

# The Attitudes and Perspectives of Filipino-Americans Regarding Speech and Language Disorders

By

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Anna Nicole C. Aniel  
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Chairperson: Mindy Bridges, Ph.D., CCC-SLP

---

Co-Chairperson: W. Matt Gillispie, Ph.D., CCC-SLP

---

Ana Paula Mumy, M.S., CCC-SLP

---

Jane Wegner, Ph.D., CCC-SLP

Date Defended: 27 April 2020

The thesis committee for Anna Nicole C. Aniel certifies that this is  
the approved version of the following thesis:

## The Attitudes and Perspectives of Filipino-Americans Regarding Speech and Language Disorders

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Co-Chairperson: W. Matt Gillispie, Ph.D., CCC-SLP

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Co-Chairperson: Mindy Bridges, Ph.D., CCC-SLP

Date Approved: 27 April 2020

## Abstract

The study investigated Filipino-Americans' cultural knowledge and perspectives of stuttering, speech sound disorders, and users of augmentative and alternative communication (AAC). The study's research questions included: (1) How familiar are Filipino-Americans with speech and language disorders? (2) What are their cultural ideas of etiology of speech and language disorders? and (3) What are the cultural beliefs regarding treatment of speech and language disorders? Using snowball or chain-referral sampling, leaders of several Filipino-American Organizations/Associations across the United States were contacted through social media platforms and asked to disseminate an anonymous, online survey provided in either English or Tagalog language. The survey consisted of a demographic questionnaire and statements related to speech and language disorders. One-hundred-sixty-six (166) Filipino-Americans representing 24 states completed the survey and provided their level of agreement to 60 statements about stuttering, speech sound disorders, and AAC. The level of agreement to these 60 statements were analyzed to provide insight into Filipino-Americans knowledge and perspectives of etiology and treatment for people with speech and language disorders. This information should contribute to Filipino-Americans' cultural perspectives and inform speech-language pathologists' clinical obligations to demonstrate culturally competence.

*Key words:* Filipino, Filipino-Americans, cultural beliefs, attitudes, perspectives, stuttering, speech sound disorders, augmentative and alternative communication, speech language disorders, speech language pathology

## Dedication

As completing this thesis became one of my biggest accomplishments, I would like to dedicate this to *Nanay, Kuya, Mama, Tito,* and *Lolo* Obet. Their unconditional love, guidance, and support have helped me have confidence in myself.

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## Chapter 1: Introduction

As the United States of America declared its independence almost 244 years ago, an evolution of its demographics into a dynamic blend of world cultures and subcultural groups, including people of color with ancestry from Africa, Asia, South and Central America, and the Pacific Island regions of the world also occurred (Bowie, Hall, & Johnson, 2011). As of 2019, most systems of the United States (U.S.), whether related to government, health, education, or something else, were developing and continuing to be influenced by different cultures. There is a growing desire within many professions in the U.S. to attend to a broader diversity of perspectives including professions related to education and healthcare. For example, the American Speech-Language-Hearing Association (ASHA), the national credentialing body of Speech-Language Pathologists (SLPs) and Audiologists (AuDs), has made strides to increase the diversity and cultural competence of its members. Their definition of cultural competency “involves understanding and appropriately responding to the unique combination of cultural variables and the full range of dimensions of diversity that the professional and client, patient, or family bring to interactions” (ASHA, 2018). ASHA believes that “developing cultural competence is such a dynamic and complex process that [requires] on-going self-assessment and continuous expansion of one’s cultural knowledge” (2018).

Many practicing professionals need and desire more information about how the cultures of their clients may affect service delivery, therapy, and counseling (Bebout & Arthur, 1997). Having knowledge of the culture of their clients is an important factor in client-therapist relationships and therapeutic work as well as knowing their perspectives and/or attitudes toward speech and language disorders. The perspectives and/or attitudes of the client or prospective

client, the client's family, and the client's community toward the causes, effects, and treatment of the disorder can be crucial in the therapeutic process (Bebout & Arthur, 1997).

Due to an increasing diversity in the U.S., SLPs are more likely to encounter challenges in providing effective services to clients with cultural backgrounds different from their own (Bebout & Arthur, 1997). It is significant that SLPs understand and consider the personal beliefs, needs, and attitudes of their clients when providing treatment or services. SLPs who serve clients from cultural backgrounds who are not familiar with them may encounter culturally-influenced attitude differences. There could also be times that the person or family members may exhibit a negative emotional response when someone is faced with a communication disorder (Kuo & Ku, 2002). Therefore, counseling strategies are necessary skills SLPs should employ during treatment due to the negative emotional reactions some individuals experience when diagnosed with communication disorders (Millar, Harrow, & Morgan, 2010). As Tomoeda and Bayles (2002) emphasized, "cultural beliefs [may] affect how [people] describe their health problems, the manners in which they present their symptoms, whom they seek for health care, how long they remain in care, and how they evaluate the care provided." A cultural gap between clients and service providers may raise potential problems hence the implications of them improving their multicultural counseling skills are tied directly and indirectly to the effectiveness of their service delivery to their clients (Millar et al., 2010). When serving patients and their families, it is important to keep their cultural values and beliefs in mind, because they will influence how the patient and the family will interpret test results, diagnoses, recommendations, and how they involve themselves during the intervention (Hidde, Harrington, & Routon-Michelinie, 2013).

### **Perspectives on Disability from Other Cultures**

There can be differences among cultural attitudes, beliefs, and values toward health and illness, including disability (Erickson, Devlieger, & Sung, 1999). Additionally, factors such as economic status, level of education, religious beliefs, and family background can influence cultural beliefs within an identified culture (Erickson et al., 1999). Therefore, multiple and different perspectives on disability exist and vary within different ethnic communities. These differences can impact the decision of someone as to whether to receive any services. Take for example, Thomas (2014) described the perspective of the population of an “invisible minority in New England” known as Cape Verde. The concept of disability remains a matter that is not readily or openly discussed (Thomas, 2014). She noted that “[since] the term “disability” is not easily translated into Portuguese or Creole, the term “dificiência” ... [which] means handicap person and the term “Quitodo” [which translates to] “poor thing” [are used instead]” (Thomas, 2014, p. 197). Due to the term “disabilities” being uncommonly known within the Cape Verdean population of Cape Verde and the U.S., the term “disabilities” as a concept is also uncommon (Thomas, 2014). A participant from the study noted how she does not refer to her daughter as having a disability because “disability is an American term and it has a dark cloud over the person” (Thomas, 2014, p. 197).

