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The effect of English accents and speakers' race on language attitudes: An experimental study with Brazilian pre-service English teachers

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O presente trabalho em nível de Mestrado foi avaliado e aprovado, em 12 de junho de 2024, pela banca examinadora composta pelos seguintes membros:

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Certificamos que esta é a versão original e final do trabalho de conclusão que foi julgado adequado para obtenção do título de Mestre em Inglês: Estudos Linguísticos e Literários.

Coordenação do Programa de Pós-Graduação

Profa. Hanna Kivistö-de Souza, Dra. Orientadora

Florianópolis, 2024.

To my mom and dad for their hard work in supporting my educational pursuits.

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It is not our differences that divide us. It is our inability to recognize, accept, and celebrate those differences. (Audre Lorde)

ABSTRACT

Globalization significantly impacts the worldwide spread of English, resulting in a socially diverse landscape regarding English varieties and those who speak to them. Although each of these varieties is relevant, the spread of English is rooted in a colonization perspective that exacerbates discrimination against marginalized and racialized English speakers. Extensive research reveals that language attitude assessments are influenced by both the prestige and non-prestige varieties of English, as well as by the speakers' racial backgrounds. Nevertheless, this scenario has not been widely examined in Brazil. Therefore, the general objective of this thesis is to explore the attitudes of Brazilian pre-service English teachers toward English varieties and the speakers' race. Specifically, the objectives are: (1) to examine attitudes towards General American, British, Southern American, South African, Spanish- and Portuguese-accented English, and (2) to explore the effect of speaker's race (Black/White) on attitudinal ratings. The data were collected from 52 Brazilian pre-service English teachers through a background questionnaire and a matched-guise test, replicated from Bouchard (2023). In this, participants watched twelve picture-videos featuring audios of six English varieties played twice to match with photographs of six black and six white women. Each picture-video was assessed on a 6-point Likert scale along three language attitude dimensions: status, solidarity, and understandability. The findings revealed that Brazilian pre-service English teachers attributed favorable attitudes toward General American and British English over South African, Portuguese- and Spanish-accented English across all attitude dimensions. Southern American English was rated less positively only compared to General American English in terms of understandability. Concerning speakers' race, the findings indicated that Black speakers received more favorable attitudes than White speakers. In addition, no significant interaction effect was found between race and English varieties. These results contribute to the advancement of studies on language attitudes in Brazil. Furthermore, they offer insights for constructing inclusive and identity-based approaches in English language teaching in Brazil.

Keywords: Language Attitudes; Stereotypes; English Varieties; Race.

RESUMO

A globalização impacta significativamente a disseminação do inglês pelo mundo, resultando em uma paisagem socialmente diversa em relação às variedades e àqueles que as falam. Embora cada uma dessas variedades seja relevante, a disseminação do inglês tem raízes na perspectiva de colonização que exacerba a discriminação contra aqueles falantes marginalizados e racializados de inglês. Pesquisas revelam que as atitudes linguísticas são influenciadas tanto pelas variedades de prestígio quanto pelas não prestigiosas do inglês, bem como pelas origens raciais dos falantes. Entretanto, compreender esse cenário entre os brasileiros é desafiador devido à escassez de pesquisas em atitudes linguísticas no Brasil. Portanto, o objetivo geral desta tese é explorar as atitudes dos professores brasileiros de inglês em formação em relação às variedades do inglês e à interseccionalidade racial dos falantes. Especificamente, os objetivos são: (1) examinar se o inglês americano, britânico, do sul dos Estados Unidos, sul-africano, com sotaque espanhol e português afetam as atitudes linguísticas e (2) explorar se as avaliações atitudinais são influenciadas pela raça do falante (negro/branco). Os dados foram coletados de 52 estudantes de licenciatura em inglês por meio de um questionário e um teste de disfarce combinado, replicado de Bouchard (2023). Neste, os participantes assistiram a 12 audiovisuais ilustrados com áudios de seis variedades de inglês reproduzidos duas vezes para combinar com fotografias de seis mulheres negras e seis brancas avaliando cada estímulo em uma escala Likert de 6 pontos ao longo de três dimensões de atitude linguística: status, solidariedade e compreensibilidade. Os resultados revelaram que os futuros professores brasileiros de inglês atribuíram atitudes favoráveis em relação ao inglês americano geral e britânico em comparação com o inglês sul-africano, com sotaque português e espanhol, em todas as dimensões de atitude. O inglês do sul dos Estados Unidos foi menos avaliado positivamente apenas em comparação com o inglês americano geral na dimensão de compreensibilidade. Em relação à raça dos falantes, os resultados indicaram que os falantes negros tiveram avaliações mais favoráveis em comparação com os falantes brancos. Além disso, nenhum efeito significativo de interação foi encontrado entre raça e variedades do inglês. Esses resultados contribuem para o avanço dos estudos sobre atitudes linguísticas no Brasil. Além disso, contribuem para a construção de abordagens inclusivas e identitárias no ensino de inglês no contexto brasileiro.

Palavras-chave: Atitudes Linguísticas; Estereótipos; Variedades do Inglês; Raça.

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1 INTRODUCTION

The impact of globalization has influenced the spread of the English language. As English usage expands, it intersects with multiple cultures, giving rise to various English language varieties associated with diverse speakers' identities. However, within this linguistic diversity, there is a hierarchy that mirrors social and power dynamics, reinforcing existing inequalities. While some varieties adhere to established language-related social norms, others, often spoken by marginalized language groups, are considered as non-standard and are subjected to societal discrimination. This hierarchical categorization of English varieties reflects deeply rooted attitudes influenced not only by linguistic but also by socio-cultural factors that perpetuate linguistic stereotypes. Consequently, since individuals' cognitive attitudes affect their behavior, such constructed ideologies and stereotypes can lead to prejudice and discrimination, having a significant impact on the social level.

Numerous studies on language attitudes have examined the reasons why different varieties of English elicit different levels of bias. These studies have shown a tendency: English speakers of non-prestigious varieties tend to be evaluated less favorably in terms of attitudinal dimensions, such as status (i.e., leader, intelligent) and solidarity (i.e., friendly, cool) when compared to those who speak socially prestigious varieties (e.g., Chien, 2014; Dragojevic; Goatley-Soan, 2020; Monfared; Khatib, 2018). For instance, it has been discovered that speakers of non-standard varieties are perceived to be associated with jobs of low social prestige (Cesar *et al.*, 2024). This attitudinal bias is explained by the fact that language attitudes are affected by social group memberships, each associated with different stereotypes (Ryan, 1983). Consequently, within the coloniality system, where the language was co-naturalized based on a binary logic (Flores; Rosa, 2017), language-based categorization groups that deviate from the dominant ideological norms of Euro-American varieties are racialized and frequently perceived as inferior.

Since language is a powerful social force that indicates membership to social groups, language is intersected other social identities, as race, gender, social class, to name a few. Hence, there is a growing interest among linguists in understanding the intersectionality of non-linguistic social categories with language in the field of attitudes. Studies show that language attitudes are affected, for instance, by race (Kutlu, 2022), sexual orientation (Fasoli *et al.*, 2023), age (Coupland; Bishop, 2007), and gender (Merritt; Bent, 2020), to name a few. Notably, Kang and Rubin (2009) found that listeners reversed linguistic stereotypes when English varieties were matched with a photo of an Asian speaker of English. Therefore,

alongside language, race is a social categorization inherently co-naturalized within colonial history (e.g., BIPOC¹ is seen as inferior and White as superior; Flores; Rosa, 2017). As well as racialized accents, when racialized individuals intersected with language in contemporary, it shapes language attitudes.

Based on the previous research on language attitudes, the main objective of this study was to investigate language attitudes toward English varieties and their speakers' race. As far as I know, no previous study has examined language attitudes towards multiple English varieties intertwined with the racial background of speakers within the Brazilian context. The participants of earlier studies in the Brazilian context have been undergraduate and K-12 student populations (El-Dash; Busnardo, 2001; Oliveira, 2008; Cesar *et al.*, 2024), whereas the present study has chosen to examine the language attitudes of Brazilian pre-service English teachers with the supposition that teachers' attitudes will be reflected in their teaching practice. The varieties examined include General American English, British English, Southern American English. South African English, Spanish-accented English, and Portuguese-accented English. Furthermore, in addition to attitudes towards English varieties, to the best of my knowledge, no study has analyzed the attitudes of Brazilian pre-service teachers towards English varieties in conjunction with speakers' race. Hence, the current study has a second specific objective of investigating the language attitude evaluations of Brazilian pre-service teachers towards Black and White English speakers.

Since little research has been conducted on language attitudes, particularly regarding the various English varieties and their speakers, this study aims to contribute to advancing studies on language attitudes in Brazil. Moreover, understanding the attitudes of pre-service English teachers is fundamental for supporting the development of appropriate curricula for English undergraduate programs. This support is crucial because teachers are likely to influence how their students perceive and judge English speakers around them. Therefore, pre-service English teachers, as future in-service educators, will play a crucial role in teaching English as a language of meaning-making and identity construction (Jenkins, 2018). For instance, in a Spanish undergraduate program at Western Michigan University, black students face challenges in advancing to higher-level courses and tend to receive lower grades than other groups of students (Zárate-Sández, 2021). Therefore, this piece of research will contribute to reflecting on inclusive and culturally responsive language learning settings that

¹ BIPOC stands for Black, Indigenous, and People of Color.

recognize and validate the experiences and identities of Black students and students with different English varieties.

1.1 STATEMENT OF MOTIVATION

My interest in starting this research stems from the time of being an undergraduate student in English and Portuguese undergraduate program when I desired to investigate the field of phonetics and phonology. During the phonetics and phonology course, I learned about the phenomenon of vowel epenthesis in Brazilian Portuguese, which piqued my curiosity. I observed this phenomenon in students' speech while working as a Teaching Assistant in the Institutional Teacher Initiation Scholarship Program at a public school in the city of Lavras, Minas Gerais. This observation sparked my interest in going beyond the context of my undergraduate English Pronunciation course by investigating the reasons for the occurrence of vowel epenthesis through a research project. In hindsight, the desire to investigate this area was based on the colonial system into which I automatically had fallen, to achieve the pronunciation of an idealized white English speaker, which would never be possible for me as an Afro-Brazilian non-binary person.

My academic journey continued as I pursued a master's degree at the Federal University of Santa Catarina (UFSC). At the very beginning of my graduate studies (2022), during a talk by Professor Christine Shea (University of Iowa) at the research group on Phonetics and Phonology Applied to Foreign Languages (NUPFFALE), whereby I am an active member, I encountered a pivotal question that further ignited my curiosity. In her presentation titled 'Speech Perception is Dialect Perception,' she pointed out that indexical variabilities, such as gender/age and dialect variability, impact speech processing and perception. The opportunity to participate in this event was a significant turning point in my research interest. It prompted me to question: Why not start investigating language perception, considering that this was the motivating factor for me to begin my undergraduate research project – the perception I held about the accents of elementary school students?

My research was established in the language attitudes field when I came across Bouchard's (2022) study. She investigated the undergraduate students' language attitudes toward French varieties and race. As an Afro-Brazilian, I could not help but deeply resonate with the variables explored in Bouchard's study. I have experienced and continue to experience how racism has influenced and influence perceptions toward me, impacting my sense of insecurity and fear of speaking English. Once this insecurity prompted me to strive for perfection in my speech, I decided to delve into the potential intersectionality between language and race within the field of language attitudes. I believe that conducting this piece of research is imperative to consider the diversities in our educational practices, as it can support the maintenance and confidence of Black and students of different English varieties within the academic environment.

1.2 ORGANIZATION OF THE THESIS

In addition to this current introduction, the thesis is organized into four main parts: (1) the review of literature, (2) the method, (3) the results, and (4) the conclusions. (1) The literature review draws discussions from sociolinguistics and linguistic anthropology, specifically World English, English as a Lingua Franca, and Raciolinguistics perspectives. The second part focuses on the social psychology of language and sociolinguistics fields to attain profound insights into language attitudes and their measurements, correlating them with the reviewed studies on language attitudes. (2) The method section provides a detailed description of the study in 12 subsections. Initially, an overview of the design and participants involved is provided, followed by the report of the instruments, replicated from Bouchard's (2022) study (i.e., background questionnaire and matched-guise test), and finally, the procedures for data collection and analysis. (3) The results section presents the findings based on the sequence of the two research questions: the first one concerning attitudes toward English varieties, and the second one concerning attitudes toward speakers' race. After presenting the results of the two research questions, the findings are discussed in relation to the literature reviewed in this thesis. Ultimately, (4) the final section of this thesis outlines conclusions, limitations, and suggestions for future research.

2 REVIEW OF LITERATURE

The current chapter will introduce the core constructs and definitions that support the background and rationale of this study. Considering the objective of investigating the effect of English varieties and speakers' race on pre-service English teachers' attitudes, this section discussion will traverse the fields of Sociolinguistics, Linguistic Anthropology, and Social Psychology of Language. Pursuing these specific areas, this chapter is fragmented into three subsections: *The Global Spread of English, Language Attitudes*, and *Previous Studies on Language Attitudes*.

The first subsection, *The Global Spread of English*, will use the World Englishes perspective to discuss the formation of linguistic hierarchy through the global spread of English. Following, English as a Lingua Franca will be used to emphasize English beyond national boundaries and as a tool for mutual intelligibility and identity construction. At last, this subsection will adopt the Raciolinguistic perspective to discuss, through the colonial history that underlies the spread of English, the continued marginalization of racialized English speakers.

The second subsection, *Language Attitudes*, will present the definition and construct of Attitude theory, highlighting its psychological tendency at the individual and intergroup level. In sequence, language attitude theory will be discussed to emphasize the groups' social categorization and their attributed stereotypes as cognitive determinant processes for intergroup language attitude tendencies. Ultimately, the implicit attitude measurement instrument, the matched-guise test, will be discussed.

The last subsection of literature review, *Previous Studies on Language Attitudes*, will present a review of studies on language attitudes toward English varieties and speakers' race conducted in different contexts, including some in Brazil.

2.1 THE GLOBAL SPREAD OF ENGLISH

In the current context of globalization, English has crossed borders and is a language widely spoken by people worldwide as a native, a second, and a lingua franca (Pennycook, 2009). Its number of speakers globally is estimated to be around two billion (Crystal, 2003). Undoubtedly, English has become a global language. However, this global status is associated with more than just the number of speakers. Following Crystal (2003, p. 3), "a language achieves a genuinely global status when it develops a special role that is recognized in every

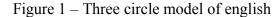
country." Reproduced as a system through contemporary manifestations of globalization, this elevated English status throughout many countries is tied to colonization's historical roots (Flores; Rosa, 2017). Anchored on this discussion, the current subsection will cover three main topics: first, it will provide an overview of how English has spread from the perspective of World Englishes; second, it will discuss English as a Lingua Franca through its first, second, and recent third phases; finally, it will analyze the co-naturalization of language and race in colonial history through raciolinguistic ideologies.

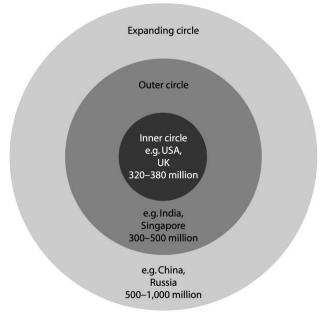
2.1.1 World Englishes

In this thesis, World Englishes (henceforth WEs) is a theoretical framework starting point for understanding the Global Spread of English and the establishment of language ideologies and, consequently, English varieties hierarchies. Particularly, WEs has their roots in the early 1960s, while its formal and functional development was initiated in 1978 by the Indian American linguist Braj Kachru (Kachru, 1992). Although Kachru's development in WEs started earlier, it earned special attention a few years later through his ground-breaking article (Kachru, 1984). In this article, Kachru analyzed the spread of English under the lens of the Three Circles Model of English, whereby he aimed to represent the "[...] types of spread, the patterns of acquisition and the functional domains in which English is used across cultures and languages" (Kachru, 1984, p. 12). He named these three concentric circles as follows: Inner Circle, Outer Circle, and Expanding Circle. Specifically, WEs is utilized in this thesis to determine formal, functional sociolinguistic/historical factors of the English varieties selected for this current research within the three circles (i.e., General American, British, Southern US, South African, Portuguese-accented, and Spanish-accented Englishes).

Going into further detail about the nature of each circle, the Inner Circle consists of countries where English is traditionally the first language of the majority population. These countries include, for instance, the United States, United Kingdom, Canada, Australia, and New Zealand. A prominent feature of these varieties is their endonormative nature, indicating that the language is already established within these countries (Schneider, 2014). This frequently leads to mistaken beliefs that they can determine language ideologies based on ideas of correctness and appropriateness (Bruthiaux, 2003; Rosa; Flores, 2017). The Outer Circle comprises countries where English was imposed through European colonialism. After colonial rule, English permeates various societal spheres within these countries. Examples include South Africa, India, Nigeria, Jamaica, and Pakistan. Despite a progressive movement

from exonormative toward endonormative attitudes in these locales, speakers frequently attribute higher status to Anglo-American norms over their varieties, characterizing them as deficient (Bruthiaux, 2003; Kutlu, 2020). In turn, the Expanding or Extending Circle refers to countries that recognize English as a foreign language, such as Brazil, Spain, Finland, Japan, and Argentina, to name a few. Notably, most English speakers worldwide are concentrated within the Expanding Circle, and vast interaction in English occurs throughout these contexts among these individuals (Crystal, 2003; Kachru, 2005). Figure 1 below illustrates graphically the positions of these three circles:





Source: Crystal (2003, p. 61)

According to Figueiredo (2018), the Three Circles Model of English has gained increased acceptance because it deviates from the traditional perspective that assumes other varieties of English are deficient. Rather, it recognizes the differences among other English varieties arise from their spread, use, and adaptation to locations and cultures across the globe (Figueiredo, 2018). Kachru defines this proclivity as nativization and acculturation: the former "refers to the process that creates a localized linguistic identity of a variety, [while the latter] gives English distinct local cultural identities" (Kachru, 1992, p. 6). This elucidates Kachru's emphasis on the intricate relationship between functionality and historical aspects in explaining the spread of English. In essence, the model considers that English is not exclusively for its native speakers but also for non-native ones, such as those located in Outer and Expanding Circles.

Despite the Kachru's model acknowledges the existence of various English varieties, it fails to capture the complexities inherent in each one thoroughly. This oversimplistic categorization stems from its grounding in a coloniality viewpoint of geographically bound, as it overlooks other sociolinguistic scenarios within each specific circle (Figueiredo, 2018; Jordão; Marques, 2018). For instance, Kachru's model emphasizes the prestige varieties of Inner Circle countries based on a nation-state ideology to the detriment of approaching other regional linguistic varieties within these countries (Bruthiaux, 2003). Furthermore, an oversimplified comprehension of the complex sociolinguistic arrangements occurs when Outer Circle countries are referred to solely based on their shared colonial history. This oversimplification, for instance, results in the inability to distinguish multilingual communities (e.g., Nigeria, South Africa) from those for whom English is at an official level, but most of the people are monolingual speakers (e.g., Hong Kong, Bangladesh) (Bruthiaux, 2003). Finally, following Bruthiaux's (2003) observation, as for the Expanding Circle, the model lacks references to varying proficiency levels and levels of communicative competence among English language users.

