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Navigating Healthcare and Language: Unraveling the Complex Experiences of Hispanic Americans in Sickness and in Health

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An abstract of
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Abstract

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For Hispanic Americans, culturally distinct conceptions of wellness and illness, access to culturally appropriate care, and Low English Proficiency (LEP) are some of the largest barriers to consistent, high-quality healthcare. Using data collected through a Pew Research Center survey, this paper investigates the historical, cultural, and social contexts that inform Hispanics' health access and experiences in the United States, while deconstructing the homogenization of the label "Hispanic." STATA software was used to conduct linear and logistic regression on the pool of nearly 15,000 participants and tease out the most salient points of experience among Hispanics. Additionally, Spanish-dominant, bilingual, and English-dominant categories were isolated to provide further insight into the varied experiences of those within the Hispanic diaspora. Compared to their White peers, Hispanics reported significantly lower quality of care, but they did not report a statistically significant difference in ease of accessing care nor receiving less respect from providers. Spanish-dominant and bilingual groups preferred and recently used ethnically concordant care. They also preferred Spanish concordance with providers, which they ranked as providing superior care. The findings of this study support implementing culturally informed healthcare for Hispanic populations through interpretation services, ethnic and linguistic concordant dyads, and increased health literacy in patient populations.

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I. Introduction

Communication is a practice that we all as humans engage in daily, yet we often forget the incredible beauty of language as a cultural practice. Certainly, it conveys essential pragmatic information between individuals, but simultaneously, it delivers expansive semantic information that is often culturally, socially, and even historically influenced. The ways that we speak to one another defines us as individuals and as members of communities in immensely important ways. Language diversity is central to the American melting pot as the demographics of the United States continue to evolve into the 21st century. Hispanics have grown to an ethnic majority-minority of millions of people, and their cultural diversity presents an exciting challenge when considering assimilation and acculturation patterns. Careful exploration of the experiences in the healthcare sphere are pertinent across ethnic groups but are particularly meaningful when examining linguistic patterns of Hispanic Americans. Most generally, how does Hispanic identity impact access to and experiences with healthcare? Then to isolate linguistic cohorts, how do Hispanic Americans' linguistic preference between Spanish, English, or bilingualism impact their experiences with and perceptions of healthcare in the United States? These are incredibly broad musings and the specific questions that could be asked to assess these characteristics are nearly endless, but some important directions are general ease of access, respect from providers, and quality of medical care.

Among Hispanic Americans, the preference for ethnic and linguistic concordance is an important clinical consideration. The impact of these preferences on patient-provider interactions continues to be contested. This influences general accessibility and experiences in healthcare spaces that vary between linguistic groups of Hispanics. Additionally, complicating factors such as cultural values, communal support, and citizenship status all compound the ways that various Hispanics experience care. The continuum of ethnic identity and language dominance among Hispanics means that there are critical subgroups to evaluate and consider when addressing healthcare policies and directions.

However, the clinical implications of language and ethnicity cannot be fully understood without investigating the socio-historical context of Hispanics as a homogenized group in the Latin American and U.S. contexts, including racism, colorism, and linguistic discrimination. Furthermore, the assertion that healthcare is a cultural system opens the theoretical conversation to link variations of Hispanic culture in the American context with the centrality of healing and illness practices. In connecting these two theoretical areas, the practical conversations of social determinants of health, acculturation, health literacy, and cultural competency can each be teased apart to display the profound intersection of Hispanic identity and the American healthcare system. With the quantitative comprehension of the data analyzed in this study, readers are then able to see the implementable solutions on a systemic and clinical level that will have lasting impacts on access and communication for Hispanic Americans.

II. Theories of Ethnicity, Race, and Health

a. Who are Hispanics within the U.S. Context?

What is the difference between Latino/Latina/Latinx and Hispanic? Why is Hispanic the only ethnicity question on the United States Census? These are all questions that arise and are incredibly valid to consider in this context of health outcomes, language and ethnic concordance, and experiences of care. The official appearance of "Hispanic" came after a 1976 United States Congressional Bill that mandated the census to include statistical collection of information about "Americans with Spanish origin or descent." The collection of data on those from Spanish-speaking countries further reinforced the grouping of Hispanics into one ethnic group, the only ethnic group tracked in the U.S. census (Public Law 94-311 1976). Since Hispanics comprise the largest minority group in the States with 62.1 million people in 2020, the deliberate tracking of those with Spanish descent continues to be a pertinent goal to American demographers and the government (Lopez and Funk 2022).

The linguistic terminology has continued to evolve as well, which prompts the conversation of Hispanic vs. Latino/a. The simplest distinction is Hispanic refers to Spanish language ancestry, while Latino refers to geographic origin from countries south of the United States. Anyone from a Spanish-speaking nation, including Spain and Mexico, can be Hispanic, while anyone from Latin America, including the Caribbean Islands and Brazil, can be Latino. The majority of people from Central and South America fall into both categories but may have a personal preference for a particular term over another. Latinx has become increasingly more popular in the U.S. as a gender-neutral option to Latino/a, which originates from the gendered terminology found in most Latin-derived languages. However, not all who identify with Latino/a believe that Latinx is a valid term, as it demonstrates the continued linguistic colonialism that is perpetuated by English-speakers (Alexander 2022). Afro-Latino is another term that is often left out of the conversation but is a critical identity for millions of people who have ties to their African descent in conjunction with their Spanish language use or ancestry (Garcia 2021).

This complex intersection, a theory first applied by Dr. Kimberlé Crenshaw to black women's struggles, of ethnic, racial, and linguistic identities is central to this investigation (Crenshaw 1991). However, for this paper, Hispanic will be the most common term and is used as a distinct term from Latino/a since I am referring directly to the relevance of Spanish as a social determinant of health.

b. Historic Patterns of Homogenization of Spanish-speakers on the Racial, Ethnic, and Linguistic Historical Landscape of Latin America

The positioning of Hispanics as a homogeneous ethnic group in the U.S. context is an underlying complication to the study of Hispanic experiences in healthcare. In 2012, the Pew Research Center studied Hispanics' own perceptions of the term and what it means in the U.S. context specifically. The survey found that only 24% of those from Spanish-speaking nations felt Hispanic was an appropriate term for their identity. More than half instead preferred to use their own or their family's country of origin to define their ethnic identity, which highlights the heterogeneous nature of those from Spanish-speaking nations. While most respondents felt that there are significant differences between Hispanics (based on country of origin), Spanish as their shared language was demonstrated to be an important point of connection (Taylor et al. 2012).

To fully comprehend the difficulty of addressing health outcomes of Spanish-speakers from a variety of countries from South and Central America, Mexico, and even Spain, the racial, ethnic, and linguistic interplay must be unraveled. In the groundbreaking book *Pigmentocracies,* Edward Telles argues that the homogenous label of "Hispanics" has not been an incidental occurrence nor an inevitable progression of society to a racially and ethnically neutral place. The homogenization of Hispanics was actively promoted by the elites of South and Central American countries in the middle of the 20th century in a way that ensured that their black and indigenous populations were grouped into fluid racial categories, and therefore, were also unable to explicitly ask for protections or anti-discriminatory policies. Furthermore, this move was an intentional push to homogenize many people in these nations into a mestizo or mixed group that would allow for collective whiteness and attract immigrants from white European nations to their countries. The elites and governments of Southern and Central American nations could claim transcendence above racism that the U.S. had not yet achieved with its legalized segregation and pervasive racism (Telles 2014; Almaguer González, Vargas Vite, and García Ramírez 2014).

Simultaneously, the suppression of indigenous languages has been a central practice of European colonization. This complicating factor in Latin American history has implications on the health of those with indigenous heritage as language preference and health-seeking behaviors can be vastly different from others in the Hispanic grouping (Ippolito et al. 2017). Spanish conquerors exerted sociolinguistic dominance over indigenous populations in the 16th century which has connections in the present. The various native languages of Central and South America were critical to inter-tribe trade and relations prior to Spanish and Portuguese conquest, but those same languages soon became mechanisms for social and cultural control. Most importantly, Spanish proliferated Christian theology to the pagan natives of the Americas. In regions of modern-day Peru, this meant that bilingualism between Spanish and Quechua, the primary language of the Inca empire, was not encouraged among much of the population. Linguistic separation was a powerful tool of hierarchical control. Priests and certain key merchants used Quechua as a mechanism for conversion and trade, but otherwise, Spanish retained its centrality and exclusivity as the “civilized” language. Quechua was not entirely suffocated as the Spanish elite living in the Americas continued to use their bilingualism to control the masses of indigenous folks whom they exerted social and political jurisdiction over. However, in the following centuries, Spanish was promoted more aggressively as the only language to be used in these areas, despite the rich cultural importance of Quechua, Aymara, and other Andean languages (Escobar 2011).

Sadly, the forced assimilation of indigenous populations across race and language has had serious implications for the preservation of native culture and practices. The physical and linguistic separation of Spanish settlers and indigenous communities was pervasive until modern national independence movements in the 20th century. It stifled the process of socio-linguistic integration of native peoples into elite Spanish society, while also systematically disadvantaging those with indigenous heritage. This pattern of linguistic domination of indigenous languages is a critical component of Spanish colonialism and continued imperialism into the modern age. But, there have been grassroots initiatives to protect Quechua and other native dialects as symbols of native identity and pride, some of which have been adopted by governments and written into law in the last 20 years. Due to the pervasive dismissal of native languages and plural identities until recently, colorist delineations have remained pivotal to the social hierarchy of Latin American nations that acts in conjunction with linguistic discrimination (Escobar 2011).

The importance of race comes from racialization as a social process that directly relies on the perceptions of one's skin color in the eyes of others. There is no biological or perfectly objective categorization of race or ethnicity that censuses have missed, but instead, the exact challenges that are being encountered are a product of its social construction. While race, ethnicity, and skin color are often seen as quasi-synonyms, there are critical differences between race and ethnicity that apply in both the Latin American context and in the United States. Typically, race is understood as phenotypic and genetic differences that are stricter boundaries, while ethnicity has softer, fluid barriers that are culturally based and can be learned and unlearned, such as language preference. This is why Hispanics in the U.S. context are specifically seen as an ethnicity since their shared language is a proxy for shared culture, even though many Hispanics feel national cultures are quite varied and may have indigenous roots as well (Telles 2014).

The impossibility of Hispanics to be classified as a single race originates in the historical context of colonization in these areas. While in North America, there were typically family units that moved to the New World and remained relatively separate. In the South and Central areas, there were predominantly male European immigrants, which led to greater mixing of white, indigenous, and African peoples. These increasingly mixed communities were then able to develop more fluid notions of ethnic and racial categories, but the research of *Pigmentocracies* contradicts the assumption that with less verbalized categories there is in fact less colorism. Their findings support the continued importance and recognition of skin color on a continuum that perceiving individuals still recognize. While citizens of these Spanish (and Portuguese) speaking nations may not self-identify as black, Afro-descendants, or indigenous, their perceived darker skin color still predisposes them to more color-based discrimination, irrespective of their personal identification. While the forced homogenization of Latino people has had a strong run, multiculturalism is finally becoming more widely accepted (Telles 2014). Certain nations have even declared indigenous languages as official languages, as Peru did in their 1993 constitution. Unfortunately, the acceptance and legitimization of native languages does not change the pattern of Spanish as the expected mode of communication in official narratives and popular media (Escobar 2011). Multiculturalism is central to the historical development of the Hispanic and Latino diaspora and cannot be homogenized without investigation.

c. Colorism and Linguistic Discrimination in the United States

Latin America's historical tides must be considered while focusing on the American system. Eduardo Bonilla-Silva, a premier sociologist on race and ethnicity theory, proposes a massive cultural shift within our racial ordering that is currently ongoing. Rather than remaining with the historically dominant biracial system of white vs. nonwhite, he believes that the U.S. is firmly shifting to a tri-racial system: white, honorary white, and collective black. While the shift away from a strict biracial system, with legal segregation and clear delineation of racialized benefits, may seem that the U.S. is shifting away from racism and towards a more multicultural society, Bonilla-Silva believes we are moving into a new era of an even more robust and protected white elite (Bonilla-Silva 2002). Specifically, the emergence of colorism as a powerful force is parallel to the racial structures of Latin America. He sees this as a predictable shift following the American Civil Rights Movement of the 1960s that has not erased racism by any means but has converted many into color-blind racism or smiling discrimination. These discriminatory practices still serve to uphold white supremacy and may even be more difficult to combat as multiculturalism grows (Bonilla-Silva 2004).