Moreover, Erickson et al. (1999) identified the attitudes of the Korean-American women toward disabilities, specifically their causes and treatment. These researchers identified Koreans’ religious beliefs as the foundation for cultural beliefs (Erickson et al., 1999). Traditional beliefs such as having contact with dead spirits, dead spirits entering the body, or receiving punishment for sins of former ancestors are common beliefs found in the Korean culture (Cheng, 1993). For example, a mother may cite the fact that her child has a disability because she attended a funeral during her pregnancy (Chan, 1986). Then, a Korean mother may blame the “spirit of a dead

horse” for entering her body during her pregnancies for the disorders of her two boys with intellectual disabilities (Chan, 1986). There is another citing from a mother who believed her son was emotionally disturbed because of his alcoholic grandfather (Chan, 1986).

While these particular examples may provide practical explanations of the Korean-American population and their beliefs in the spiritual world as the major influence of the causes of disabilities, generalization of these beliefs to this particular population should be avoided since it would be unwise to do so (Erickson et al., 1999).

This is a similar case when discussing another perspective, particularly the community of the Hmong. As this community also has its own perspective regarding disabilities, Anne Fadiman (1997) discusses one condition that is commonly known as a seizure disorder or epilepsy. Similar to the beliefs in the Korean culture regarding the cause of disabilities being related to the spiritual world, Hmong culture also has this belief, particularly regarding the spiritual origin of many illnesses. The term “quag dab peg” is the term commonly used to describe epilepsy within this culture (Fadiman, 1997). The Hmong Online Dictionary defines and translates each word in this phrase as “participation,” “evil spirit,” and “leave” ( n.d.). Anne Fadiman shared a story in her book to suggestively translated this term to “the spirit catches you and fall down” (1997). The Hmong population believes that having such a condition is a gift or a blessing due to having a connection to the spiritual world (Fadiman, 1997). Indeed, different perspectives exist, and India is one of the other countries that also has its own perspective about stuttering, a speech communication disorder.

### **Perspectives of Asian-Americans on Disability and Communication Disorders**

One speech disorder that has been documented in India since Vedic times (around 5000 BC to 200 BC) is stuttering. According to a study about perceptions of stuttering in India by

Subramanian and Prabhu (2005), there is an ancient system of Indian medicine called “Ayurveda” which contains references, medicines, and yogic practices that help people who stutter. Examples include yogic practice and breathing exercises to help those who stutter to produce clear and fluent speech (Subramanian & Prabhu, 2005). While this study provides one perception of how stuttering is treated in India, another study about the attitudes of the same speech disorder is completed in Taiwan. Shu-Lan Yang (2005) studied the attitude of the Taiwanese population about stuttering. Accordingly, people who stutter prefer to discuss their stuttering online through websites or forums because they are worried they will be labeled as stutterers if they seek treatment (Yang, 2005). At the same time, it is because the Taiwanese do not believe the clinicians can offer good quality services (Yang, 2005). Many people in Taiwan view stuttering as a truly negative label, as described by Mr. Hsi-Che Ho, a Taiwanese clinician known as the “Father of Stuttering,” who indicated that most of his clients would frequently state they “would rather have no arms than to suffer from stuttering” (Yang, 2005). With this study, Yang (2005) concludes that confidence of the clinicians or therapists may be affected due to their lack of solid training; therefore, it also immensely affects their confidence in treating the people of Taiwan (Yang, 2005).

These perceptions are often the reflection of the unique life of people in their own country. In Japan, they also have their own view of stuttering. A study by Iimuraa et al. (2018) shares that the country’s limited public awareness and knowledge towards stuttering are not unlike other countries. Accordingly, older people or those with higher levels of education are more likely to have relatively more knowledge of stuttering (Iimuraa et al., 2018). To add to that, due to the negative attitude towards the treatment of stuttering, Japanese were forced to live with stuttering rather than treat the problem; therefore, the history of treating such speech disorder

was known to be relatively short (Iimuraa et al., 2018). As these countries further illustrate the differences in their feelings, attitudes, or views toward stuttering as a communication disorder, it would be an unwise conclusion to generalize such information, especially given that all have their own history on how their perceptions have started. At the same time, these countries consist of people with different linguistic and cultural backgrounds hence their perceptions may also vary (Shames, 1989).

To investigate the attitudes of the Cantonese-American community towards speech disorders, Bebout and Arthur (1997) surveyed this specific population in their study. Within this community, a study focusing on misarticulation as one of the topics, probed some statements from the literature, and such statements include “people with speech disorders (i.e., phonological problems) are viewed differently than those without such disorders” (Bebout & Arthur, 1997). In accordance with the response of survey participants, it was found that people who contained a single error type in their speech (e.g., /w/ for /r/ as in “wabbit” for “rabbit”), whether elementary school children, teenagers, or adults, would likely be viewed more negatively and would be considered less intelligent, educated, or employable than their peers (Bebout & Arthur, 1997). In addition, children who had problems with articulation would likely be seen to benefit from treatment by nonmedical personnel and as most likely to be able to improve their own speech (Bebout & Arthur, 1997).

Even with the knowledge that the U.S. has always been culturally and linguistically diverse, these different views add to the fact that a variety of perspectives regarding disorders or conditions like communication disorders exist within different ethnic communities (Shames, 1989). While Hispanics may seem to be the largest cultural and linguistic minority group in the U.S., Asian-Americans are also showing a significant increase in many parts of the country

(Chan, 1992). The census demographics of the U.S. from 2018 revealed that 5.9% of the U.S. population identified as Asian only which followed the 13.4% who identified as Black or African American only (U.S. Census Bureau QuickFacts: United States). It is possible that Asian-Americans in the U.S. could double in the next few years; therefore, clinicians in North America, specifically in the U.S., will likely see more Asian patients or clients (Bebout & Arthur, 1997).