Regarding applied linguistics and English language teaching and learning-related perspectives, this coloniality notion embedded in the model is still reflected. Coloniality in this educational situation is "understood as a system of unequal relations of knowledge, power, resources, and authority (among others), [and it] is not restricted to historical time" (Jordão; Marques, 2018, p. 56). It relies mainly on binary logic and nation-state ideology, leading to exclusionary practices and the perpetuation of power dynamics. Jordão and Marques (2018) point out that binary logic reinforces a traditional dichotomous perspective, such as right and wrong, superior and inferior, or standard and non-standard. This simplifies the complexity underlying English variety diversity, consequently establishing standardized ideologies and linguistic hierarchies within the learning environment. In relation to nationstate ideology, it further sustains the notion that the teaching and learning English should conform to global north national English varieties (Jordão; Marques, 2018). Accordingly, both coloniality concepts reinforce that some varieties and speakers are considered superior or more legitimate than others (Flores; Rosa, 2017). It promotes a standardized and idealized monolingual norms, which, in turn, marginalizes bilingual and multilingual language practices (Rosa; Flores, 2017; Jordão; Marques, 2018).

In Brazil, the use of English goes beyond this simplistic division. However, the colonial bias embedded in Kachru's model persists as a reality in Brazil, categorizing Brazilian Portuguese-accented English as dependent on Inner Circle English norms. Some

studies have demonstrated that English is attributed with more positive attitudes than Portuguese and that English proficiency is associated with intellectual ability (El-Dash; Busnardo, 2001; Friedrich, 2000). According to Nascimento (2019), this prestige is due to English teaching in Brazil being linked to colonial dominance and privilege. English was introduced in schools during the military dictatorship as part of a "modernity" project supported by colonial policies (Nascimento, 2019). The approval of the *Guidelines and Bases of National Education Law* (LDB, 1969) removed its mandatory status in public schools, leading to the establishment of private schools exclusively attended by white middle-class and elite students (Nascimento, 2019). Nowadays, although English is mandatory in schools, the quality of English teaching remains inadequate, with only a small portion of the population accessing quality education through private schools². Therefore, the situation of English in Brazil reflects a colonial legacy where the white middle and upper class have access, and English is associated with high privilege.

In summary, this subsection discussed the spread of the English language globally through the World Englishes paradigm and contextualized the situation of English in Brazil. In order to illustrate the global spread of Englishes, Braj Kachru employed the Three Circles Model of English, which comprises the Inner Circle, the Outer Circle, and the Expanding Circle where the Inner Circle is considered as norm-providing varieties, the Outer Circle as norm-developing, and the Expanding Circle as norm-dependent. Although Kachru's model is outstanding in understanding the global spread of English, it has received various criticisms. It has been criticized for its oversimplification approach limited exclusively to geopolitical boundaries. Notably, the criticism mentions that the model carries a nation-state ideology and binary logic rooted in coloniality that mirrors power relations in English teaching practices. Therefore, considering coloniality as a system perpetuated in the contemporary (Flores; Rosa, 2017), the purpose of approaching this model in the current thesis is no more than to understand the co-naturalization of the six English varieties selected to analyze critically the tendency of pre-service teachers' language attitudes.

2.1.2 English as a Lingua Franca

² In Brazil, 5.1% of the population aged over 16 state that they have some knowledge of the English language, and of these, only 1% are fluent (DATA POPULAR INSTITUTE, 2014, p.7).

As pointed out in the previous subsection, is evident that the increasing number of English users is closely tied to globalization. Its widespread use spans various sectors worldwide, including public and private educational institutions, along with international forums, media, finance, politics, and tourism (see, Pennycook, 2009, for an in-depth discussion). Consequently, there is currently a vast amount number of English speakers, with a significant concentration in Expanding and Outer Circle countries (Crystal, 2003). English has transcended borders and has become, in turn, a facilitating instrument for communication between individuals from different linguistic backgrounds (Jenkins, 2018). English as a Lingua Franca framework (hereafter ELF) is another important paradigm that addresses the global spread of English this subsection aims to discuss. It will explore its earlier phase as an emulation of WEs to its most recent phases as a complement to WEs.

In an introduction and general overview, the initial phase of ELF is directly related to the principles associated with World Englishes (Jenkins, 2018). However, there are some critiques against the intersection of ELF and WE (e.g., Friedrich; Matsuda, 2010; Jordão; Marques, 2018). Meanwhile, concerning ELF and its most recent concepts, Jenkins (2018) considers WE not as different but as a complementary paradigm. Since ELF is a complex phenomenon, it remains in active development and is open to continuous (re)theorization and further empirical evidence (Jenkins, 2015).

Specifically, the initial phase of ELF, referred to as ELF1, is most influenced by the WEs paradigm, as no other paradigm considered the English-using in a global context to draw on (Jenkins, 2018). Remarkably, ELF1 emerged from Jenkins's (2000) seminal work on pronunciation features and phonological accommodation and was further supported by Seidlhofer's (2001) research on lexicogrammar features. Jenkins (2000), for instance, aimed to identify potential pronunciation features that caused miscommunication among speakers from diverse linguacultural backgrounds. Moreover, she determined the phonological adjustments these speakers implemented to improve their pronunciation intelligibility. These features were mainly founded on segmental (e.g., consonants, vowels) and prosodic (e.g., intonation, stress) elements (Jenkins, 2015). Identifying ELF pronunciation elements resulted in the most concrete outcome of this phase: the Lingua Franca Core (LFC). As a result, there was rapid growth in ELF1 research, even in other fields of linguistics (e.g., House, 2002; Cogo; Dewey, 2006). Nevertheless, according to Jenkins (2015), as influenced by WEs, researchers raised the idea of future ELF's codification, potentially leading to a shift from its unbounded communication focus to traditional language boundaries.

Additionally, developmental shifts occurred during phases 2 and 3. In phase 2, labeled 'ELF2' (Jenkins, 2015; Jenkins, 2018), the focus shifted towards the underlying communication processes among speakers from diverse linguacultural backgrounds. This alteration in the conceptualization of ELF development originated from Seidlhofer's concern regarding the emphasis on core features established in ELF1, which, according to her, might "easily bring the ideal [English] down into the gutter" (Seidlhofer, 2009). She argues that apart from language feature encodings, fluidity and meaning-making exist in ELF communication due to the multilingual repertoires available in the dynamic context of English usage (Seidlhofer, 2009). Therefore, ELF in its second phase can be defined as "any use of English among speakers of different first languages for whom English is the communicative medium of choice, and often the only option" (Seidlhofer, 2011, p. 7).

In the realm of the third phase of English as a Lingua Franca – labeled 'ELF3' (Jenkins, 2015) – a new reconceptualization places multilingualism at the very core of the ELF development. The significant change in understanding of ELF 3 is that it not only considers that "ELF is a multilingual practice" (Jenkins, 2015, p. 63) but also considers English as one option among many others available in repertories in flux. Accordingly, the languages of subjects play a role in communicative interactions, whether directly employed or subtly influencing the way speakers use English. Moreover, Jenkins (2018) suggests using the term 'repertoires in flux' instead of 'multilingual repertoires' and 'multilingual resources', as the former conveys a transient and emergent nature of ELF. To emphasize the significance of multilingualism for ELF, Jenkins (2018) suggested changing to a new name: 'English as a Multilingua Franca (EMF).' She defined it as "Multilingual communication in which English is available as a contact language of choice but is not necessarily chosen" (Jenkins, 2018, p. 12).

In summary, it is essential to delve into what this thesis regards as the key concepts that unite World Englishes and English as a Lingua Franca and differentiate them. This thesis ignores the initial phase of ELF (ELF1), which emulates WEs, since both prioritize normative features at the forefront and emphasize language boundaries. Consequently, in the current thesis, the idea that English learning/teaching should adapt to specific national standard varieties and norms is not taken into account, as it highlights a nation-state ideology and a binary logic. It provides language stereotypes and excludes speakers of other varieties. Instead, there is a preference for the shared emphasis in both perspectives on aspects of identity-building and the inclusion of language diversity. In this manner, the latest ELF phases' ideals, considering English as a dynamic and fluid language that places emphasis on

the process of meaning-making within the context of learning-teaching, are favored. More specifically, this work considers Lingua Franca as an element within the acronym ELF, thereby situating English close to the framework of multilingualism (Jenkins, 2018).

2.1.3 Raciolinguistic ideologies

It is noteworthy that language is not the only factor established under colonialism. Instead, race is another crucial aspect of the speakers' identity that was the object of colonial domination, which continues to permeate contemporary society as a system (Rosa; Flores, 2017). To illustrate, Morgan (2009), in reviewing studies on African American English usage, underlines that Black women have been characterized as "linguistically conservative and aggressive". Consequently, as highlighted by Flores and Rosa (2015), it is imperative to consider the dynamic interplay of language and race. This subsection will, therefore, undertake an in-depth exploration of the co-naturalization of language and race within colonialism from the Raciolinguistic perspective. This exploration aims to discern the intricate ideologies that structure power relations, consequently shaping individuals' perceptions of race when language is intertwined. To commence, it is important to highlight what we consider as race within this thesis firstly:

Race is not in the eve of the beholder or on the body of the objectified. Race is an inherited western, modern-colonial practice of violence, assemblage, superordination, exploitation and segregation. Race is constitutively and unequally relational, regulatory and governmental, demarcating the colonial rule of Europe over non-Europe. Race has diverse, irrepressible, circuitous, fractured, antagonistic, material and discursive histories. Race underlines and colors the western political institution of nation-societies. Race is the political relation of antagonism between institutionally dominant white populations and dominated non-white populations. Race is the social policing of nonwhiteness, particularly Blackness, under the authoritarian populism of whiteness. Race as these colonial constituted practices has been obscured, redefined and naturalized in liberal academic and political discourses that privilege its meaning in the shifting and changing population metaphors of biology and ethnicity, under the white gaze. (Hesse, 2016, p. 8)

Raciolinguistics is an interdisciplinary perspective that explores the dynamic of language and race interplay within historical and contemporary colonial context by rejecting their treatment as distinct and isolated categories. Specifically, it seeks to visualize the race

through the lens of language and language through the lens of race to deeply understand language and the process of racialization (Alim *et al.*, 2016). This perspective, strengthened through the work of Flores and Rosa (2015), sought to understand why racialized people continue to face stigma in language usage, regardless their adherence to standards linguistic norms. Rosa and Flores (2017) theorized raciolinguistic perspective by considering the construction and naturalization (co-naturalization) of language and race in historical and contemporary production.

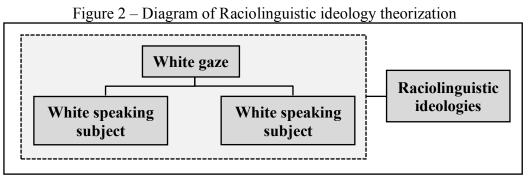
It is crucial to comprehend raciolinguistic ideologies as part of the co-naturalization of race and language located within European colonialism history. As articulated by Rosa and Flores (2017), the co-naturalization of race gave rise to the concept of the 'racial Other'. This concept employed a binary logic that casts Europeans as superior and non-Europeans as inferior, positioning them as non-human (Rosa; Flores, 2017). In a manner analogous to race, the co-naturalization of language led to the establishment of divisions and hierarchies, positioning the languages of colonized populations to as inferior (Rosa; Flores, 2017). For instance, colonizers uttered those indigenous languages as animal-like forms of communication, perceived as lacking complexities compared to European languages (Veronelli, 2015, Cesaire, 1972). This resembles the racialized notion of languagelessness (ROSA, 2016) which portrays racialized individuals as unable to effectively communicate in any language. In this sense, race and language are not separate, but rather complex intersections co-naturalized within colonial history that still perpetuate the marginalization of colonized populations in the contemporary.

Contemporary raciolinguistic ideologies are deeply entwined with European colonialist history. For instance, European languages are perceived as modern vehicles of science and technology, whereas indigenous languages are viewed as anti-modern – treated akin to museum artifacts that connect humanity with its history (Cameron 2007; Marr 2011). Applying to the Brazilian context, as stated by Gabriel Nascimento (2019), it is suitable to wonder on the reason of Portuguese being the only official language of Brazil with over 180 indigenous languages within the country. In this manner, individuals must decide whether to preserve their heritage language or adopt a European language in order to become modern and engaged citizens in contemporary society. Nevertheless, it is worth noting that even though racialized individuals strive to conform to prevailing colonial white norms, they are consistently perceived as inferior speakers (*e.g.*, Kang; Rubin, 2009; Kutlu, 2020; Rosa, 2016). Therefore, seen as a reinforcement of the racialization processes deeply rooted in

colonial history, contemporary raciolinguistic ideologies also function as prerequisite for modes of perceptions from the perspective of white listening hegemony.

Rosa and Flores (2017) specifically theorized Raciolinguistc perspective through the white gaze, which is a crucial component that upholds and sustains raciolinguistics ideologies. This white gaze is rooted in the reproduction of power structures which is constructed within historical and contemporary colonialism context (Rosa; Flores, 2017). In a detailed definition, the white gaze "should be understood [...] as an ideological position and mode of perception that shapes our racialized society" (Flores; Rosa, 2015). In essence, the white gaze has the legitimacy to establish language appropriateness within society that, in turn, guides the perception of language and race intersection. The idea of appropriateness is built upon the perception of an idealized white speaking subject, which is specifically considered a white monolingual subject who speaks a standard and an 'appropriate' language norm (Flores; Rosa, 2015). In addition to the *white speaking subject*, the *white gaze* evolves the *white listening* subject. It perceives the linguistic practices of minoritized populations as deviant from the standard norms ideologically established by the white speaking subject. Accordingly, regardless of whether a black (or BIPOC) speaker adapts to a standard norm, their linguistics practices will continue to face stigma (Flores; Rosa, 2015; Kutlu, 2020). Therefore, the speech evaluation of a racialized speakers as inappropriate goes beyond linguistic considerations.

Figure 2 visually illustrates the process of raciolinguistic ideologies though the white gaze, which is the ideological position and mode of perception:



Source: elaborated by the author (2024)

From a raciolinguistic perspective, the central emphasis of this thesis lies not only in describing the linguistic practices of racialized populations (e.g., Afro-American English,

Labov 1972; "Pretoguês"³), but also in understanding how these language practices are constructed and established through the lens of white hegemonic modes of perception. Nascimento (2019) underscores that in Brazil, "English Language Teaching (ELT) is bound to policies of coloniality and imperialism that have been employed to maintain control over excolonies." Therefore, beyond individuals, non-human entities, such as institutions, governments, and policies, reflect this white mode of perception that perpetuates the marginalization of racialized language practices (Flores; Rosa, 2017). For instance, Acheme et al. (2023) found that race impacts undergraduate students' language attitudes at West South-Central University in the U.S. They noticed that presenting a picture of a black man significantly impacts speech evaluations compared to white (e.g., low English status evaluation). These insights suggest that raciolinguistic ideologies function to maintain the creation of racialized linguistic practices, continuing the reinforcement of dynamic power over minority populations.

In conclusion, this first thesis subsection of the literature review, *The Global Spread* of *English*, aimed to understand the position of English and its speakers worldwide. Therefore, World Englishes materialized the understanding of the worldwide spread of English and how this expansion has resulted in the emergence of language hierarchies and diverse English speakers' identities. English as a Lingua Franca has been introduced as a complement of WEs to visualize English beyond boundaries as a means of meaning-making in communication while reflecting the speaker's identity preservation. Finally, the Raciolinguistics perspective was crucial to apprehending that not only language was based on colonialism but also race. When both are intersected, they perpetuate the overvaluing of an idealized white-speaking subject over racialized speakers. Once language attitudes are based on the social categorization of social groups, they may reflect these ideological structures. Therefore, these perspectives will contribute to critically analyzing pre-service English teachers' attitudes in Brazil.

The next subsection will explore the theory of language attitudes within the field of social psychology of language to discuss how language perceptions work at an individual and intergroup level. The specific aim is to understand how language and race ideologies are manifested among Brazilian pre-service English teachers.

³ Lélia Gonzalez, a Black Brazilian anthropologist, in devoting a substantial portion of her theorization to the characterization of the Latin American population as "amefricano" people, attempts to designate the Portuguese language spoken in Brazil as "pretoguês" (Nascimento, 2019, p. 39).

2.2 LANGUAGE ATTITUDES

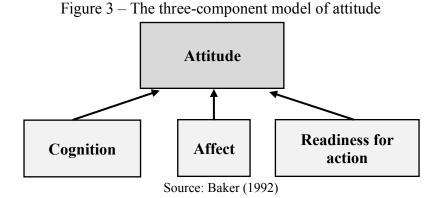
In understanding the dynamics of English use and its impact on society, it is essential to delve into the realm of language attitudes. Bayard *et al.* (2001), for instance, indicate that listeners construct assumptions about speakers' age, ethnicity, educational level, occupation, and social class exclusively based on their accent. These opinions and impressions influence individuals' interactions and are based on language stereotypes that all groups of people hold regarding how others sound. In other words, language attitudes, shaped by various socio-cultural factors, play a role in influencing individuals' feelings, beliefs, and behavior. Considering this, the current second subsection of the literature review will present the definition and construct of attitude theory by highlighting its tripartite structural components; it will highlight the language attitudes theory to emphasize the two cognitive processes (i.e., social categorization and stereotypes) as determinants processes that impact intergroup attitudinal ratings; lastly, it will present implicit attitude measurement instrument, the matched-guise test, will be discussed.

2.2.1 Attitudes

The initial theoretical and empirical developments on attitude arose since 1920s through the social sciences and social psychology (*e.g.*, Pear, 1931; Taylor, 1934). Since then, it has been defined from various perspectives thought different theories. However, for this study, two specific definitions for attitudes are utilized: Allport (1935) and Chaiken and Eagly (1993). The former describes attitude as "a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 1935, p. 8); while the latter states that "attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Chaiken; Eagly, 1993, p. 1). Taking the similarities between these definitions, an attitude is essentially an evaluation of a particular social object, whether a language(s) (e.g., Dragojevic; Goatley-Soan, 2020; Kircher; Fox, 2019), race (e.g., Kutlu *et al.*, 2022; Acheme; Montgomery; Cionea, 2023), or any other object. Such evaluation reflects the complexity of attitude measurement, as it portrays a "mental and neural state of readiness" or a "psychological tendency" that implies, in turn, on absence of an overt and direct observation.