The emergence of the honorary white category is parallel to a large middle class when investigating class struggle. Those who are close but not quite at the peak of societal control are those most invested in the upkeep of a racialized hierarchy. In Bonilla-Silva's analysis, these may include white Latinos in the “honorary white,” and even assimilated white Latinos may be welcomed in the true “white” category. However, black Latinos are left in the “collective black.” These delineations buffer the white elite from true race revolution as Western countries absorb immigrants from nonwhite nations; in the U.S., these patterns are especially obvious among Latino immigrants. He cites major socioeconomic differences seen with mean income between immigrants from “white” South and Central American countries (e.g., Argentina, Chile, Cuba) being significantly higher than those from darker countries (e.g., Mexico, Dominican Republic). These chasms between Hispanics also impact their own perceptions of race ordering as the former group is more likely to classify themselves as “white” on race questions, while the latter more often chooses “other” to describe their race. Bonilla-Silva believes these components are demonstrative of a shift towards a tri-racial system that is propelled by the influx of a varied Hispanic and Indigenous diaspora. These internal separations within the Hispanic monolith describe the importance of exploring why the American racial hierarchy is underlying when investigating Hispanic American experiences and perspectives (Bonilla-Silva 2002).

While colorism is different from racism, these two processes function simultaneously to ensure that the racial hierarchy remains intact in the U.S., and Hispanics experience pervasive expressions of colorism both towards and within their communities. White Hispanics, especially in positions of social prestige, may experience serious benefits to appearing almost white or white-passing (Takeshita et al. 2020), while dark-skinned Hispanics do not. Pew Research Center investigated how exactly colorism has impacted Hispanics' experiences of discrimination while living in the States. Across all measures of discrimination, dark-skinned Hispanics (DS-H) reported a higher proportion than light-skinned Hispanics (LS-H). Firstly, the most common discriminatory practice was "being treated as if you are not smart," which was reported among 42% of DS-H as compared to only 34% of their LS-H peers. Secondly, 33% of DS-H reported discrimination on the basis of "speaking too much Spanish," while this only occurred for 22% of LS-H. However, even within the cohort of this study, most participants classified themselves as a LS-H, while only 15% self-identified as DS-H, but the stratified results of this study still indicate the consistent effects of colorism within the Hispanic community that are tied to language and perceived intelligence. Additionally, the vast majority of participants agreed that having citizenship and being light-skinned were significant helpers in getting ahead in American society, while the lack of citizenship and darker-skin hurt these prospects (Noe-Bustamante et al. 2021).

In mental health care, Puerto Ricans reported the most cases of major depressive episodes, they were also treated on a level comparable (if not higher) to White Americans, while Mexican Americans had some of the lowest rates of treatment. Puerto Ricans are often more fluent in English and have less obvious cultural differences from mainland Americans in a way that predisposes them to better care access and concordance with mental health guidelines. This again demonstrates the persistent heterogeneity of the Hispanic diaspora in the U.S. context (González et al. 2010). Additionally, these findings corroborate the centrality of intersectionality theory that purports the idea that experiences of marginalization are not only the sum of each identity an individual holds, but a complex intersection of multilateral discrimination. In Crenshaw's studies of the intersectionality of the black female identity, she asserts that their experiences are a compounded and heightened version of both racism and sexism - neither the racism that black men experience nor solely the sexism that white women live through (Crenshaw 1991). Language, skin color, and ethnic identity are inextricably intertwined for Hispanics and Latinos, particularly in the United States, and can develop into life-changing barriers to health and adequate medical care with particularly compounded effects for those with multiple low-status identities.

d. Medical Care as a Social and Cultural System

Despite the theoretical issues with Hispanics as a singular, homogenized group, there is value in studying those with linguistic commonality in terms of language's function as a cultural system. Just as language is part of culture, medicine and healthcare are also less obvious components of social networks and cultural cohesion. Culture is central to the human experience. It is the shared structure that dictates how we each live our lives and interact with the natural environment surrounding us. However, it is not natural in the sense that the immense variation across the globe of cultural practices have inherent ranking nor relatively advanced standing; we all hold our own cultural quirks. We often do not recognize the peculiarities of our own culture's practices and beliefs as they are consistently affirmed by the social circles we inhabit, but when challenged by other ways of existing, people may see how vastly disparate cultural practices truly are (Paul 1958).

In Benjamin Paul's analysis of culture and health, he criticizes the assumption that American biomedical practice is dominant in a relative global analysis. He highlights the importance of the cultural significance of certain patterns and natural resources, such as "hot" vs. "cold" water in a Peruvian community that does not value contaminated vs. sanitized water, which comes from a cultural value assigned to understanding germ theory and practicing safe water consumption. Instead, Peruvians are more concerned about the times that they boil water, and the appropriate states of sickness and health to consume different temperatures of water and food. The frustration towards others who do not value the biomedical approach to sanitation is a product of the assumption that the American and Western way of viewing health is inherently or naturally better since it has a scientific basis. While there are serious public health concerns associated with drinking contaminated water, the goal of eliminating water-borne pathogens must begin in the culture. The process of shifting practices requires broadening cultural values to include those that promote clean water and the strong adherence to research-based solutions to illness. By approaching public health in other places with this humility, it is more likely for those striving to improve health to be successful in promoting better health among inhabitants (Paul

1958). More temporally, this approach can be applied domestically to the immigrant and non-white communities across the U.S. that hold their own unique cultural perspective and practices.

A few decades later, Arthur Kleinman, a leading medical anthropologist, proposed a preliminary framework to approach health systems as cultural systems in 1978. He asserts that medical systems always have been and will continue to be cultural and social systems. He defines this to mean that we do not only act on health behaviors but also have directed spaces and relationships with those behaviors that drive our engagement with these systems (Kleinman 1978). Our cultural identity is not distinct from our experiences of illness; in fact, it is a central cultural phenomenon that shapes social dialogue through language and traditions of communal and individual healthcare. The spectrum of individuality and communal attitudes towards illness varies among cultures, and these nuanced practices can be examined through cultural productions such as oral descriptions and written stories. "Nuestras creencias y prácticas afectan profundamente las interacciones que tenemos con otras personas en relación a la salud. Estas diferencias culturales también afectan nuestra comunicación," [Our beliefs and behaviors profoundly affect the interactions that we have with other people in relation to health. These cultural differences also impact our communication.] (McKnight and Kuhnheim 2021, pg. 93). It is in both the literal meanings of the words used and the cultural assumptions we make in conversation that the complexity of communication in the healthcare sphere arises.

The ecological model is compatible with Kleinman's model but moves beyond only the social component of healthcare systems. Bronfenbrenner's ecological model is important in developing a theoretical framework for analyzing the planes of interaction and experience for patients in the healthcare environment, specifically in individual's development from childhood. Experiences begin on the individual level in the microsystem, then the mesosystem that evaluates interpersonal relations with other patients, providers, and friends/family. One step further is the exosystem that defines the organizational environment of healthcare and experiences of illness that directly curate interpersonal experiences, and finally, the macrosystem that is the broadest and encompasses social determinants of health and other cultural systems of understanding illness along with laws and policies that impact all types of people accessing care (Bronfenbrenner 1979). These levels of social organization remain solid but can be expanded upon.

Kleinman presents culture as a creation of collective symbolic meaning that fluctuates between the internal and personal and the external and environmental social elements, as proposed by the ecological model.

> *"The health care system articulates illness as a cultural idiom, linking beliefs about disease causation, the experience of symptoms, specific patterns of illness behavior, decisions concerning treatment alternatives, actual therapeutic practices, and evaluations of therapeutic outcomes. Thus, it establishes systematic relationships between these components,"* (Kleinman 1978, pg. 86).

He strongly believes that this linkage means that the cultural system of health cannot be studied in its individual parts. And, not only can it not be studied in that manner, mistakes have been made based on false justifications of understanding, when there is a cross-cultural component that adds complexity. He also separates the health care system into three sectors: popular, professional, and folk. The majority of health is controlled and expressed within the popular realm of personal beliefs, familial values, and social/community support. The folk is expressed through traditional healers, and the professional is expressed via biomedical means of Western medicine along with medicalized traditional medicine. Communities, nationalities, and ethnic groups can have varying proportions of each of these three domains of care that impact individuals, but even within the U.S. context, all three components persist (Kleinman 1978).

While culturally, there is a consensus on the general guides of sickness and healing as cultural constructions with pervasive social influences (Koban and Wager 2016; Schulz, Hartung, and Riva 2013), there are still conflicts in how those are and should be acted upon in clinical and personal settings. Varying explanatory models of care conflict and inevitably harm the patient the most (Kleinman 1978). Racial, ethnic, and/or linguistic concordance between patient and provider can be a way to reduce cultural construction differences. Researchers in Oakland found that black men significantly benefited from racial concordance with their healthcare providers as compared to Black peers with nonblack providers in issues of cardiovascular treatment and management. They note communication between providers and patients as a key element in reducing adverse health outcomes, and they studied this by noting how often unrelated medical issues were brought up in these visits. Black patients were significantly more likely to mention other health issues in concordant visits. They emphasize that their results support their “conceptual framework that emphasizes how the source of the information and the connection between source and recipient, not just the information itself, matters for clinical decision-making,” (Alsan, Garrick, and Graziani 2019, pg. 4094). This is key because black doctors are not demonstrated to be better at conveying information, but their status as a fellow black male allows for better clinical care and more persuasive visits with patients, minute for minute. The trust that is essential to positive patient-provider relationships is deeply rooted in social understandings of race; therefore, allowing racial concordance to provide substantial benefits to those already marginalized and less likely to access preventative (and later lifesaving) care (Alsan, Garrick, and Graziani 2019).

Outside of clinical space, our personal conceptualizations of individual health can vary drastically. In health rating surveys, Spanish-speakers consistently rate their health worse than English-speaking respondents. However, perceived lifestyle limitations from physical or mental health do not vary much between non-Hispanic Whites and Hispanics generally (DuBard and Gizlice 2008). Nor are there significant differences between Whites and Hispanics in pain intensity or prevalence (Jimenez et al. 2013). Additionally, there appear to be lingering linguistic differences that lead Spanish-speakers to rate their experiences substantially worse than English-speakers as compared to their "true" health statuses (DuBard and Gizlice 2008). In Switzerland, a nation a with linguistically unique communities with physical proximity, German-speaking participants were more likely to engage in active coping to deal with chronic back pain, while French-speakers adopted more passive coping mechanisms. Italian-speakers engaged in both active and passive coping to greater extremes than either German or French speakers.

> *“Active coping with regard to chronic health conditions can be interpreted as an expression of German autonomy and a sense of the possibility of helping oneself before one asks others for help. In contrast, passive acquiescence, which included maxims of seeking social support in coping, stand for Latin collectivism and a tendency in Latin cultures to put the blame elsewhere (government institutions in particular) rather than feeling oneself responsible.”* (Schulz, Hartung, and Riva 2013).

These patterns of culturally-informed language persist in communities across the globe.

The transmission of culturally relevant explanations of care and sickness are as important as the actual biomedical information appropriate for one's treatment. The terms *disease* and *illness* are also pragmatically discrete, with the former being a biomedical fault in the body, while the latter includes the personal and social experience of sickness. The *explanatory models* (EMs) that are associated with disease tend to be written for an exclusive group of medical practitioners who have professional and intellectual access to the concepts presented. Subsequently, these intellectualized paths to healing are often then decoded and explained to laypeople in popular language. The disconnect between disease and illness is larger than the semantics of labeling, as "professional practitioners see sickness only as disease and proffer explanations that transmit technical information and treatments that are technical 'fixes,' whereas patients seek not only symptom relief, but also personally and socially meaningful explanations and psychosocial treatments for illness" (Kleinman 1978, pg. 88). While Western medicine desires to assert an impartial, scientifically supported position amongst other culturally bound explanatory models, it too is informed by the cultural context of its creation and maintenance.

For example, providers notice shocking differences in treatment protocol between countries, such as vastly different opioid prescription practices for chronic pain. The care provided outside of the U.S. experienced by Hispanics may emphasize more strongly the importance of social collectivism that promotes social cohesion and support in times of sickness, instead, of heavy reliance on pharmaceutical solutions to pain (Bifulco et al. 2023). Hispanics often express negative opinions on the use of medication as the first option and instead rely on folk or non-traditional measures to combat pain, which could include herbal supplements, psychosocial treatment, and support groups. Medication was often framed as a "last resort" if other measures did not work (Torres et al. 2017). This persists in mental healthcare as talk-therapy or group therapy is more culturally acceptable among minorities, as compared to pharmaceutical options (González et al. 2010). Language further complicates this relationship as grammatical differences between Spanish and English represent experiences of pain in wildly different ways. Spanish often places the self in the center of pain experiences while representing their ongoing and persistent nature: "*Me dolía*" meaning "it was hurting me." Conversely, English can demonstrate a more detached or objective experience: "that hurt" with the possible assumption that anyone would experience this sensation in the same manner (Gianola, Llabre, and Losin 2020). While these differences may appear minor, they are components of larger cultural and linguistic explanatory models of illness.