Shames (1989) emphasized that Asians are at times isolated by a few streets in densely populated cities of the U.S., many of them are trying to hold onto their native culture and language as they are also trying to cope with and function in accordance to the mainstream of the country. As much of this may be true, without a purpose of generalization, traditional Asian values include the expectation for children to obey and to be respectful to their parents, even as adults, and to conform to the belief system of the family (Kim et al., 2017). Answering back to the elders and performing something that is not in accordance with the family's expectations are a few of the uncommon practices of the Asian culture. Kim, Atkinson, and Umemoto (2001) conducted a study to review traditional Asian values where several familial-emphasized values were identified such as avoidance of family shame, conformity to family norms and expectations, filial piety, and commitment to maintaining family well-being.

For many families, the major source of identity of many Asians is placing strong importance on family connection, especially those who may be living in the U.S. (Carteret, 2010). Further, Fan (2014) tried to understand the home language that was mainly used at home of Chinese families in the U.S. through a survey. Consistently enforcing a rule of speaking the home language (i.e., Mandarin Chinese, Cantonese) at the home to their children was something that many Chinese parents do, even forcing the child to leave the table during meals if they happened to speak English was not uncommon (Fan, 2014). It was reported that 97.9% revealed

that home was mainly the place where children use their home language (Fan, 2014).

Additionally, 89.1% of respondents used their primary language to speak with their children at home while only 8.4% responded in English when their children talked to them in English (Fan, 2014). This study demonstrated how roles of the elders, in this case parents, were regarded respectively by their children.

Bebout and Arthur (1997) believed that to have the awareness and knowledge that many Asian-Americans maintain their linguistic and cultural ties with their ethnic origins is important for many, namely for clinicians or providers. Having more knowledge about Asian-Americans should be a high priority for many clinicians like speech-language therapists in the U.S., especially those who are unfamiliar with their cultures (Bebout & Arthur, 1997). Available studies regarding cultural attitudes toward disabilities in general or specifically toward communication disorders may have been completed, published, or are still in progress; however, other cultures remain unexplored, including Filipino-Americans. As one of the largest Asian groups in the state of South Dakota and mostly in the west of the U.S. (i.e., Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, New Mexico, Washington, and Wyoming) (USA Demographics, 2018), the cultural beliefs of Filipino-Americans, specifically related to communication disorders, should also be investigated.

### **The Philippines**

In order to better understand the Filipino culture and its effects on Filipino-American's perspectives on communication disorders, it is helpful to review the complex history of the Philippines. Even though it may already appear obvious that the Philippines consists of many islands just by looking at the map, a completed study of Mateo (2001) called *The Philippines: A story of a nation* specified that the country stretches over 1,100 miles from north to south (Figure

1), consisting of approximately 7,107 islands. Despite the numerous islands, Cajilog (2018) also completed a study and explained that the information on the history of the Philippines is dearth before the colonization of the islands. Prior to the colonization of the islands, there were numerous cultures within the islands because the people were known to be scattered among many islands in the country and in early times, there were many societies rather than one (Mateo, 2001). A book called *Brown Skin, White Minds: Filipino/American Postcolonial Psychology*, E. J. R. David (2013) also revealed that the culture of the indigenous people of the country, referred to as “Tao,” was documented to exist before the colonization and was separated by different tribes. Accordingly, there were tribes who lived in the flatter lands, by the ocean, and even in the mountainous areas (David, 2013). Mostly, they were known to have an expertise on how to hunt for food whether it may be in the mountains or ocean; build shelters out of bamboo, wood, nipa palm leaves, and even houses made on boats; and grow crops as evident through their developed irrigation system (David, 2013).

Figure 1

*Map of the Philippines.* “Provinces of the Philippines image map.” (2020). Available from *Wikipedia*. Retrieved on April 20, 2020



Regarding the development of the Tao culture, the “barangays” or tribes and villages that consisted of approximately 60 families were established and organized by the government system of Tao. For the betterment and development of the barangays altogether, laws were developed and implemented by the chief (David, 2013). Moreover, as “pook” which translates to a “place” was established as one barangay, those settlements with multiple barangays were equivalent to a “bayan” which translates to a “town” (Mateo, 2001). A writing system was later developed known as “Baybayin” to enhance and develop the literature as well as art (David, 2013). Due to the variance and diversity within the Tao tribes, different writing systems were used (David, 2013). Many Filipinos and Filipino-Americans often confuse the sounds of “F” and “P” when they speak and this may be influenced by the fact that Tao did not include the “F” sound (see Figure 2); thus, production of this may be unnatural for them (David, 2013). Then, the system of the spirituality of the Tao came after the inspiration of nature and their living environment (David, 2013). The people may be in different places within the archipelago; however, similar settlement patterns, an elaborate societal structure, a fondness for tattooing, belief in spirit worship, and many more counted as their themes and commonalities (Mateo, 2001). These may all be considered the identification marks of who and what may be considered as the Filipino culture (Mateo, 2001). As time progressed, the Tao culture advanced their society by building mutual respect of the land, nature, and all individuals while also having the knowledge of how to be resilient, independent, creative, resourceful, self-sufficient, and intelligent (David, 2013).

Figure 2

*Ancient Alphabet of the Philippines.* David, E. J. R. (2013). *Brown skin, white minds: Filipino/American postcolonial psychology.*

A		M	
B		N	
K		O	
D		P	
E		R	
G		S	
H		T	
I		W	
L		Y	

### ***Spanish Colonialism***

Following the almost entirely unheard history of the archipelago and its indigenous people, the most popular documented history of the country always begins with the discovery of a Portuguese explorer who was serving the Spanish crown named Ferdinand Magellan in 1521 (David, 2013). After Magellan's discovery of the islands, Spain continued to send expeditions and voyages to the islands which a Spanish explorer named Ruy Lopez de Villalobos later did in 1542 (David, 2013). Villalobos was the one who named a few of its islands as "Las Islas Filipinas" which easily translates to "The Philippine Islands" (i.e., Samar and Leyte) which then applied to other islands as well and calling its inhabitants "Filipinos" (Davis, 2013). This was to honor the son, Filip, of King Charles I, as the crown prince at that time of the Spanish throne (David, 2013). He later became the king of Spain as King Phillip II (David, 2013).