Research on attitude typically revolves around two main theoretical approaches: the behaviorist perspective and the mentalist (or cognitive) perspective. Regarding behaviorist viewpoint, an attitude is predicted solely based on readily observable behaviors in response to stimuli (e.g., Osgood et al., 1957). Nevertheless, the criticisms that emerged in the 1960s discussed about the weakness of the attitude-behavior relationship by presenting evidence that behavior tends to exhibit inconsistency across contexts (e.g., Weaker, 1969; Mcguire, 1969). As stated by Ajzen (1988, p. 45), "every instance of human action is determined by a unique set of factors. Any change in circumstances, be it ever so slight, might produce a different reaction." Therefore, attitude "may require reference to a wide variety of personal, interpersonal, and situational factors" (Baker, 1992, p. 16) instead of assuming behavior as the sole determinant of attitude. Due to this, recent studies in attitude predominantly align with the mentalist framework rather than the behaviorist one, which is considered outdated (Kircher; Zipp, 2022). Consistent with the initial definitions, the mentalist approach views attitudes as multifaceted alongside behavior instead determining it the sole predictable variable (Garret, 2010).

Attitude scholars relying on the mentalist perspective widely assume that attitude structure formation occurs through a classic model composed of tripartite structural components: cognitive, affective, and readiness for action (or conative/behavior) (e.g., Baker, 1992; Garret, 2010). These three components will be discussed by using the variables of the current study as an example. Particularly, the *cognitive component* associates intrinsically with thoughts and beliefs about the attitudinal object. For instance, favorable attitudes of Brazilian pre-service teachers toward American English may correlate with their beliefs and perceptions of enhanced job opportunities for their future students. The affective component involves more deep-seated feelings and emotions about the attitudinal object. This can reveal, for instance, the appreciation of pre-service English teachers to all linguistics aspects of General American English over the other varieties. Ultimately, the third attitude structure component, (readiness for) action or behavior, encompasses the individual inclination to behave in certain ways with respect to certain attitudinal object. For example, pre-service teachers may aspire to sound like an American English speaker or even focus solely on teaching aspects of General American English phonology in their English pronunciation classes. For an illustration of the tripartite constituents of attitude structure, refer to Figure 2 displayed below.



Establishing the interconnectedness and consistent alignment of attitude components, which are often examined in terms of cognition, affect, and behavior triad, poses a dilemma. Perloff (2021), for instance, emphasizes that most attitudes possess an affective component, as it shows that affect significantly intertwines with cognition, and that it potentially indicates the behavior component (e.g., Erwin, 2001; Bezooijen, 1994). Conversely, Breckler (1984) validates cognition, affect, and behavior as independent components, emphasizing their varied alignment depending on the methodological approach employed. Regardless of how components are interconnected, attitudes at the individual level may influence cognition, affect, and behavior (Kircher; Zipp, 2022). At the intergroup level, they establish social boundaries and distinctions between individual' own group (ingroup) and the individual' other groups (outgroups) with whom it is interacted (Kircher; Zipp, 2022). These distinctions are due to stereotypes (cognition), prejudices (affect), and discrimination (behavior) that contribute to the formation and perpetuation of group ideologies.

Having addressed the definition of attitude, its three components, and the impact they have at an individual and intergroup relation, the next subsection will delve into the language attitudes as reflect of social groups categorization and stereotyping.

2.2.2 Language attitudes: social categorization and stereotyping

Language attitude is an important concept widely explored in an array of fields due to its significant impact on identity construction, language preservation, language planning, and policy, among others (Garret, 2010). Rooted in the tripartite model of attitudes in social psychology, language attitude is, by definition, "any affective, cognitive or behavioral index of evaluative reactions towards different varieties and their speakers" (Ryan *et al.*, 1982, p. 7). Individuals' attitudes towards an English variety can vary between these three components, depending on their inferences about the variety (Dragojevic, 2018). For example, a study conducted in Canada showed that Francophone Quebeckers express an affective connection to French than English (affect), while they acknowledge the practical importance of English in today's interconnected world (belief), and thus engage in learning and using English for socio-economic mobility (behavior) (Oakes, 2010). Returning to the topic at hand, the focus of the current subsection will be, in turn, on the cognitive component of language attitudes, aiming to understand the thoughts and beliefs of Brazilian pre-service English teachers.

Based on Dragojevic (2018), language attitude is theorized as a function of two fundamental cognitive processes: social categorization and stereotypes. Regarding social categorization, individuals consider linguistic traits of a language/variety to place a speaker in a social group membership (Dragojevic, 2018). This social categorization of language is a process that occurs almost instinctively and usually unconsciously (Kinzler; Shutts; Correll, 2010). Remarkably, even the way someone pronounces a single word may quickly signal linguistic traits that determine their social group membership (e.g., Purnell; Isdardi; Baugh, 1999). Accordingly, interactions between people who speak different English varieties are often based on social intergroup relations (*i.e.*, ingroup/outgroup; Dragojevic, 2022; Ryan, 1983). Tajfel and Turner (1986) point out that although groups may differ, not all differences are significant, and when they are, the judgments can vary depending on the specific groups in question. Therefore, language is not merely a tool for communication but also a potent symbol of social identity (Kircher; Zipp, 2022).

Once a language is an inherent variable to members of different social groups, language-based categorization does not exclusively mirror its linguistic cues (Dragojevic, 2018). Appel and Muysken (2005, p. 12) emphasized it when they said that "if a language has social meaning, people will evaluate it in relation to the social status of its users." Linguistic cues, therefore, constantly serve as indicators of various other social identities, such as race (Kutlu *et al.*, 2022), sexual orientation, nationality (Fasoli *et al.*, 2023), and gender (Merritt; Bent, 2020), to name but a few. For example, a prior study on speech perception showed that undergraduate students with less diverse social networks attributed higher accentedness judgments to American and Indian English varieties when matched with pictures of South Asian speakers (Kutlu *et al.*, 2022). According to Dragojevic (2018), this variation in a specific language-based categorization (e.g., American English accent) occurs due to different social groups being linked to different concepts and beliefs. Consequently, a language/variety categorization stimulate distinct attitudes when associated with different social group categorization (Kirche; Zipp, 2022).

Social categorization promotes stereotyping (Fiske *et al.*, 2002). Once a speaker is categorized as a social group member, their inferred group is attributed to language stereotypical traits (Dragojevic, 2018). Language-related stereotypes are based on socio-structural intergroup relationship (Fiske *et al.*, 2002). However, as previously referred, language-based categorization is not merely reliant on language cues but is also intersected with other social categories of its speakers. Hence, the opposite stereotypical process is so-called Reverse Linguistic Stereotyping (RLS; Kang; Rubin, 2009), whereby the listener's conception of a speaker's social identity is a strong predictor of triggering distorted attitudes toward that speaker's language characteristics (e.g., Yook; Lindemann, 2013; Acheme; Cionea, 2023). Following the Stereotype Content Model (SCM; Fiske *et al.*, 2002), stereotypes are organized based on two judgmental dimensions: status/competence and solidarity/warmth.

Much like their speakers, different English varieties are associated with different stereotype level across both dimensions. On the status dimension (e.g., intelligence, professionalism, leadership), stereotypes are based on standardness of the speech style, socioeconomic status, and upward social mobility (Dragojevic, 2018; Kircher; Zipp, 2022; Ryan, 1983). In this vein, varieties perceived as standard (e.g., General American English) are attributed more positive attitudes than nonstandard varieties, which include regional (e.g., Southern U.S. English), ethnic (e.g., African American English) and non-native English varieties (e.g., Spanish-accented English) (Dragojevic; Giles; Watson, 2013). The same occurs when these varieties are associated with racialized speakers, whereby they are stereotyped as speech that is inferior to the idealized white-speaking subject (Flores; Rosa, 2017). Thus, grounded on social categorizations, individuals associated with dominant groups (e.g., high-prestige English speakers) are frequently assigned higher status stereotypes when compared to those linked with stigmatized subordinated groups (e.g., low-prestige English speakers) (Dragojevic, 2018).

Solidarity stereotypes (e.g., friendliness, social attractiveness) are symbols of ingroupoutgroup loyalty and interpersonal attraction (Dragojevic, 2018). Since language is a potent force in shaping social identity, speakers who strongly identify with their ingroup variety tend to attribute high solidarity assessments to members of their linguistic community (Ryan, 1983). This solidarity stereotype tendency materializes when the ingroup-outgroup variety has elevated or increased vitality (i.e., status, high population number, institution support; Ryan *et al.*, 1984). A contrary tendency tends to occur when the language has a low or decreasing vitality for the ingroup speech community (Dragojevic, 2018). For instance, El-Dash and Busnardo (2001) found that Brazilian teenagers' ingroup categorization attributed higher status to English over Portuguese. The authors attributed this finding to the all-pervasive influence of English among the teenage population in Brazil (e.g., films, music, or even English classrooms). Accordingly, in communities where nonstandard speech prevails vitality (i.e., support from institutions, media), speakers are more likely to be positively perceived for solidarity traits by ingroup members.

Building on Dragojevic's (2018) postulation, language attitudes are not isolated cognitive outputs but rather have input effects on other social behaviors. Notably, serious consequences can arise for speakers of non-prestige language varieties, leading them to experience anxiety, embarrassment, and shame (Gluszek; Dovidio, 2010). In addition, beyond stereotype (i.e., status and solidarity), language attitudes influence on how well listeners report to comprehend speech. For instance, Telo *et al.* (2024) found that L1 Spanish speakers of L2 Brazilian Portuguese were attributed higher comprehensibility ratings when applying for low-prestige occupations. Therefore, reduced comprehension of foreign-accented speech is related not only to the difficulty of understanding the accent itself but also to the listener's negative attitudes towards it and its corresponding speakers (Dragojevic, 2018).

In summary, this subsection presented language attitudes as a psychological tendency comprising two cognitive processes: social categorization and stereotypes. When groups of individuals are categorized in terms of language, they are attributed language-based stereotypes. On the other hand, since attitudes are "social attitudes," they also reflect other social groups beyond language. Based on Tajfel and Turner (1986), the stereotype may vary depending on the group. Hence, considering race and language as processes deeply rooted in colonialism and reflected in contemporary society, racialized English speakers are subjected to reverse linguistic stereotypes by individuals' attitudes. These stereotypes are, in turn, regarding the solidarity and status traits of the categorized group and other input social behaviors, such as, for example, comprehensibility.

2.2.3 Implicit measurement of language attitudes

Considering that attitudes are fundamental to understanding stereotypes (cognition), prejudices (affect), and discrimination (behavior) in both individual and intergroup relations (Kircher; Zipp, 2022), it is crucial to measure them accurately. However, individuals' attitudes can sometimes be hidden and difficult to observe due to the social undesirability of expressing stereotypes, depending on the sensitivity of the topic (Bouchard, 2023).

Consequently, various methods have been developed to uncover the most authentic attitudes. For instance, several direct data-gathering methods, such as direct questions or questionnaires, are used to reveal attitudes. However, this type of measurement is not always reliable. Instead, indirect methods are generally assumed to reveal more private reactions, thereby increasing the internal validity of the experiment (Loureiro-Rodríguez; Acar, 2022). Therefore, for the current M.A. research, the speech perception technique, matched-guise test, will be employed to assess Brazilian pre-service English teachers' language attitudes implicitly.

The matched-guise test was originally designed by Wallace Lambert and his colleagues (Lambert *et al.*, 1960) to elicit covert attitudes toward different languages. Specifically, they examined language attitudes toward English and French in Montreal, Canada, to observe intergroup relations among Anglophone and Francophone individuals. Drawing on Loureiro-Rodríguez and Acar (2022), this technique is based on three core postulations: first, the languages or varieties a certain speaker uses influence the way listeners perceive them; second, listeners commonly attribute stereotypes to individuals based on their speech; and third, direct methods often fail to capture true attitudes toward speakers of different language varieties.

Regarding the structure of the matched-guise test, participants or judges listen to a multilingual or multidialectal speaker reading a text in two different linguistic varieties (Dragojevic; Goatley-Soan, 2022). Each recording represents a different guise, with the same speaker reading the same elicited text. Thus, the only variation is the linguistic variety spoken (guises). The participants, believing they are listening to two different speakers, are asked to judge both varieties on various attitudinal traits (e.g., professionalism, friendliness), typically using a Likert scale. The traits are usually based on two dimensions of language attitudes, namely status and solidarity (cf. 2.2.2). Therefore, the evaluations are not about the individual speakers as people, but about the language varieties and the stereotypes associated with these language groups (Loureiro-Rodríguez; Acar, 2022).

In a concrete example from the original study, Lambert et al. (1960) used this technique to assess language-based stereotypes among sixty-six French-Canadian and sixty-four English-Canadian students. Each student listened to recordings of four bilingual speakers reading a passage in both French and English. After listening, they rated the speakers on attitudinal traits. As a result, English-Canadian students evaluated the English guises positively on seven traits and the French guises on one trait (i.e., sense of humor). Importantly, no significant difference was found regarding the two remaining traits. The French-Canadian students judged the English guises more favorably on ten traits and the

French guises more favorably only on two traits. Following Lambert et al.'s (1960) interpretation, this result can be explained by the high status attributed to English-speaking individuals in Montreal. Consequently, in alignment with the notion of social mobility (Dragojevic, 2018), French speakers, as the minority in that context, adopted the characteristics of the dominant language group.

Following Lambert et al. (1960), Bouchard (2022) conducted a *modified* matchedguise test. Since the current research replicates this study, it will be discussed in detail. Notably, Bouchard investigated how L2 French learners taking French classes at the University of British Columbia, Canada, judged different varieties of French and the speaker's race. Therefore, a modified technique of the matched-guise test was adopted to assess the participant's attitudes (Lambert, 1960). In order to compose this speech perception method, five speakers (four native speakers of different varieties of French and one L2 French speaker) were recruited and recorded describing "Van Gogh's La Chambre" painting. The recordings were presented twice randomly, and each audio was associated with ten photographs, five of black women and five of white women. These recordings and speakers on a six-point Likert scale on four dimensions: status, solidarity, understandability, and general perspective. Taking this design into account, Bouchard (2022) is replicated in the current research, aiming to observe Brazilian pre-service English teachers' attitudes toward different English varieties and the race of speakers.

In conclusion, this second subsection, namely *Language Attitudes*, aimed to present the concept of attitude to understand its three mental processes and how they impact the individual's intergroup relations. Based on the general understanding of attitude, language attitude was subsequently introduced to highlight the cognitive process, the basis of the current study. It was paramount to examine how the processes of social categorization and linguistic-based stereotypes, including reverse linguistic stereotypes, operate between groups. Given Brazil's multicultural nature and the existence of various groups with distinct attitudes, these discussed factors will be crucial in analyzing the interaction of Brazilian pre-service English teachers' attitudes toward different English varieties intertwined with the speakers' racial backgrounds. Finally, the matched-guise test was discussed to highlight its implicit nature as a speech perception method, with particular emphasis on Bouchard's (2022) study, which is replicated herein.

2.3 PREVIOUS STUDIES ON LANGUAGE ATTITUDES

This last subsection of the literature review provides a description of some significant studies in the field of language attitudes relevant to the current research. Given that this study investigates the attitudes of pre-service English teachers as the dependent variable and considers English varieties and race as independent variables, it is crucial to explore how these variables are manifested in various research contexts.

2.3.1 Language attitudes toward accent and race

Some studies have demonstrated a preference of English users for prestigious English native varieties over non-prestige varieties (*e.g.*, Dragojevic; Giles, 2016; Hu; Lindemann, 2009). For instance, Chien (2014) investigated Taiwanese students' attitudes toward prestigious (*i.e.*, American English) and non-prestigious (*i.e.*, Japanese English, Spanish English, and Taiwanese English) English varieties. A verbal-guise technique was used to measure such attitudes. The participants were asked to listen to English speakers from different varieties and rate them in a six-point rating scale in terms of status dimension (*e.g.*, 1 to intelligent, and 6 to unintelligent) and solidarity dimension (*e.g.*, 1 to friendly, and 6 to unfriendly). Altogether, the results showed high ratings for American English variety in terms of status dimension and low rating in terms of solidarity dimension for Japanese English, Spanish English, and Taiwanese English. These findings reinforce the results of some studies that indicate a propensity on favoring standard varieties over non-standard ones (*e.g.*, Chien, 2014; Dragojevic; Goatley-Soan, 2020; Monfared; Khatib, 2018).

In a similar fashion, Dragojevic and Goatley-Soan (2020) conducted a study focusing on examining the attitudinal reactions of American nationals regarding the standard American English accent and different nine non-standard accents. Besides, they also aimed at focusing on verifying the reason for distinct evaluation raised to a range of different non-standard accents. A verbal-guise technique was used, which consisted of audio stimuli of ten different English accents. The American nationals had to listen to twenty guises, whereby they heard a male and a female voice associated with each of the ten previously selected accents. Americans' attitudes were measured by using a 7-point scale (1 to not at all; 7 to very) for status, and solidarity traits. Also, they measured the processing fluency by means of the participants' understandability regarding the speakers on a 7-point scale (1 to not at all; 7 to very); and the social categorization/stereotyping as an open question by asking where the participants think the speakers come from. Under those circumstances, Dragojevic and Goatley-Soan (2020) found that non-standard accents were rated less positively than the standard American accent regarding the status and solidarity dimensions. However, some variances in the degree of ratings non-standard accents of English were noticed. For instance, in general, the Western European English speakers (*i.e.*, German-, and French-accented speech) were more favorably rated than the English speakers from the Middle East (*i.e.*, Arabic-, Vietnamese-, and Farsi-accented speech). Ultimately, the authors associated such variances in listeners' judgment to the degree of processing fluency, such that the harder the English speakers was to understand, the more negatively they were evaluated; and, to the social categorization/stereotype due to the high English prestige being related to Western European countries (Dragojevic; Goatley-Soan, 2020).

Following this logic, focused on attitudes toward different English accents, Acheme and Cionea (2022) examined individuals' attitudinal evaluations toward Standard American English (SAE) and non-SAE accented speakers. The subjects that participated in the investigation were 670 undergraduate students from a prominent West South-Central USA university. The authors employed a verbal guise technique, comprising six audio recordings representative of Standard American, Indian, and Nigerian English accents. The results indicated statistically significant differences between English accents and attitude ratings on status, solidarity, and dynamism dimensions. Precisely, ratings for SAE on status traits were significantly higher when compared to ratings toward Indian and Nigerian accents. Regarding solidarity, the undergraduate ratings were significantly higher for the Indian accent than SAE and Nigerian, and both did not show significant differences. Ultimately, SAE was statistically significantly different compared only to the Nigerian accent, presenting high ratings on the dynamism dimension.