One model defines two ends on the spectrum of cultural practices: individualism or low-context, which is more common in Western societies and medical practices, and collectivism or high-context, which is more common in non-Western societies (Global South, Eastern/Traditional medicine). There is no clear grouping of these two as most individuals and even countries have a range of both low and high context practices. An investigation of the perception of time through models of communication: task-oriented or relationship-oriented exposes systemic barriers to good medical care. The preference for American cultural values (task-oriented, low-context) dominates in the provider-client power dynamic in the U.S. medical context. This means that for LEP patients who often come from far more high-context, collectivist, and relationship-oriented communities may be linguistically alienated but more importantly culturally distinct in way that makes care difficult to access (Park et al. 2018). Lack of empathic care, rush visits, and numeric-based systems of pain management can be alienating for both parties (Bifulco et al. 2023). The trust that is central to any patient-provider relationship is strained by lack of language concordance but also by gaps in providers' cultural literacy (Park et al. 2018). The constraints of work in a low-income clinic may force task-oriented care to prevail constantly, despite Hispanic providers and staff being employed at those locations. The value that many patients with Latin American backgrounds place on relational-based care may simply not be possible in the clinical context (Blanchard, Nayar, and Lurie 2007).

The assertion that biomedical, task-oriented processes are the only best practice model promotes disconnects between EMs of physicians and their culturally diverse patients. The openness to pluralism and the welcoming of different EMs of illness and modes of expression will improve relationships in the medical space, but also improve tangible health outcomes for patients, especially those approaching illness with nontraditional EMs (Kleinman 1978; Torres et al. 2017). The expansion of patient-centered care to relationship-based care is a critical step in not only focusing on the needs of a patient, medically and personally, but serving those needs with an understanding of the social, cultural, and political context that patient resides within. This applies on the micro, meso, and macro levels as patients and providers engage with each other as parts of direct relationships, communal roles, and larger health systems (Cooper et al. 2006).

e. The Social Determinants of Health

The demographic trends of the larger U.S. population are concerning among Hispanic and Black Americans as they demonstrate lower income, health insurance coverage, education level, and health status (Saha, Arbelaez, and Cooper 2003). These can be characterized as *Social Determinants of Health* (SDoH) and more broadly defined as the non-medical social and environmental factors that are highly influential in individual and collective health trajectories (Irwin and Scali 2007; Braveman, Egerter, and Williams 2011). The goals to identify and combat the social roots of illness and disease developed with the creation of the World Health Organization (WHO), which spearheaded the modern public health movement with goals to create not solely a lack of illness but actively create total wellness in communities across the world. The impact of colonialism was still present in this period of organizational development following World War II and into the 1950s and 60s. The social determinants of health were not central in health campaigns that typically focused on the urban centers of recently independent (previously colonized) countries. This organization favored treating those with curable infectious diseases, which has quantifiable goals such as vaccines delivered, and the urban elite, who retained power even in post-colonial societies. The poorer, rural areas of Central and South America were not included in this big push towards better health. However, the realization that these models of care were not addressing inequality, and even perpetuating it, ushered in a new wave of community-based care in the late 1960s into the 70s. The author asserts, "in Central America, South Africa, and the Philippines, loose alliances of community-based health programmes gradually grew into social movements linking health, social justice, and human rights agendas" (Irwin and Scali 2007, pg. 238).

In the 1980s leading up to the year 2000, another shift towards Primary Health Care (PHC) envisioned a healthier future through the use of primary care providers on the communal level. This was inherently tied to the social determinants of health as a major public health issue as Health for All campaigns targeted the economic, nutritional, educational, industry, and lifestyle changes globally. However, there was systemic resistance to these programs that demanded economic equality among vague demands that clashed with the neoliberalism of the 1980s that enforced even more liberal markets and encouraged capitalist gains over social benefit. This was characterized by the growing influence and control that the World Bank exerted as the WHO dwindled in power. Most recently, the WHO has attempted to reinvigorate the Health for All campaign for the 21st century as a way to recenter PHC and the social determinants of health as relevant factors towards the improvement of health, especially in low-income countries. This requires power-sharing between colonial actors, many of whom are the main contributors of the WHO and World Bank, and the independent governments of the modern day to ensure that civil society and communal desires are met and exceeded (Irwin and Scali 2007).

In examining the historical development of the SDoH, the distinction between upstream and downstream determinants is critical. The factors that have direct causal pathways are downstream determinants such as poor-quality drinking water or low education achievement, while those that are harder to pinpoint and therefore address such as systemic racism or socioeconomic inequality are upstream determinants. Education attainment, zip code, race and ethnicity, working conditions, gender, and income are some of the most critical determinants of health, through measures of mortality and morbidity, that have been identified but are not treatable with just a vaccine (Braveman, Egerter, and Williams 2011; Kumar, Schlundt, and Wallston 2009; Edberg, Cleary, and Vyas 2011). Hispanics experience the SDoH through systemically lower income, educational attainment, and linguistic discrimination. Group outcomes can be seriously impacted by identity-based systemic disenfranchisement (Saha, Arbelaez, and Cooper 2003; Showstack et al. 2018).

f. The Culture of American Healthcare & Limited English Proficiency Patients

Limited English Proficiency (LEP) is a particularly relevant SDoH that often clashes even more drastically with the American healthcare system. As defined by the federal government, LEP individuals are those “who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English … may be eligible to receive language assistance with respect to a particular type of service, benefit, or encounter” (Office for Civil Rights 2008). This group is protected under the 1964 Title VI Civil Rights Act that prohibits discrimination on the basis of "race, color, or national origin" from any program that receives Federal funding. In 1974, Low English Proficiency peoples were affirmed to be a group protected under the component of national origin discrimination after the Supreme Court ruling in Lau v. Nichols. The practical implementation of this ruling has yet to be fleshed out fully. The government has created guides to assist healthcare spaces in their efforts to support and best treat those with limited English skills through comprehensive language interpretation and translation services to ensure holistic treatment and bi-directional understanding between patient and provider (Office for Civil Rights 2008; Office of Minority Health 2013).

While the regulations around interpretative services and communication for LEP patients have been defined clearly by the government, the actual institutional practice of this concept has lagged. There have not been critical cultural shifts in the way that providers utilize interpretation services, which then trickles down into the younger student demographic, only perpetuating a cycle of bias against those with LEP. These physicians frame the idea of a "poor historian" as the label that is often applied to those with LEP to shift blame to the individual rather than employing impartial services to address the lack of communication. Rather than labeling and blaming the patient who likely already lacks a cultural understanding of the American healthcare system, physicians should be reaching for available interpretive services such as live interpreters or tele-interpreters to best serve their clients. This should already be happening in hospitals per the laws laid out by the federal government, but serious solutions to this widespread issue have not been found nor implemented. They note that the use of interpreters is often seen as a burden or time-consuming, but it is also true that English proficient patients always have access to communication through their provider, while LEP patients do not. The use of interpreters or hiring more bilingual providers cannot be framed as an annoyance, but instead, a critical component of care for those who are already likely experiencing marginalization due to their language skills. This fight must be made a cultural and financial priority in order for implementation and access to change on the institutional level. Physicians cannot be the only agents of change in this instance. Systemic barriers to using interpretive services need to be lowered as interpreters are added to the team network of components of successful care delivery (Green and Nze 2017).

III. Hispanics' Access to and Experiences in Healthcare Spaces

a. The Practical Applications of the Social Determinants of Health

In establishing healthcare as a cultural system embodied by collective meaning and practices, ethnicity and language appear as powerful determinants of individual experiences in healthcare perceptions and experiences. In terms of quantifiable health, Hispanics experience worse health outcomes across conditions and care pathways; diabetes prevalence and treatment intensification is higher among Hispanic and Black Americans along with other comorbidities such as hypertension and hypercholesterolemia (Traylor et al. 2009). Total joint replacement is less common despite equivalent rates of arthritis (Katz et al. 2011). Hispanics are more likely to experience chronic pain and more likely to report providers misunderstanding their pain levels and care needs (Bifulco et al. 2023). Pain reports can differ drastically when communicating in one's non-dominant language that can mean patients are unable to physiologically feel and then communicate their pain as effectively (Gianola, Llabre, and Losin 2020). However, these patterns do not operate in a social vacuum; instead, they are predictable products of acculturation (or the lack thereof), access to appropriate and culturally competent care, and culturally relevant conceptualizations of health and care.

The relentless examination of the SDoH is critical to later initiatives to address them. The ED is an especially good place to examine the SDoH because often the most marginalized populations end up arriving for all care. In a hospital in Texas, the stark consequences of the SDoH have been revealed. Researchers added up each determinant they investigated to create three strata: low, medium, and high (varying degrees of burden). Whites were more likely to be in low/middle, while Blacks and Hispanics were more likely to be in middle/high. However, they specifically found undocumented, Spanish-speaking Hispanics to be disproportionately in the high burden group. Women were also represented at a higher proportion in the low strata. When examining the impact of language specifically, "people having Spanish as their primary language were 3.12 times as likely to be in the middle impact stratum but 5.16 times as likely to be in the higher impact stratum compared to the reference English speaking and lower impact stratum" (Ordonez et al. 2021, pg. 893). Language and ethnicity are critical to health in ways that are statistically quantifiable. With no access to public health insurance (due to restrictions on recent citizens and undocumented people), only 20% of Spanish-speakers reported having health insurance as compared to 50% of English-speakers. This is deeply concerning, especially since 25% also noted they had not been able to access care when needed in the past year due to high costs from lack of insurance. This creates a serious gap in primary and preventative care for Spanish-speakers as they are less likely to receive vaccines or screening tests for cancers (DuBard and Gizlice 2008).

The availability of interpretation services that are expensive or non-reimbursable from insurance companies is a major barrier; despite federal mandates regarding linguistic access, many patients are still left without strong communication avenues. This may be further compounded by lack of a regular, concordant provider (González et al. 2022). Familiarity with the healthcare system, in part through regular providers, is also a factor that improved satisfaction with overall care experiences in pediatric care. Specialized and emergency care can be the most challenging settings due to fewer language services and greater stress and unfamiliarity (Steinberg et al. 2016). The removal of financial and access barriers is not sufficient when there are cultural understandings of illness that are pervasive among recent immigrants that do not directly support the use of Western medicine in clinical spaces as the best option for care (Torres et al. 2017).

Barriers to care thrive beyond the systemic disadvantage of certain groups when those most in-need communities begin to self-limit in order to mitigate historical risk from medical malpractice and discrimination.

> *"[Indigneous populations have] diferentes conceptos de causalidad de las enfermedades, derivados de una cosmovisión particular desde la cual percibe una serie de riesgos en los servicios y espacios de salud, que dificultan el que acudan a ellos libremente"*
>
> [Indigenous populations have different causal concepts of illness derived from a particular worldview that perceives a series of risks in health services and spaces that complicate their free access to these services.] (Almaguer González, Vargas Vite, and García Ramírez 2014).

The combination of dismissing the value of traditional medicine and insisting on biomedical practices leaves indigenous populations particularly vulnerable to low quality or no care (Almaguer González, Vargas Vite, and García Ramírez 2014). Similarly, recent immigrants of Hispanic and/or indigenous heritage are at risk for experiencing altering social patterns that can have lifelong impacts (Edberg, Cleary, and Vyas 2011). In the spirit of the mission of the WHO, 21st century public health must address and mitigate the SDoH among all people, but particularly in the U.S. context among Hispanic, LEP, and low socioeconomic status peoples.

b. Acculturation of Hispanic Groups in the American Context

Individuals belonging to one or more minority groups experience health disparities in similar and different forms. Black, Hispanic, and Asian Americans are more likely to report at least one instance of miscommunication or poor communication with providers than their white peers. Black Americans who are English proficient experience the impacts of systemic racism through less personable interactions, fewer questions, and have a lower quality of interactions overall. Hispanics tend to experience more serious disparities due to language barriers and lack of acculturation in the U.S. context (Cooper et al. 2006). *Acculturation* is the concept that members of a non-dominant culture, and typically a foreign one, assimilate over time into the dominant culture. Acculturation is a crucial component of the discussion around Hispanics' experiences in healthcare in the U.S. context. The Hispanic diaspora in the States is quite varied, but certain researchers have begun to see the progression of assimilation as an important determinant of experience, which has been preliminarily measured by one's level of English proficiency. The ability to speak English is a major component of American culture and therefore cultural and social integration. Acculturation is a multifaceted process, but language is a good proxy (Jimenez et al. 2013).

