, M., & Graf, S. (2014). Accuracy of national stereotypes in central Europe: Outgroups are not better than ingroup in considering personality traits of real people. *European Journal of Personality, 28,* 60-72

Hu, L. T., & Benter, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods, 3,* 424-453

IBGE. (2016). Nomes no Brasil https://wwwibgegovbr/censo2010/apps/nomes

ILGA. (2022). Rainbow Index Europe: 2022 https://wwwilga-europeorg/report/rainbow-europe-2022/

INE. (2023). 2021 Census: Occupations and educational qualifications. https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdest_boui=611923478&DESTAQUESmodo=2

Jarrin, A., & Pitts, B. (2020). “They are mar-vel-ous and they all want me!” Gay Brazilian tourists and global geographies of desire. *Sexualities, 23,* 1499-1517

Jetten, J., Postmes, T., & McAuliffe, B. J. (2002). ‘We’re *all* individuals’: Group norms of individualism and collectivism, levels of identification and identity threat. *European Journal of Social Psychology, 32,* 189-207

Jussim, L. (1991). Social perception and social reality: A reflection-construction model. *Psychological Review, 98,* 54-73

Kachel, S., Simpson, A. P., & Steffens, M. C. (2018). “Do I sound straight?”: Acoustic correlates of actual and perceived sexual orientation and masculinity/femininity in men’s speech. *Journal of Speech, Language, and Hearing Research, 61,* 1560-1578

Kalokerinos, E. K., Kjelsaas, K., Bennetts, S., & von Hippel, C. (2017). Men in pink collars: Stereotype threat and disengagement among male teachers and child protection workers. *European Journal of Social Psychology, 47,* 553-565

Kang, S. K., & Bodenhausen, G. V. (2015). Multiple identities in social perception and interaction: Challenges and opportunities. *Annual Review of Psychology, 66,* 1-7

Kang, S. K., & Chasteen, A. L. (2009). Beyond the double-jeopardy hypothesis: Assessing emotion on the faces of multiply-categorizable targets of prejudice. *Journal of Experimental Social Psychology, 45,* 1281-1285

Katz, D., & Braly, K. (1933). Racial stereotypes of one hundred college students. *The Journal of Abnormal and Social Psychology, 28,* 280-290

Katz, J. (2007). *The invention of heterosexuality*. University of Chicago Press

Kawakami, K., Young, H., & Dovidio, J. F. (2002). Automatic stereotyping: Category, trait, and behavioral actions. *Personality and Social Psychology Bulletin, 28,* 3-15

Kay, A.C., Day, M. V., Zanna, M. P., & Nussbaum, A. D. (2013). The insidious (and ironic) effect of positive stereotypes. *Journal of Experimental Social Psychology, 49,* 287-291

Keuroghlian, A. S., McDowell, M. J., & Stern, T. A. (2017). Providing care for lesbian, gay, bisexual, and transgender immigrants at health centers and clinics. *Psychosomatics, 59,* 193-198

Kite, M. E., & Deaux, K. (1987). Gender belief systems: Homosexuality and the implicit inversion theory. *Psychology of Women Quarterly, 11,* 83-96

Klauer, K. C., & Wegener, I. (1998). Unraveling social categorization in the "Who said what?" paradigm. *Journal of Personality and Social Psychology, 75,* 1155-1178

Klysing, A. (2023). Prototypicality at the intersection of gender and sexual orientation. *British Journal of Social Psychology, 62,* 1506-1533

Knöfler, T., & Imhof, M. (2007). Does sexual orientation have an impact on nonverbal behavior in interpersonal communication? *Journal of Nonverbal Behavior, 31,* 189-204

Kohne, J., Gallagher, N., Kirgil, Z. M., Paolillo, R., Padmos, L., & Karimi, F. (2020). The role of network structure and initial group norm distributions in norm conflict. In E. Deutschmann, J., Lorenz, L. Nardin, D. Natalini, & A. Wilhelm. (Eds.), *Computational Conflict Research* (pp. 113-140). Springer

Koven, M. (2004). Transnational perspectives on sociolinguistic capital among Luso-descendants in France and Portugal. *American Ethnologist, 31,* 270-290

Kramer, E. (1964). Personality stereotypes in voice: A reconsideration of the data. *Journal of Social Psychology, 62,* 247-251

Krings, F., Manoharan, S., & de Oliveira, A. (2022). Backlash for high self-promotion at hiring depends on candidates' gender and age. *International Journal of Selection and Assessment,* 1-15

Kunz, S. (2019). Expatriate, migrant? The social life of migration categories and the polyvalent mobility of race. *Journal of Ethnic and Migration Studies, 46,* 2145-2161

Kurinec, C. A., & Weaver, C. A. (2021). "Sounding black": Speech stereotypicality activates racial stereotypes and expectations about appearance. *Frontiers in Psychology, 12,* 1-15

Kurzban, R., Tooby, J., & Cosmides, L. (2001). Can race be erased? Coalitional computation and social categorization. *Proceedings of the National Academy of Sciences of United States of America, 98,* 15387-15392

Landy, D., Guay, B., & Marghetis, T. (2017). Bias and ignorance in demographic perception. *Theoretical Review, 25,* 1606-1618

Lee, T. L., & Fiske, S. T. (2006). Not an outgroup, not yet an ingroup: Immigrants in the stereotype content model. *International Journal of Intercultural Relations, 30,* 751-768

Lenton, A. P., Bruder, M., & Sedikides, C. (2009). A meta-analysis on the malleability of automatic gender stereotypes. *Psychology of Women Quarterly, 33,* 183-196

Leonardelli, G. J., & Brewer, M. B. (2001). Majority and minority discrimination: When and why. *Journal of Experimental Social Psychology, 37,* 468-485

Levon, E. (2014). Categories, stereotypes, and the linguistic perception of sexuality. *Language in Society, 43,* 539-566

Levy, G. D., Sadovsky, A. L., & Troseth, G. L. (2000). Aspects of young children's perceptions of gender-typed occupations. *Sex Roles, 42*, 993-1006

Levy, A., Saguy, T., Halperin, E., & van Zomeren, M. (2017). Bridges or barriers? Conceptualization of the role of multiple identity gateway groups in intergroup relations. *Frontiers in Psychology, 8,* 1-12