In addition to demonstrating language stereotypes toward non-native English varieties, listeners also demonstrate prejudices against speakers, mainly those belonging to minority background groups (Kubota, 2020). Such listener's biases may reflect directly on the speech evaluation of minority speakers (Babel; Russell, 2015; Hu; Lindemann, 2009; Yook; Lindemann, 2013). This prejudice against speakers is in line with the *Reverse Linguistic Stereotype* (RLS) hypothesis previously presented (Kang; Rubin, 2009). Taking this into account, the following studies will analyze the attitudes toward accent intertwined with the speakers' race.

In a follow-up study employing a matched guise test, Kang and Rubin (2009) sought to observe the proclivity of listeners to engage with RLS hypothesis. To do so, they analyzed individuals' attitudes toward native and non-native and the speakers based on two dimensions – superiority, and social attractiveness (i.e., photos of Euro-American and Asian ethnicity) paired with audio from a standard English speaker. Kang and Rubin (2009) found that native and non-native listeners on the social attractiveness dimension evidenced a drop in comprehensibility toward Asian guise. Regarding the superiority dimension, listeners perceived the native English speaker as more accented when they were shown an Asian guise photograph. Finally, Kang and Rubin (2009) found no statistical significance as to the Caucasian/Euro-American guise. Therefore, based on the previous results, it was possible to conclude that listeners reverse linguistic stereotypes when faced with the social traits of speakers, which may be observed by means of attitudes measurement.

More recently, Babel and Russell (2015) employed a design similar to the studies conducted by Rubin (1992) and Kang and Rubin (2009). In this study, the authors aimed to investigate whether the perceived ethnicity of English speakers elicits distinct attitudes among forty undergraduate students and if these attitudes influence speech intelligibility and accentedness ratings. In the method, Forty English native speakers from the University of British Columbia, Canada, listened to audio stimuli of native Canadian English paired with Chinese Canadian and White Canadian faces. Babel and Russell (2015) found that speakers' ethnic cues impact listeners' speech intelligibility and assessment of speech. In other words, listeners' intelligibility decreased when Canadian English voices were paired with Asian-Canadian faces. In addition to speech intelligibility, the undergraduate students attributed high accentedness ratings to the voices of White Canadians when Canadian English was associated with Asian faces.

From a raciolinguistic perspective, Kutlu (2020) aimed to investigate the effect of racial identity on accentedness evaluations toward American and Indian English. Sixty-seven undergraduate students executed a matched-guise test. The test comprised two English varieties, American and Indian English, each featuring White and South Asian faces. Participants were presented with visual stimuli matched with the auditory stimuli. Subsequently, they had to rate each English variety on a 9-point Likert scale to determine the speakers' accent level. The findings regarding accents show that American English was significantly higher than Indian English. As for race, when both accents were matched with South Asian faces, the speakers were attributed significantly higher accentedness ratings. In addition, Kutlu (2020) conducted a reaction time analysis. When stimuli were shown alongside South Asian faces, the reaction to them was faster, and Indian English stimuli

reacted slower than American English. According to Kutlu (2020), these findings align with raciolinguistic ideologies, suggesting that racially marginalized speakers are commonly perceived as more accented compared to white English speakers.

Similarly, Yook and Lindemann (2013) conducted a study to examine the impact of ethnicity on language attitudes of Korean university students. To accomplish that, they divided participants into two groups to carry out a verbal guise test. One group was told about the ethnicity/nationality of the speaker (*informed group*), while the other group was not (*uninformed group*). Participants listened to five English varieties and evaluated them based on nine traits, categorized into status and social attractiveness dimensions using a six-point semantic differential scale. In the end, all were required to complete a questionnaire containing five questions related to the English importance and accent preferences. The questionnaire findings revealed that 58 out of 60 students considered English to be important, with 48 indicating that Koreans should learn American English. Regarding verbal guise test, repeated measure ANOVA results revealed a significant impact of English speakers on status and social attractiveness ratings. Additionally, a crucial result was the significant interaction found between the informed group and the uninformed group, affecting ratings on both dimensions.

Interestingly, Acheme *et al.* (2023) found a different pattern of results compared to the previous described studies regarding speakers' race. To explore this, they examined the language attitudes of 502 undergraduate students toward Standard American English (SAE) and Nigerian English. They employed the Verbal Guise Technique across three conditions: accent-only, where participants listened to recordings in either SAE or Nigerian English; race-only, where participants viewed photos of either White or Black males with accompanying text; and race-accent, which combined the accent and race conditions by presenting White males with SAE accents and Black males with Nigerian English. Regarding English varieties, the results indicated that SAE speakers were generally attributed more favorable attitudes in terms of status compared to Nigerian English speakers. Regarding the speakers' race, Black males surprisingly received more positive attitudes on dimensions of solidarity and dynamism than White males. White one was attributed positive attitudes on status dimension. Acheme *et al.* (2023) explained that these mixed stereotypes, aimed at appeasing marginalized groups by attributing them social desirability, serve to reinforce ideologies and systems of dominance.

In conclusion, these studies highlight the prevalence of language and reverse linguistic stereotypes. Through matched-guise and verbal guise tests, the studies draw on two main aspects: attitudes toward English accents and attitudes toward accents intertwined with the speakers' race or any other identity. The three initial studies on attitudes toward English varieties indicate a similar tendency: prestigious English varieties are evaluated more highly than non-prestigious varieties through dimensions of status, solidarity, and, in addition, dynamism, analyzed by Acheme and Cionea (2022). This tendency fits within the coloniality appropriateness discourse (Flores; Rosa, 2017), perpetuating power dynamics that privilege Euro-American varieties while marginalizing others. Furthermore, four studies comprising attitudes toward English accents intersected with race were reviewed. The fourth study depicts similitudes: biases against non-standard varieties and the influence of non-linguistic social factors on language attitudes. They show the same tendency as the three initial studies – positive attitudes toward prestigious over non-prestigious varieties – but when matching with Black speakers' race, there is a decrease in ratings. Importantly, as showed, this affects not only in attitudes dimensions (i.e., status, solidarity) but also in communication (e.g., intelligibility, Babel; Russell, 2015).

Once this subsection has highlighted a broad view of the studies with similar varieties to the current one, the next subsection will delve into some studies conducted in Brazil, context of this research.

2.3.2 Studies on language attitudes in Brazil

In 2000, Friedrich conducted a study to investigate and describe the attitudes of Brazilian students towards English. Specifically, she aimed to explore how these learners perceive the importance of English for international communication, its role in Brazil, and their expectations regarding the effort required to learn the language. The study surveyed 190 adult learners who were attending a private language institute in the São Paulo metropolitan area. The survey had twenty-four questionnaire items focused on aspects such as the perceived status of English, its intelligibility, and its international use. The findings showed that participants evaluated American English slightly higher in status than British English, although the difference was insignificant. Once most students stated they were learning American English, it suggests the importance of high-status English variety. In addition, the study showed that Brazilian English learners believe that proficiency in English provides high-status job opportunities and benefits in different areas of study. Importantly, participants indicated that proficiency in the English language is associated with intellectual ability.

Regarding the Brazilian context, El-Dash and Busnardo (2001), in a pilot study, investigated the language stereotypes to observe the prestige and vitality of English and

Portuguese languages among 148 teenage students in Brazil. The test was conducted in public schools of Barão Geraldo, a district of Campinas, São Paulo. The Brazilians' attitudes toward both languages were measured in terms of status and solidarity dimensions by using the social-psychological test matched-guise. The test consisted of 12 audiotapes (i.e., 6 English guises and 6 Portuguese guises) recorded by six bilingual speakers of Portuguese and English. This was followed by a 7-point semantic differential scale with adjectives such as competent, chic, and successful related to the status dimension, and attractive, sincere, and interesting related to the solidarity dimension. Moreover, a comparative subjective vitality questionnaire was carried out directly. In short, the results of this study indicated that, in general, the classification of Brazilian adolescent students was evenly divided in terms of favoring Portuguese or English, both in terms of status and solidarity. However, what was most surprising in the factorial analysis was the positive assessment of English in the solidarity dimension. El-Dash and Busnardo (2001) associated this finding with the representative use of English in the middle of the Brazilian teenage group.

Based on the study conducted by Teló et al. (2022) within the Canadian context, Teló et al. (2024) examined Brazilian evaluations of speech in Brazilian Portuguese as both a first and second language within work-related contexts. Their specific aim was to investigate the relationship between listeners' professional, experiential, and linguistic assessments with speakers' variety, job prestige, and performance. Sixty native Brazilian Portuguese-speaking listeners rated audio recordings of speakers of Brazilian Portuguese as their first language and Spanish as their second language, speaking Brazilian Portuguese across dimensions of (i.e., (i.e., competence professional), treatment preference experiential), and comprehensibility (i.e., linguistic). The findings demonstrate that Bazilian listeners find speech more straightforward to understand when the speaker's accent is closer to what they are accustomed to hearing. Additionally, the study revealed that performance level and job prestige affected the evaluated dimensions differently depending on the speaker's variety. Notably, L1 Spanish speakers of L2 Brazilian Portuguese were found to have higher comprehensibility ratings when applying for low-prestige occupations.

In summary, these studies were conducted in Brazil. The findings indicate that individuals have a preference for prestigious varieties, either English or Portuguese. However, in terms of purposes, each study is distinct. The first study analyzed adults' attitudes toward two prestigious varieties to observe the status of English in Brazil. The second study focused on attitudes toward both Portuguese and English languages among young Brazilians. The last study examined Brazilian speech perception regarding L1 and L2 Brazilian Portuguese. In

addition, other studies on attitudes and speech perception were conducted in Brazil (Oliveira, 2008; Anjos, Scheyerl, 2021; Anjos, 2022). Nevertheless, as far as we know, no study has investigated specifically the attitudes of Brazilian pre-service English teacher populations toward a plethora of English varieties intersecting with the speakers' race. Since this country is multicultural, it is necessary to observe this. Therefore, this study will present, in the next section, the method for conducting this research on language attitudes in order to contribute to the field of linguistics.

3 METHOD

This thesis's second section outlines the method employed to investigate the impact of English accents and the racial background of English speakers on the language attitudes of Brazilian pre-service English teachers. The section is structured into six subsections. Firstly, the general overview discusses the academic rigor, defines the research design utilized, and mentions the Ethics Review Board approval process. This is followed by delineating objectives, research questions, and hypotheses, the basic components guiding this research. Next, the participants' subsection discusses the details of the study sample. The instruments consist of a background subsection and a matched-guise subsection, each divided into three parts to explain their structure. These parts include details of the visual and audio stimuli and the attitude rating questionnaire of the test. Finally, details about the procedures adopted for data collection and, subsequently, for data analysis are provided.

3.1 GENERAL OVERVIEW

The method of this study was strictly designed to answer the proposed research questions and to ensure the validity and reliability of the findings. Hence, a cross-sectional and survey-experimental design was adopted, rooted in a quantitative approach. Once it is the replication of the study conducted by Bouchard (2022), several adaptations were made to the research method design of the current study, specifically to comprise the independent variable (*i.e.*, English accents and speakers' race) and the dependent variable (*i.e.*, attitude ratings of Brazilian pre-service English teachers). The whole method section, thus, will involve comprehensive exposition of these adaptations.

Additionally, in aiming to adhere to prevailing academic formalities, this study was formally submitted and protocolled on the Plataforma Brasil. It received approval on April 11th, 2023, from the Ethics Review Board of the Federal University of Santa Catarina (*Comitê de Ética em Pesquisas com Seres Humanos da Universidade Federal de Santa Catarina – CEPSH/UFSC*), under the protocol number (*Certificado de Apresentação de Apreciação Ética – CAAE*) 68255523.3.0000.0121. In addition, the procedures adopted in the present research meticulously obeyed the established ethical standards governing human research in Humanities, Arts, and Social Sciences by following Resolution CNS No. 510 of 2016 and Circular Letter No. 2/2021/CONEP/SECNS/MS for research conducted in virtual environments.

To start delving into, the next subsection will present the three fundamental components of this research study.

3.2 OBJECTIVES, RESEARCH QUESTIONS AND HYPOTHESES

As previously mentioned, this study replicates Bouchard's (2022) research. Recapitulating, her research explored the language attitudes of French L2 learners toward French varieties and the speakers' race. Based on Bouchard's objective, the objectives of this research were elaborated, aiming to explore this tendency in the context of Brazil. Therefore, the general objective of the present research is to investigate the attitudes of Brazilian preservice English teachers toward diverse English varieties intersected with the racial categorization of the speakers involved.

Considering the general objective, the specific objectives are twofold. (1) The first one seeks to examine the proclivities of Brazilian pre-service English teachers' attitudes toward both standard and non-standard English varieties in terms of status, solidarity, and understandability. (2) The second objective is to analyze whether the racial background of the English speakers affects the language attitudes ratings assigned by Brazilian pre-service English teachers. Elucidating both objectives, the following research questions and hypotheses will guide the course of this investigation:

RQ1: Do Brazilian pre-service English teachers demonstrate any bias toward certain varieties of English in their ratings of speakers with different accents?

As previously seen, language attitudes are grounded in two cognitive processes: social categorization and linguistic stereotypes (Dragojevic, 2018). Speakers belonging to groups of varieties socially categorized as standardized are attributed positive language stereotypes, while speakers socially categorized as non-standard groups are attributed negative stereotypical traits (e.g., Dragojevic; Goatley-Soan, 2020; Chien, 2014; Kutlu et al., 2022). Following the Raciolinguistics perspective (Flores; Rosa, 2017), language is conaturalized in colonial history and socially reflects binary logic, whereby idealized appropriateness varieties are seen as superior to racialized varieties. Therefore, varieties from the Inner Circle have positive attitudes compared to those from the Outer and Expanding Circles (Kachru, 1985). Accordingly, the two following hypotheses related to research question one was elaborated:

H1a-c: Brazilian pre-service English teachers will provide positive assessments for GAE and BrE accents on (a) status, (b) solidarity, and (c) understandability attitude dimensions.

H2a-c: Brazilian pre-service English teachers will provide negative evaluations for their own Brazilian Portuguese-accented English, Spanish-accented English, and South African English accents on (a) status, (b) solidarity, and (c) understandability.

RQ2: Do Brazilian pre-service English teachers demonstrate any bias toward a certain race in their ratings of black and white speakers?

Considering that language is related to other social categorizations, when intersected with other social identity groups, it may indicate a reverse linguistic stereotype (Kang; Rubin, 2009). Hence, speakers socially categorized as black can be attributed more negative stereotypes than white speakers independently of the English variety categorization (e.g., Acheme, 2022; Kutlu, 2022; Yook; Lindemann, 2013). This is explained because, as well as language, racialized speakers were co-naturalized within colonial history. Therefore, they are seen as inferior to white speaking subjects, who are considered, due to colonial-stablished ideologies, as those who speak the idealized standard language (Flores; Rosa, 2017). Based on this, the following hypothesis was constructed:

H3a-c: Brazilian pre-service English teachers will attribute higher ratings to white speakers compared to black speakers across (1) status, (2) solidarity and (3) understandability.

The following subsection will delve in detail into this study sample to answer both the research question and the three related hypothesis.

3.3 PARTICIPANTS

Participants selected for the current study were Brazilian pre-service English teachers enrolled in *Letras* English or dual *Letras* English and Portuguese undergraduate programs at Brazilian public universities, including both federal and state. According to Dörnyei and

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Csizér (2012), recruiting a sample that resembles the target population is crucial. Therefore, specific exclusion criteria were established: participants were required to have Brazilian Portuguese as their first language, express a desire to teach English, and, importantly, be enrolled from the 5th phase onwards. This is crucial because students enrolled in the final phases typically opt to undertake school internships, thus ensuring their potential to become future English teachers.

Participants recruitments were based on the non-probability sampling design, involving several strategies to achieve a trade-off (Dörnyei; Csizér, 2012; Kircher; Zipp, 2022). Convenience sampling strategy, where the participants' recruitment was based on convenience and available resources, was employed together with snowball sampling, encouraging participants to indicate others willing to participate voluntarily. Bearing this in mind, recruitment was conducted from 19 *Letras*⁴ undergraduate programs that granted permission for the study's execution through emails sent (see Appendix A). They disclosed the invitation on the virtual learning platforms for the students (see Appendix B). Also, recruitment was extended to Instagram social media (see Appendix C), which contributed significantly to the amplification of the target population. In addition to these virtual procedures, this researcher affixed research flyers onto pinboards at UFSC and attended an inperson class to reinforce the invitation.

An average of forty *Letras* undergraduate students were initially expected to act as listeners and raters. This average criterion was established considering a statistical standpoint, positing that surveys-based research ideally involves thirty participants to achieve normal distribution and more than fifty participants to reach statistical significance (Dörnyei; Csizér, 2012). A total of 72 participants consented to participate in the study. However, responses from 20 participants were excluded because they did not meet the previously established criteria or showed difficulties with the task. Namely: two participants whose first language was not Portuguese, along with five participants enrolled in the initial phases of the *Letras* major, and seven participants who did not intend to teach English, were excluded from the study. Additionally, six participants who provided sequential responses across all questions were also excluded.

Ultimately, the study encompassed a final sample size of 52 participants from 22 Brazilian public universities, whose age ranged from 19 to 45 years (M = 23.5 years, SD =

⁴ In Brazil, the term *Letras* refers to undergraduate programs focused on the study of literature, and linguistics. Therefore, in this thesis, *Letras* is reference to majors in English or dual English and Portuguese.

4.2). As delineated in Table 1, these participants exhibited a heterogeneity regarding linguistic and non-linguistic backgrounds. The majority were female (n = 37) predominantly selfidentified through two distinct racial background, including Black⁵ (n = 22) and White (n =30). In comparison to those pre-service teachers enrolled in dual *Letras* Portuguese and English undergraduate programs (n = 12), more than half of the participants (n = 40) were enrolled in *Letras* English programs. Among them, a considerable portion expressed interest in becoming English teachers (n = 27), with nearly half of them already engaged in English teaching (n = 25). In terms of familiarity with English varieties, participants exhibited a greater degree of familiarity with General American English (M = 4.6), Brazilian Portugueseaccented English (M = 4.2), and British English (M = 3.9). Conversely, they indicated a lack of familiarity with non-standard varieties. Detailed participants' background is reported in Table 1.

Table 1 – Participants' background			
Category	Characteristics	N (%) ⁶	
Age		Range: 19–45 M = 23.5	
Gender	Female Male Non-binary Prefer not to answer	37 (71.1%) 9 (17.4%) 4 (7.6%) 2 (3.9%)	
Race	Black White Indigenous	22 (40.4%) 30 (57.7%) 1 (1.9%)	
Undergraduate program	Letras Inglês Letras Português/Inglês	40 (76.9%) 12 (23.1%)	
Enrollment phase	5 th -7 th phase 8 th -10 th phase	23 (44.2%) 29 (55.8%)	

⁵ In this thesis, *Negro* (Black), used to refer to the race of 22 participants, follows the IBGE definition. It represents a group of Black and *Pardo* (Brown) individuals, both of whom have African ancestry.