In a qualitative study of Hispanic youth, all the participants cited difficulty interacting with the American healthcare system due to their inability to converse comfortably or fully in English (Garcia and Duckett 2009). Patients with Low English Proficiency (LEP) have been demonstrated to have poorer access to care, poorer comprehension of care and adherence to post-care regimes, poorer quality of care, and higher dissatisfaction with care they did receive (Jacobs et al. 2006). Another study noted serious systemic barriers that limited effective communication as LEP patients, and cultural differences that alienated patients from their providers and in turn the care they were offering. These compounding issues can cause foreign-born, Spanish-dominant clients to feel particularly distant from their providers and unlikely to return for treatment despite serious pain. English competency is only one component that causes a serious gap between client and provider. The healthcare sphere is a particularly important locus for acculturation across levels (Torres et al. 2017).

Aside from the direct communication between patient and provider in a common language, there are serious cultural gaps and conflicting explanatory models that cause dissonance in these relationships. Historically, the responsibility of communication has fallen to the patients who are already struggling to navigate the American healthcare system, which is a cultural practice in of itself that LEP patients may be unfamiliar with or confused by. While providers may be comfortable with their "cultural orientation" or worldview based in biomedical explanatory models of healing and care, the patients they interact with may not feel that same ease. This is particularly true when low-context, individualist healthcare systems encounter patients from high-context, communal backgrounds. The cultural orientation of the provider and system may clash with the expectations of the patient in ways that cause serious harm (Park et al. 2018).

Familial approval of medical choices and illness management (Garcia and Duckett 2009; Torres et al. 2017; Evans, Coon, and Crogan 2007; Katz et al. 2011; Ma et al. 2014), pharmaceutical intervention as a less desirable option (Torres et al. 2017; González et al. 2010), quality time, and profound relationships with providers have all been documented as particularly relevant in treating Hispanic patients (Evans, Coon, and Crogan 2007). There is social weight to the connections that Hispanics hold with family members and those they interact with broadly (Ma et al. 2014). "*Personalismo,*" or the ability to be personable to patients, is equally important as Hispanics desire a more interpersonal connection with their providers rather than just biomedical and technical competency. Providers will not attract and retain patients with medical skills alone, they must also engage in the cultural practice that is medicine with the Hispanic patients and become aware of the ways they can best serve the physical, emotional, and social needs of their clients (Evans, Coon, and Crogan 2007).

Further divisions arise when language preference is isolated within Hispanic populations. When studying the interactional components of patient visits, Spanish-speaking patients more commonly expressed their pain in metaphorical and nonspecific terms, which was supported by providers who commented that these patients also typically disconnected their physical, chronic pain from mental health concerns. This may be explained by cultural stigma surrounding of mental illness and suffering in Hispanic cultures (Bifulco et al. 2023), which has been found to reduce the appropriate use of pharmacotherapy and/or psychotherapy for depression, specifically among Mexican Americans (González et al. 2010). The overreliance on Western techniques without regard to socially and culturally significant traditional practices cannot be ignored, especially when treating those with chronic pain and other conditions that are not always curable with Western medicine alone. The removal of financial and access barriers is not sufficient when there are cultural understandings of illness that are pervasive among recent immigrants that do not directly support the use of Western medicine in clinical spaces as the best option for care (Torres et al. 2017).

In a qualitative study of 10 Hispanic and 10 Hmong LEP patients, researchers aimed to explore how exactly client experiences were shaped by language, culture, and trust. They most generally found that LEP clients valued quality time and conversation-based relationships with providers far more explicitly than their non-LEP, non-minority peers. Participants reported wanted pleasantries that indicated an interpersonal relationship, thorough explanations of procedures and outcomes, and respectful engagement, which all contributed to relational sensation with those delivering care. Additionally, they were unimpressed by the quick, task-orientated nature of visits that did not value the time it takes for patient-provider relationships to develop. These complaints illustrate the common cultural differences that disrupt true connection and trust between provider and client that are more common among those with LEP (Park et al. 2018).

Spanish-dominant Hispanics are most influenced in their clinical decisions by word-of-mouth and other communal strategies to navigate care spaces including religion and faith. They also often have a less participatory relationship with providers or allow their physicians to be the primary driver of healthcare choices (Katz et al. 2011). Hispanic culture emphasizes deference to authority figures, which discourages patients from speaking up or challenging the expert advice of their doctors. This is most easily described as a cultural value placed on respect that Hispanics continue to employ even after migrating to the United States (Zamudio et al. 2017). The upholding of respect towards persons of authority often stems from respect towards parental figures and then applies to dynamics outside of the nuclear family. The ratification of respect in all interactions can support feelings of personal agency and demonstrate appreciation of one's own cultural heritage; it is culturally relevant practice that informs how patients then interact with their highly expert providers (Ma et al. 2014). The consensus against speaking up also limits community efficacy to change harmful policies or patterns on a local and certainly on a national level, meaning that Hispanics are often unable to be agents in their own health improvement. However, this is not to say sweepingly that Hispanics are helpless nor incompetent as that would be a gross generalization; in fact, the strength of their ethnic and linguistic identification can be incredibly protective and even lead calls for access to and support from medical systems in the United States (Edberg, Cleary, and Vyas 2011).

c. Gaps in Health Literacy

As component of limited acculturation, Hispanics have trouble accessing healthcare due to the complexity of the care system (Garcia and Duckett 2009), higher likelihood of experiencing systemic burdens to their health (Ordonez et al. 2021; Cooper et al. 2006), and a particularly low health literacy as compared to White and Black Americans. Low-income and non-English proficient patients are even more at risk for low health literacy, which is defined as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (Heinrich 2012, pg. 218). Hispanics are significantly less likely to rate themselves in good health, have access to routine care and urgent/needed care, or have insurance coverage (DuBard and Gizlice 2008).

In populations that have a range of linguistic abilities, there is no singular, accepted definition for what makes someone health literate and different clinical situations may require different skills or proficiencies (e.g., quantitative literacy for billing, conversational ability with providers) (Jacobson, Hund, and Soto Mas 2016). Health literacy is a dynamic concept that depends on individual beliefs and behaviors, one's medical situation, and the period in one's life; one is never perfectly health literate even in their native language. Thus, the goal is for the best possible proficiency to support the specific needs of that patient in their health journey, especially communicating the continuation of care that is needed outside of a clinical space. Even English-native speakers have difficulty remembering and adhering to the follow-up regime given in a clinical visit, revealing how LEP patients are disadvantaged by the compounding of both natural memory capacity and lack of total clarity. In a cross-sectional study of low-income patients receiving diabetes care in the Southern U.S., 65% of participants had low health literacy. Spanish-speakers had the lowest levels of health literacy of any of the demographic populations studied – a concerning outcomes. Additionally, white participants scored the highest, but still had significant prevalence of low literacy, then Black participants, and finally Hispanics (Heinrich 2012).

Patients and providers are both aware of the negative implications of incomplete communication and language dis-concordance, which is especially common among immigrant populations in their non-native country. Low health literacy impacts medication regimen adherence, diagnosis comprehension, and overall use of health services and return visits. The miscommunication around follow-up regimen and medication usage results in medical complications, adverse reactions to pharmaceuticals, general avoidance of further care (Al Shamsi et al. 2020), and low utilization of preventative care (Edberg, Cleary, and Vyas 2011). Medical instant messaging pre- and post-visit may further compound care gaps among patients with low literacy (Crossley et al. 2020).

Ethnically concordant care may be one avenue to address gaps in acculturation, but only 13.7% of Hispanics prefer ethnically concordant care. This measure is low despite Hispanics' higher satisfaction scores with ethnically concordance care, which was particularly improved by greater time spent with providers (Saha, Arbelaez, and Cooper 2003). This is true among other races too; concordance leads to higher patient satisfaction (Takeshita et al. 2020), in part through more participatory care practices (Cooper-Patrick et al. 1999).

Hispanics often have moderate or complete bilingualism between English and Spanish that could improve their ability to understand and engage with providers in medical encounters. There is not sufficient research to understand how bi- or multilingualism impacts health literacy in any language of care, but in the U.S. context, with a dominant model of biomedical practice, there are critical questions of how Hispanics with LEP move through an English-dominated network. English competency was not surprisingly the best predictor of greater scores on a health literacy test given to immigrants with native Spanish fluency and low to medium fluency in English who were living a U.S.-Mexico border city. 35% of participants were at the "inadequate level" of health literacy, while 36% were at the marginal level, and 28% with adequate proficiency. English language classes were associated with greater scores as was younger age (Jacobson, Hund, and Soto Mas 2016).

d. Language as a Barrier to Care

The overwhelming majority of studies support the assertion that language barriers are a serious issue facing LEP patients (Torres et al. 2017; Cooper et al. 2006; Garcia and Duckett 2009; Park et al. 2018), and that language concordance leads to improved health outcomes (Diamond et al. 2019; Jacobs et al. 2006), as does ethnic concordance more generally (Takeshita et al. 2020). 76% of the studies on concordance for LEP patients in a 2019 review had a positive association between linguistics-concordance and at least one quality marker of care, either patient-reported or diagnostic. The combination of improvements in patient-reported measures and diagnostic measures indicates that there is a compounding effect of greater, more fluid communication on patient experience and perceptions of care and quantifiable positive health outcomes (Diamond et al. 2019). Patients like being understood and being able to understand (Garcia and Duckett 2009; Jacobs et al. 2006). While general communication somewhat trended towards positive outcomes in ethnically concordant pairs, language concordance was consistently a stronger predictor of health outcomes in a review of 27 papers (Meghani et al. 2009). The prevalence of provider-patient concordance is low in the United States. For Hispanics, nearly 25-30% reported having a regular provider with the same ethnicity (González et al. 2022; Saha, Arbelaez, and Cooper 2003), while only 23% reported race, ethnicity, and preferred language to match with their providers. However, the exclusion of anyone without a regular provider, as high as 45% of Hispanics, may be artificially lowering those estimates of ethnic and linguistic concordance. Low concordance is a longstanding issue as medical education is highly inaccessible to non-white communities due to cost, opportunities, and limited guidance on the process (González et al. 2022).

Effective communication between patient and provider is critical to care, but recent studies have shown that the language of a visit plays a significant role in the physiological experiences of care. Language is not solely a mode of communication, but a cognitive process of understanding and expression that is heavily culturally influenced (Jacobson, Hund, and Soto Mas 2016). In a controlled trial, researchers tested 80 adults with a mean age in the late 20s to see how ratings of pain from heat varied based on the linguistic priming (which language the session was carried out in) and cultural affiliation (whether they identified more with Hispanic culture or American culture or were in the middle). This study was with Spanish-English bilinguals, so they each had one session in English and one in Spanish with the exact same pain simulation process. They found the strongest association between language of the session and high-level pain reports in bilinguals that identified more strongly with Hispanic culture. These adults reported significantly higher pain from the same process when the session was conducted in Spanish as compared to English. The reverse was true for bilinguals with stronger identification with American culture, as they reported lower pain rating in Spanish sessions. Finally, those who were truly between Hispanic and American cultures reported similar results from both their sessions. Additionally, measurable physiological markers of pain were also correlated with cultural identification, meaning that Hispanics that were more culturally Hispanic and received the session in Spanish had heightened physiological responses as well. The researchers labeled this as a mediating variable in the relationship between reports of pain and cultural identification pain (Gianola, Llabre, and Losin 2020). The importance of race or ethnic centrality to one's own proprioception influences pain and the importance of provider-patient concordance as a connecting mediator in clinical dyads (Moore et al. 2022).

For situations where bilingual providers are not available, the use of interpreters can provide comfort among LEP patients (Garcia and Duckett 2009) and medically relevant improvements in care (Jacobs et al. 2006). Among Hispanic OBGYN patients with LEP, the presence of interpreters validated experiences of pain in these women and improved perceived helpfulness of their medical team. Overall, those with consistent access rated their experiences as superior to those without interpreters (Jimenez et al. 2012). Despite the clinical benefits, the use of interpreters can feel like a burden to the care team, but it is critical to remember that English proficient patients are always able to communicate with their team, while LEP patients are not guaranteed that right (Green and Nze 2017).