A memorable event that became an inspiration of many Filipinos to start revolutions and fight against Spain was when a wrongful death of a Filipino occurred: Jose Rizal. (Mateo, 2001). Rizal later became a national hero of the Philippines (David, 2013). During the 300 years of colonization and ongoing degradation of the culture of the Filipinos, the Philippines Revolution of 1896 occurred which won the freedom of many people from Spain (Mateo, 2001). As when the Philippines was beginning to have an independent government in place, transfer of ownership of the country was not a right of Spain anymore; however, due to the refusal of acceptance of the American and Spanish peace commissioners of the sovereignty of the Philippines during the meeting at the Treaty of Paris in 1898, the U.S. proceeded to take control of the country (Mateo, 2001).

### ***United States Colonialism***

The Philippines may have finished fighting for their independence against the Spaniards; however, they had to do it all over again to keep the sovereignty of their land against the U.S. (David, 2013). This occurred in 1899 until 1902 as the Philippines-American War, also known as the “Forgotten War” (David, 2013). After an estimate of 16,000 soldiers and 200,000 civilians were brutally murdered and killed, Filipinos had to surrender (David, 2013). Subsequently, the U.S. gained a complete control over the country and its inhabitants that lasted until 1913 (David, 2013).

Moreover, the U.S. “civilized” the Filipinos by giving them their “first bath” and “brush of education” (David, 2013, p. 29). At the time of their colonization, the Pacification Campaign was developed to establish nationwide schools with English-taught, Americanized, Western centric education efforts to “educate... uplift... civilize...and Christianize” the Filipinos (David, 2013). As part of their “benevolent” and “noble” effort, the American culture created a

propaganda that operated through scholarship opportunities for “promising Filipinos” to study in the U.S. (David, 2013). The education provided in these schools nationwide resulted in Filipinos to have negative views of themselves as always inferior to the outsiders of their own country, and it also propagated Filipinos to have an idea that moving to a different place would always be a better thing for them to do (David, 2013). Eventually, this program became one of the immigration waves of the Filipinos to the U.S. (Mateo, 2001), which is summarized later in this chapter.

### ***Japanese Colonialism***

As the Philippines was under the colonization of the U.S., Japan attacked the Philippines as a colony of the U.S. and began their invasion during World War II (Mateo, 2001). As the war continued, the forces of the Japanese attempted to take over the government of the Philippines and even declared pseudo-independence of the country from the U.S. (Mateo, 2001). The Japanese wanted Jose P. Laurel, the president of the Philippines at the time, to declare war against the U.S., but he refused (Mateo, 2001). However, to avoid more bloodshed in the country, Laurel compromised and allowed the Japanese military to use the Philippines as their military bases and economic resources (Mateo, 2001). Eventually, American forces returned to the Philippines and brought more vessels and soldiers (Mateo, 2001). Soon after, by late December of 1944, the islands of the Philippines were cleared of Japanese soldiers (Mateo, 2001). The fighting continued until late the following year and Japan surrendered to the U.S. and Philippines resistance forces (e.g., Japanese Imperial Revolution) in September 1945; however, similar to many wars that occurred in the Philippines, the country had lost many of its people due to deaths and land due to physical destruction (Mateo, 2001).

### *Immigration Waves of the Filipinos to the United States of America*

Through the painful, traumatic, shameful, and degrading events that occurred from the colonization by different countries, the immigration of Filipinos to the U.S. was more complex than the common “voluntary” immigration and far different from other communities in Asia (David, 2013). The Filipinos were likely the first Asians in the U.S. who carried an immigration history that came to exist because of wars and colonization (Strobel, 1996). Despite biased immigration policies and cheap labor demands, Filipinos still felt indebted to its colonizers (Cajilog, 2018). From immigration waves of the Luzon Indians; the Manila men; the pensionados; and the manongs to military families; students; and professionals, all of them came to existence due to the interconnected nature of the Philippines with its colonizers (Cajilog, 2018).

Accordingly, there are five documented Filipino immigration waves to the U.S. (Cajilog, 2018). Dated in 1587, the first documented presence of Filipinos in the U.S. was dozens of “Luzon Indians” as they were taken from the Philippines to Morrow Bay, California and used as free labor and mediators between the Spaniards and the Native Americans in the “New World” (Strobel, 1996). Then in 1763, there were Filipinos who were known as the “Manila men,” and this was another documented presence of Filipinos in the U.S. (Strobel, 1996). Manila men jumped ship to escape the Spanish galleons and settled in St. Malo, Bataria, Camp Dewey, and other places in Louisiana (Strobel, 1996).

As time progressed, the third immigration wave occurred during the early 1900s (Strobel, 1996). The “pensionados” were the Filipinos who participated in the colonial program of the U.S. (Strobel, 1996). As discussed earlier in this chapter, this program trained Filipinos to be leaders for future political roles in the colonial government through education (Strobel, 1996).

This wave was one of the major waves of the Filipinos to the U.S. (Cajilog, 2018). Due to the culture shock and discrimination that many Filipinos experienced in the American universities, many returned to the Philippines (Strobel, 1996). This led most of them to also fail and not complete their education; however, many also stayed in the U.S. to avoid the shame of returning home as “failures” (Strobel, 1996). This eventually followed by them finding and acquiring cheap labor jobs (Strobel, 1996).

Further, the immigration waves of Filipinos to the U.S. corresponded to the gradual growth of Filipinos in some careers, specifically, in health care settings (Cajilog, 2018). Filipinos as “skilled workers,” which were defined as positions such as teachers, doctors, nurses, and engineers were also included in the third wave of Filipino immigrants into the U.S. (Nadal, 2011). Since careers in health care settings are still desirable today, specifically careers in the nursing field, the Philippines had the highest number of nursing schools in the world hence providing the highest amount of nurses to the U.S. and leading the world in nurse emigration (Berg et al., 2004). Career choice was a great example of the continued influence that drove the immigration of Filipinos and was known as the easiest way to immigrate and secure success in the U.S. (Nadal, 2011).