⁶ Frequency numbers and percentages are posited for categorical variables, while range and mean for continuous variables.

Plan to be English teacher	Yes Currently teaching English	27 (51.9%) 25 (48.1%)
Familiarity with English accents	American English Spanish-accented English South African English British English Brazilian Portuguese-accented English Southern US English	Range: 1-5 M = 4.6 M = 2.8 M = 2.3 M = 3.9 M = 4.2 M = 3.0

Source: modified from Bouchard (2022)

In examining the backgrounds of the participants, the diversity of the sample in this study is notably higher compared to other studies, particularly those conducted in other countries (e.g., in Canada, Bouchard, 2022; in the USA, Acheme, Montgomery, and Cionea, 2023; in England, Kircher; Fox, 2019). This diversity stems from the recruitment of participants from Brazilian public universities, which operate under federal law No. 12.711/2012 (*Lei de Cotas*; Brazil, 2012). This law constitutes an affirmative action policy that ensure 50% of enrollments for the admission of historically underserved and underrepresented populations into public higher education institutions (Brasil, 2012). Although Black individuals represent 55.5% of the population compared to White individuals at 43.5%, they occupy only 48.3% of the positions in higher education institutions, data refered to public and private universities (IBGE, 2022). Even though they are not equally represented, this distribution of diversity is reflected in this study's sample, underlining the impact of affirmative action policies in Brazil in public universities.

3.4 INSTRUMENTS

The experiment was conducted via the online Google Forms platform, utilizing three principal instruments to systematically collect essential data pertinent to the objectives and research questions posed in this study. These instruments include (1) an Informed Consent Form comprising details of the study and ethical resolutions (see Appendix D); (2) a background questionnaire designed for Brazilian pre-service teachers' completion (see Appendix E); and (3) a matched-guise test as the primary task of the experiment (see Appendix F), comprising audio stimuli concomitantly presented with visual stimuli and

followed by an attitude rating questionnaire. Meticulous descriptions of instruments are following reported.

3.4.1 Background questionnaire

The background questionnaire, translated from French to English, mirrored the original one elaborated by Bouchard (2022) with some adaptions that encompassed the investigation context of the present study. The questionnaire, in this study, aimed to ascertain the alignment of participants with the research context and contribute to an accurate interpretation of the results by collecting linguistic and non-linguistic information. Specifically, comprising two distinct categories of questions, the questionnaire included (1) personal informational questions (*e.g.*, age, gender, race, and academic credentials) and (2) English language-related experience questions (*e.g.*, number of spoken languages, years of studying English, time spent in an anglophone countries, and level of familiarity with the English varieties).

Some research suggests that people alter their attitudes towards language features upon encountering pertinent information (Carmichael, 2016; Hay; Drager, 2010). Hence, to minimize the impact of questionnaire questions' content-related information on the responses of participants in the matched-guise test, a strategic division was implemented. Relatedly, the former set of personal questions was presented before the execution of the matched-guise test, while the latter language-based questions were presented afterward. An illustration of the background questionnaire questions is available in Appendix E.

3.4.2 Matched-guise test

In this study, the modified matched-guise test (Lambert *et al.*, 1967) was implemented as the optimal technique for collecting attitudinal data from Brazilian preservice teachers. As well as the background questionnaire elaboration, the study also replicated, with several adaptations, the original matched-guise test elaborated by Bouchard (2022).

Considering the original test overview, certain modifications were implemented in the matched-guise test replicated in the present study (see Appendix F). The test consisted of six audio stimuli featuring various English accents (cf., 3.5.2.1), matched with twelve visual

stimuli represented by six photographs of black women and six of white women (cf., 3.5.2.2), followed by an attitude rating questionnaire (cf., 3.5.2.3). As detailed in Appendix G, the test was split into four blocks, comprising fifteen trials overall. Block 1 involved a trial designated for participants to familiarize themselves with the test protocol. Block 2 comprised six trials, each featuring six English accents and four black and two white women's photos. Block 3 included two distractor stimuli trials whose data were not incorporated into the final analysis. The distractor stimuli were introduced in the middle of the test to minimize the chances of participants realizing they had encountered the same speaker more than once (Lambert et al., 1960; Bayard, 2001) (i.e., English accents and speakers' race). Block 4 involved the repetition of the audio files from the Block 2 but now matched with six different photos – two of black women and four of white women. For instance, the British English accent in trial 4 was paired with a black woman's photo, while the same accent in trial 2 was matched with a white woman's photo. An attitudinal rating questionnaire, structured on a 6-point Likert scale, followed the presentation of English accents paired with photos in each of the fifteen trials. Finally, drawing on the Babel and Russel (2015) findings, it is evident that order effects can influence the assigned ratings. Consequently, to mitigate the impact of this order effect, the sequences of repetitions were randomized.

Moreover, the matched-guise test and the background questionnaire were set up on the *Google Forms* platform. Nevertheless, the platform exclusively permits the upload of *YouTube* videos. Consequently, both stimuli of the matched-guise test were integrated and saved in picture video format using *iMovie* (version 10.3.8), an Apple video editing application. Subsequently, each resultant picture video was uploaded onto the *YouTube* platform and set as unlisted. As a result, access to the picture video content was restricted to the participants engaged in the survey. A visually illustration of a test trial is available in Appendix F.

3.4.2.1 Audio stimuli

Six recorded speech samples derived from a 69-word English paragraph were the basis stimuli for the matched-guise test implementation. These audio samples were meticulously selected from the Speech Accent Archive, hosted on the website of George Mason University in the United States of America (Weinberger, 2011). This freely available archive encompasses a collection of audio recordings featuring a wide range of English varieties. The audio files capture native and non-native speakers articulating the same

elicitation paragraph. The selected files from the archive exhibit a mean duration ranging from 20 to 30 seconds. The available text from the Speech Accent Archive is as follows:

Please call Stella. Ask her to bring these things with her from the store: Six spoons of fresh snow peas, five thick slabs of blue cheese, and maybe a snack for her brother Bob. We also need a small plastic snake and a big toy frog for the kids. She can scoop these things into three red bags, and we will go meet her Wednesday at the train station. (Weinberger, 2011)

Moreover, in terms of the English speakers' background, the archive systematically categorizes each one based on their native language, coupled with a designated ID number (*e.g.*, english01, portuguese01), and presents their essential biographical information. In addition to this study, this Speech Accent Archive has been employed in previous research addressing identical inquiries to those pursued in the present study (*e.g.*, Becker; Kluge, 2015; Chien, 2014; Yook; Lindemann, 2013).

Considering the speaker's categorization, this study carefully selected all six recordings to keep control over the gender and age background of English speakers. Prior investigations demonstrate that speakers undergo disparate evaluations contingent upon their gender, suggesting potential variations in language attitudes predicated upon speaker gender (*e.g.*, Acheme; Cionea, 2022; Merritt; Bent, 2020, Yook; Lindemann, 2013). Furthermore, research has indicated speakers' age as an additional determinant factor influencing individuals' attitude ratings (*e.g.*, Yook; Lindemann, 2013; Coupland; Bishop, 2007). Therefore, among these six audio stimuli, four native English speakers' women and two women from a non-native English-speaking variety, with a mean age of M = 36.5, were carefully selected. Considering that the study measures the attitude toward native and non-native, the selected accents outright contemplate the Three Concentric Circles of English (*i.e.*, Inner Circle, Outer Circle, and Expanding Circle; Kachru, 1985).

As detailed in Table 2 below, each of these selected speakers comes from a different location and origin. Regarding native varieties, the test comprised a General American English speaker from Merced, California, USA; a South African English speaker from Cape Town, South Africa; a British English speaker from Birmingham, UK; and a Southern US English speaker from Winnfield, Louisiana, USA. In the realm of non-native English varieties, the selected audios included a Spanish-accented English speaker from Madrid, Spain; and a Brazilian Portuguese-accented English from São Paulo, Brazil. In addition, for the two distractor trials, other speakers with different English accents were chosen. These

included a Maltese English speaker from Mosta, Malta, and an Indian English speaker from Yole, India. For a precise reference of the six different English accents used in the survey, Appendix G outlines in detail their related phonetic transcriptions.

Table 2 – Speakers' profile						
Speakers' ID	English variety	City/State	Country	Age		
English147	General American English	California	USA	40 years		
English271	South African English	Cape Town	South Africa	32 years		
English02	British English	Birmingham	UK	30 years		
English83	Southern US English	Louisiana	USA	42 years		
Spanish22	Spanish-accented English	Madrid	Spain	32 years		
Portuguese37	Portuguese-accented English	São Paulo	Brazil	43 years		

Source: elaborated by the author (2024)

3.4.2.2 Visual stimuli

Regarding visual stimuli, twelve photographs of women were selected and matched with the six selected twice-played recordings. These photographs mirrored those employed in the replicated study (Bouchard, 2022), encompassing six photos of black women and six of white women selected on the *Humans of New York Facebook page*⁷. However, for this study, two additional photographic representations were necessary, one featuring a black woman and the other a white woman, to encompass the twelve recordings. The addition of these two photos adhered to Bouchard's (2022) criteria in selecting the initial set of ten photographs in her original study. The criteria were rooted in the similarities of the pictures: "all women were smiling, we could see only their faces and the upper parts of their bodies, and the background was a room in a home" (Bouchard, 2022, p.10) – similarly, the chosen photos for both stimuli distractor trials adhered to the outlined criteria. To emphasize, as well as the practice trial, both photos in for the distractor trials depicted Asian women. All selected photos can be visualized in an arrangement table of the matched-guise test stimuli in Appendix H.

⁷ Humans of New York is a photo blog that proposes taking photos of New Yorkers and including daily glimpses of these subjects' lives. This photography project is freely accessible on its own Facebook page https://www.facebook.com/humansofnewyork and its website https://www.facebook.com/humansofnewyork and its website https://www.humansofnewyork.

3.4.2.3 Measures: Attitude rating questionnaire

Brazilian pre-service English teachers evaluated English speakers they had listened to based on Bouchard's (2022) 8-item scales, utilizing a 6-point Likert scale (*i.e.*, 1 to completely disagree; 6 to completely agree). Multi-item scales were chosen as they are essential for assessing abstract and indirect observable variables (*e.g.*, attitudes and beliefs) in questionnaire surveys (Dörnyei; Csizér, 2012). Additionally, a 6-point Likert scale was implemented once even-numbered attitude point scales prevent respondents from remaining in a neutral position by encouraging them to choose a positive or negative side of the scale (Garrett, 2010).

Consistent with the attitude rating questionnaire utilized in the original study (Bouchard, 2022), the 8-items are grounded in three distinct attitude dimensions: *status* assessed with three items (e.g., *this person is professional; this person is a good leader; this person is educated*); *solidarity* assessed with three items (*i.e., this person is dynamic; this person is friendly; this person is sociable*); and *understandability*, assessed with two items (*i.e., this person is easy to understand; this person would be suitable to teach English*). The *general perspective* from the original study was excluded from the current study because it was assessed with one item only (*i.e., I think it's a beautiful French*). According to Dorney (2012), evaluating based on very few items is risky due to internal reliability. An illustration of how the attitude rating questionnaire were conducted can be seen as follows in Figure 3:

		Completely disagree	Disagree	Slightly disagree	Slightly agree	Agree	Completely agree
	1. This person is professional	1	2	3	4	5	6
Status	2. This person is a good leader	1	2	3	4	5	6
	3. This person is educated	1	2	3	4	5	6
	4. This person is dynamic	1	2	3	4	5	6
Solidarity	5. This person is friendly	1	2	3	4	5	6
	6. This person is sociable	1	2	3	4	5	6
Understandability	7. This person is easy to understand	1	2	3	4	5	6
Understandaomity	8. This person would be suitable to teach English	1	2	3	4	5	6

Figure 4 – Attitude rating questionnaire structure

3.5 PROCEDURES FOR DATA COLLECTION

The procedures for data collection of the experiment encompassed (1) the invitation to participate in the study, (2) the Informed Consent Form endorsement, and (3) the survey execution, comprising both background questionnaire and matched-guise test. As outlined in the Participants subsection, Brazilian pre-service English teachers were invited to participate voluntarily via virtual learning platforms from Brazilian *Letras* undergraduate programs and, in addition, via *Instagram* social media. Notably, they received a message containing all general information about the study and the survey access link (see Appendix B). On the other hand, those participants who demonstrated interest in the study through social media received a similar message via *Instagram* Direct Message (see Appendix C).

Participants conducted the research online via the Google Forms platform, at the convenient timeframe established by the researcher. Upon clicking the provided link, participants accessed the Informed Consent Form (see Appendix D), wherein comprehensive information about the study, accompanied by its approval report from the UFSC Ethics Committee Board, was delineated. Participants who perused the document and consented to participate were required to select the checkbox corresponding to the option "I accept to participate in the study". Conversely, participants who declined to participate were required to select the checkbox corresponding to the option "I accept to select the checkbox option "I do not accept to participate in the study" and, in consequence, they were directed to the end of the survey. Brazilian pre-service teachers who accepted participation were subsequently directed to a thank-you section containing the survey access link to proceed with completing the study. Before clicking the survey link, each received an automatic email with a copy of the Informed Consent Form and was instructed to save it carefully.

As the first part of the experiment, participants were asked to complete the initial questions of the background questionnaire (see Appendix E), providing details about personal information. In adherence to ethical conformities, all provided information was maintained confidential. Posteriorly, the matched-guise test (see Appendix F) was conducted. Participants were instructed to use a computer/laptop with a stable internet connection and earphones. They executed the experiment with an average duration ranging from 25-30 minutes: approximately 10 minutes for the background questionnaire and approximately 20 minutes for the matched-guise test. The first trial was a practice exercise to familiarize the participants

with the test, not included in the data analysis. In the survey, participants listened to 14 audio recordings matched with six black women's photographs, six white women's photographs, and two distractor photographs that were not included in the final data analysis. Following each audio-visual exposure, they evaluated the speaker on 8-item scales using a 6-point Likert scale. After matched-guise test, Brazilian pre-service English teachers were required to furnish information concerning their English language-related experiences as the second part of the background questionnaire. At the last section, participants were presented a thanked message for their voluntarily participation.

3.6 PROCEDURES FOR DATA ANALYSIS

The procedure for data analysis involved two main steps: (1) the preparation of the raw data for processing in the software and (2) the data analysis through statistical procedures. Initially, the data (i.e., background questionnaire and matched-guise test responses) were registered in the Google Forms platform. Subsequently, the raw data were inputted into the Microsoft Excel program of the researcher's computing device (MacBook Air, 2020 model, Apple M1, 8 GB RAM). Each participant's data was deleted from the online platform to uphold confidentiality and ethical privacy measures. Afterward, a pre-coding schema was utilized to design pre-defined codes (Révész, 2012). Accordingly, a codebook was created to systematically label the variables based on their statistical level of measurements (i.e., nominal, ordinal, and scale), thereby facilitating the codification of raw data. At the end, the data underwent a cleaning process to remove participants who did not fit the research profile and those who provided sequential responses.

Once the data was coded and cleaned, composite variables were created for status, solidarity, and understandability for each of the twelve trials. Remarkably, participants' responses on professionalism, leadership, and education questions were added up and divided by three to form the *status* composite variable; their dynamism, friendliness, and sociability responses were combined for *solidarity* in the same manner; and, finally, a mean of the understandability and teachability responses established the *understandability* composite variable (cf. 3.5.2.3). Composite variables were also created to analyze attitudes toward the six English varieties and the two races across the three dimensions (cf. Bouchard, 2022): responses by all the black speakers independently of their English variety were combined to form the variable named as black_speaker. The same procedure was repeated for the white speakers across the varieties. Similarly, the black speaker and white speaker scores within

each variable were combined to have a single score for each variety, following Bouchard (2022). The final file version of the data was converted into a CSV file and uploaded to the statistics program.

Statistical analyses were conducted using the JASP statistics program, version 0.18.3. For each research question, descriptive statistics were performed to examine the mean values and to assess the normal distribution, aiding in the decision to conduct parametric or non-parametric tests. Accordingly, for RQ1 a one-way repeated measures ANOVA and post-hoc tests were conducted to determine if statistically significant differences existed in attitude ratings towards six English varieties across dimensions of status, solidarity, and understandability. As for RQ2, in order to test statistically significant differences in language attitudes evaluations toward white speakers compared to black speakers, a *paired sample t-test* for solidarity, and a non-parametric *Wilcoxon test* for the status and understandability dimensions were implemented. Finally, a *two-way repeated measures ANOVA* was employed to investigate the interaction effects between speakers' variety and race on attitude evaluations. As no significant differences were found, the need for conducting a *post-hoc* test was eliminated.

Considering this thesis' method description, the subsequent session will present the results of the current thesis in detail.

4 RESULTS

This results section of the experiment is organized around the two primary research questions and their corresponding hypotheses to systematically present and interpret the findings. In the first subsection, the outcomes related to attitudes toward different English varieties will be presented in detail. In the second subsection, the focus will shift to outcomes related to race. This segment will examine how speakers' racial backgrounds impact Brazilian pre-service English teachers' attitudes. For each research question, a thorough discussion subsection will be included to interpret the results. The discussions will not only highlight key findings but also explore their implications, drawing connections to existing literature and the theoretical frameworks utilized in this thesis.

4.1 ATTITUDES TOWARD ENGLISH VARIETIES

In this subsection, the statistical analysis outcomes address the following RQ1: Do Brazilian pre-service English teachers demonstrate any bias toward certain varieties of English in their ratings of speakers with different accents? To answer this question, *one-way repeated measures ANOVA* was run to the (1) six English varieties (i.e., General American, British, Southern American, South African, Spanish- and Portuguese-accented English) as the independent variable, and (2) the attitude rating measures as the dependent variable. The ANOVA was conducted three times, one for each dimension (i.e., status, solidarity, and comprehensibility dimensions). The outcomes will be contextualized within the scope of Hypotheses 1, 2, and 3. Namely: H1a-c, Brazilian pre-service English teachers will provide positive assessments for GAE and BrE accents on (a) status, (b) solidarity, and (c) understandability; H2a-b, Southern US English will be evaluated less positively than GAE and BrE on the dimension of (a) status and equally highly evaluated with inner circle varieties in (b) solidarity; H3a-c, Brazilian pre-service English teachers will provide negative evaluations for their own Brazilian Portuguese-accented English, Spanish-accented English, and South African English accents on (a) status, (b) solidarity, and (c)

In addition, they will be visualized in Table 3, displaying mean scores and standard deviations of language attitude assessments and in the respective descriptive plots provided in Figure 3, 4 and 5.

Table 3 presents the descriptive statistics for the attitudes toward six English varieties on status dimension. As for status dimension, analysis of the mean values reveals

that participants hierarchized the six varieties: General American English ranks highest values (M=5.11, SD=0.80), followed by British (M=5.12, SD=0.72), Southern American (M=4.86, SD=0.77), and South African English (M=4.61, SD=0.91). Finally, Spanish- (M=4.34, SD=0.81) and Portuguese-accented (M=4.32, SD=1.01) English received very close, equally low positive ratings on the status dimension, with Spanish slightly leading.