Lewis, R. A. (2019). "And Suddenly I Became a Lesbian!". In B. M. Haas (Ed.) & A., Shuman (Ed.). *Technologies of Suspicion and the Ethics of Obligation in Political Asylum.* Athens, OH: Ohio University Press

Lick, D. J., & Johnson, K. L. (2016). Straight until proven gay: A systematic bias toward straight categorizations in sexual orientation perception. *Journal of Personality and Social Psychology, 110,* 801-817

Löckenhoff, C. E., Chan, W., McCrae, R. R., De Fruyt, F., Jussim, L., De Bolle, M., Costa, P. T., Sutin, A. R., Realo, A., Allik, J., Nakazato, K., Shimonaka, Y., Hrebíčková, M., Graf, S., Yik, M., Ficková. E., Brunner-Sciarra, M., de Figueora, N. L.,… Terracciano, A. (2014). Gender stereotypes of personality: Universal and accurate? *Journal of Cross-Cultural Psychology, 45,* 675-694

Locksley, A., Hepburn, C., & Ortiz, V. (1982). Social stereotypes and judgements of individuals: An instance of the base-rate fallacy. *Journal of Experimental Social Psychology, 18*, 23-42

Long, K. (2015). *From Refugee to Migrant? Labor Mobility's Protection Potential.* Migration Policy Institute

Lourenço, I. (2011). Religion and gender: The Hindu diaspora in Portugal. *South Asian Diaspora, 3,* 37-51

Lourenço, I. (2017). Bollywood in Portugal: Watching and dancing practices in the construction of alternative cultural identities. *Etnografica, 21,* 175-202

Lowe, M., Khan, R., Thanzami, V., Barzy, M., & Karmaliani, R. (2021). Anti-gay "honor" abuse: A multinational attitudinal study of collectivist-versus individualist-orientated populations in Asia and England. *Journal of Interpersonal Violence, 36*, 7866-7885

Lyons, A., & Kashima, Y. (2003). How are stereotypes maintained through communication? The influence of stereotype sharedness. *Journal of Personality and Social Psychology, 85,* 989-1005

Mace, C. A. (1943). National stereotypes – their nature and function. *The Sociological Review, a35,* 29-36

Mack, S., & Munson, B. (2012). The influence of /s/ quality on ratings of men's sexual orientation: Explicit and implicit measures of the 'gay lisp' stereotype

Macrae, C. N., & Bodenhausen, G. V. (2000). Social cognition: Thinking categorically about others. *Annual Review of Psychology, 51,* 93-120

Macrae, C. N., Bodenhausen, G. V., & Milne, A. B. (1995). The dissection of selection in person perception: Inhibitory processes in social stereotyping. *Journal of Personality and Social Psychology, 69,* 397-407

Macrae, C. N., Bodenhausen, G. V., Milne, A. B., Thorn, T. M. J., & Castelli, L. (1997). On the activation of social stereotypes: The moderating role of processing objectives. *Journal of Experimental Social Psychology, 33,* 471-489

Macrae, C. N., Hewstone, M., & Griffiths, R. J. (1993). Processing load and memory for stereotype-based information. *European Journal of Social Psychology*, *23*, 77-87

Macrae, C. N., Milne, A. B., & Bodenhausen, G. V. (1994). Stereotypes as energy-saving devices: A peek inside the cognitive toolbox. *Journal of personality and Social Psychology*, *66*, 37.

Madon, S. (1997). What do people believe about gay males? A study of stereotype content and strength. *Sex Roles, 37,* 663-685

Malheiros, J., & Padilla, B. (2015). Can stigma become a resource? The mobilization of aesthetic-corporal capital by female immigrant entrepreneurs from Brazil. *Identities, 22*, 687-705

Mathies, N., Coleman, T., McKie, R. M., Woodford, M. R., Courtice, E. L., Travers, R., & Renn, K. A. (2019). Hearing “that’s so gay” and “no homo” on academic outcomes for LGBTQ+ college students. *Journal of LGBT Youth, 16,* 255-277

McConahay, J. B. (1986). Modern racism, ambivalence, and the modern racism scale. In J. D., Dovidio, & S. L., Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91-125). Academic Press

McCrae, R. R., Chan, W., Jussim, L., De Fruyt, F., Löckenhoff, C. E., De Bolle, M., Costa, P. T., Hrebíčková, M., Graf, S., Realo, A., Allik, J., Nakazato, K., Shimonaka, Y., Yik, M., Ficková. E., Brunner-Sciarra., M., Reátigui, N., de Figueora, N. L., Schmidt, V.,… Terracciano, A. (2013). The inaccuracy of national character stereotypes. *The Journal of Research in Personality, 47,* 831-842

McDermott, R. C., Pietrantonio, K. R., Browning, B. R., McKelvey, D. K., Jones, Z. K., Booth, N. R., & Sevig, T. D. (2019). In search of positive masculine role norms: Testing the positive psychology masculinity paradigm. *Psychology of Men & Masculinity, 20,* 12-22

McDonald, R. P. (1999). *Test theory: A unified treatment.* Lawrence Erlbaum Publishing

McPhail, R., McNulty, Y., & Hutchings, K. (2014). Lesbian and gay expatriation: Opportunities, barriers and challenges for global mobility. *The International Journal of Human Resource Management, 27,* 382-406

Mendes, M. M., & Candeias, P. (2013). Immigrant perceptions of ethnic and racial discrimination: Patterns and singularities in a municipality in the Lisbon metropolitan area. *International Review of Sociology, 23,* 401-420

Miller, A. E. (2018). Searching for gaydar: Blind spots in the study of sexual orientation perception. *Psychology & Sexuality, 9,* 188-203

Mobasseri, S. (2019). Race place and crime: How violent crime events affect employment discrimination. *American Journal of Sociology, 125*, 63-104

Montgomery, C., & Moore, E. F. (2018). Evaluating S(c)illy voices: The effects of salience, stereotypes, and co-present language variables on real-time reactions to regional speech. *Language, 94*, 629-661

Montgomery, G., & Zhang, Y. B. (2017). Intergroup anxiety and willingness to accommodate: Exploring the effects of accent stereotyping and social attraction. *Journal of Language and Social Psychology, 37,* 1-20

Moore, A., & Stathi, S. (2020). The impact of feminist stereotypes and sexual identity on feminist self-identification and collective action. *Journal of Social Psychology, 160,* 267-281

Moore-Berg, S. L., & Kapinski, A. (2018). An intersectional approach to understanding how race and social class affect intergroup processes. *Social Personality and Psychology Compass, 13,* 1-14