Regarding the pensionados who remained in the U.S. after failing in school, their presence in the U.S. greatly influenced the fourth wave of immigration (Strobel, 1996). There was a large-scale cheap labor that occurred in Hawaii and California where many single male Filipinos became workers (Strobel, 1996). They were often employed as bellboys, houseboys, janitors, yard keepers, busboys, and farm hands (Strobel, 1996). As their population aged, these Filipinos were referred to as “manongs,” and some created many organizations from fraternities to unions to advocate for fair labor treatment (Strobel, 1996). During this time, anti-Filipino

sentiments grew as the single male Filipino population began to marry white women (Strobel, 1996). Therefore, the increasing number of “undesirable” Filipino men became “a threat to society” in the U.S. (Strobel, 1996, p. 3) and contributed to granting independence to the Philippines through the Tydings McDuffie Act of 1934 as a colony of the U.S. (Strobel, 1996).

This changed the immigration status of Filipinos in the U.S. from “nationals” to “aliens,” and forced Filipinos to either leave the U.S. or stay and enter in the U.S. military (Strobel, 1996). Many of them entered the military and created the first and second Filipino Infantry Battalion (Strobel, 1996). This contributed to the fifth wave of the immigration after World War II (Strobel, 1996). The Filipinos and Filipino Americans who fought for the U.S. returned to the U.S. with their families and dependents (Strobel, 1996). Soon after, around 276,000 Filipinos immigrated to the U.S. between 1966 and 1976 due to the increased quota for Asian countries from the Immigration and Naturalization Services (INS) in 1965 (Strobel, 1996). From 1971 to 1984, the numbers of Filipinos who immigrated to the U.S. increased dramatically (Cajilog, 2018). In 2011’s American Community Survey, Filipinos accounted for 4.5% (1.8 million individuals) of the total immigration to the U.S. (Migration Policy Institute, 2013).

Given the long history of colonization of the Philippines and the Filipino immigration waves to the U.S., it is possible that many Filipinos may still struggle with their colonial mentality as they may experience oppression as to where they are right now (David, 2010). Further, a sense of cultural mistrust may be developed by many of them and they may believe that painful, traumatic, shameful, or degrading events should always be avoided (David, 2010). Therefore, due to these inherently natural attitudes of Filipinos, they may be unwilling to acknowledge any events that may be encountered when utilizing any health care services (David, 2010).

## **Health Disparities in the United States of Filipino Americans**

As it should not be surprising, the medical treatment of people in the U.S. is known to be continuously and extensively different (Blackstone et al., 2011). Even though researchers have plenty of documents to signify the disparities in access and quality of care, the disparities over time remain persistent and health disparities also occur within the Filipino-American community (Cajilog, 2018; Blackstone et al., 2011).

As a result of assimilation, Filipinos ate higher rates of processed food with lower rates of activity (Ursua et al., 2013). As a key factor for cardiovascular disease, hypertension remains to be a growing public health problem (Ursua et al., 2013). Moreover, as a predictor for cardiovascular disease, hypertension is high for Filipino-Americans compared to other minority groups (Ursua et al., 2013). In accordance with that, it may be due to a number of potential risk factors such as the high rates of smoking and physical inactivity (Ursua et al., 2013). In addition, family history, stress, alcohol usage, sodium intake, and chronic health conditions may add to these potential risk factors (Ursua et al., 2013).

The Filipino-American community adjusts to the significant changes that they must experience as immigrants of the U.S. (Ursua et al., 2013). They believe that dietary changes, food affordability, food security, and a higher presence of meat and junk food in the U.S. are the causes of hypertension (Ursua et al., 2013). Research also revealed that Filipinos' low medication management, lack of culturally and linguistically appropriate screening and educational materials, limited knowledge of health care systems, and lack of health insurance contribute to their poor disease management (Ursua et al., 2013). Thus Filipino-Americans experience unfortunate health implications as there are a number of factors that affect their health disparities.

## **The Recent Origination of Speech-Language Pathology as A Profession**

Adding to the many health disparities that occur within Filipino-American community, there are also inequities that can result from a range of barriers that affect patients to a large extent with communication difficulties (Bartlett et al., 2008). Language as a barrier may be affecting the decrease of quality of care, but other barriers that possibly affect this are also difficult to identify due to the dearth of research, knowledge, and acknowledgment of speech and language disorders within the community (Bartlett et al., 2008).

Although Cheng, Olea, and Marzan (2002) believed that the field of speech-language pathology (SLP) in the Philippines has come a long way since its inception almost half a century, and noticeable changes and developments within the profession have occurred so far, some things still remain the same. Still, Filipinos are working on improving their sense of self-esteem by hiding their feelings of inferiority or insecurities from other people, including their fellowmen (David, 2013). There is a possibility that their cultural beliefs, social and family practices, and concepts may be adding to why some things have remained the same. Additional reasons may be due to the infancy of the SLP profession throughout the nation and limited access to services in the Philippines.

As of 2019, there are four documented institutions in the Philippines that offer SLP as a degree. A Bachelor's degree is the minimum requirement to practice the SLP profession in the Philippines and while it is not a graduate degree, it is similar to Master's level SLP programs in other countries (i.e., USA) (Cheng et al., 2002). Accordingly, the University of the Philippines-Manila (UP-Manila) is the first of many institutions in the country that grants a Bachelor of Science in Speech Pathology (BSSP) (Cheng et al., 2002). This program is a four-year undergraduate clinical science program and seeks to help students develop the basic

competencies needed to practice SLPs as independent clinicians in the Philippine setting (Cheng et al., 2002). Students in the BSSP program of UP-Manila are provided with multiple opportunities to work with professionals from the fields of rehabilitation science, education, psychology, and medicine (Cheng et al., 2002). As they are exposed to a variety of employment choices and work settings, they are also clinically trained through a program that provides SLP students a variety of opportunities to develop and practice their clinical skills in assessment and evaluation, treatment planning, clinical documentation, treatment implementation, decision-making, and interpersonal skills (Cheng et al., 2002). There has been an increase in the number of enrollees in the program from less than 5 per year to 25-30 (Cheng et al., 2002).