	Status			λŢ
	М	SD	R	Ν
GAE	5.11	0.80	2.8 - 6.0	
BrE	5.12	0.72	3.3 - 6.0	
SAE	4.86	0.77	3.1 - 6.0	50
SafrE	4.61	0.91	2.5 - 6.0	52
SpE	4.34	0.81	2.6 - 6.0	
PtE	4.32	1.01	1.8 - 6.0	

Table 3 – Descriptive statistics of status ratings toward varieties

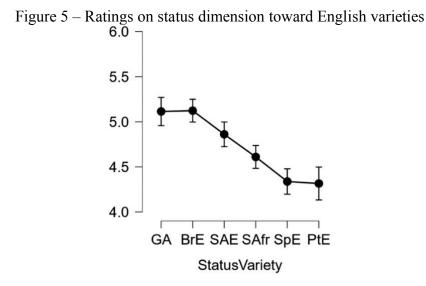
Source: elaborated by the author (2024)

Notes: M = Mean value; SD = Standard deviation; R = Range; N = Sample size. GAE refers to General American English; BrE refers to British English; SAE refers to Southern American English; SpE refers to Spanish-accented English; PtE refers to Portuguese-accented English.

The results of the ANOVA revealed a significant difference in terms of status evaluations among the different English varieties F(3.12,159.17) = 24.86, p < .001, $\eta^2 = 0.33$. However, as indicated, not all varieties received similar evaluations. Consequently, Holm-corrected post-hoc tests were conducted for multiple comparisons. Post-hoc comparisons are available in Appendix I.

Consistent with H1a, General American and British English were attributed higher status ratings compared to the other varieties. Even though Southern American English approached statistical significance, no significant difference was observed when compared to General American English (p=.059) and British English (p=.058). Due to this, H2a was not supported. However, unlike General American and British English, Southern American English was attributed a significantly higher status solely in comparison to Spanish- and Portuguese-accented English (p<.001) once it did not differ statistically from the status ratings to South African English (p=.059). In comparison to the other varieties, South African English (p<.001) and significantly higher when compared to Portuguese-accented English (p<.001) and significantly higher when compared to Portuguese-accented English (p<.001) and significantly higher when compared to Portuguese-accented English (p<.001) and significantly higher when compared to Portuguese-accented English (p<.001) and significantly higher when compared to Portuguese-accented English (p<.001) and significantly higher when compared to Portuguese-accented English (p=.032). Even though South African English (M=4.61) was rated higher in terms of status than Spanish-accented English (M=4.34), this difference was not statistically significant (p=.052). Lastly, partially supporting H3a, Spanish- and Portuguese-accented English were

perceived as having equally low ratings on the status dimension by Brazilian pre-service English teachers. This hierarchy on status ratings can be clearly observed in Figure 4.



Notes: Y-axis represents the status dimension rating scale (1-6, 6 = completely agree). X-axis represents the six English varieties.

Regarding attitudes on the solidarity dimension, upon observing the descriptive statistics in Table 4 bellow, different patterns on the prestige inner circle varieties can be seen. Notably, British and Southern American English are rated highly, followed closely by General American English (M=4.70, SD=0.93). Among non-standard varieties, South African English ranks first (M = 4.39, SD = 0.88), followed by Spanish-accented English (M=4.32, SD=0.81) and Portuguese-accented English with the lowest solidarity rating (M=4.14, SD=1.01).

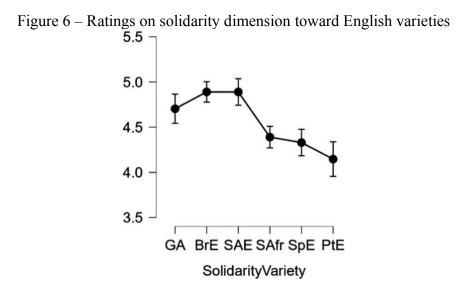
		Solidarity			
	М	SD	R	Ν	
GAE	4.70	0.93	2.0 - 6.0		
BrE	4.89	0.77	3.0 - 6.0		
SAE	4.89	0.76	3.0 - 6.0	52	
SafrE	4.39	0.88	2.8 - 6.0	32	
SpE	4.32	0.81	2.6 - 6.0		
PtE	4.14	1.01	2.3 - 6.0		

Table 5 – Descriptive statistics of solidarity ratings toward varieties

Source: elaborated by the author (2024)

Notes: M = Mean value; SD = Standard deviation; R = Range; N = Sample size. GAE refers to General American English; BrE refers to British English; SAE refers to Southern American English; SpE refers to Spanish-accented English; PtE refers to Portuguese-accented English.

The findings for one-way repeated measures ANOVA indicate that these six varieties were rated significantly differently in terms of solidarity, F(3.58, 182.70) = 17.94, p < .001, η^2 = 0.26. Results of Holm-corrected post-hoc tests support H1b as they attest that British and General American English were associated with highest solidarity and did not differ from each other significantly (p=.383). Southern American English did not differ significantly from either General American English (p=.383) or British English (p=1.00) and it was rated significantly higher than South African English, Spanish-accented English and Portugueseaccented English (p<.001). Consequently, these results support H2b. As for South African English, it was rated significantly lower in terms of solidarity compared to the inner circle varieties. Even though it was rated slightly higher than Spanish and Portuguese-accented English, its solidarity ratings did not differ statistically from these non-native varieties (Safr-SpE p=1.00; Safr-PtE p=.125). Both Spanish- and Portuguese-accented English were attributed to low solidarity, and the difference between them was not statistically significant (p=.383). These results validate H3b. Finally, an interesting picture emerged: solidarity ratings for General American and British English were lower compared to their status ratings (GAE M=5.11; BrE M=5.12), while Southern American English ratings were similar in both dimensions (status, M=4.86; solidarity, M=4.89). Figure 5 depicts the results of the solidarity dimension.



Notes: Y-axis represents the status dimension rating scale (1-6, 6 = completely agree). X-axis represents the six English varieties.

When scrutinizing understandability dimension, the descriptive statistics in Table 5 exhibit a distinct pattern, particularly regarding non-standard varieties. General American shows the highest rating among the two prestige inner circle varieties (M = 5.58, SD = 0.85),

followed by British English (M=5.37, SD=0.10) and Southern American English (M=5.11, SD=0.10), a non-standard native variety. Conversely, regarding non-prestige varieties, South African English (M=4.51, SD=0.13) shows approximate ratings to Portuguese-accented English (M=4.49, SD = 0.13), followed by Spanish-accented English (M=4.16, SD=0.13).

	U	nderstanda	bility	۸Ţ
	М	SD	R	Ν
GAE	5.58	0.85	3.0 - 6.0	
BrE	5.37	0.10	2.7 - 6.0	
SAE	5.11	0.10	3.2 - 6.0	52
SafrE	4.51	0.13	2.5 - 6.0	52
SpE	4.16	0.13	1.7 - 6.0	
PtE	4.49	0.13	2.2 - 6.0	
	0 1	1 / 11 /1	(1) (2024)	

Table 4 – Descriptive statistics of understandability ratings toward varieties

Source: elaborated by the author (2024)

Notes: M = Mean value; SD = Standard deviation; R = Range; N = Sample size. GAE refers to General American English; BrE refers to British English; SAE refers to Southern American English; SpE refers to Spanish-accented English; PtE refers to Portuguese-accented English.

The repeated measures ANOVA indicated a significant effect of varieties on understandability F(2.83, 144.20) = 50.90, p < .001, $\eta 2 = 0.50$. Holm-corrected post-hoc tests indicated that General American and British English were equally highly understandable, and no differences between them were found (p=.119), confirming H1c. General American was rated as the most understandable variety and differed significantly from all the other varieties (p < .001) except for British English. Regarding British English, it was rated significantly higher when compared to the expanding and outer circle varieties (p < .001), but it was not rated significantly higher than Southern American English (p=.063), a non-prestige inner circle variety. Southern American English was rated significantly more understandable than South African English, Spanish- and Portuguese-accented English (p < .001). When compared to non-native varieties, South African English was as understandable as Portuguese-accented English (p = .863), but when compared to Spanish-accented English (p=.011), it was significantly more understandable. Finally, Portuguese-accented English was rated significantly more understandable than Spanish-accented English (p=.015). Therefore, rejecting H3c, results indicate that Spanish-accented English was the only least understandable and differed significantly from all varieties. Figure 6 displayed bellow show these tendencies.

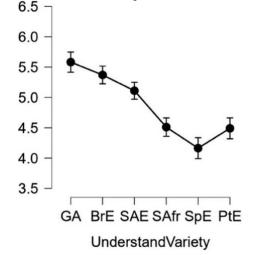


Figure 7 – Ratings on understandability dimension toward English varieties

Notes: Y-axis represents the status dimension rating scale (1-6, 6 = completely agree). X-axis represents the six English varieties.

4.1.1 Discussion of RQ1

In addressing RQ1, the present study investigated whether pre-service English teachers are biased toward six English varieties (i.e., General American, British, Southern American, South African, Spanish-, and Brazilian-accented English). Broadly, the findings revealed a complex scenario in attitude evaluation attributed to the inner, outer, and expanding circles of English varieties. To navigate this complexity, the following discussion will contextualize these results on accent within the framework of language attitudes, drawing connections within realms of World English, English as a Multilingual Franca and Raciolinguistics.

The results of attitudes on status dimension toward English varieties indicated a clear hierarchy. Notably, General American and British English were attributed higher status than other Portuguese- and Spanish-accented English. The findings are consistent with past studies that found negative evaluation toward outer and expanding circle compared to inner circle varieties (e.g., Acheme, 2022; Yook, Lindemann, 2013). The findings are also consistent with the notion of status in language attitude theory aligned with the colonial legacy idea. The status dimension is associated with related notions of socioeconomic prestige and upward social mobility (Kircher, 2022). Hence, this high status attributed to Anglo-American varieties is linked to the construction and naturalization of raciolinguistic ideologies in colonialism (Flores; Rosa, 2017). Accordingly, these ideologies are perpetuated through media representations and educational systems as norms of language appropriateness (Dragojevic,

2018). Consequently, despite participants' high familiarity with Portuguese-accented English, they attributed it to lower status, as they did to Spanish-accented English. It is also plausible that Brazilian pre-service English teachers evaluated both prestige accents positively due to the high status attributed to them within the educational environment in Brazil (El-Dash; Busnardo, 2001).

Surprisingly, the assessments regarding status between Southern American and South African English were not statistically different, thus creating a secondary evaluation hierarchy. A potential explanation for the perceived similarity in status could be due to their shared native status. Nevertheless, by comparing both varieties' relationships to inner-circle standard varieties, a complex status dynamic is unveiled, decreasing the chance of this finding being linked to native-speakerism. Although Southern American English was attributed to lower status, it did not significantly differ from General American and British English, whereas South African English was rated significantly lower. It suggests that these ratings are not solely determined by their native share status but are influenced by other factors. Despite being non-standard, Southern American English, a regional variety localized in inner circle, exhibits higher prestige than South African English, which belongs to the outer circle. Therefore, these findings on status dimension advocate to the different vitality⁸ of these both varieties.

Additionally, ratings on the solidarity dimension indicate in-group loyalty and interpersonal attraction (Dragojevic, 2018). Consequently, it was expected that the results would show that Brazilians perceive the Portuguese-accented English speaker as "friendly" and "socially attractive." However, the contrary was observed: Brazilian pre-service English teachers attributed lower solidarity ratings to their in-group variety. These results support and replicate empirical evidence from some studies with East Asian participants, which reported that participants were harsher toward members of their own group (e.g., Lan et al., 2023; Chien, 2014). One explanation for this opposite pattern is consistent with the notion of *Social Mobility* – the attempt to linguistically assimilate to the dominant out-group (Dragojevic, 2018). Subordinate group members use this strategy when they have little loyalty to their ingroup variety and perceive their lower position in the social hierarchy as stable (Reid; Anderson, 2010). Hence, plausible that Brazilian pre-service English teachers favored the dominant group's variety over their own to assimilate linguistically and distinguish

⁸ According to Dragojevic (2018), language vitality is related to its number, distribution, and, importantly, institutional support (e.g., visibility in government, media).

themselves from their perceived subordinate in-group. Drawing on Acheme (2023), this is a reflection of coloniality that functions as a system of privilege and dominance to promote existing raciolinguistic ideologies, and beliefs that always favor them. Therefore, it is not always about in-group membership.

Another relevant observation is that although not significantly different British English and Southern American English were attributed slightly higher solidarity evaluations than General American English. This surprising finding aligns with the findings of Acheme and Cionea (2022). The authors noticed that undergraduate students in the U.S. rated Indian English significantly higher in solidarity compared to Standard American English. This lack of favoring toward General American is perhaps due to participants not engaging in social attraction with the variety, irrespective of its prestige status, as solidarity indicates the friendliness of varieties. Instead, Brazilian pre-service teachers may engage in social creativity (Dragojevic, 2018), meaning they strive to achieve positive distinctiveness from the dominant group. Although not significantly different from British and Southern US Englishs, this can be attributed to critical reflections on English varieties in the *Letras* English undergraduate programs. Therefore, due to Portuguese-accented English being a non-vital variety in Brazil, participants choose alternatively British and even Southern U.S. English, which are endonormative inner-circle varieties, to establish this distinctiveness.

The results also unveiled a hierarchy in understandability ratings. General American, British, and Southern American English varieties were attributed high understandability. However, unlike status and solidarity, Southern American English was significantly less understood than General American English. This could be attributed to the lower familiarity and exposure of Brazilian pre-service English teachers with Southern American English compared to General American English. In addition, future teachers may have rated South African, Portuguese-accented, and Spanish-accented English as less understandable due to their limited presence in the classroom. Although Portuguese-accented English is familiar to Brazilians, it is not referenced or discussed alongside other instructional varieties. This can be linked to the notion of coloniality embedded in the educational system. Therefore, when only Euro-American standards are considered the sole instructional model, higher understandability is presumed to be attributed to these idealized models.

Finally, the findings on understandability also reveal a contrasting pattern compared to status and solidarity dimensions for the outer and expanding circle varieties. However, Portuguese-accented English received high understandability, showing no significant difference from South African English, and a notable contrast with Spanish-accented English, which was significantly lower than all other varieties. In other words, although Portugueseaccented English was rated negatively on status and solidarity, it was better understood. This could be attributed to pre-service English teachers' familiarity to this accent in *Letras* undergraduate programs through professors.

The following subsection will delve into the results concerning Brazilian attitudinal evaluations toward the race of English speakers.

4.2 ATTITUDES TOWARD RACE OF ENGLISH SPEAKERS

The results of this second subsection pertain to the following RQ2: Do Brazilian preservice English teachers demonstrate any bias toward a certain race in their ratings of black and white speakers? The independent variable is (1) race of English speakers, which is divided into two groups (i.e., black and white), with (2) each dimension of attitude (i.e., status, solidarity, and understandability) examined as a dependent variable. Considering this context, a paired-sample t-test was employed for solidarity, while the non-parametric Wilcoxon test was employed for status and understandability. The emerging outcomes will be reported within the scope of the following Hypothesis 4: Brazilian pre-service English teachers will attribute higher ratings to white speakers compared to black speakers on (1) status, (2) solidarity and (3) understandability. The results are presented through descriptive statistics in Tables 6, 7 and 8 and visually illustrated through descriptive plots in Figures 7, 8 and 9.

Table 5 – Descriptive statistics of solidarity ratings toward race

		Solidari	ty	λ
	М	SD	R	IV
Black	4.7	0.71	3.0 - 5.9	52
White	4.42	0.77	2.8 - 5.7	52

Source: elaborated by the author (2024) Notes: N = Sample size; M = Mean value; SD = Standard deviation.

Table 6 – Descr	intive statistics	of status ratings	toward race
		01 500005 10000000	

		Status		N
	М	SD	R	ĨŇ
Black	4.81	0.69	3.2 - 6.0	50
White	4.65	0.74	3.1 - 6.0	32
	a 1			

Source: elaborated by the author (2024)

Notes: N = Sample size; M = Mean value; SD = Standard deviation.

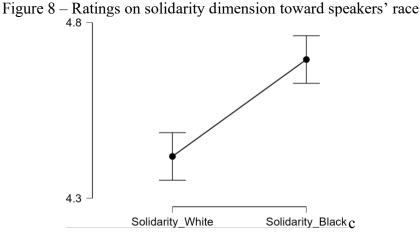
		Understandability		
	М	SD	R	IN
Black	4.88	0.66	3.0 - 6.0	50
White	4.86	0.68	2.7 - 6.0	52
	<u> </u>		1 (0.0.0.4)	

Table 7 – Descriptive statistics of understandability ratings toward race

Source: elaborated by the author (2024) Notes: N = Sample size; M = Mean value; SD = Standard deviation.

The descriptive statistics in Tables 6, 7 and 8 indicate that Black speakers consistently received high favorable ratings than White speakers across all attitude dimensions. Particularly, in terms of solidarity, Black speakers exhibit notably higher mean values (M = 4.70, SD = 0.71) than White speakers (M = 4.42, SD = 0.77). Regarding status, Black speakers also show higher ratings (M = 4.81, SD = 0.69) compared to White speakers (M = 4.65, SD = 0.74). At last, although Black speakers receive high positive evaluations for understandability (M = 4.88, SD = 0.66), the difference in ratings compared to White speakers (M = 4.86, SD = 0.68) is small.

The examination of solidarity ratings for black and white speakers, as determined by the *p*-value Shapiro-Wilk test, demonstrated a normal distribution (p = .141). This finding prompted to the application of a parametric paired-sample t-test, which revealed a statistically significant difference in solidarity evaluations between black and white speakers, t(51) = -5.78, p < .001, Cohen's d = -0.802. Notably, the analysis of mean values in Table 6 and plots in Figure 7 below indicates that black speakers received significantly higher solidarity ratings than white speakers. Diverging from the distribution pattern observed in solidarity ratings, evaluations on status (p = <.001) and understandability (p = .006) did not conform to normality, as can be seen in the *p*-value of Shapiro-Wilk. Accordingly, the non-parametric Wilcoxon test was employed for both dimensions. The result indicated a significant disparity in status evaluations, with black speakers receiving significantly higher assessments in this regard, z(129.00) = -3.907, p < .001. No differences in understandability emerged between black and white speakers, as evidenced by the findings, z(415.500) = -0.450, p = .656. Therefore, these findings do not support H4, which states that Brazilian pre-service English teachers would attribute higher ratings to white speakers than black ones.



Notes: Y-axis represents the solidarity dimension rating scale (1-6, 6 = completely agree). X-axis represents the speakers' race.