Moscatelli, S., Hewstone, M., & Rubini, M. (2017). Different size, different language? Linguistic majority favoritism and minority derogation by majority and minority groups. *Group Processes & Intergroup Relations, 20,* 757-769

Moya, M., & Moya-Garófano, A. (2021). Evolution of gender stereotypes in Spain: From 1985 to 2018. *Psicothema, 33,* 53-59

Mullen, B., Brown, R., & Smith, C. (1992). Majority bias as a function of salience, relevance, and status: An integration. *European Journal of Social Psychology, 22,* 103-122

Munson, B. (2007). The acoustic correlates of perceived masculinity, perceived femininity, and perceived sexual orientation. *Language and Speech, 50,* 125-142

Nario-Redmond, M. R. (2010). Cultural stereotypes of disabled and non-disabled men and women: Consensus for global category representations and diagnostic remains. *British Journal of Social Psychology, 49,* 471-488

Nascimento, T., & Bianchi, M. (2021). Stereotypes, emotions, and behaviors in intergroup context in Portugal. *Análise Psicológica, 1,* 39-51

Neto, J., Oliveira, E. N., & Neto, F. (2017). Acculturation adaptation and loneliness among Brazilian migrants living in Portugal. In I. Muenstermann (Ed.), *People's Movements in the 21st Century: Risks, Challenges, and Benefits* (pp. 169-185). InTechOpen Publications

Newport, F. (2015). Americans Greatly Overestimate Percent Gay, Lesbian in U.S. https://news.gallup.com/poll/183383/americans-greatly-overestimate-percent-gay-lesbian.aspx

Nicholas, C. L. (2004). Gaydar: Eye-gaze as identity recognition among gay men and lesbians. *Sexuality & Culture, 8,* 60-86

Nicolas, G., de la Fuente, M., & Fiske, S. T. (2017). Mind the overlap in multiple categorization: A review of crossed categorization, intersectionality, and multiracial perception. *Group Processes & Intergroup Relations, 20,* 621-631

Nisbett, R., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgement*. Prentice Hall

Nós Portugueses. (2023). Estatísticas https://nosportuguesespt/pt/estatisticas

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory (3rd edition)*. McGraw-Hill

Olier, J. S., & Spadavecchia, C. (2022). Stereotypes, disproportions, and power asymmetries in the visual portrayal of migrants in ten countries: An interdisciplinary AI-based approach. *Humanities and Social Sciences Communications, 9*

Opara, V., Sealy, R., & Ryan, M. K. (2020). The workplace experiences of BAME professional women: Understanding experiences at the intersection. *Gender, Work, and Organizations, 27,* 1192-1213

Oren, T., & Gorshkov, A. (2021). Lived experiences of recent Russian-speaking LGBT+ immigrants in the United States: An interpretive phenomenological analysis. *Journal of LGBTQ Issues in Counseling, 15,* 290-309

Organista, K., Carrillo, K., & Ayala, G. (2004). HIV prevention with Mexican migrants: Review, critique, and recommendations. *JAIDS, 37*

Padilla B., & França, T. (2016). Migration policies and institutional frameworks. Development and evolution in Portugal. *Comparative Cultural Studies: European and Latin America Perspective, 1,* 37-52

Painter, D., Fasoli, F., & Sulpizio, S. (2021). The impact of stimuli length and analytic method on auditory 'gaydar' research. *Journal of Voice, 21*

Paladino, M. P., & Mazzurega, M. (2020). One of us: On the role of accent and race in real-time in-group categorization. *Journal of Language and Social Psychology, 39,* 22-39

Park, E., Klieve, H., Hodge, S., & Klopper, C. (2020). Speaking with a foreign accent: Developed strategies of East Asian international students in Australian higher education. *Linguistic Research, 37,* 59-88

Parker, R. G. (1998). *Beneath the Equator: Cultures of desire male homosexuality and emerging gay communities in Brazil*. Routledge Publications

Passani, A., & Debicki, M. (2016). Students opinions and attitudes toward LGBT persons and rights: Results of a transnational European project. *Journal of LGBT Youth, 13,* 67-88

Payne, B. K., Vuletich, H. A., & Brown-Iannuzzi, J. L. (2019). Historical roots of implicit bias in slavery. *PNAS,* 116, 1-6

Pedulla, D. S. (2014). The positive consequence of negative stereotypes: Race sexual orientation and the job application process. *Social Psychology Quarterly, 77,* 75-94

Peplau, L. A., & Fingerhut, A. (2004). The paradox of the lesbian worker. *Journal of Social Issues, 60,* 719-735

Pereira, H. (2021). Male sex workers selling physical sex during the COVID-19 pandemic in Portugal: Motives safer sex practices and social vulnerabilities. *Societies, 11,* 1-13

Pereira, S. (2013). Replacement migration and changing preferences: Immigrant workers in cleaning and domestic service in Portugal. *Journal of Ethnic and Migration Studies, 39,* 1141-1158

Peters, G. Y. (2014). The alpha and the omega scale of reliability and validity: Why and how to abandon Cronbach's alpha and the route towards more comprehensive assessment of scale quality. *European Health Psychology, 16,* 56-69

Petsko, C. D., & Bodenhausen, G. V. (2017). Race-crime congruency effects revisited: Do we take defendants' sexual orientation into account? *Social Psychological and Personality Science, 10,* 73-81

Petsko, C. D., & Bodenhausen, G. V. (2020). Multifarious person perception: How social perceivers manage the complexity of intersectional targets. *Social and Personality Psychology Compass, 14,* 1-13

Petsko, C. D., & Bodenhausen, G. V. (2019). Racial stereotyping of gay men: Can a minority sexual orientation erase race? *Journal of Experimental Social Psychology, 83,* 37-54

Petsko, C. D., Rosette, A. S., & Bodenhausen, G. V. (2022). Through the looking glass: A lens-based account of intersectional stereotyping. *Journal of Personality and Social Psychology, 123,* 763-787

Pierné, G. (2013). Hiring discrimination based on national origin and religious closeness: Results from a field experiment in the Paris area. *IZA Journal of Labor Economics, 2*

Pietraszewski, D., Curry, O. S., Petersen, M. B., Cosmides, L., & Tooby, J. (2015). Constituents of political cognition: Race, party politics, and the alliance detection system. *Cognition, 140,* 24-39