Over the years, the University of Santo Tomas, a Catholic university in the Philippines, has started to offer a Bachelor of Science in SLP as well. The Cebu Doctors University in Mandaue City then followed as the third institution to offer a similar degree through their Department of Speech and Language Pathology (DSLPP) (Bongcac, 2014). This started in June 2012 with 56 students and later increased by more than 50% (i.e., 133 students) (Bongcac, 2014). Moreover, at the time of this study, the latest institution to offer SLP as a college degree is the De La Salle Health Sciences Institute (DLSHI) in Dasmariñas City (Alcantara, 2014). This degree was launched in the first semester of the 2014-2015 school year and drew at least 39 students, which if compared to the UP-Manila's enrollees when it started (i.e., 4-6 students), the enrollees have definitely increased (Alcantara, 2014).

Given the number of institutions that offer SLP as a profession, the future of the field of SLP in the Philippines is promising given the creativity, resourcefulness, and unique experiences, and strong educational foundation of the Filipino SLPs (Cheng et al., 2002). Adding to that, a national credentialing body of SLPs in the Philippines, the Philippines Association of

Speech Pathologists (PASP), which is similar to the American Speech-Language-Hearing Association (ASHA) in the U.S., was established in 2014. This organization provides more information about the Speech Pathology profession and those who are interested in the profession. According to the PASP's official website (n.d.) at the time of this study, "[it] is a non-stock, non-profit organization that seeks to work for the advancement of (speech pathologists) SP as a discipline, as a service, and as a profession through further education and research." PASP (n.d.) "aims to ensure that SPs practicing in the Philippines are qualified, equipped with proper training and knowledge to provide quality service to their client." Additionally, this organization "sets the standards of practice and formulates the code of ethics for the profession" (PASP, n.d.). They also define speech-language pathology as "a branch of rehabilitation devoted to the study of human communication, its normal development and its disorders, [and] its concerned [involve] with helping children and adults who may have articulation, hearing, voice, fluency, swallowing difficulties and language disorders (PASP, n.d.).

Similar to other organizations, PASP has a membership for SLP students, professionals, or prospective students. With more detailed information, the "Certified Regular" is the membership for a person who practices the profession and who has fulfilled the requirements set by the PASP Membership Committee; "International Member" is then a local trained professional who intends to practice abroad or a foreign-trained professional who intends to practice the profession in the Philippines; an "Affiliate" is another membership where a graduate of this Bachelor's degree from an accredited university chose a different vocation but still wants to be involved and support the endeavors of the association; further, a "Graduate Member" is for an individual whose certified regular membership is still pending but would want to get involved in the activities of the association; and, finally, there is a membership for an individual who has

acquired the Bachelor's degree and has secured a Speech Pathology certification or licensure from professional organizations outside the Philippines (PASP, n.d.).

Despite the new academic programs, professional association, and progress made, there are still barriers to services including the dearth number of service providers, accessibility of services, and lack of awareness which may all be due to the infancy of the SLP profession in the country. With more specifics, the PASP's official website shares the number of service providers. At the time of this study, their official website lists that there are approximately 666 members in PASP including all types of memberships: 563 are certified regular members, 87 are graduate members, 5 are affiliate members, 11 are international members (see Figure 3). Furthermore, the PASP has a convenient directory to find providers in a specific area and according to this, it is divided into the three big island groups of the Philippines: Luzon, Visayas, and Mindanao (n.d.). The Philippines as a country is divided into 17 regions consisting of at least 142 cities: Luzon having the regions I, II, III, IV-A, IV-B, V, Cordillera Administrative Region (CAR) and National Capital Region (NCR); Visayas having the regions VI, VII, and VIII; and, Mindanao having the regions IX, X, XI, XII, XIII, and Autonomous Region in Muslim Mindanao (ARMM) (Bravo et al., 2014).

Figure 3

*Service Directory of SLP Services in the Philippines. Adapted from PASP (2020).*

Islands	Regions	City/Province	Institution	SLPs per institution		
Luzon	I (Ilocos)					
	II (Cagayan Valley)					
	III (Central Luzon)	Bulacan		2	2	
					3	
	IV-A (CALABARZON)	Batangas		3	1	
					5	
					9	
		Cavite		2		1
						3
		Laguna		3		3
						7
	Quezon Province			1	3	
					4	
	Rizal			1	4	
	IV- B (MIMAROPA)					
	V (Bicol)					
	CAR (Cordillera Autonomous)					
	NCR (National Capital Region)	Las Piñas		3	2	
					5	
					6	
		Makati		1	16	
		Mandaluyong		1	2	
		Manila		1	8	
Paranaque			4		10	
					1	
					1	
Pasig			2		1	
					8	
Quezon City				7	16	
					12	
	10					
	Available upon inquiry					
	3					
San Juan		1		4		
				7		
Taguig		1	9			
Visayas	VI (Western Visayas)	Iloilo	1	1		
	VII (Central Visayas)	Cebu	2	1		
				4		
VIII (Eastern Visayas)	Southern Leyte	1	2			
Mindanao	IX (Western Mindanao)	Zamboanga Del Norte	1	1		
	X (Northern Mindanao)					
	XI (Southern Mindanao)					
	XII Central Mindanao)					
	XIII (Caraga)					
	ARMM (Autonomous Region of Muslim Mindanao)					

Given all these regions of the country, each region consists of different cities as well, and according to the PASP directory around the time of this study, only a few regions for each island group have SLP providers who could provide services related to communication concerns. Take for example, Luzon being the largest island group with the most regions in the country, speech and language services are only available in regions III, IV-A, and NCR. Across these regions, the city of Bulacan in region III has two places where five SLP providers in total are available. Then, region IV-A has the cities or provinces of Batangas, Cavite, Laguna, Quezon Province, and Rizal, involving a total of 12 places where there is a total of 38 SLP providers. NCR, on the other hand, is the region where most SLP graduates work. Moreover, Metro Manila is the metropolitan area that contains the City of Manila, the capital of the Philippines (Bravo et al., 2014). With this being true, there is a total of 21 places across the cities of Las Piñas, Makati, Mandaluyong, Manila, Parañaque, Pasig, Quezon City, San Juan, and Taguig involving 138 SLP providers. There is an uneven distribution of practicing SLPs in the Philippines; therefore, others from different places must travel to the place where these SLP services can be obtained, which makes the accessibility of the SLP services a problem as well (Cheng et al., 2002). As it should not be surprising, the number of service providers across the Philippines is lacking hence limited access to such services, which also leads to a lack of awareness of the people.