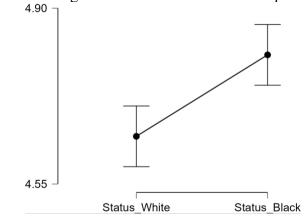
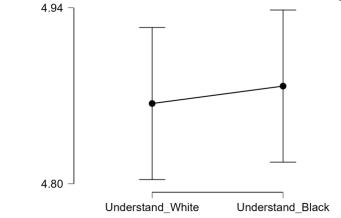


Figure 9 - Ratings on status dimension toward speakers' race

Notes: Y-axis represents the status dimension rating scale (1-6, 6 = completely agree). X-axis represents the speakers' race.

Figure 10 – Ratings on understandability dimension toward speakers' race



Notes: Y-axis represents the understandability dimension rating scale (1-6, 6 = completely agree). X-axis represents the speakers' race.

Finally, two-way repeated measures ANOVAs were conducted to examine whether the consistency of the assessments regarding speakers' race – high positive ratings for Black speakers and lower ratings for White speakers in solidarity and status dimensions – persisted uniformly across all the six English varieties or not. The interactions between Variety and Race were non-significant for Status (p=.146) and Solidarity (p=.416) dimensions, indicating that the pattern observed for black vs. white speakers was not affected by the variety. In other words, white speakers were attributed higher favorable ratings when compared to black speakers across General American, British, Southern US, South African, Portuguese- and Spanish-accented Englishes. Importantly, it was unnecessary to carry out an analysis on understandability dimension once there were no significant effects for race in earlier analysis. For verification purposes, full results of the two-way repeated measures ANOVA can be visualized in Appendix J.

4.2.1 Discussion of RQ2

With regard to Research Question 2, this thesis delved into examining the impact of the racial background of English speakers on attitude ratings attributed by Brazilian preservice English teachers. This exploration, grounded in language attitudes theory and the raciolinguistic perspective, initially hypothesized that white speakers would receive superior ratings in comparison to black speakers across three dimensions. However, the findings, consistent with the original study's results (Bouchard, 2022), revealed a different tendency: Black speakers were consistently attributed higher ratings across all attitude dimensions when compared to white speakers. This unexpected outcome triggers a deep discussion on multiple ways.

One potential and optimistic explanation for the findings on attitudes toward speakers' race on status and solidarity dimensions may be due to the historical and ongoing struggles with racial inequality in Brazil. For instance, the implementation of the *Cotas* Law (Brazil, 2012) as an affirmative action policy has significantly increased the number of Black students in public universities. Consequently, these institutions now have a more diverse student body that emphasizes social justice to ensure their continued integration into academic environments. Therefore, efforts to promote anti-racism and diversity inclusion in academic spaces are evident and likely contribute to increased racial awareness among students. This context of diversity promotion, aligned with the fact that the study's sample comprises pre-

service English teachers from Brazil's public universities, likely explains the positive attitude ratings attributed to Black speakers.

Another potential explanation, though pessimistic, is that the favorable attitudes attributed to Black speakers and the lower ones to White speakers may be related to social desirability bias. One explanation for this is consistent with the raciolinguistic perspective, which posits that the ideal model of a speaker is intertwined with race. As pointed out by Flores and Rosa (2017), raciolinguistic ideologies are connected to the colonial legacy, where standard varieties are associated with the idealized White speaking and listening subject. However, there was a clash in the results: prestigious accents were attributed higher positive attitudes than non-prestigious racialized varieties, while White speakers were attributed negative attitudes than racialized Black speakers. Given that individuals are conscious of stereotypes and what is predominantly socially desirable (Acheme; Montgomery; Cionea, 2023; Bouchard, 2022), participants may have hidden their biases when exposed to this sensitive research topic, race. Therefore, the display of Black women's photographs may have prompted participants to respond in a socially and politically correct manner.

In addition, in accordance with some studies outcomes, individuals may have their attitudes toward language features altered upon encountering previous relevant information (e.g., Carmichael, 2016; Hay, Drager, 2010). Considering that the present study included personal-related questions, which included one inquiring about the participant's race, it could have elicited distrust during the test execution. Consequently, participants may have been inclined to provide socially desirable responses when presented with photographs of black and white speakers throughout the test. Furthermore, many participants were recruited via Instagram, where they may have accessed this researcher's profile and become aware of their racial background. As a result, this awareness could have influenced pre-service English teachers to provide socially desirable responses in the matched-guise test.

The ANOVA findings on the understandability dimension indicated no significant difference in attitude ratings between Black and White speakers may reveal the participants' true attitudes. When considering the findings on attitudes toward English varieties, the ratings on understandability, compared to the status and solidarity dimensions, are more clearly hierarchized. This hierarchy reveals a significant social stereotype, with favorable attitudes toward prestigious varieties over non-prestigious ones, and Spanish-accented English receiving the least positive attitudes. This may explain why the results of attitudes toward race in the understandability dimension more accurately reflected the attitudes of pre-service teachers.

The lack of significant difference in ratings toward Black and White speakers on understandability also suggests a likely influence of the understandability dimension-related items. Participants were asked whether the speaker was easy to understand or suitable to teach English. Following Ryan's (1983) and Dragojevic's (2018) postulations, teachability would fit better into the status dimension instead. According to them, status represents speech style, socioeconomic status, and upward social mobility (e.g., professionalism, intelligence, and leadership). Therefore, since this study replicated Bouchard's (2022), conducting a Cronbach's alpha reliability analysis would determine whether "suitable to teach" is an item that affects attitudes ratings toward race on understandability dimension.

In summary, the reasons behind these results on pre-service teachers toward English speakers' race require further exploration, both in terms of quantitative and qualitative research. Therefore, the next final section will draw on the final conclusions, highlighting limitations and suggestions for future research.

5 CONCLUSIONS

The conclusions section of this current M.A. thesis will briefly revisit the methodology employed throughout the study, followed by an overview of the findings, emphasizing their implications for English teaching in Brazil.

The theoretical frameworks and studies earlier reviewed showed that English varieties are evaluated to varying degrees (e.g., Kachru, 2004; Dragojevic; Goatley-Soan, 2020), and this evaluation is affected not only by the varieties themselves but also by the speakers' race (Flores; Rosa, 2017; Kutlu, 2020). Based on this knowledge, the main objective of this study was to investigate language attitudes toward English varieties and their respective speakers' race. However, notably fewer studies examined language attitudes toward many English varieties and toward the speakers' race within the Brazil context. The existing studies relied solely on undergraduate and K-12 students. Therefore, it was decided to examine the language attitudes of Brazilian pre-service English teachers toward General American, British, Southern American, South African, Spanish- and Portuguese-accented English. Moreover, aiming to observe the racial effects, the attitudinal ratings of Brazilian pre-service teachers toward Black and White English speakers were analyzed.

In pursuit of these objectives, two research questions emerged from the replicated study conducted in Canada (Bouchard, 2022). Firstly, given the understudy of various English varieties' attitudinal evaluation within Brazil, it was perceived as necessary to understand whether Brazilian pre-service English teachers exhibit biases toward native and non-native English varieties. Secondly, considering previous findings indicating the influence of race on speech evaluation, it was deemed indispensable to determine whether Brazilian pre-service teachers hold prejudices toward English speakers.

To answer both inquiries, a language attitudes test was designed based on the original study (Bouchard, 2022) to assess the *Letras* undergraduate students' attitudes implicitly. Initially, a background questionnaire covering personal backgrounds and English language experiences were created solely to establish the participants' profiles for the study's inclusion criteria. Hence, it was not subjected to further analysis. Subsequently, a modified matched-guise test was employed to uncover the actual attitudes of participants, bypassing potential conscious stereotypes they might conceal. Briefly, as for audio stimuli of the test, the six English variety samples were played twice to match with 12 visual stimuli, featuring six black and six white women photos. To measure the attitudes toward both stimuli, an attitude rating questionnaire composed of 8-items were grounded on three attitudes

dimensions and rated in a 6-point Likert scale. The findings of this study are outlined as follows:

Regarding findings on attitudes toward English varieties reveal a strong preference of Brazilian pre-service English teachers for prestigious English varieties over non-prestigious ones. Overall, they attributed more favorable attitudes toward General American, British, and Southern US Englishes than South African, Spanish-, and Portuguese-accented Englishes across dimensions of status, solidarity, and understandability attitudes. This finding is consistent with hypotheses 1 and 2 and with literature demonstrating that inner circle prestige varieties receive higher attitude ratings than outer and expanding circle varieties. Moreover, an interesting finding was that Southern American and British English received more positive attitudes on solidarity than General American English. This might be attributed to Brazilian pre-service teachers' lower level of engagement in terms of social attractiveness with the prestigious US English variety despite its high prestige.

Concerning the effect of English speakers' race, the results indicate that black speakers were more highly evaluated in all dimensions. However, although higher evaluated, black speakers did not show significantly higher solidarity ratings than white speakers. After examining the effect of race, a two-way repeated measures ANOVA indicated no significant effect of variety and race interaction. White speakers were consistently rated lower than black speakers across all varieties. In other words, black speakers were attributed high attitude ratings irrespective of the variety. Two potential explanations are worth considering. Firstly, this pattern may be linked to the prevailing emphasis on social justice and equity within the Brazilian academic context, particularly within *Letras* undergraduate programs. Secondly, it is plausible that participants engaged in social desirability responses due to societal norms or expectations.

These findings lead to some pedagogical implications and limitations. Therefore, the next two subsections propose valuable insights into the implications of this study by providing suggestions for future research.

5.1 PEDAGOGICAL IMPLICATIONS

The findings of the experiment hold significant implications for English teaching in Brazil and in Expanding Circle countries. Considering the results showed an attitudinal preference among Brazilian pre-service English teachers for high-prestige English varieties, this is likely to affect classroom practices. Drawing on the three-component model of attitude (Baker, 1992), individuals' language attitudes are reflected not only in their cognition but also in their behavior. Therefore, this tendency in pre-service teachers' language attitudes may reflect, as future teachers, in their teaching practices, shaping how English will be taught. Aligned with the findings, for instance, Friedrich (2000) stated that it is still common for teachers in Brazil to privilege British or American English in their teaching. Although this is not inherently problematic, doing so without critical reflection can lead students to base their proficiency on sounding like Americans or Britons, which has linguistic and social impacts. Therefore, it is important to emphasize implications for English teaching that highlight it as a means for intelligible communication and individuals' identity maintenance (Jenkins, 2018).

In terms of linguistic, teacher training in Brazil's public universities should prioritize fostering awareness about intelligibility rather than nativeness. Because English is spoken by both native and non-native speakers worldwide, this focus on intelligibility is important for maintaining linguistic identity in multilingual communication (Jenkins, 2018). Accordingly, regardless of the English variety chosen for instruction, pre-service teachers must recognize that it is merely one of many (Matsuda; Friedrich, 2011). To achieve this, *Letras* undergraduate programs faculty should expose future teachers to different varieties of English so they can gain familiarity with them. Considering that Portuguese-accented English was attributed negative attitudes across all dimensions, it is particularly important to approach Expanding Circle varieties. More than just presenting the diversity of English, it is crucial to engage in discussions and activities that elevate pre-service teachers' awareness of how Englishes are tied to social forces (Figueiredo, 2018). In addition, it is relevant to create opportunities for pre-service teachers to reflect on communication strategies as an important shared responsibility. This will help their future students to communicate with speakers from different linguacultural backgrounds and maintain their own linguistic identity.

Additionally, in terms of intercultural awareness, faculty should engage pre-service teachers in discussions that problematize the Eurocentric view of English speakers. Colonialism perpetuates raciolinguistic ideologies, privileging White native speakers of standard norms and marginalizing racialized individuals and languages that deviate from this idealized subject. This traditional emphasis on the ideal White speaker from an Inner Circle country who speaks standard English can be limiting and exclusionary. Therefore, it is crucial to encourage pre-service English teachers to critically reflect on the global spread of English and its relationship to colonization (Figueiredo, 2018). Furthermore, work towards decolonized thinking by discussing established ideologies about Englishes and their speakers, and reflect on their impacts on individual and intergroup social relations is needed. By doing

so, future teachers will be better equipped to validate linguistic pluralism or racial awareness and respecting each student's identities.

5.2 LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

As with any other scientific work, this thesis presents several limitations that warrant consideration. Therefore, this subsection aims to comprehensively outline these limitations and propose suggestions for further investigation.

Due to time and thesis space limitations, not all collected data were included in the analyses presented. This refers specifically to participants' familiarity with different accents and the participants' race. Considering that interactions between people with different English varieties are based on social intergroup relations, language attitudes reflect inferred group stereotypes (Dragojevic, 2022; Ryan, 1983). Although individuals may feel attached to their in-group, members of subordinate groups often do not consider their group and attribute it low attitudes to fitting into dominant out-group. Thus, for a more in-depth interpretation of the results, future studies could consider incorporating additional variables in the analysis, such as participants' familiarity with English varieties and their racial backgrounds.

Regarding English varieties investigation, this study was limited to only two expanding circle varieties. Since both Portuguese- and Spanish-accented Englishes were attributed distinct evaluations along the three dimensions, it would be suitable to examine Brazilians' attitudes toward them alongside other expanding varieties. This may provide insights into the social dynamics, identity belonging, and intergroup relations of individuals from expanding circle countries. Moreover, it would be interesting to incorporate other regional or ethnic varieties of English. This would help to interpretate the analysis of the attitudes toward the Southern U.S. English regional accent of this current study. Although idealized, this study did not include the African American English variety. This limitation arose from the constraints of the Speech Accent Archive, which only provides the language name (e.g., English) and not the variety type. Finding a speaker to record the Speech Accent Archive passage was not feasible due to geographical distance and a lack of contact with an African American English speaker.

In terms of attitudes toward speakers' race, contrary to Hypothesis 3, Black speakers received more favorable attitudinal evaluations than White speakers. Considering this scenario, employing experimental designs that rigorously manipulate and control intervening variables would offer deeper insights into the interplay between race and English language

speech. For instance, control groups, reaction time control (Kutlu, 2020), and controls for social desirability (Acheme; Cionea, 2022) could be utilized in future attitude research. Additionally, following Kutlu et al.'s (2022) findings, the level of listener diversity in social networks influences speech perception regarding an individual's race. Nevertheless, this study conducted analyses exclusively with Brazilian pre-service English teachers, a population from a public university context characterized by social struggles, racial awareness in Brazil, and diversity. Hence, conducting a study that also analyzes the ecological diversity of another target population in Brazil may contribute to understanding Brazilian pre-service English teachers' attitudes.

Furthermore, since this study investigated only speech intertwined with race, there is a potential influence of social categories to affect Brazilian pre-service teachers' attitudes when intertwined with English varieties. For instance, Acheme and Cionea (2022) found a significant interaction effect between accent and nationality. Hence, future research could benefit from investigating the introduction of nationality with varieties of English among Brazilians. Additionally, some study's findings indicate that societal norms, gender expectations (Merritt; Bent, 2020) and sexual orientations (Fasoli *et al.*, 2023) might affect language attitude evaluations. Hence, future research could have solid interpretations by examining the role of gender identity by going beyond the binary norm (e.g., women, transgender, non-binary, and men speakers, etc.) and sexual orientation (e.g., lesbian, gay, queer, straight, etc.). Investigating identity intersectionality alongside accent perceptions would add up on the understanding of the complexities involved in English language and intergroup social identities within Brazilian society.

Finally, the visual stimuli reported in the method section (cf., 3.4.2.2) were chosen to be the same as in Bouchard's (2022) replicated study. Because of this, the photos were not piloted, and this may have introduced potential biases. For instance, some women portrayed in the photos might have been perceived as more professional than others, potentially influencing the status ratings. This biased perception could stem from one main factor: the women's t-shirts. The lack of piloting means this control variable was not considered, which might have affected the validity of the results. Thus, future research should pilot the photos used to ensure whether they impact the attitude ratings in the status dimension. Moreover, according to Köche (2015), it is not possible in one experiment to analyze all control variables at the same time. Therefore, another possibility is conducting a study by naturalizing the clothes of the speakers (e.g., choosing photos with t-shirts or outfits in the same style and color, or modifying them in Photoshop).

5.3 CONCLUDING WORDS

In conclusion, this thesis presents empirical findings that shed light on the social identities' variables influencing language attitude outcomes, such as accent and race, through evaluations of status, solidarity, and understandability. Given the increasing trends of globalization, immigration, migration, and multiculturalism that continue to reshape societies worldwide, understanding intergroup interactions and personal relations has become imperative. Grounded in a colonialist perspective, the global spread of English mirrors this phenomenon, emerging speakers from diverse identities. It underscores the necessity for a nuanced understanding of language dynamics in each country. The present study takes an initial step toward explaining whether Brazilian pre-service English teachers demonstrate prejudice toward English varieties and their related speaker's racial identity. Thus, beyond contributing to advancing studies about language attitudes in Brazil, the current research enables us to reflect on the English teaching practices we must consider within this multicultural country.

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APPENDIX A – EMAIL SEND FOR UNDERGRADUATE PROGRAMS IN ENGLISH OR DUAL PORTUGUESE AND ENGLISH

Olá,

Sou Bremdellin Gabriel Ramos, estudante de mestrado do Programa de Pós-Graduação em Inglês da Universidade Federal de Santa Catarina. Estou conduzindo uma pesquisa sobre atitudes linguísticas sob a orientação da professora Dra. Hanna Kivistö-de Souza e, atualmente, estou na fase de coleta de dados. O público-alvo da minha pesquisa são professores de inglês em formação no contexto brasileiro, ou seja, alunos de Letras Inglês ou Letras Inglês/Português (licenciatura dupla).

Com o objetivo de alcançar esse público, estou enviando e-mails para secretarias e coordenações de alguns cursos de graduação em Letras de universidades públicas do Brasil para divulgarem a minha pesquisa. Dito isso, gostaria de perguntá-los se poderiam, por gentileza, divulgar a minha pesquisa no fórum da graduação, por e-mail ou por meio de comunicação que possuem costume de utilizar com os alunos do curso de Letras da universidade, seja Inglês/Português (licenciatura dupla) ou somente Inglês, se houver. Se precisarem de alguma comprovação, posso encaminhar via e-mail alguns dados referentes à aprovação do meu projeto de mestrado pelo Comitê de Ética em Pesquisa. Aguardo o retorno.

Desde já, muito obrigado, Bremdellin

APPENDIX B – INVITATION VIA VIRTUAL PLATFORMS OF UNDERGRADUATE PROGRAMS

Hello, everyone!

Sou Bremdellin Gabriel Ramos, estudante de mestrado do Programa de Pós-Graduação em Inglês da Universidade Federal de Santa Catarina. Gostaria de convidar vocês, estudantes de Letras, matriculados nas fases finais do curso (5^a fase em diante), a participarem da minha pesquisa. Anexado a esta mensagem está o post oficial com as informações básicas da tarefa da pesquisa. The survey is super fast!