Pinsof, D., & Haselton, M. G. (2017). The effect of promiscuity stereotype on opposition to gay rights. *PLoS One, 12,* 1-10

Pinto, D., & Nogueira, C. (2016). Portuguese nursing students' attitudes toward lesbians: From prejudice to recommendations for change. *Trends in Psychology, 24,* 805-814

Pires, R. P. (2019). Portuguese Emigration Today. In C. Pereira & J. Azevedo (Eds.), *New and Old Routes of Portuguese Emigration* (pp. 29-48). IMISCOE Research Series

Plaza, M., Bioché, J., Brunel, L., & Ruchaud, F. (2017). Sport = male… but not all sports: Investigating the gender stereotypes of sport activities at the explicit and implicit levels. *Sex Roles, 76,* 202-217

Polavieja, J., Lancee, B., Ramos, M., Veit, S., & Yemane, R. (2023). In your face: A comparative field experiment on racial discrimination in Europe. *Socio-Economic Review, 0,* 1-28

Pratto, F., Sidanius, J., & Levin, S. (2006). Social dominance theory and the dynamics of intergroup relations: Taking stock and looking forward. *European Review of Social Psychology, 17,* 271-320

Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly, 26,* 269-281

Purdie-Vaughns, V., & Eibach, R. (2008). Intersectional invisibility: The distinctive advantages and disadvantages of multiple subordinate-group identities. *Sex Roles, 59,* 377-391

Queer Lisboa. (2021). The Festivals. Retrieved from: http://queerlisboa.pt/en/festivals

Rakić, T., Steffens, M. C., & Mummendey, A. (2011). Blinded by the accent! The minor role of looks in ethnic categorization. *Journal of Personality and Social Psychology, 100,* 16-29

Ramsay, J. E., & Pang, J. S. (2017). Anti-immigrant prejudice in rising East Asia: A stereotype content and integrated threat analysis. *Political Psychology, 38,* 227-244

Rauhut, D., & Esteves, A. (2020). Becoming a part of 'elsewhereness': On the self-perceived integration of Swedish immigrants in Portugal. *Population, Space, and Place, 27,* 1-33

Reese, J., Santos, A., & Palma, T. A. (2023). A case of 'de-immigrantization': When sexual minority individuals love immigrant status. *Current Psychology,* Advance online publication

Reese, J., Santos, A., Palma, T. A., & Roberto, M. S. (2023). Triggering competence may protect multiple minority members from hiring discrimination. *Humanities and Social Sciences Communications, 10*

Rehman, Z., Jaspal., R., & Fish, J. (2020). Service provider perspectives of minority stress among black, Asian, and minority ethnic lesbian, gay and bisexual people in the UK. *Journal of Homosexuality, 14,* 1-23

Remedios, J. D., Chasteen, A. L., Rule, N. O., & Plaks, J. E. (2011). Impressions at the intersection of ambiguous and obvious social categories: Does gay + black = likable? *Journal of Experimental Social Psychology, 47,* 1312-1315

Remedios, J. D., & Snyder, S. H. (2018). Intersectional oppression: Multiple stigmatized identities and perceptions of invisibility, discrimination, and stereotyping. *Journal of Social Issues, 74,* 265-281

Reyna, C., Dobria, O., & Wetherell, G. (2013). The complexity and ambivalence of immigration attitudes: Ambivalent stereotypes predict conflicting attitudes toward immigration policies. *Cultural Diversity and Ethnic Minority Psychology, 19,* 342-356

Riggle, E. D. B., Ellis, A. L., & Crawford, A. E. (1996). The impact of "media contact" on attitudes toward gay men. *Journal of Homosexuality, 31,* 55-69

Rosch, E. (1975). Cognitive representations of semantic categories. *Journal of Experimental Psychology, 104,* 192-223

Rosenthal, L. (2016). Incorporating intersectionality into psychology: An opportunity to promote social justice and equity. *American Psychologist, 71,* 474-485

Ruckstuhl, A. (2016). *Protecting LGBTI refugees: The role of cities.* UNU-GCM, United Nations University Institute on Globalization, Culture and Mobility.

Rudman, L. A. (2011). *Implicit measures for social and personality psychology*. Sage Publications

Rule, N. O., Ambady, N., Reginald, A. B., & Neil, M. C. (2008). Accuracy and awareness in the perception and categorization of male sexual orientation. *Journal of Personality and Social Psychology, 95,* 1019-1028

Rule, N. O., Ishii, K., Ambady, N., Rosen, K. S., & Hallett, K. C. (2011). Found in translation: Cross-cultural consensus in the accurate categorization of male sexual orientation. *Personality and Social Psychology Bulletin, 37,* 1449-1507

Ryan, M. K., Haslam, S. A., Hersby, M. D., & Bongiorno, R. (2011). Think crisis-think female: The glass cliff of contextual variation in the think manager-think male stereotype. *Journal of Applied Psychology, 96*, 470-484

Roth, J., Steffens, M. C., & Vignoles, V. L. (2018). Group membership, group change, and intergroup attitudes: A recategorization model based on cognitive consistency principles. *Frontiers in Psychology, 9*

Sadika, B., Wiebe, E., Morrison, M. A., & Morrison, T. G. (2020). Intersectional microaggressions and social support for LGBTQ persons of color: A systematic review of the Canadian-based empirical literature. *Journal of GLBT Family Studies, 16,* 111-147

Santos, A. C. (2004). Sexual orientation in Portugal: Towards emancipation. *South European Society and Politics, 9*, 159-190

Santos, L. B. (2013). Prejudice discrimination Luso-tropicalism Lusophony and organizational justice in Portugal from the point of view of Brazilian immigrants. *Revista Psicologia: Organizações e Trabalho, 13,* 61-74

Sardinha, J. (2011). Highlighting the contrasts, downplaying the divergences: Insertion and visibility tactics of Brazilians in Portugal. *Ethnic and Racial Studies, 34,* 986-1005

Sardinha, J. (2013). Lifestyle migrants in central Portugal. In M. Janoschka & H. Haas (Eds.). *Contested Spatialities, Lifestyle Migration and Residential Tourism.* Routledge Publishing

Savaş, Ö., Greenwood, R. M., Blankenship, B. T., Stewart, A. J., & Deaux, K. (2021). All immigrants are not alike: intersectionality matters in views of immigrant groups. *Journal of Social and Political Psychology, 9,* 86-104