However, simply the idea of interpretation is not enough. Providers cite feelings of disconnection from their patients when there is not a mutually intelligible language and/or interpretive services are the only option (Bifulco et al. 2023); language barriers impact all parties involved (Al Shamsi et al. 2020). Hispanic mothers of pediatric patients preferred bilingual providers over interpretation services it assisted in semantic communication but also pragmatic communication that has both a linguistic and ethnic basis of trust and commonality; certain mothers even asked directly for Hispanic or Latinx providers when accessing care for their children. Their preference for linguistic concordance was driven by both positive experiences of strong communication, but also negative ones with semi-fluent staff members or having to pay for an interpreter from their own community (Steinberg et al. 2016). The entire care team has a role to play in LEP patients' experience (Torres et al. 2017; Blanchard, Nayar, and Lurie 2007), and bilingual nurses have improved patient satisfaction but may still face stigma for speaking multiple language or an increased workload when being asked to act as an interpreter randomly on other cases (Ali and Johnson 2017). The seriousness of language as a barrier to care persists among Hispanic patients.

e. The Healthy Migrant Wrinkle and Other Statistical Complications

Common disease prevalence (i.e., diabetes, arthritis, high BP, and obesity) are significantly lower among Spanish-speakers, which can in part be attributed to the "healthy migrant" phenomenon that finds that those who have recently immigrated to the U.S. are usually in better health than their native-born counterparts (DuBard and Gizlice 2008; Edberg, Cleary, and Vyas 2011). Spanish-speaking subjects are more likely to have just immigrated and not have yet adopted American patterns of health, both in behavior and increasing chronic conditions. This is especially true in states with recent booms in Hispanic population growth as the Hispanic communities are more likely to be centered on previous health behaviors, rather than having fully accultured to dominant, white, English-speaking society. Conversely, states with traditionally large Hispanic communities showed more chronic conditions across the population (DuBard and Gizlice 2008). Spanish-speaking Hispanics report greater healthy behaviors (such as low rates of tobacco and alcohol use and safer sexual activity) (Ma et al. 2014), while also reporting lower rates of physical activity, specifically leisure physical activity (DuBard and Gizliee 2008). When examining the impacts of chronic pain, Spanish-dominant Hispanics rated their functional impairment lower than their English-dominant peers, which may suggest that recent immigrants are less likely to allow pain to be a serious impairment to their ability to work and complete their duties (Jimenez et al. 2013).

Simultaneously, recent immigrants without U.S. citizenship are at a far higher risk of encountering barriers to accessing healthcare (Ordonez et al. 2021). There is not a clear pathway forward to addressing this issue. One proposal is the integration of health literacy into pre-existing educational plans, but that already requires that Spanish-speaking individuals continue their education in the U.S. at least through the high school level. For those who are no longer enrolled in educational institutions, it is critical that there are other outreach measures through health clinics, workplaces, and community organizations to ensure that all Hispanics, regardless of English level, educational attainment, or socioeconomic status, can effectively manage their health (Soto Mas and Jacobson 2019). Hispanics also recognize citizenship as a key factor in financial and social success in the U.S. context (Noe-Bustamante et al. 2021), but the best direction to mitigate this issue among new undocumented immigrants is unclear.

The statistical discrimination hypothesis has been demonstrated among providers who are aware of demographic patterns in disease prevalence, and therefore, when presented with a patient in a particular demographic (more impacted by this disease), they may treat more aggressively or attentively to try and combat those demographic statistics (Traylor et al. 2009). These patterns of ethnically-informed treatment prescriptions from doctors are compounded by ethnically-informed preferences in treatment methods (Katz et al. 2011).

f. Argument Against Concordance

There is not a consensus on the clinical benefit of racial and ethnic concordance with providers (Meghani et al. 2009; Blanchard, Nayar, and Lurie 2007; Saha, Arbelaez, and Cooper 2003). Respect is a central tenant of social relations in Hispanic culture (Ma et al. 2014), so it is not surprising that it could be a point of contention in clinical encounters. Patient-provider concordant dyads sometimes report less respect than non-concordant pairings. This may be explained by racial positioning of higher social status providers and lower status patients (Meghani et al. 2009), specifically when Mexican Americans composed the majority of Hispanic participants. For example, a highly educated white Argentinian physician may have far less in common with a Mexican patient than a non-Hispanic, white provider who grew up in Texas (Blanchard, Nayar, and Lurie 2007). Hispanic providers can still be culturally insensitive when addressing those under the Hispanic umbrella The importance of nationality is key in investigating the Hispanic diaspora, especially when individuals statistically feel more connection to their nation roots than the broader “Hispanic” or “Latino” labels (Taylor et al. 2012).

A more recent review found 9% of the studies they surveyed had a negative relationship between concordance and positive health outcomes. Colorectal screening was lower and hospital ER visit times were longer, but those could be impacts of greater care and communication between patients and providers that created more informed choices (with greater understanding) through longer conversations (Diamond et al. 2019). Time spent with the patient has been demonstrated to be particularly important to Hispanic patients, so longer visits might not be a negative outcome (Saha, Arbelaez, and Cooper 2003). This is more broadly categorized as relational-based care, which is not as typical in the U.S. setting, but they may expect that a provider who appears Hispanic and/or speaks Spanish would defer to cultural practices that are more common in Central and South America. However, due to time and financial constraints that may be even more serious in low-income clinics, these providers cannot deviate from the task-oriented system. This may lead to feelings of disrespect in concordant dyads. Conversely, Hispanics may not expect these culturally-significant behaviors from non-Hispanic providers and rate them more favorably (Blanchard, Nayar, and Lurie 2007). Hispanics are a complicated group to study as they may identify with a variety of racial categories and nationalities, and without examining more specific identifiers beyond just Hispanic, it is difficult to determine the efficacy of concordance. However, there is certainly evidence that complicates the straightforward push for more ethnic concordance, while linguistic concordance remains an important determinant across Hispanics (Meghani et al. 2009).

IV. Methods

Data for this analysis is sourced from the Pew Research Center's American Trends Panel (ATP) Survey – Wave 100, which is a nationally representative cohort consisting of randomly selected American adults from an Address-Based System. This particular survey (wave) was collected between Nov. 30th and Dec. 12th, 2021 under the management of Ipsos and was conducted online with self-administered surveys. 22,612 people were contacted and 14,497 responded to the survey (65% response rate) with an oversampling of 4,533 Black or Hispanic Americans from Ipsos' KnowledgePanel. Additionally, the survey was offered to participants in both English and Spanish. However, due to the oversample of Black and Hispanic participants in addition to the nationally representative ATP group, the researchers had to weight the data to recalibrate it to the standards within the United States.

Once the data was imported into STATA/BE Version 18.0 in the correct format, the data was available for cleaning and then regression analysis. First, any questions that were of interest were noted, and clearer variable names were generated. These new variables were then cleaned by removing any missing values and, depending on the question, were sometimes condensed to have more responses in each distinct category. Additionally, since every question was not asked to all participants, a variety of independent variables were considered. Data about the race, ethnicity, and language dominance of the participants was used to evaluate a number of dependent variables asking about healthcare experiences and perceptions.

Second, crosstabulation was executed to check the Chi-squared test of independence to investigate bivariate relationships. This allowed the level of significance to be ascertained from the 0.05, 0.01, or 0.001 alpha significance level among all three types of language preference (Spanish-dominant, Bilingual, and English-dominant) as well as among ethnicity/race categories (Hispanic, White; Hispanic, all others). Finally, linear and logistic regression was conducted on the appropriate variables to evaluate the relationship between the dependent and independent variables. This was conducted with both unweighted and weighted measures to ensure rigorous checks of the p-values.

a. Independent Variables

Due to the structuring of the questions in this survey, not every question was asked to all 14,497 participants. A few of the general questions were asked to participants of all races, and therefore race and language dominance could both be investigated (Q1). However, for the remaining questions of interest, the survey only presented those to Hispanic or Black respondents (Q2-5). This resulted in language dominance being the more prevalent independent variable examined. However, the Hispanic ethnicity question could be used as the IV for Q1. The survey asked*: Are you of Hispanic, Latino, or Spanish origin, such as Mexican, Puerto Rican, or Cuban?* This provided dichotomous results of those who consider themselves Hispanic and those who do not. Simultaneously, from the question asking about racial identification: *What is your race or origin?* All White, non-Hispanic participants could be isolated to function as the control group compared to all Hispanic participants. To clarify, for Q1, Hispanics were compared to all others, and then specifically to only White Americans. This can be seen in Table 1.1 and is separated by color.

For all question groups (Q1-Q5), primary language was assessed and used to create three discrete groups: Spanish-dominants, bilinguals, and English-dominants. These grouping were created from four questions that probed level of one's English and Spanish: 1+2) *How well, if at all, would you say you can carry on a conversation in English/Spanish?* 3+4) *How well, if at all, would you say you can read a newspaper or book in English/Spanish?* Based on the scoring on a scale of 1-4, participants were classified into one of the three discrete categories. This was coded as their primary language, and I then used this variable to create three dummy variables to perform regression analyses. The assumption was that the English-dominant group were the best control group, so the bilingual and Spanish-dominant groups were the compared variables.

b. Dependent Variables

A full list of questions and answer values examined can be found in the appendix. Overall, there were 21 dependent variables evaluated in this study, split into five categories: 1) general experiences with care; 2) ethnic and linguistic concordance; 3) comparative care; 4) ethnic group outcomes; 5) citizenship concerns.

c. Hypotheses

Q1.1: Are Hispanics more likely than their peer counterparts to report difficulty accessing healthcare?

- H_0: There is no difference on the basis of ethnicity in experiences of accessing care.

- H_A: Hispanic Americans experience more difficulty accessing care than the general American population, but face particularly more difficulty compared to white Americans.

Q1.2: How does language preference among Hispanic Americans impact experiences of healthcare access?

- H_0: There is no difference on the basis of language dominance in experiences of accessing care among Hispanics.
- H_A: Spanish-dominant Hispanics experience the most difficulty accessing care and report worse experiences, particularly related to respect, as compared to bilingual or English-dominant participants.

Q2: How does one's dominant language (English, Spanish, or bilingual) impact preferences for linguistic concordance with healthcare providers?

- H_0: There is no preference for ethnically and linguistically concordant care among Hispanics with different personal language dominance.
- H_A: Spanish-dominant Hispanics have the greatest preference for ethnic and linguistic concordance with providers, followed by bilinguals, and finally English-dominant Hispanics with the lowest preference.

Q3: How does one's dominant language influence comparisons of care between ethnically non- and concordant providers?

- H_0: There is no difference between Hispanics with different language dominance in concordant vs. non-concordant care experiences.
- H_A: Spanish-dominant Hispanics more often report positive correlations with Hispanic providers as compared to non-concordant providers, followed by bilinguals, and finally English-dominant Hispanics with the reporting of preference.

Q4: How does linguistic dominance impact perceptions of Hispanic "group" health outcomes in the United States as compared to other non-Hispanic adults?

- H_0: There is no difference on the basis of dominant language for how Hispanics perceive group outcomes in the U.S. context.

- H_A: Spanish-dominant Hispanics will report worse group outcomes for Hispanics, while bilinguals and English-dominant Hispanics report more positive group outcomes.

Q5: How do concerns about citizenship manifest differently based on dominant language use in healthcare settings?

- H_0: There is no difference on the basis of dominant language for how often Hispanics are concerned for close friends or family members about citizenship status when accessing care.
- H_A: Spanish-dominant Hispanics and bilinguals will more often report concerns from friends and family about citizenship when accessing care as compared to English-dominant Hispanics.

d. Demographic Characteristics

The investigation of sociodemographic characteristics is important in this analysis to ensure that extraneous factors are not seriously changing the associations of interest. Additionally, Tables X & Y provide insight into the demographic spread of the participants studied, specifically looking at gender, race, census region, income tier, years spent living in the U.S., and U.S. citizenship status. In Table X, it is relevant to note that only 3% of Hispanic participants self-identified as Black, and 24% chose "Other" compared to only 2% of the non-Hispanic group. Additionally, Hispanics were disproportionately living in the Southern and Western regions as compared to non-Hispanics. Finally, Hispanics were significantly more likely to be in the lower (46%) and middle (42%) income tiers, while non-Hispanics were more evenly distributed among these categories with the majority in the middle (53%) income bracket. While most participants were U.S. born, 1 in 2 Hispanics were born outside of the U.S., which is also likely because U.S. territories were not included in the U.S. born category. Finally, nearly all non-Hispanics had U.S. citizenship, but only 84% of Hispanics were citizens.

When breaking out the Hispanic category into language preference categories in Table Y, there is a near even distribution of those who belong in each grouping with slightly fewer (26%) in the Spanish dominant category. While all three groups had around 65% of their participants identify their race as White, English dominant Hispanics (EDH) were much less likely to pick Other as their race. Comparatively, Spanish dominant Hispanics (SDH) had the highest percentage of Other (28%) and had the least selections in any of the other categories, meaning they had the most dichotomous results of any group. SDHs were also most concentrated in the Southern U.S., while EDHs were more evenly distributed with large groups in the West. Bilinguals had the largest percentage in the Northeast (13%) compared to the other two. Most interestingly, SDHs had over 2/3 of their participants in the lower income tier and only 2% in the upper tier. This is compared to bilinguals and EDHs that had the most respondents in the middle-income group, and EDHs had 17% in the upper tier. For years spent living in U.S., the pattern is clear: spending more time in the U.S. corresponds to being more likely to be English dominant. Finally, just over 1 in 2 SDHs had U.S. citizenship, while EDHs mirrored the percentage found in non-Hispanic participants (98%).