As the Asian population grew faster than any other race group in the U.S. from a Census observation from year 2000 to 2010, Filipino became the second-largest detailed Asian group of the Asian only or multiracial population of 3.4 million (Hoeffel et al., 2012). Of all the groups that had a population of one million or more, Filipinos grew the second fastest by 44 percent from 2000 to 2010 (Hoeffel et al., 2012). They became the second largest in multiple states: Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, New Mexico, Washington, and

Wyoming (Hoeffel et al., 2012). These statistics contribute to the understanding of the changing racial and ethnic diversity of the U.S. as a nation (Hoeffel et al., 2012). As this still holds true up to the time of this study, SLPs in the U.S. are surrounded by cultural-linguistic diversity and are more likely to face the task of providing effective services to clients with cultural backgrounds different from their own (Bebout & Arthur, 1997). To add to this, among the cultural and linguistic groups, encountering Asians are likely to experience by the clinicians in North America (Bebout & Arthur, 1997). Now since the demographic change since 2010, including births, death, and immigration, there is a growing Filipino population expansion in recent years, which has clinical implications for SLPs working in the U.S. (Hamilton et al., 2018).

### **Research Questions**

The objective of this study is to contribute cultural information about Filipino's knowledge and perceptions of communication disorders for clinicians to consider in clinical practice. In addition, the researcher hoped the study would spread awareness about the profession of speech-language pathology, and the disorders or conditions that SLPs assess and treat. It is also expected that Filipino-Americans with different levels of acculturation will show different attitudes, perspectives, and knowledge towards stuttering, speech sound disorders, and use of augmentative and alternative communication (AAC). Further, information gathered from this study will not only contribute to the limited number of studies of speech-language pathology within the minority groups in the U.S., but also could encourage clinicians to become culturally competent by familiarizing or considering the cultures, especially those that are non-mainstream, of their clients. Therefore, the purpose of this study is to investigate and address the following research questions:

- (1) How familiar are Filipino-Americans with speech and language disorders?

- (2) What are their cultural ideas of etiology of speech and language disorders?
- (3) What are the cultural beliefs regarding the treatment of stuttering, speech sound disorders, and the use of AAC?

## **Chapter 2: Methodology**

### **Procedures**

Upon receiving approval from the Human Research Protection Program (HRPP) of the University of Kansas (See Appendix A), the researcher recruited participants by a snowball or chain-referral sampling, which included contacting different university and community leaders of several Filipino-American Organizations/Associations across the U.S. using social media platforms (i.e., Facebook groups and Facebook pages). Using the survey tool Qualtrics, an anonymous survey was then disseminated to these organizations and associations. Prior to participation in the survey, the researcher informed participants of the confidentiality and voluntary nature of their participation as well as the potential benefits and/or risks for participating through a brief description of the study sent to them (See Appendix B).

Additionally, an informed consent approved and sealed by HRPP was also embedded in the survey at the beginning and was required to be completed before any participant could continue to complete the survey (See Appendix C). Participants were aware that the researcher was available to answer general questions regarding the study at any given time. The anonymous survey remained open for approximately five weeks starting December 2019 and continuing until January 2020.

### **Measures**

The survey consisted of demographic questions and sections associated with three communication disorders: stuttering, speech sound disorders, and people with communication needs who use AAC (See Appendix D). Each section started with a brief definition of the disorder or the concept of AAC, written in nontechnical language, and an example of how a person with the disorder might sound when saying a sentence or an example of a scenario

demonstrating when a person might use an AAC device. Each section included 20 statements about the disorder or condition that were adapted from a survey used to assess the attitudes of Cantonese Americans toward speech disorders (Bebout & Arthur, 1997) and developed from personal and/or cultural beliefs, social and family practices/experiences, and concepts of some Filipinos, including the researcher. Participants rated each statement using a 4-point scale which indicated their level of agreement or disagreement with the statement. Further, each participant completed the survey in either English and Tagalog to ensure a participant pool with varying language skills and cultural perspectives (See Appendix E). The Tagalog version was translated by the researcher who is a native speaker of the language. The researcher also consulted with three other native speakers of the Tagalog language assuring that the desired meaning was conveyed properly, and the accuracy of the translation was finalized and approved. Additionally, aside from the researcher, a close consultation of the English version occurred through a review and pilot-testing by three native English speakers, all of whom had knowledge of the study. They were asked to provide feedback on the survey's ease of use, formatting, and clarity of instructions and terminology. Based on this feedback, changes or modifications were applied as needed.

### **Participants**

Filipino-Americans living in the U.S. of America were recruited using snowball or chain-referral sampling. The researcher contacted community leaders of several Filipino-American Organizations/Associations across the nation using social media platforms (i.e., Facebook groups and Facebook pages) and sent email invitations consisting of a link to the anonymous Qualtrics survey.

In all, 291 Filipino-Americans participated in the study. However, 98 participants were eliminated from analyses because their surveys were incomplete. Then, the participants who reported they were working as a speech-language pathologist and/or a physician were excluded from participating in the survey ( $N = 21$ ). When the informed consent was presented at the beginning of the survey, one participant informed they were not willing to continue while another was under the age of 18. All these participants were excluded and received an end survey message (See Appendix F). Four additional participants who completed the survey were excluded because they were not currently residing in the U.S. This reduced the total participants to 166, of which 92.8% ( $N = 155$ ) participated in English and 7.2% ( $N = 12$ ) participated in Tagalog.

Out of all the 166 Filipino-Americans who completed the survey and used in the analysis, 71.7% ( $N = 119$ ) participants were female and 28.3% ( $N = 47$ ) were male. The participants' age ranged from 18 to 61 years old and older. Forty-six percent ( $N = 77$ ) of participants were between 18-29 years old. Most participants ( $N = 145$ ) identified as one race while remaining participants considered themselves biracial ( $N = 17$ ) or multiracial ( $N = 4$ ) (i.e., including three or more races). See Table 1 for a summary of the participant ages.