Schinkel, W. (2018). Against 'immigrant integration': For an end to neocolonial knowledge production. *Comparative Migration Studies, 6.*

Schiappa, E., Gregg., P. B., & Hewes, D. E. (2006). Can one TV show make a difference? *Will & Grace* and the parasocial contact hypothesis. *Journal of Homosexuality, 51,* 15-37

Schug, J., Alt, N. P., & Klauer, K. C. (2015). Gendered race prototypes: Evidence for the non-prototypicality of Asian men and black women. *Journal of Experimental Psychology, 56,* 121-125

SEF. (2022). Relatório de imigração Fronteiras e Asilo 2022. https://www.sef.pt/pt/pages/conteudo-detalhe.aspx?nID=92

Sesko, A. K., & Biernat, M. (2010). Prototypes of race and gender: The invisibility of black women. *Journal of Experimental Social Psychology, 46,* 356-360

Settes, L. H. (2006). Use of an intersectional framework to understand black women's racial and gender identities. *Sex Roles, 54,* 589-601

Sherif, M., Harvey, O. J., Hood, W. R., Sherif, C. W., & White, J. (1988). *The Robbers Cave experiment: Intergroup conflict and cooperation.* Wesleyan University Press

Sherman, J. W., Stroessner, S. J., Loftus, S. T., & Deugman, G. (1997). Stereotype suppression and recognition memory for stereotypical and nonstereotypical information. *Social Cognition, 15,* 205-215

Shih, M., Pittinski, T. L., & Ambady, N. (1999). Stereotype susceptibility: Identity salience and shifts in quantitative performance. *Psychological Science, 10,* 80-83

Sidanius, J. (1993). The psychology of group conflict and the dynamics of oppression: A social dominance perspective. In S. Iyengar & W. J. McGuire (Eds.), *Explorations in Political Psychology* (pp. 183-219). Duke University Press

Sidanius, J., Hudson, S. T., Davis, G., & Bergh, R. (2018). The theory of gendered prejudice: A social dominance and intersectional perspective. In A. Mintz & L. Terris (Eds.), *The Oxford Handbook of Behavioral and Political Science.* Oxford University Press

Sidanius, J., & Pratto, F. (1999). *Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression.* Cambridge University Press

Singh, R., Yeoh, B. S., Lim, D. I., & Lim, K. K. (1997). Cross-categorization effects in intergroup discrimination: Adding versus averaging. *British Journal of Social Psychology, 36,* 121-138

Sink, A., & Mastro, D. (2017). Mediated contact with gay men as a predictor of modern homonegativity: An analysis of exposure to characters appearing on television between 2000 and 2015. *Communication Reports, 31,* 78-90

Śliwa, M., Aguzzoli, R., Brewster, C., & Lengler, J. (2023). Workplace accentism as a postcolonial and intersectional phenomenon: The experiences of Brazilians in Portugal. *Human Relations, Advance online publication*

Sloan, T. S. (1990). Psychology for the third world? *Journal of Social Issues, 46,* 1-20

Skočajić, M. M., Radosavljević, J. G., Okičić, M. O., Janković, I. O., & Žeželi, I. L. (2020). Boys just don't! Gender stereotyping and sanctioning of counter-stereotypical behaviors in preschoolers. *Sex Roles, 82,* 163-172

Smyth, R., Jacobs, G., & Rogers, H. (2003). Male voices and perceived sexual orientation: An experimental and theoretical approach. *Language in Society, 32,* 329-350

Snefjella, B., Schmidtke, D., & Kuperman, V. (2018). National character stereotypes mirror language use: A study of Canadian and American tweets. *PLOS One, 13*

Song, J., & Zuo, B. (2016). Functional significance of conflicting age and wealth cross-categorization: The dominant role of categories that violate stereotypical expectations. *Frontiers in Psychology, 7*

Souza, L. E. C., Pereira, C. R., Camino, L., Lima, T. J. S., & Torres, A. R. R. (2016). The legitimizing role of accent on discrimination against immigrants. *European Journal of Social Psychology, 46,* 609-620

Steffens, M. C., Niedlich, C., Beschorner, R., & Köhler, M. C. (2018). Do positive and negative stereotypes of gay and heterosexual men affect job-related impressions? *Sex Roles, 80,* 548-564

Sterkens, P., Dalle, A., Wuyts, J., Pauwels, I., Durinck, H., & Baert, S. (2022). Homosexuality's signaling function in job candidate screening: Why gay is (mostly) ok. *IZA Discussion Paper, No. 15285*

Stocker, L. (2017). The impact of foreign accent on credibility: An analysis of cognitive statement ratings in a Swiss context. *Journal of Psycholinguistic Research, 46*, 617-628

Stolier, R. M., & Freeman, J. B. (2016). Neural pattern similarity reveals the inherent intersections of social categories. *Nature Neuroscience, 19,* 795-797

Stoller, A., Armstrong, E., Bey, K. J., Honorof, D., & Moore, A. (2014). Speech stereotypes: Good vs evil. *Voice and Speech Review, 8,* 78-92

Strinić, A., Carlsson, M., & Agerström, J. (2021). Multiple-group membership: Warmth and competence perceptions in the workplace. *Journal of Business and Psychology, 36,* 903-920

Sulpizio, S., Fasoli, F., Maass, A., Paladino, M. P., Vespignani, F., Eyssel, F., & Bentler, D. (2015). The sound of voice: Voice-based categorization of speakers' sexual orientation within and across languages. *PLoS One, 10*

Sultana, N., Pekerti, A. A., Okimoto, T. G., & Härtel, C. E. (2023). The effect of race and foreign accent on managers' career progression. *International Journal of Cross Cultural Management, 23*, 247-278

Sykes, H. (2015). Hetero- and homo-normativity: Critical literacy, citizenship education and queer theory. *Curriculum Inquiry, 41,* 419-432

Sue, S., Sue, D., Sue, L., & Takeuchi, D. T. (1995). Psychopathy among Asian Americans: A model minority? *Cultural Diversity and Mental Health, 1*, 39-54

Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relation.* Hall

Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology, 2,* 149-178

Tang, L., & Koveos, P. E. (2008). A framework to update Hofstede's cultural value indices: Economic dynamics and institutional stability. *Journal of International Business Studies, 39*, 1045-1063