Table X: Demographic Characteristics by Ethnicity

		Hispanic (%)	**Non-Hispanic (%)**
Overall sample		25.7 (n = 3,716)	74.3 (n = 10,766)
Woman		57.0 (n = 1,557)	58.2 (n = 6,252)
Race	*White*	65.1 (n = 2,405)	61.6 (n = 6,626)
	Black/ African American	3.27 (n = 121)	28.2 (n = 3,038)
	Asian/ Asian-American	0.8 (n = 31)	3.5 (n = 378)
	Multiracial (including Black)	2.4 (n = 88)	2.7 (n = 295)
	Multiracial (excluding Black)	4.25 (n = 157)	1.9 (n = 209)
	Other race	24.1 (n = 893)	2.0 (n = 214)
Education Level	*≥ College Grad*	32.50 (n = 1,205)	49.03 (n = 5,270)
	Some College	29.94 (n = 1,110)	32.36 (n = 3,478)
	≤ H.S. Graduate	37.57 (n = 1,393)	18.61 (n = 2,000)
Census region	*Northeast*	12.1 (n = 448)	15.8 (n = 1,703)
	Midwest	7.1 (n = 264)	23.57 (n = 2,538)
	South	46.1 (n = 1,712)	41.6 (n = 4,478)
	West	34.8 (n = 1,292)	19.0 (n = 2,047)
Income Tier	*Upper*	11.7 (n = 418)	24.3 (n = 2,470)
	Middle	42.4 (n = 1,510)	52.8 (n = 5,356)
	Lower	45.9 (n = 1,634)	22.9 (n = 2,321)
Years Spent in the U.S.	*U.S. Born*	50.9 (n = 1,861)	91.9 (n = 9,857)
	21+	28.5 (n = 1,042)	5.6 (n = 601)
	11-20	11.9 (n = 435)	1.3 (n = 139)
	0-10	8.7 (n = 319)	1.2 (n = 125)
U.S. Citizenship		83.6 (n = 3,068)	98.3 (n = 10,571)

Table Y: Demographic Characteristics by Language Dominance Among Hispanics

		English Dominant (%)	**Bilingual (%)**	**Spanish Dominant (%)**
Overall sample		35.8 (n = 1,299)	38.4 (n = 1,392)	25.8 (n = 935)
Woman		53.9 (n = 699)	55.5 (n = 770)	63.7 (n = 594)
Race	*White*	65.7 (n = 851)	63.0 (n = 871)	67.8 (n = 632)
	Other race	18.8 (n = 243)	26.41 (n = 365)	27.9 (n = 260)
Education Level	≥ *College Grad*	35.6 (n = 462)	38.4 (n = 534)	21.0 (n = 196)
	Some College	35.0 (n = 454)	31.7 (n = 440)	20.9 (n = 195)
	≤ *H.S. Grad*	29.5 (n = 383)	29.9 (n = 415)	58.1 (n = 541)
Census Region	*Northeast*	11.6 (n = 150)	13.1 (n = 182)	11.7 (n = 109)
	Midwest	10.9 (n = 142)	5.8 (n = 81)	4.2 (n = 39)
	South	37.3 (n = 485)	49.5 (n = 689)	52.8 (n = 494)
	West	40.2 (n = 522)	31.6 (n = 440)	31.3 (n = 293)
Income Tier	*Upper*	17.1 (n = 213)	13.89 (n = 185)	1.9 (n = 17)
	Middle	48.0 (n = 599)	46.1 (n = 614)	29.0 (n = 262)
	Lower	34.9 (n = 436)	40.0 (n = 533)	69.1 (n = 624)
Years Spent in the U.S.	*U.S. Born*	88.0 (n = 1,139)	47.7 (n = 655)	3.7 (n = 34)
	21+	9.7 (n = 126)	36.6 (n = 503)	42.9 (n = 391)
	11-20	1.7 (n = 22)	9.0 (n = 124)	30.2 (n = 275)
	0-10	0.5 (n = 7)	6.7 (n = 92)	23.2 (n = 211)
U.S. Citizenship		98.4 (n = 1,296)	89.4 (n = 1,236)	54.6 (n = 498)

V. Results

Table 1.1 demonstrates results of OLS and logistic regression between Hispanics and non-Hispanics. These were the only four questions of interest that were asked to all participants, not just Hispanic ones. There was not a significant difference in any of the tests between Hispanics and anyone else when asked if the healthcare process is hard to understand. For question 1B, there was a highly significant result at the 0.001 level among Hispanics when compared to everyone else in the study, and even more drastically when compared to White participants only. However, the direction of the coefficient is negative indicating that Hispanics more often said "No, never happened" when asked if they had to speak up to receive proper care in a clinical setting compared to everyone else. When controlling for years spent in the U.S. specifically (and other demographic factors with little impact), the coefficient becomes slightly smaller from -0.142 to -0.107, but the tendency to say that they had not spoken up to doctors remained clear and significant. In 1C, the issue of lower quality care was asked, and before demographic controls, Hispanics were significantly more likely to report this as being an issue they perceived to occur in clinical spaces with a linear coefficient of 0.044 and 0.068. However, education level primarily caused the significance between Hispanics and Non-Hispanics, while income level majorly impacted the difference between Hispanics and Whites. Between the latter group, controlling for years spent in the U.S. raised the coefficient slightly and made it significant, but the combination of controlling for demographic characteristics in both cases, resulted in insignificant findings. Finally, when asked about experiencing less respect from providers, there were not significant findings at all.

When analyzing the same questions in Table 1.1 but only among Hispanics, Table 1.2 demonstrates the importance of language dominance among Hispanics generally. Being Spanish Dominant lowered the linear coefficient by -0.161 compared to English dominant Hispanics (EDHs), and -0.173 after demographic controls. Bilinguals were insignificant regardless as compared to EDHs. Spanish dominant Hispanics (SDHs) were significantly less likely to speak up to receive proper care at the alpha 0.001 level both with (-0.239) and without demographic controls (-0.281). After controlling for the four demographic factors, bilinguals lowered the coefficient to -0.121 at the 0.01 level. In the third question, SDHs were significantly less likely to report they had experienced lower quality (-0.134) care as compared to their ED counterparts. Bilinguals after controlling for demographic factors were not more likely to report this. When controlling exclusively for years spent in the U.S., the pattern seen on the table remains, while when only controlling for income tier makes both SDHs and bilinguals insignificantly different from EDHs. In the final question, experiences of less respect from providers bilinguals never reported significant differences from EDHs, but SDHs coefficient was -0.154 when controlling for demographic factors, meaning they were significantly more likely to report that they had not had disrespectful experiences with providers.

The results detailed in Table 2 demonstrate a consistent pattern in this series of questions with all variables of interest producing significant results when comparing language dominance groups to each other with English-dominant participants as the control group. Even when accounting for weighting all the coefficients remained significant at least at the alpha 0.05 level (see Table 2.A in Appendix), but the majority remained below the 0.001 alpha level. In the two cases of OLS regression, the t-test statistic is being used to calculate the appropriate p-value, while in the two logarithmic regressions, the z-test statistic is used. Additionally, the constant coefficient can be interpreted in all four situations as the intersection of the linear or logarithmic line with the y-axis on the graph, but it holds little practical significance in this particular study.

Spanish dominant Hispanics (SDH) were most likely to prefer ethnic concordance and have had ethnic concordance previously with their medical providers as compared to English dominant Hispanics (EDH). Being Spanish dominant compared to English dominant raises the linear coefficient for preference for ethnic concordance by 0.725, and bilinguals raise the linear coefficient to 0.134 as compared to English-dominants, both are significant to the alpha 0.001 level. However, when controlling for income tier, education level, census region, and years spent in the U.S., bilinguals were no longer significantly more likely to prefer ethnic concordance as compared to English dominants. SDHs are 1.8 times more likely to have seen an ethnically concordant provider than EDHs. Bilingual Hispanics are 1.4 times more likely to have had concordant care than EDHs. The log odds and odds ratio for Spanish-dominants were significant at the 0.001 alpha-level, while the bilinguals were only significant at the 0.05 alpha-level after weighting when no controls were applied and when income and census region were controlled for. However, when controlling for years spent in the U.S. and education level, the log odds for SDHs jumped to 2.3 and bilinguals to 1.5, with alpha at the 0.001 and 0.01 level respectively.

Not surprisingly, SDHs raised the linear coefficient to 1.597 as compared to the control, and bilinguals were likely (0.479) to also prefer Spanish concordance to a highly significant degree. Even when controlling for the four sociodemographic factors, the pattern remained highly significant and consistent. Interestingly, when asking if the participants had close friends or family who needed Spanish concordance in medical care situations, bilinguals were 3.3 times more likely to report this to be true. SDHs were 2.8 times more likely than the control to also report this at the alpha 0.001 level, and despite controlling for sociodemographic factors, this remained a highly significant finding in both SDHs and bilinguals. Of the four demographic factors controlled for in this analysis, after controlling for education, the coefficient was larger in all four cases. However, when controlling for the other three factors, the coefficient became slightly smaller and typically retained significance at the same level as the un-controlled analysis (isolated control tables are not shown).

In Table 3, the comparison between care from ethnically concordant providers is contrasted with that from non-concordant providers. SDHs were more likely to rate concordant care as taking symptoms and concerns seriously (0.145 at alpha 0.001), but demographic controls, specifically years spent in the U.S., makes this insignificant. Bilinguals were not significantly different in either analysis. SDHs were significantly more likely to say that concordant providers treated them with more respect at the 0.05 alpha level with a coefficient of 0.121 as compared to EDHs. Bilinguals were again insignificantly different from EDHs. In 3C, when asked about the quality of care from concordant providers, both SDHs (0.148) and bilinguals (0.067) responded significantly higher than EDHs, but after demographic controls that difference disappeared. Years spent in the U.S. most drastically impacted the bilingual group to make the results insignificant, while controlling for all four demographic factors each impacted SDHs slightly until it became insignificant. In the final question of this group, being a SDH raised the linear coefficient by 0.079 and then to 0.123 when controlling for four factors compared to EDHs. Controlling for years spent in the U.S. and education level contributed to the higher coefficient. The linear coefficients for bilinguals were again not significantly different.

In the fourth question group seen in Table 4, participants were asked a number of questions surrounding Hispanics' group outcomes. First, 4A asks if they believe group outcomes have worsened, stagnated, or improved in the past 20 years. Without controls, SDHs linear coefficient was 0.180 at alpha 0.01, but became insignificant after demographic controls, specifically due to years spent in the United States. The second question finds that SDHs are not likely to rate access as a major contributor to poor group outcomes (-0.253) at a high significance level, but this disappears after controls are accounted for. IN 4C, lower priority being a major cause does not elicit a significant difference among SDHs, and only in uncontrolled analysis of bilinguals (0.103) is there slight significance. This significant is removed by specifically controlling for years in the U.S. among bilinguals. In the last question 4D, there are no significant results when asked if linguistic or cultural miscommunication is a major issue. In all but 4C, bilingual responses were not significantly different from EDHs.

The final question in Table 5 asks about citizenship concerns among friends or family members when they go to access care. All results were significant to the alpha 0.001 level as both bilinguals and SDHs were significantly more likely to report knowing someone with these legal concerns. SDHs were 3.3 times more likely to report this with demographic controls and bilinguals were 2.9 times more likely to say the same than EDHs.