Caso tenham interesse em participar, este é o link de acesso à pesquisa: https://forms.gle/HJh6zcPXHcUbNTEk9.



Flyer attached to the invitation

APPENDIX C – INVITATION VIA SOCIAL MEDIA

Image shared on Instagram story



Direct message (DM) after acceptance (via social media)

Muito obrigado pela disposição em querer participar da minha pesquisa. Ao clicar no link (https://forms.gle/XvtFX3xKUzT7zcSg9), você realizará uma tarefa de compreensão auditiva e responderá a um breve questionário sobre sua experiência com a língua inglesa. **Ressalto que é obrigatório abrir o link no computador/notebook para realizar a pesquisa**. Pesquisa esta que deverá durar entre 25 e 30 minutos. It's super fast!

APPENDIX D – INFORMED CONSENT FORM

TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO

Prezada(o) participante,

Eu, Bremdellin Gabriel Ramos, mestrando do Programa de Pós-Graduação em Inglês da Universidade Federal de Santa Catarina, gostaria de convidá-lo(a) a participar da minha pesquisa intitulada "Um estudo das atitudes linguísticas entre os alunos de inglês", orientada pela Professora Dra. Hanna Kivistö-de Souza. Peço, por gentileza, que você leia este documento atentamente e tire quaisquer dúvidas em relação à pesquisa antes de concordar em participar do estudo.

Esta pesquisa tem como objetivo analisar as atitudes dos professores de inglês em formação. Para atingir esse objetivo, queremos envolver o maior número possível de professores de inglês em formação de algumas universidades do Brasil.

Se você concordar em participar, você completará duas tarefas. Na primeira tarefa, você irá: (i) responder a um questionário com algumas informações pessoais e sobre sua experiência com a língua inglesa; (ii) fazer uma tarefa de listening em que você ouvirá a gravação de quatorze mulheres falando inglês e, após cada gravação, responder a um questionário com perguntas sobre a falante. A primeira seção servirá como prática e terá como objetivo familiarizá-la(o) com a tarefa e não será incluída nos resultados. Estima-se que o tempo a ser destinado para o comprimento de toda a tarefa seja de cerca de trinta minutos. Em média 10 minutos responder o questionário, e 20 minutos para realizar a tarefa de listening. Todos os procedimentos ocorrerão de forma online, e será necessário o uso de um computador com acesso à Internet. Você também poderá participar da pesquisa no horário que for mais conveniente para você, mas sugerimos que você use fones de ouvido e encontre um lugar confortável e apropriado, sem que haja muito barulho.

Os riscos ou desconfortos associados à participação desta pesquisa são baixos. Contudo, a sua participação pode causar cansaço mental, nervosismo, ansiedade, constrangimentos e aborrecimentos, os quais são fatores comuns em situações de aprendizagem e/ou que envolvam avaliações. Além disso, visto que a coleta de dados ocorrerá de forma on-line, você estará exposto(a) aos riscos característicos do contato remoto por meios eletrônicos e ambientes virtuais e precisará, porventura, lidar com limitações tecnológicas. Similarmente, existe a possibilidade de quebra de sigilo e privacidade, ainda que de maneira involuntária e não intencional. Para minimizar o risco de quebra de sigilo somente os pesquisadores terão acesso às informações que possam levar à sua identidade. Para minimizar os demais efeitos, você poderá notificar os pesquisadores de quaisquer desconfortos no decorrer do teste que prestaremos assistência integral e imediata pelo tempo que for necessário. Além disso, você tem o direito de não responder quaisquer questões, sem que haja necessidade de justificar a decisão.

Não há benefícios diretos associados à sua participação nesta pesquisa. No entanto, a sua participação nesta atividade pode ser vista como uma oportunidade de praticar a habilidade de escuta (listening). No nível da pesquisa, esta contribuirá para a compreensão das atitudes dos professores de inglês em formação.

Os pesquisadores colocam-se à disposição para esclarecimentos, antes, durante e após a pesquisa, comprometendo-se a acompanhá-lo e auxiliá-lo durante todo o processo, bem como a manter o sigilo das informações prestadas.

Seus dados ficarão, inicialmente, registrados na plataforma utilizada. Todas as amostras de dados (respostas do questionário e da tarefa) serão baixadas e os arquivos serão armazenados nos dispositivos pessoais dos pesquisadores, como computadores e HD externos portáteis. Assim que os dados estiverem devidamente armazenados, suas informações serão excluídas das plataformas online. Os resultados da pesquisa poderão ser divulgados em eventos e em publicações científicas, mas não haverá nenhuma identificação dos participantes.

Caso você decida não participar e retirar seu consentimento durante a realização desta pesquisa, não haverá consequências e nem prejuízo ao atendimento que você recebe ou possa vir a receber na instituição. Se fizer isso, todos os seus dados e informações serão descartados pelos pesquisadores.

Conforme regulamenta a legislação brasileira, sua participação nesta pesquisa não prevê nenhum tipo de pagamento e não terá nenhum custo relativo aos procedimentos envolvidos. Porém, é direito dos participantes o ressarcimento de quaisquer despesas advindas de sua participação na pesquisa. Portanto, você poderá entrar em contato com um dos pesquisadores, caso necessite de algum ressarcimento.

Caso haja algum eventual dano material ou imaterial, devidamente comprovado, decorrentes da pesquisa, este documento garante o reparo ao dano que deve ser pago de acordo com a Resolução 510/16. Portanto, você poderá entrar em contato com um dos pesquisadores, caso necessite de algum reparo de dano.

Você terá garantia de livre acesso a todas as informações e esclarecimentos sobre a pesquisa e seus resultados e poderá contatar os pesquisadores para obtê-las.

Em caso de dúvidas sobre a pesquisa, ou para mais informações, você pode entrar em contato diretamente com o pesquisador assistente, Bremdellin Gabriel Ramos, através do e-mail brendellim@gmail.com ou pelo telefone celular (35) 99884-1884. Você ainda pode contatar a pesquisadora responsável pela pesquisa, Professora Dra. Hanna Kivistö-de Souza, através do e-mail hanna.kivistodesouza@gmail.com ou pelo telefone (48) 3721-6607. O endereço profissional dos pesquisadores é: sala 111 do prédio B do Centro de Comunicação e Expressão, Universidade Federal de Santa Catarina, Campus Reitor João David Ferreira Lima, s/n, Trindade, 88040-900, Florianópolis - SC, Brasil.

Asseguramos que esta pesquisa está em conformidade com os critérios da Resolução CNS 510/2016 (pesquisas em Ciências Humanas e Sociais), as orientações do OFÍCIO CIRCULAR Nº 2/2021/CONEP/SECNS/MS para pesquisas envolvendo ambientes virtuais, bem como as demais normativas e legislações vigentes e aplicáveis. Asseguramos, também, que esta pesquisa passou pela aprovação do Comitê de Ética em Pesquisa com Seres Humanos (CEPSH) da Universidade Federal de Santa Catarina.

Para o seu conhecimento: "O CEPSH é um órgão colegiado interdisciplinar, deliberativo, consultivo e educativo, vinculado à Universidade Federal de Santa Catarina, mas independente na tomada de decisões, criado para defender os interesses dos participantes da pesquisa em sua integridade e dignidade e para contribuir no desenvolvimento da pesquisa dentro de padrões éticos" (https://cep.ufsc.br/). Para maiores informações, você pode contatar o CEPSH: Prédio Reitoria II, R: Desembargador Vitor Lima, nº 222, sala 701, Trindade, Florianópolis/SC, CEP 88.040-400, Contato: (48) 3721-6094, cep.propesq@contato.ufsc.br.

Se você estiver de acordo em participar desta pesquisa, clique no botão abaixo "Aceito participar desta pesquisa". Logo após, clique em "Enviar" para que a via deste documento seja enviada automaticamente para o seu e-mail e para o do pesquisador assistente (Bremdellin Gabriel Ramos). Considerando que este documento garante seus direitos como participante da pesquisa, recomendamos manter sua via armazenada em local seguro e de fácil acesso. Depois de clicar em "Enviar", você será direcionado para a tela final que indicará o link de acesso à pesquisa. Caso não queira participar da pesquisa, clique em "Não aceito participar desta pesquisa"

APPENDIX E – BACKGROUND QUESTIONNAIRE

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Dear participant,

I appreciate your interest in my study of English listening comprehension!

To participate in this study, you must use a computer/laptop with stable internet connection and head/earphones to listen to the recordings. *A DON'T USE CELL PHONE!*

I want to inform you that your participation is vital to the execution of this research project. I sincerely thank you for your time and responses.

Q1. What gender do you identify with? *

 O Woman O Man O Non-binary O I prefer not to answer O A different identity, please specify:
Q2. How old are you? *
Q3. How do you declare yourself regarding to color/race? *
O Black (Pardo/Preto) O Asian O White O Indigenous
Q4. What is your university? *
Q5A. Choose the option related to your undergraduate major: *
O Letras Inglês O Letras Português e Inglês (duble major) O I am not a Letras student
Q5B. Which semester/phase are you enrolled in? *
Q6. What is your native language? *
Q7. How many languages do you speak? *
Q7B. What are the languages you speak? *
 O English O Portuguese O French O Spanish O Mandarin O Italian O Korean O German Other:

Q8. How many years have you been studying English? *_____

Q9A. Have you ever lived in an English-speaking country? *

O Yes O No

Q9B. If so, which country? *_____

Q10. Are you planning to become an English teacher? *

O Yes

O No

O I am currently teaching English

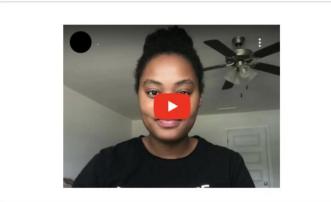
Q11. Indicate on a scale from 1-5 how familiar you are with the following English accents: *

	Very unfamiliar	Unfamiliar	Average	Familiar	Very familiar
1. British English	1	2	3	4	5
2. Indian English	1	2	3	4	5
3. American English	1	2	3	4	5
4. South African English	1	2	3	4	5
5. German-accented English	1	2	3	4	5
6. Australian English	1	2	3	4	5
7. Portuguese-accented English	1	2	3	4	5
8. Nigerian English	1	2	3	4	5
9. Southern US English	1	2	3	4	5
10. Spanish-accented English	1	2	3	4	5

Thank you for your participation! Click on 'Enviar' to register your answers.

If you would like to get in touch with the researcher, send an email to the following address: brendellim@gmail.com

APPENDIX F – MATCHED-GUISE TEST SCREENSHOT



	Completely disagree	Disagree	Slightly desagree		Agree	Completely agree
This person is easy to understand	0	0	0	0	0	0
l think it's a beautiful English	0	0	0	0	0	0
This person would be suitable to teach English at a university	0	0	0	0	0	0
This person has a strong accent	0	0	0	0	0	0
This person is dynamic	0	0	0	0	0	0
This person is friendly	0	0	0	0	0	0
This person is sociable	0	0	0	0	0	0
This person is professional	0	0	0	0	0	0
This person is a good leader	0	0	0	0	0	0
This person is educated	0	0	0	0	0	0

Where do you think this speaker is from?

Sua resposta

APPENDIX G – PHONETIC TRANSCRIPTIONS

English22: Spanish-accented English

[plĭz kal ıstela æs x^jeı tu bııŋ dıs tıŋs wið hei fiən di stoi siks ispũns af fies snou p̆s faif θ ik slæbz os blu ov blu tſī:z ãn meißi ai snæk foi hai biaðei bap wi olso n̆t e smal plæstik esneik æ̃n ə bix toi fraukf foi di kids ſī kān skup^h dis θ ĩŋs intu θ ii: iĕd bags æ̃n wi wil gou mit hai wɛ̃nzdei æt de tieñŋ

English271: South African English.

[p^hlis kəl stɛ:lʌ ask s tə bıĩŋ ðiz θĩŋẓ wif hɜ fıʌ̃ŋ ðə stəı siks spunẓ əɣ fuʃ sņou pi:s faɪf θık slæbs əv blu tʃi:z ɛn măıbi з snæk foi hɜ bıarĕ ?ə brʌðə bap wi əl^ysö nid ə sməl^y plæstık sneik ɛn ə bık tui fıəg fɛ̃ ðə kidş ʃi kɛ̃n skøp ðiz θĩŋs ıntu fii ıɛd bægẓ ɛn wi wıl gou mi:d š wĕnʑdem ɛt də tıcın steɪʃən]

Portuguese37: Portuguese-accented English

[pli:s kəl stelə æsk hightarrow t^hu brĩŋ di m 0ĩŋz wim 0 hightarrow fiam di stoð siks ispu:nz əy fieightarrow išnov pi:z faiv m 0ik slæ:bz af blu tm 1i:z ən meibə aĭ şnæk f $m h}$ hm braðð bab wi also nir ei şmal plæstik isneik en ə big təi frəg fm di kids m 1 kæn skup ðis m 0ī:ŋz ĩntu m 0i: ied bægs æn wi^w gov mi:t hm wenzdei æt də tieĩn steim 1m] English147: American English

[p^hli: $z k^h$ ha: stelə æsk hə rə bıın ni:z θ ıns wi θ hə firm də stəl siks spy:nz əy fie \int snov p^hi:z faiv θ ik slæ:bz əv bly t \int i:z en meibi e snæk fə hə birdə ba:b wi al^yso nid e smal^y p^hlæstik sneik end e big t^həi fia:g fə di k^hid $z \int$ i k^hən skup diz θ inz inrə θ .i: red bæ:gz en wi wil^y go mit hə wenzdei æt də tiein steifən]

English2: British English

[p^hli:z kal steə ?ask hȝ tɨ biŋ ði:z θĩŋz wiθ hȝ frǝm ðǝ stɔ: siks spų̃:nz əf fiɛſ snǝu p^hi:z faiv θik slæbz əv blụ tſĭ:z æm meibi ǝ snæk fȝ hȝ biʌðǝ bab wi ol^ysǝ u nidǝ smɔl p^hlæstik sneik ?æn ǝ big tɔi fiag fǝ ðǝ kidz ſi kǝn skụp ð:z θĩŋz ? ĩntǝ θii iɛd bægz ?æn wi wil gǝu mit hȝ wɛ̃nzdei æt ðǝ treĩn steiʃǝn]

English83: Southern US English

[p^hliz k^haul^y ste:lə æsk ə rə bieĩŋ ðiiz θ eĩ wið ə fiñm ðə sowə siks spüunz əf fiɛʃ snoɔu p^hiiz fa:v θ ik slæbz ə blu tʃ^hiiz æ:n meibi ə snæk fð ə bisðə ba:b wi al^yso nid ə smaul^y p^hlæstik sneik æn ə big t^hɔi fiɛ:g fə ðə k^hiəds ſi kẽn skuup ðis θ eĩŋz ĩnrə θ ii i iɛd bæ:gz ə̃n wil^y gou mir ə wĩnzdi ət ðə tʃ^hiɛĩn

APPENDIX H – MATCHED-GUISE TEST STIMULI ARRANGEMENT



 Block 2: Stimuli

 Trial 1: Spanish-accented English
 Trial 2: American English
 Trial 3: South African English

 Image: Spanish accented English
 Image: Spanish accented English
 Image: Spanish accented English

 Image: Spanish accented English
 Image: Spanish accented English
 Image: Spanish accented English

 Image: Spanish accented English
 Image: Spanish accented English
 Image: Spanish accented English

 Image: Trial 4: British English
 Image: Trial 5: Brazilian Portuguese-accented English
 Image: Trial 6: Southern US English

 Image: Spanish accented English
 Image: Spanish accented English
 Image: Spanish accented English

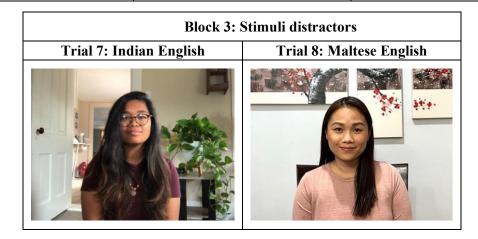
 Image: Spanish accented English
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	Block 4: Randomized repetition of stimuli				
Trial 9: Spanish-accented English	Trial 10: American English	Trial 11: South African English			
Trial 12: British English	Trial 13: Brazilian Portuguese- accented English	Trial 14: Southern US English			

APPENDIX I – POST-HOC COMPARISON OF ATTITUDES TOWARD ENGLISH VARIETIES

 Table 1 - Post-hoc comparison on status

	BrE	SAE	SAfrE	SpE	PtE
GAE	1.000	0.059	0.001*	0.001*	0.001*
BrE		0.058	0.001*	0.001*	0.001*
SAE			0.059	0.001*	0.001*
SAfrE				0.052	0.032*
SpE					1.000
Note: $F(3)$	3.12,159	(.17) = 2	4.86, p<	.001, and	$\eta^2 = 0.33$

Table 2 - Post-hoc comparison on solidarity

le 2 - Po	st-noc c	ompariso	on on some	darity
BrE	SAE	SafrE	SpE	PtE
0.383	0.383	0.021*	0.003*	0.001*
	1.000	0.001*	0.001*	0.001*
		0.001*	0.001*	0.001*
			1.000	0.125
				0.383
(3.58, 1	82.70) =	= 17.94, <i>p</i>	0 < .001, 100	$\eta^2 = 0.26.$
	BrE 0.383	BrE SAE 0.383 0.383 1.000	BrE SAE SafrE 0.383 0.383 0.021* 1.000 0.001* 0.001*	0.383 0.383 0.021* 0.003* 1.000 0.001* 0.001* 0.001* 0.001*

 Table 3 - Post-hoc comparison on understandability

		I I I			
	BrE	SAE	SAfrE	PtE	SpE
GAE	0.119	0.001*	0.001*	0.001*	0.001*
BrE		0.063	0.001*	0.001*	0.001*
SAE			0.001*	0.001*	0.001*
SAfrE				0.863	0.011*
PtE					0.015*
Note: I	7(282)	(44.20) -	50.00 m	< 001 m	2 - 0.50

Note: $F(2.83, 144.20) = 50.90, p < .001, \eta 2 = 0.50$

APPENDIX J – POST-HOC COMPARISON OF ATTITUDES TOWARD SPEAKERS' RACE

Table 1 - Within subjects effects on status			
Effect	F-statistic	<i>p</i> -value	
Variety	24.863	< .001	
Race	14.656	< .001	
Variety * Race	1.655	0.146	
	Note: <i>z</i> (129.00) = -3.907, <i>p</i> <	< .001	

F-statistic	<i>p</i> -value
17.918	< .001
33.258	<.001
1.003	0.416
	17.918 33.258

Table 3 - Within subje	ects effects on understandability
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Effect	F-statistic	<i>p</i> -value
Variety	50.895	< .001
Race	0.115	0.736
Variety * Race	1.520	0.184
	Note: $z(415,500) = -0.450$ n	= 656

Note: z(415.500) = -0.450, p = .656