Taylor, S. E. (1981). In D. L. Hamilton (Ed.), *A Categorization Approach to Stereotyping*. Psychology Press

Terracciano, A., Abdel-Khalek, A. M., Ádám, N., Adamovová, L., Ahn, C., Ahn, H., Alansari, B. M., Alcalay, L., Allik, J., Angleitner, A., Avia, A., Ayearst, L. E., Barbaranelli, C., Beer, A., Borg-Cunen, M. A., Bratko, D., Brunner-Sciarra, M., Budzinski, L., Camart, N., Dahourou, D.,… McCrae, R. R. (2005). National character does not reflect mean personality trait levels in 49 cultures. *Science, 7,* 96-100

Thayer, L. O., & Pronko, N. H. (1959). The effect of conceptual stereotypes in an ambiguous reading situation. *Journal of General Psychology, 60,* 269-273

Thompson, E. H., & Pleck, J. H. (1986). The structure of male role norms. *American Behavioral Scientist, 29,* 531-543

Timmons, S., McGinnity, F., & Carroll, E. (2023). Ableism differs by disability, gender and social context: Evidence from vignette experiments. *British Journal of Social Psychology, 63,* 637-657

Tilcsik, A. (2011). Pride and prejudice: Employment discrimination against openly gay men in the United States. *American Journal of Sociology, 117,* 586-626

Todorov, A., Olivola, C. Y., Dotsch, R., & Mende-Siedlecki, P. (2015). Social attributions from faces: Determinants, consequences, accuracy, and functional significance. *Annual Review of Psychology, 66,* 519-545

Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96,* 506-520

Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology, 74,* 118-128

Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika, 38,* 1-10

Turner, J. C. (1987). A self-categorization theory. In J. C. Turner, M. A. Hogg, P. J. Oakes, S. D. Reicher, & M. S. Wetherell (Eds.), *Rediscovering the social group: A self-categorization theory.* Basil Blackwell

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group.* Blackwell Press

Valdez, C. R., Valentine, J. L., & Padilla, B. (2013). "Why we stay": Immigrants' motivations for remaining in communities impacted by anti-immigration policy. *Cultural Diversity and Ethnic Minority Psychology, 19,* 279-287

van Es, M. A. (2019). Muslim women as 'ambassadors' of Islam: Breaking stereotypes in everyday life. *Identities, 26,* 375-392

van Hoorn, A. (2014). Individualist-Collectivist culture and trust radius: A multilevel approach. *Journal of Cross-Cultural Psychology, 46,* 269-276

Vargas, M. E. (2020). Ghostly others: Limiting constructions of deserving subjects in asylum claims and sanctuary protection. *Journal of International Women's Studies, 21,* 77-90

Veit, S., Arnu, H., Di Stasio, V., Yemane, R., & Coenders, M. (2022). The "big two" in hiring discrimination: Evidence from a cross-national field experiment. *Personality and Social Psychology Bulletin, 48,* 167-182

Wall, K., Cunha, V., Atalaia, S., Rodrigues, L., Correia, R., Correira, S. V., & Rosa, R. (2017). *Men and Gender Equality in Portugal.* CITE. https://eeagrants.cig.gov.pt/wp-content/uploads/2018/02/WHITE_PAPER.pdf

Wigboldus, D., Dijksterhuis, A., & van Knippenberg, A. (2003). When stereotypes get in the way: Stereotypes obstruct stereotype-inconsistent trait inferences. *Journal of Personality and Social Psychology, 84,* 470-484

Wilkins, A. C. (2012). Becoming black women: Intimate stories and intersectional identities. *Social Psychology Quarterly, 75,* 173-196

Wilson, J. P., Remedios, J. D., & Rule, N. O. (2017). Interactive effects of obvious and ambiguous social categories on perceptions of leadership: When double-minority status may be beneficial. *Personality and Social Psychology Bulletin, 43,* 888-900

Wilson, W. J. (1978). The declining significance of race. University of Chicago Press

Wittenbrink, B., Judd, C. M., & Park, B. (2001). Spontaneous prejudice in context: Variability in automatically activated attitudes. Journal of Personality and Social Psychology, 81, 815-82

Wojciske, B., Bazinska, R., & Jaworski, M. (1998). On the dominance of moral categories in impression formation. Personality and Social Psychology Bulletin, 24, 1245-1257

Wojnowicz, M. T., Ferguson, M. J., Dale, R., & Spivey, M. J. (2009). The self-organization of explicit attitudes. Psychological Science, 20, 1428-1435

Wong, F. Y., McCreary, D. R., Carpenter, K. M., Engle, A., & Korchynski, R. (1999). Gender-related factors influencing perceptions of homosexuality. Journal of Homosexuality, 37, 19-31

Woodford, M. R., Howell, M. L., & Silverschanz, P. (2013). "That's so gay": Heterosexual male undergraduates and the perpetuation of sexual orientation microaggressions on campus. Journal of Interpersonal Violence, 28, 416-435

World Bank. (2023). Countries and Economies. The World Bank. https://data.worldbank.org/country

Wright, T. (2016). Women's experience of workplace interactions in male-dominated work: The intersections of gender, sexuality and occupation group. Gender Work & Organization, 23, 348-362

Wulff, J. N., & Villadsen, A. R. (2020). Are survey experiments as valid as field experiments in management research? An empirical comparison using the case of ethnic employment discrimination. European Management Review, 17, 347-356

Wyer, R. S., & Carlston, D. E. (1979). Social cognition inference and attribution. Routledge Publications

Zhong, C. B., Phillips, K. W., Leonardelli, G. J., & Galinsky, A. D. (2008). Negational categorization and intergroup behavior. Personality and Social Psychology Bulletin, 34, 793-806

Zuckerman, M., & Driver, R. E. (1989). What sounds beautiful is good: The vocal attractiveness stereotype. Journal of Nonverbal Behavior, 13, 67-82

APPENDICES

APPENDIX A: CORRELATIONS TABLES IN CHAPTER 2.3.1

Table A

Correlations of Stereotypical Ratings Between Male Conditions

	Portuguese Men	Gay Men	Immigrant Men
Portuguese Men	-		
Gay Men	.107	-	
Immigrant Men	.595*	.351*	-
Gay Immigrant Men	.109	.946*	.315*

Note. An asterisk (*) indicates a p-value of <.001. Pearson's *r* is reported.