Table 1.1: General Experiences with Healthcare System Across Ethnic Groups

	1A: Hard to understand healthcare process		**1B: Had to speak up to receive proper care**		**1C: Received lower quality care than other patients**		**1D: Experienced less respect from providers**	
	No controls (n = 14,351)	Income Tier, Census Region, Years in U.S., Education Tier (n = 13,524)	No controls (n = 14,411)	Demographic controls (n = 13,575)	No controls (n = 14,400)	Demographic controls (n = 13,565)	No controls (n = 14,399)	Demographic controls (n =13,567)
Hispanics (compared to all others)	0.155 (0.026)	0.021 (0.030)	-0.142*** (0.020)	-0.107*** (0.023)	0.044** (0.017)	-0.012 (0.020)	0.008 (0.017)	-0.034 (0.020)
Constant	2.483*** (0.012)	2.966*** (0.087)	0.578*** (0.010)	0.674*** (0.072)	0.269*** (0.008)	0.458*** (0.059)	0.271*** (0.008)	0.417*** (0.060)
	(n = 10,259)	(n = 9,710)	(n = 10,299)	(n = 9,748)	(n = 10,288)	(n = 9,734)	(n = 10,286)	(n = 9,735)
Hispanics (compared to white participants)	-0.002 (0.026)	-0.010 (0.033)	-0.160*** (0.021)	-0.145*** (0.026)	0.068*** (0.018)	0.007 (0.021)	0.033 (0.017)	-0.005 (0.021)
Constant	2.501*** (0.013)	3.098*** (0.108)	0.596*** (0.012)	0.769*** (0.089)	0.245*** (0.010)	0.410*** (0.067)	0.247*** (0.010)	0.318*** (0.067)

P-values: ≤ 0.001 = *** ≤ 0.01 = ** ≤ 0.05 = *	
OLS coefficient (Std. error)	Logit coefficient (Std. error) Log Odds ratio (Std. error)

Table 1.2: General Experiences with Healthcare System Among Hispanics

	1A: Hard to understand healthcare process		**1B: Had to speak up to receive proper care**		**1C: Received lower quality care than other patients**		**1D: Experienced less respect from providers**	
	No controls (n = 3,591)	Income Tier, Census Region, Years in U.S., Education Tier (n = 3,416)	No controls (n = 3,610)	Demographic controls (n = 3,432)	No controls (n = 3,604)	Demographic controls (n = 3,424)	No controls (n = 3,607)	Demographic controls (n = 3,428)
Spanish Dominant	-0.161**	-0.173*	-0.239***	-0.281***	-0.010	-0.134**	-0.063	-0.154**
	(0.056)	(0.082)	(0.042)	(0.058)	(0.036)	(0.050)	(0.036)	(0.054)
Bilinguals	-0.001	-0.035	-0.058	-0.121**	0.078*	0.017	0.037	-0.017
	(0.054)	(0.058)	(0.041)	(0.042)	(0.035)	(0.036)	(0.035)	(0.037)
Constant	2.545***	3.104***	0.526***	1.141***	0.285***	0.816***	0.283***	0.635***
	(0.037)	(0.178)	(0.028)	(0.148)	(0.022)	(0.120)	(0.023)	(0.127)

P-values: ≤ 0.001 = *** ≤ 0.01 = ** ≤ 0.05 = *	
OLS coefficient (Std. error)	Logit coefficient (Std. error) Log Odds ratio (Std. error)

Table 2: Preference for and Experience with Ethnically and Linguistically Concordant Care

	2A: Ethnic concordance preference		**2B: Prior ethnic concordance with provider**		**2C: Spanish language concordance preference**		**2D: Others' Spanish concordance need**	
	No controls (n = 3,610)	Income Tier, Census Region, Years in U.S., Education Tier (n = 3,431)	No controls (n = 3,605)	Demographic controls (n = 3,425)	No controls (n = 3,615)	Demographic controls (n = 3,436)	No controls (n = 3,613)	Demographic controls (n = 3,433)
Spanish Dominant	0.725*** (0.055)	0.575*** (0.079)	0.595*** (0.139) 1.812*** (0.252)	0.853*** (0.194) 2.348*** (0.455)	1.597*** (0.048)	1.398*** (0.079)	1.014*** (0.143) 2.757*** (0.395)	0.941*** (0.211) 2.564*** (0.541)
Bilingual	0.134*** (0.042)	0.068 (0.047)	0.300* (0.127) 1.349* (0.172)	0.378** (0.139) 1.459** (0.202)	0.479*** (0.043)	0.413*** (0.047)	1.196*** (0.135) 3.308*** (0.447)	1.156*** (0.148) 3.178*** (0.469)
Constant	2.160*** (0.025)	2.53*** (0.169)	0.030 (0.088) 1.031 (0.090)	0.335 (0.420) 1.399 (0.588)	1.798*** (0.025)	2.258*** (0.157)	-0.86*** (0.100) 0.425*** (0.043)	0.075 (0.440) 1.077 (0.474)

P-values: ≤ 0.001 = *** ≤ 0.01 = ** ≤ 0.05 = *	
OLS coefficient (Std. error)	Logit coefficient (Std. error) Log Odds ratio (Std. error)

Table 3: Comparison between Concordant vs. Non-concordant Care

	3A: Concordant provider taking symptoms & concern seriously		**3B: Treated with more respect from concordant provider**		**3C: Received better quality care from concordant providers**		**3D: Concordant provider acted in patient’s best interest**	
	No controls (n = 3,596)	Income Tier, Census Region, Years in U.S., Education Tier (n = 3,421)	No controls (n = 3,591)	Demographic controls (n = 3,415)	No controls (n = 3,594)	Demographic controls (n = 3,419)	No controls (n = 3,590)	Demographic controls (n = 3,414)
Spanish Dominant	0.145*** (0.033)	0.066 (0.058)	0.102** (0.033)	0.121* (0.054)	0.148*** (0.029)	0.057 (0.042)	0.079* (0.031)	0.123* (0.052)
Bilinguals	0.049 (0.029)	0.006 (0.035)	0.055 (0.030)	0.036 (0.034)	0.067** (0.026)	0.009 (0.028)	0.044 (0.029)	0.043 (0.032)
Constant	2.111*** (0.019)	2.370*** (0.121)	2.113*** (0.020)	2.245*** (0.115)	2.066*** (0.015)	2.519*** (0.094)	2.097*** (0.018)	2.232*** (0.116)

P-values: ≤ 0.001 = *** ≤ 0.01 = ** ≤ 0.05 = *	
OLS coefficient (Std. error)	Logit coefficient (Std. error) Log Odds ratio (Std. error)

Table 4: Perceptions and Causes of Ethnic Group Health Outcomes

	4A: Ethnic group's outcomes have improved in the last 20 yrs.		**4B: Limited access to quality medical care is a major cause**		**4C: Hospitals and clinics giving lower priority is a major cause**		**4D: Lack of cultural/linguistic communication is a major cause**	
	No controls (n = 3,570)	Income Tier, Census Region, Years in U.S., Education Tier (n = 3,397)	No controls (n = 3,586)	Demographic controls (n = 3,413)	No controls (n = 3,577)	Demographic controls (n = 3,403)	No controls (n = 3,592)	Demographic controls (n = 3,416)
Spanish Dominant	0.180** (0.067)	0.119 (0.094)	-0.253*** (0.055)	-0.144 (0.079)	0.044 (0.054)	-0.022 (0.075)	-0.098 (0.053)	-0.060 (0.075)
Bilinguals	-0.037 (0.057)	-0.089 (0.060)	0.046 (0.050)	0.056 (0.052)	0.103* (0.051)	0.072 (0.054)	0.032 (0.050)	0.037 (0.052)
Constant	3.489*** (0.038)	3.924*** (0.202)	2.315*** (0.036)	2.432*** (0.159)	1.836*** (0.036)	2.252*** (0.162)	2.252*** (0.034)	2.477*** (0.159)

P-values: ≤ 0.001 = *** ≤ 0.01 = ** ≤ 0.05 = *	
OLS coefficient (Std. error)	Logit coefficient (Std. error) Log Odds ratio (Std. error)

Table 5: Citizenship Concerns with Friends & Family

	5: Have friends or family members who worry about their legal status when accessing healthcare	
	No controls (n = 3,609)	Income Tier, Census Region, Years in U.S., Education Tier (n = 3,428)
Spanish Dominant	1.743*** (0.165) 5.717*** (0.942)	1.184*** (0.226) 3.268*** (0.738)
Bilinguals	1.356*** (0.160) 3.880*** (0.620)	1.059*** (0.171) 2.883*** (0.492)
Constant	-1.946*** (0.128) 0.143*** (0.018)	-0.483 (0.506) 0.617 (0.312)

P-values: ≤ 0.001 = *** ≤ 0.01 = ** ≤ 0.05 = *	
OLS coefficient (Std. error)	Logit coefficient (Std. error) Log Odds ratio (Std. error)

VI. Discussion

a. Study Findings

Five main patterns can be parsed out from this research: 1) strong preferences for ethnic and linguistic concordance; 2) mixed impacts of ethnic concordance; 3) centrality of respect in clinical spaces; 4) intersectionality of inverse results; 5) attention to citizenship and family.

As originally hypothesized, Spanish-dominant Hispanics (SDHs) are highly statistically significantly more likely to prefer a Spanish-speaking, Hispanic provider than English-dominant Hispanics (EDHs), and they are more than twice as likely to have previously had an ethnically concordant provider, as well as, have family or friends who need a Spanish-speaking providers. Bilinguals are more likely to have had a concordant provider and do prefer Spanish-language concordance than EDHs, but less intensely than SDHs. However, they are more than 3 times more likely than EDHs to know friends and family with linguistic needs. They do not hold the same preference for ethnic concordance as SDHs do. It cannot be emphasized enough, but the preferences of individual patients matter deeply. In the interviews conducted with Hispanic youth by Garcia and Duckett, they found "It's hard to get care when you don't speak English" and "Care is better when we can communicate in Spanish" (2009). These assertions among Hispanic youth are substantiated by other research demonstrating both the verbal and physiological impacts of language in clinical reports of pain. Language is more than just the literal means of communication; it holds vital cultural and semantic meaning for individuals, even those who are bilingual in both English and Spanish (Gianola, Llabre, and Losin 2020).

Interestingly, when comparing ethnically concordant vs. non-concordant care, there were mixed results, which the original hypothesis had not accounted for. SDHs were statistically significantly more likely to report that concordant care led to more respect and feeling that the provider was acting in their best interest. However, SDHs after controlling for demographic characteristics did not report that concordant providers specifically took their symptoms more seriously nor generally provided better quality care. Bilinguals reported that none of these categories were improved (nor harmed) through ethnically concordant care as compared to EDHs, which coordinates well with the finding that bilinguals did not have a significant preference for ethnic concordance. In part, this finding is supported by the mixed body of research on the benefits of ethnic concordance, especially in Hispanic dyads (Meghani et al.

2009; Blanchard, Nayar, and Lurie 2007; Saha, Arbelaez, and Cooper 2003). In other studies, racial concordance has shown astounding benefits in preventative care and in health outcomes minute for minute (Alsan, Garrick, and Graziani 2019; Takeshita et al. 2020). It appears that the body of research dedicated to racial and ethnic concordance requires more investigation, and likely more specificity in who within ethnic groups most benefits from concordant care.

Respect is a value enforced throughout Hispanic cultural practices and certainly extends into the patient-provider power dynamic, as mentioned before, SDHs rated ethnically concordant care as more respectful than non-concordant care. Hispanics are not quick to challenge the professional authority of their providers (Zamudio et al. 2017; Ma et al. 2014). This may be a major stressor among people who do not typically speak up or challenge providers and other authority figures. Hispanics were highly significantly unlikely to speak up to receive proper care as compared to all others in the study, and even more so when compared to only White respondents. When further separating Hispanics into language-dominance groups, the variation among Hispanics along linguistic lines becomes far clearer. English-dominant Hispanics (EDHs) were the most likely to report having spoken up with Spanish-dominant Hispanics (SDHs) being the least likely to do so, and bilinguals reported a frequency in-between. This was not originally hypothesized, but as the literature review expanded, it became clear that the deference to authority figures in clinical spaces was tied to central value in Hispanic culture (Zamudio et al. 2017; Ma et al. 2014) as compared to other questions asked in section 1.1 and 1.2 (e.g., quality of care, general accessibility).

Conversely, the first hypothesis asserted that Hispanics would rate the difficulty of accessing care as significantly more difficult than all others, and especially as compared to their white peers, and this was not supported by the data. The results showed no significant difference between Hispanics and non-Hispanics when asked about difficulty understanding the healthcare process, quality of care (after controlling for demographic factors), or perceived respect from providers. Furthermore, SDHs were significantly less likely to report difficulty with understanding the healthcare system, receiving lower quality care, or having less respectful interactions with providers. These are slightly surprising findings in the context of this study as bilinguals did not have significantly different opinions as compared to EDHs. Although it seems to indicate that SDHs may experience a mediating factor that leads them to generally rate their dissatisfaction less seriously than Hispanics more assimilated into American culture. As found in consistently lower self-rating of health among Spanish-speakers, there are linguistic and/or cultural values that are misaligned with the ways in which American, English-speaking participants self-rate health (DuBard and Gizlice 2008). It is entirely possible that similar reasons for downplaying one's own health status apply when rating experiences of care.

Additionally, the intersection of the "healthy migrant" phenomenon may bias the sample SDHs who are accessing care at all (DuBard and Gizlice 2008; Edberg, Cleary, and Vyas 2011). If SDHs in this study are uncharacteristically healthier than their bilingual or English dominant peers, they may really have never experienced lower quality care or disrespect. This is also feasible considering the wording of the answers to these questions (1B-1D): "No, never happened," "Yes, but not recently," or "Yes, recently," which assumes that all respondents are accessing care frequently or at all in the U.S. context. This cannot be assumed for recent migrants who may face numerous barriers to accessing care and may have selected "No, never happened" with the interpretation of the question that they have never been to an American clinic. When controlling for years spent in the U.S., the significance of these results appears or grows, which indicates there is a basis of this pattern beyond time as a driver of acculturation among Hispanics. SDHs, as a linguistically distinct group, approach this rating differently than other Hispanics in this study. I hypothesize that the intersection of the healthy migrant phenomenon, more average-to-low rating of health in all respects, and respect towards professional clinicians, all impact SDHs to rate these particular concerns as occurring less frequently.

In the final conclusion, SDHs were 3.3 times more likely to report having friends or family who worried about their own citizenship status when accessing care as compared to EDHs. Bilinguals were 2.9 times more likely to report the same. This highlights the importance of legal status when assessing serious barriers to health treatments, while also possibly reinforcing the importance of familial bonds among Hispanics in healthcare processes. The knowledge alone of friends' and family members' private legal concerns connects to the value of social ties that has been shown to be a major determinant of decisions among Hispanics (Garcia and Duckett 2009; Torres et al. 2017; Evans, Coon, and Crogan 2007; Katz et al. 2011; Ma et al. 2014). Additionally, the analysis of ethnic group outcomes provided no results of significance or difference between linguistic groups of Hispanics, despite the original hypothesis that SDHs would rate difficulty accessing care, lower quality of care, and particularly cultural and linguistic miscommunication as major factors in group health outcomes.

The most significant finding is that there is a demand among bilinguals for language concordance, and among SDHs for language concordance and ethnic concordance. The origin of some of the more surprising findings can be related back to the importance of respect in Hispanic communities along with the unique intersection of identities to impact health access and outcomes. Finally, citizenship (of lack thereof) remains a key consideration for many.

b. Implications for Improved Care

These social and cultural determinants of health are not just a theoretical issue to explore. One study from 2009 estimated that inequality in the health sphere accounts for $1.24 trillion in avoidable losses. “They estimate that eliminating health disparities for minorities would have reduced direct medical care expenditures by about $230 billion and indirect costs associated with illness and premature death by more than $1 trillion for the years 2003-2006 (in 2008 inflation-adjusted dollars)” (LaVeist, Gaskin, and Richard 2011). The implications of studies like mine are not just socially important but also fiscally critical. Participatory care, trust, knowledge of life story, and respect are all components of care that are central to a relationship-based delivery and are consistently experienced less frequently by non-white patients. Racial and ethnic concordance have been proposed as "easy" fixes to the main components of low-quality care, as has continuity of patient-provider relationship over time, which presents a promising solution for non-concordant dyads (Cooper et al. 2006; Nelson 2002).

Racial and ethnic concordance may not always be the most central factors to patient experience, and studying health outcomes opens the door for more qualitative approaches for both patients (health literacy) and providers (cultural competency) regardless of ethnic dis- or concordance. With the goal of improving care, “experts in cross-cultural education have cautioned that the essence of cultural competence is not mastery of “facts” about different ethnic groups, but rather a patient-centered approach that incorporates fundamental skills and attitudes that may be applicable across ethnic boundaries” (Saha, Arbelaez, and Cooper 2003). However, the goal is not to assimilate the high-context group into the dominant American model through sheer force; instead, providers and networks need to work to bridge the gap between high and low-context individuals with the providers engaging in serious cultural literacy practice to ensure that patients feel heard, have their time respected, and can build meaningful interpersonal relationships with their medical providers (Park et al. 2018). Conventional education focuses on changing the attitudes of minority populations, which assigns blame to those already struggling against systemic discrimination and illness. Instead, intercultural education values varied approaches to health that impart sensations of bodily autotomy and independence that are key to a healthy life (Almaguer González, Vargas Vite, and García Ramírez 2014). Language concordance is a necessary first step towards building trust and good communication, which is especially important for high-context individuals, but serious understanding of cultural literacy and humility is needed on the provider side for LEP patients to have their holistic health needs met. It is not enough to simply focus on the biomedical tasks required when patients with collective attitudes and a desire for human-to-human connection arrive in clinics (Park et al. 2018).

For LEP patients, there are federal protections detailed in Title VI , the legally binding ruling from 1964 that prohibits discrimination on the basis of national origin. While the regulations only apply to healthcare delivery systems receiving Federal funding, the reach of the U.S. Department of Health and Human Services is far. The majority of organizations across the States have some federally funded project, which makes them liable to follow Title VI regulations. The largest issue with LEP patient care is the situationally influenced requirements. All care organizations are “required to take reasonable steps to ensure meaningful access to their programs and activities,” but what does that really mean? It depends on four main factors: 1) proportion of LEP patients in care pool; 2) frequency of contact with those patients; 3) nature and importance of services provided; 4) cost and availability of services. These four markers create a unique profile for every care organization and dictate (with serious flexibility) the actionable amount of interpretation/oral and translation/written services that must be provided. Additionally, providers need to identify and address the personal needs of individuals with LEP to deliver high-quality, unbiased care within the scope of services available to them (Office for Civil Rights 2008).

In more recent years, the Office of Minority Health has documented in detail the best practices for equitable care implementation across all Americans to reduce health inequality and poor health outcomes. They purport that ethical and equitable care delivery to all Americans will in turn assist business practices to deliver the highest-quality and lowest-cost care in competitive markets. The implementation of linguistically and culturally component care has been far slower than the ever-changing demographics of the U.S. population, which contributes to the delivery of less-than-ideal care to Americans, but specifically, minority racial and ethnic groups (Office of Minority Health 2013). Interpretive services such as Google Translate and MediBabble serve as low-cost solutions to the common need for language interpretation across geographic locations. However, even these services have limitations and are not the same as face-to-face conversation and mutual understanding. Although, in rapidly changing demographics across the world, they can be serious aids to major language gaps that could result in low satisfaction and harmful outcomes (Al Shamsi et al. 2020; González et al. 2022; Nelson 2002). However, there is no standardized mechanism for assessing the language proficiency of the provider in concordant dyads. This is a pervasive issue across medical spaces that do not allow for serious language barrier reduction through true (native level) fluency of the provider or authenticated interpretive services. This major gap within individual hospitals makes it difficult to self-assess the quality of care delivered to LEP patients and makes it even more difficult to assess national trends in the efficacy of language concordance (Diamond et al. 2019).

While virtual interpretation is an available fix to the limited availability of bilingual providers and clinics, the true goal is diversifying healthcare workers (Nelson 2002; González et al. 2022) including the supporting staff in healthcare clinics (Blanchard, Nayar, and Lurie 2007). By increasing the proportion of ethnically diverse healthcare providers to better match the communities they serve, true value can be placed on multiculturalism. And, despite astounding technological advances, face-to-face conversation with bilingual providers is the gold standard in terms of patient experience. There is not yet a substitute for the trust that comes from speaking the same language (Steinberg et al. 2016; Evans, Coon, and Crogan 2007). Particularly among SDHs, Spanish-proficient providers are a necessary and desired component of regular healthcare.

c. Limitations

The Pew Research Center approach that did not ask all participants every question limited the comparability of Hispanic experiences to those of white or non-Hispanic respondents. Aside from Q1, the only "control" group was EDHs, which provided great insights into the experiences of those most assimilated into the cultural and linguistic landscape of the United States, but an even more stark comparison could have been investigated if answers had been collected from all 14,497 participants. Additionally, while the study is relatively generalizable to the larger U.S. population, the pool of Hispanics surveyed could have been larger. Finally, some of the questions, particularly those asking about ethnic group health outcomes, were broad or vague, and produced no results of interest, which is not inherently a limitation. However, there are many complicating factors (health migrant phenomenon, lower scoring among Hispanics) that could have contributed to nonsignificant results but were not explicitly asked during data collection.

VII. Conclusion & Future Research

The implications of these findings reside within the larger frameworks of social determinants of health, explanatory models of sickness and healing, and racism and colorism in the United States with a historical background beginning during the colonialization of the Americas with the imposition of Spanish across indigenous, African, and mixed populations. Hispanics are an incredibly diverse group of supposedly ethnically similar peoples who have unique characteristics, and therefore their own needs and values in the healthcare sphere. These differences are valuable to investigate, not with the goal to squash cultural variation, but instead to hold space for social and cultural practices in clinical spaces. The manifestations of Hispanic culture can be explored through communal values, individual health behaviors, and personal narratives of health. Although, most critically, language must be highlighted as a critical component of healthcare. Language is culture, and culture gatekeeps access to health. At the most fundamental level, individuals must have the ability to communicate with their providers; therefore, a common language is required to have successful clinical encounters.

While limited English abilities are often a monumental barrier to quality care, there are other complicating factors such as citizenship, recent migration, and culturally distinct conceptualizations of care that make Hispanics particularly vulnerable to clashing with the American healthcare system. Particularly among recent immigrants and refugees, Edberg, Cleary, and Vyas supply a comprehensive trajectory for cultural and medical integration by addressing nine domains of interest: mitigating migration experience, promoting healthy acculturation, improving socioeconomic status, encouraging social networks, improving neighborhood environment, addressing health status, educating on health knowledge/practices, opening access to care, and limiting discrimination (Edberg, Cleary, and Vyas 2011). Despite the original authors considering newer migrants, the majority of these concepts can be applied to the larger Hispanic population in the United States. I propose adding a directive to value individuals' national affiliation and identity that may be more specific than "Hispanic" or "Latino/a." The acknowledgment of national origin identity can better isolate the distinct cultural practices within the Hispanic population while also demonstrating the systemic valuing of more complex identities.

The combination of linguistic dominance and nationality will improve the applicability of future studies along with the feasibility of implementing targeted interventions in clinical environments. Health is determined by much more than just medical care; it is a compounding intersection of social, cultural, and environmental factors that creates distinct yet trackable patterns among populations. Hispanics are a growing minority, and the work to incorporate their needs and preferences practically into the complex American system has never been more critical.

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IX. Appendix

a. Question Bank

Q1A (BIO53_W100 – easeProcess): Do you think the process for getting medical care at hospitals and medical centers is generally easy or hard to understand?

1. Very easy to understand
2. Easy to understand
3. Hard to understand
4. Very hard to understand

Q1B (BIO54_b_W100 – hadToSpeakUp): Thinking about problems people may face when getting health care, have any of the following happened to you when dealing with doctors or other health care providers? B: You had to speak up to get the proper care.

Q1C (BIO54_e_W100 – lowerQuality): Thinking about... E: Felt you received lower-quality care than other patients.

Q1D (BIO54_d_W100 – lessRespect): Thinking about... D: Felt you were treated with less respect than other patients.

0. No, never happened
1. Yes, but not recently
2. Yes, recently

Q2A (BIO55_W100 – concordancePref): Would you prefer to see a doctor or other health care provider for routine care who is of your ethnic background?

Q2C (BIO57_W100 – spanishConcordance): Do you prefer to see a doctor or other health care provider for routine care who speaks Spanish?

1. Prefer not
2. Neutral

3. Somewhat prefer
4. Strongly prefer

Q2B (BIO56_W100 – haveConcordance): Have you ever seen a doctor or other health care provider for routine care who was of your racial background?

Q2D (BIO58_W100 – othersSpanNeed): Do you have a close friend or family member who needs a Spanish-speaking health care provider or translator?

0. No
1. Yes

Q3A (BIO59_a_W100 – comparisonSymptomCare): Do you think a doctor or health care provider who is of your racial background is better, worse, or about the same as other health care providers at each of the following? A: Taking your symptoms and concerns seriously.

Q3B (BIO59_b_W100 – comparisonRespect): Do you think a doctor... B: Treating you with respect.

Q3C (BIO59_c_W100 – comparisonQuality): Do you think a doctor... C: Providing you with the best quality medical care.

Q3D (BIO59_d_W100 – comparisonBestInterest): Do you think a doctor... D: Looking out for your best interests.

1. Worse than other doctors
2. Same as other doctors
3. Better than other doctors

Q4A (BIO60_W100 – racethOutcomes): Thinking about the past 20 years, would you say health outcomes for people of your racial background have...

1. Gotten a lot worse
2. Gotten worse
3. Stayed the same
4. Gotten better
5. Gotten a lot better

Q4B (BIO61_a_W100 – outcomesAccess): How much of a reason is each of the following for why people of your racial background generally have worse health outcomes than other adults in this country? A: They have less access to quality medical care where they live.

Q4C (BIO61_d_W100 – outcomesPriority): How much of a reason... D: Hospitals and medical centers give lower priority to their well-being.

Q4D (BIO61_f_W100 – outcomesMiscom): How much of a reason... F: There are more communication problems from language or cultural differences.

1. Not a reason
2. A minor reason
3. A major reason

Q5 (BIO62_W100 – citizenshipWorry): Do you have a close friend or family member who worries about their legal status in the U.S. when thinking about going to see a health care provider?

0. No
1. Yes