Table B

Correlations of Stereotypical Ratings Between Female Conditions

	Portuguese Women	Lesbian Women	Immigrant Women
Portuguese Women	-		
Lesbian Women	0.605*	-	
Immigrant Women	0.796*	0.427*	-
Lesbian Immigrant Women	0.617*	0.957*	0.468*

Note. An asterisk (*) indicates a p-value of <.001. Pearson's *r* is reported.

APPENDIX B: ACCENT-RELATED ANALYSIS IN EXPERIMENT 1 OF CHAPTER 4.2

A 2 (Target accent) x 2 (Target sexual orientation) repeated measures ANOVA was performed to examine whether participants were more or less accurate for any target group. The repeated measures ANOVA found a significant main effect of accent, ($F(1, 73) = 2533.69$, $p < .001$, $\eta^2 p = .97$), indicating Portuguese speakers ($M = 1.39$, $SD = .47$) were perceived as having prototypically Portuguese accents, while Brazilian speakers ($M = 6.38$, $SD = .62$) were perceived as having prototypically Brazilian accents. There was no main effect of sexual orientation, ($F(1, 73) = .10$, $p = .749$, $\eta^2 p = .001$), and a significant interaction, ($F(1, 73) = 5.34$, $p = .024$, $\eta^2 p = .07$) allowed us to confirm that, in a planned comparison, both Portuguese groups were not significantly different from one another and both Brazilian groups were not significantly different from one another.

APPENDIX C: DEMOGRAPHIC ANALYSIS IN CHAPTER 4.2

Demographic Analyses for Experiment 1

Nationality and Sexual Orientation Accuracy (Dichotomous Choice)

A series of independent samples *t*-tests examined whether or not participants' gender or sexual orientation influenced the accuracy of speakers' nationalities and sexual orientations (SO). Importantly, the participant who did not specify their gender was excluded from analyses regarding gender. First, there was no effect of participants' gender on the accuracy of speakers' nationalities (*p*s >.05); that is, men and women guessed each target groups' nationality with similar accuracy. Similarly, there was no effect of participants' SO on the accuracy of speakers' SO (*p*s >.05). Next, there was no effect of participants' gender on the accuracy of speakers' SO (*p*s >.05). Finally, there was no effect of participants' SO on the accuracy of Brazilian speakers' SO (*p*s >.05); however, straight participants (M = 92.50, SD = 1.21) were better at guessing the sexual orientation of straight Portuguese speakers than lesbian, gay, or bisexual (LGB) participants (M = 76.30, SD = 2.54) ($t(73) = 3.75$, $p < .001$, $d = .90$), while LGB participants (M = 64.20, SD = 2.63) were better at guessing the sexual orientation of gay Portuguese speakers than straight participants (M = 46.70, SD = 2.87), $t(74) = -2.62$, $p = .011$, $d = -.63$.

Perceived Nationality and Sexual Orientation (Likert Scale)

To test perceived nationality, we examined participants' nationality, gender, and SO in a 2 (Demographic: nationality, gender, or SO) x 2 (Target nationality) x 2 (Target SO) repeated measures ANOVA, focusing on the interactions between variables. An initial repeated measures ANOVA found no significant participant nationality*target nationality interaction, ($F(1, 72) = .08$, $p = .781$, $\eta^2p = .001$), and no significant participant nationality*target SO interaction, $F(1, 60) = .85$, $p = .360$, $\eta^2p = .01$. A second repeated measures ANOVA found no significant participant gender*target nationality interaction, ($F(1, 71) = 3.73$, $p = .057$, $\eta^2p = .05$) and no significant participant gender*target SO interaction, ($F(1, 73) = .001$, $p = .983$, $\eta^2p = .001$). A second repeated measures ANOVA examining participants' SO found no significant participant SO*target nationality interaction, ($F(1, 72) = .53$, $p = .470$, $\eta^2p = .01$), and no significant participant SO*target SO interaction, $F(1, 72) = 2.13$, $p = .149$, $\eta^2p = .03$.

The same procedure was used to examine potential differences in perceived sexual orientation. An initial repeated measures ANOVA found a significant participant nationality*target nationality interaction, ($F(1, 72) = 4.44$, $p = .039$, $\eta^2p = .06$), with a post-hoc comparison (Bonferroni) suggesting

Brazilian participants perceived Portuguese speakers less straight (M = 3.84, SD = 1.01) than Portuguese participants (M = 3.33, SD = .81). There were no differences for Brazilian speakers (p = 1.00), and there was no significant participant nationality*target SO interaction, $F(1, 72) = .01$, $p = .943$, $\eta^2p = .001$. A second repeated measures ANOVA found no significant participant gender*target nationality interaction, ($F(1, 71) = .03$, $p = .860$, $\eta^2p = .001$) and no significant participant gender*target SO interaction, ($F(1, 73) = 1.16$, $p = .285$, $\eta^2p = .02$). A final repeated measures ANOVA also found no significant participant SO*target nationality interaction, ($F(1, 71) = 3.55$, $p = .064$, $\eta^2p = .05$) and no significant participant SO*target SO interaction, ($F(1, 73) = 2.33$, $p = .132$, $\eta^2p = .03$).

Demographic Analyses for Experiment 2

Categorical Estimations

Categorical estimations were evaluated in a series of independent samples *t*-tests with participants' nationality, gender, and SO used as the grouping variables. Importantly, the participant who marked 'other SO' was excluded from analyses regarding SO. An initial set of independent samples *t*-tests found participants' nationality did not influence the estimations of the number of Portuguese, Brazilian, straight, or gay speakers (*p*s >.05). Participants' gender and SO also did not affect the estimations of target groups (*p*s >.05 in separate *t*-tests).

Attribution of Stereotypical Behaviors

To test gender stereotyping, we examined participants' nationality, gender, and SO in a 2 (Demographic: nationality, gender, or SO) x 2 (Target nationality) x 2 (Target SO) repeated measures ANOVA, focusing on the interactions between variables. An initial repeated measures ANOVA regarding stereotypically masculine behaviors found a significant interaction of participants nationality*target nationality, ($F(1, 60) = 5.34$, $p = .024$, $\eta^2p = .08$), with a post-hoc comparison (Bonferroni) suggesting Brazilian participants perceived Portuguese speakers (M = 3.25, SD = .77) as more likely to engage in masculine behaviors than Brazilian speakers (M = 2.86, SD = .91). However, there were no differences within Portuguese participants (*p*s >.05). There was also no significant participant nationality*target SO interaction, $F(1, 60) = .71$, $p = .402$, $\eta^2p = .01$. A second repeated measures ANOVA revealed no significant participant gender*target nationality interaction, ($F(1, 60) = 1.14$, $p = .289$, $\eta^2p = .02$), and no significant participant gender*target SO interaction, $F(1, 60) = .64$, $p = .428$, $\eta^2p = .01$. A final repeated measures ANOVA also found no significant participant SO*target nationality interaction, ($F(1, 59) =$

.001, p = .950, η^2p = .001), and no significant participant SO*target SO interaction, $F(1, 59) = .16$, p = .688, η^2p = .001.

Next, the same procedure was used to examine the attribution of feminine behaviors. An initial repeated measures ANOVA found no significant participant nationality*target nationality interaction, ($F(1, 60) = 3.94$, p = .052, η^2p = .06), and no significant participant nationality*target SO interaction, $F(1, 60) = .85$, p = .361, η^2p = .01. A second repeated measures ANOVA found no significant participant gender*target nationality interaction, ($F(1, 60) = .47$, p = .498, η^2p = .01), and no significant participant gender*target SO interaction, $F(1, 60) = .54$, p = .541, η^2p = .01. A final repeated measures ANOVA found a significant participant SO*target nationality interaction, ($F(1, 59) = 8.45$, p = .005, η^2p = .13), but a post-hoc comparison (Bonferroni) did not detect between-participant SO and within-nationality differences (ps >.05). There was no significant participant SO*target SO interaction, $F(1, 59) = .16$, p = .689, η^2p = .001.

Perceived Masculinity and Femininity

To test perceived masculinity and femininity, we examined participants' nationality, gender, and SO in a 2 (Demographic: nationality, gender, or SO) x 2 (Target nationality) x 2 (Target SO) repeated measures ANOVA, focusing on the interactions between variables. An initial repeated measures ANOVA found no significant participant nationality*target nationality interaction, ($F(1, 60) = .33$, p = .569, η^2p = .01), and no significant participant nationality*target SO interaction, $F(1, 60) = .240$, p = .626, η^2p = .001. A second repeated measures ANOVA found no significant participant gender*target nationality interaction, ($F(1, 60) = .17$, p = .686, η^2p = .001), but found a significant participant gender*target SO interaction, ($F(1, 60) = 5.60$, p = .021, η^2p = .09), with a post-hoc comparison (Bonferroni) suggesting men viewed gay speakers as more feminine (M = 3.91, SD = 1.30) than women (M = 3.25, SD = 1.14). Men and women viewed straight speakers similarly (p = 1.00). A final repeated measures ANOVA found no significant participant SO*target nationality interaction, ($F(1, 59) = .44$, p = .509, η^2p = .01), and no significant participant SO*target SO interaction, $F(1, 59) = 1.50$, p = .226, η^2p = .03.

APPENDIX D: WHO SAID WHAT? SCRIPT IN CHAPTER 4.3.1

Sentence Number	O quê fez ontem à tarde?	Speaker
1	Fiz uma chamada pelo Skype *esta manhã*	BS1
2	*Esta manhã*, assisti a uma série online	PS5
3	I browsed the internet with my phone	BS2
4	Eu fiz algumas compras online	BS4
5	I spent the afternoon in the garden	PS4
6	I spent the afternoon at home	BS6
7	Troquei o purificador de ar do meu carro	PS3
8	I took the car to the mechanic yesterday	PS2
Sentence Number	**Quando foi a última vez que sentiu que a sua personalidade se destacou pelas suas ações?**	**Speaker**
9	Sou contra a legalização das drogas	PS3
10	I recently got a political tattoo	PS2
11	Estou ativamente envolvido na política local e nacional	BS1
12	Escrevi um post político no meu blog recentemente	PS5
13	I went to a TED talk	BS2
14	Eu reclamei do barulho do vizinho ontem à noite	BS4
15	I often ride my bicycle	PS4
16	I bought a newspaper to read	BS6
Sentence Number	**Quando foi a última vez que apreciou comer uma comida?**	**Speaker**
17	I went to the restaurant near my parents' home	PS4
18	I went to the McDonald's beneath my apartment	BS6
19	Visitei um novo restaurante no fim de semana passado	PS3
20	I had dinner at 10pm last night	PS2
21	Eu almocei no Subway	BS1
22	Jantei às 7h ontem à noite	BS4
23	I ate vegetables that I bought at the supermarket	BS2
24	De manhã, fui ao supermercado comprar morangos	PS5
Sentence Number	**O que fez na última vez que interagiu com os seus amigos?**	**Speaker**
25	I sent text messages	BS2
26	Organizei uma festa da faculdade durante a semana	BS4
27	I spent last Friday afternoon at a party	PS4
28	I went to an archery competition last week	BS6
29	Eu fui escalar com amigos	PS3
30	I invited my friends to my birthday party	PS2
31	Fui ao cinema	BS1
32	Fiz uma viagem interrail com os meus amigos	PS5

APPENDIX E: PERMUTATIONS OF JOBS IN EXPERIMENT 2 OF CHAPTER 4.4.3

Because masculine and feminine jobs were not shown twice to participants, we first conducted a series of one-way ANOVAs to explore whether or not a specific job was an outlier, using each of the 4 permutations within a target group. No significant interaction was found for any of the 8 main target groups, indicating that masculine and feminine job types were perceived as either masculine or feminine regardless of the group. The ANOVA outputs for each group may be found in the table below.

Group	ANOVA Output
Masculine Straight Men	$F(3, 56) = 1.02$, $p = .391$, $\eta^2 = .05$
Feminine Straight Men	$F(3, 56) = .93$, $p = .433$, $\eta^2 = .05$
Masculine Gay Men	$F(3, 56) = 1.46$, $p = .235$, $\eta^2 = .07$
Feminine Gay Men	$F(3, 56) = .06$, $p = .981$, $\eta^2 = .001$
Masculine Straight Women	$F(3, 56) = .31$, $p = .818$, $\eta^2 = .02$
Feminine Straight Women	$F(3, 56) = .85$, $p = .472$, $\eta^2 = .04$
Masculine Lesbian Women	$F(3, 56) = .85$, $p = .471$, $\eta^2 = .04$
Feminine Lesbian Women	$F(3, 56) = .47$, $p = .708$, $\eta^2 = .02$