Table 1

*Participants' Age Range*

<b>Age Range</b>	<b><i>N</i></b>	<b>Percentage</b>
<i>18-29 years old</i>	77	46.4%
<i>30-45 years old</i>	39	23.5%
<i>46-60 years old</i>	34	20.5%
<i>Over 61 years old</i>	16	9.6%
<b>Total</b>	<b>166</b>	<b>100%</b>

Participants also reported whether they obtained any education in the U.S. Almost three quarters (72.3%) of the participants reported they obtained at least one year to 17 years of education in the U.S. while the rest ( $N = 46$ ; 27.7%) of the participants reported they did not obtain any education in the U.S.. See Table 2 for a summary of the participant's years of education in the U.S.

Table 2

*Participants' Years of Education in the United States*

<b>Years Range</b>	<b><i>N</i></b>	<b>Percentage</b>
<i>0 years (not in the U.S.)</i>	<i>46</i>	<i>27.7%</i>
<i>1-6 years</i>	<i>32</i>	<i>19.3%</i>
<i>7-12 years</i>	<i>24</i>	<i>14.5%</i>
<i>13-18 years</i>	<i>47</i>	<i>28.3%</i>
<i>19 or more years</i>	<i>17</i>	<i>10.2%</i>
<b>Total</b>	<b>166</b>	<b>100%</b>

The researcher also obtained the participants' highest education level, of which 32.5% ( $N = 44$ ) of participants reported they completed or received this in the Philippines, and more than half of the participants ( $N = 67.5%$ ) marked in the U.S. Twenty-two percent ( $N = 36$ ) of participants completed a Graduate degree including but not limited to M.A., M.S., M.B.A., M.Ed., Ph.D., Ed.D., MD., JD., etc. Forty-five percent ( $N = 74$ ) of participants acquired their Bachelor's degree, 7.8% ( $N = 13$ ) earned their Associate's degree, 2.4% ( $N = 4$ ) reported "Other" and specified that they had "some college/certification," 22.9% ( $N = 38$ ) obtained their high school diploma or equivalent, and 0.6% ( $N = 1$ ) completed less than a high school diploma. See Table 3 for a summary of the participants' education level.

Table 3

*Participants' Education Level*

<b>Highest Degree Obtained</b>	<b><i>N</i></b>	<b>Percentage</b>
<i>Less than a high school diploma</i>	1	0.6%
<i>High school diploma or equivalent</i>	38	22.9%
<i>Other (some college/certification, no degree)</i>	4	2.4%
<i>Associate's Degree</i>	13	7.8%
<i>Bachelor's Degree</i>	74	44.6%
<i>Graduate Degree</i>	36	21.7%
<b>Total</b>	<b>169</b>	<b>100%</b>

The employment status of the participants was also collected. Out of all participants, 58.4% ( $N = 97$ ) were employed full time and/or working for at least 40 hours a week, 10.3% ( $N = 17$ ) worked part time and/or worked at least 20 hours a week, 9% ( $N = 15$ ) were unemployed, 14.5% ( $N = 24$ ) were students, and 7.8% ( $N = 13$ ) were retired.

All 166 (100%) participants resided in the U.S. at the time of the study, an inclusionary requirement for the study. The state with most participants was Kansas ( $N = 68$ ; 41%) followed by California ( $N = 27$ ; 16.3%), and Missouri ( $N = 9$ ; 5.4%). Table 4 provides a summary of the states represented in the study.

Table 4

*Participants' Representing State*

<b>Name of State</b>	<b>N</b>
<i>Arizona</i>	<i>1</i>
<i>Arkansas</i>	<i>3</i>
<i>California</i>	<i>27</i>
<i>Colorado</i>	<i>1</i>
<i>Connecticut</i>	<i>1</i>
<i>Delaware</i>	<i>1</i>
<i>District of Columbia</i>	<i>3</i>
<i>Florida</i>	<i>8</i>
<i>Georgia</i>	<i>2</i>
<i>Illinois</i>	<i>5</i>
<i>Kansas</i>	<i>68</i>
<i>Massachusetts</i>	<i>2</i>
<i>Michigan</i>	<i>1</i>
<i>Minnesota</i>	<i>4</i>
<i>Missouri</i>	<i>9</i>
<i>Nebraska</i>	<i>8</i>
<i>Nevada</i>	<i>1</i>
<i>New Jersey</i>	<i>7</i>
<i>New York</i>	<i>5</i>
<i>North Carolina</i>	<i>1</i>
<i>Oklahoma</i>	<i>2</i>
<i>Pennsylvania</i>	<i>3</i>
<i>Virginia</i>	<i>1</i>
<i>Washington</i>	<i>2</i>
<b>Total</b>	<b>166</b>

Participants then revealed the language(s) they could speak. They were allowed to choose more than one language and/or dialect. No participants were able to speak Tagalog only but 30.7% ( $N = 51$ ) of participants reported they spoke English only. There were more bilingual speakers ( $N = 85$ ; 51.2%) than monolingual speakers, of which 75 of the bilingual participants spoke English and Tagalog. Thirteen percent ( $N = 22$ ) were trilingual, and the remaining participants spoke multiple languages/dialects ( $N = 8$ ; 4.8%). Other languages and/or dialects spoken by the participants were Visaya ( $N = 10$ ), Spanish ( $N = 9$ ), Ilocano/Ilokano ( $N = 5$ ), Kapampangan ( $N = 4$ ), Bicolano/Bikolano ( $N = 3$ ), Mandarin Chinese ( $N = 3$ ), Ilonggo ( $N = 2$ ), Korean ( $N = 2$ ), American Sign Language ( $N = 1$ ), Arabian ( $N = 1$ ), Chavacano ( $N = 1$ ), French ( $N = 1$ ), German ( $N = 1$ ), Hebrew ( $N = 1$ ), Italian ( $N = 1$ ), Japanese ( $N = 1$ ), and Malagasy ( $N = 1$ ).

From the 166 participants of the survey, the majority were born in the Philippines ( $N = 113$ ; 68.1%) while only 31.9% ( $N = 53$ ) of them were born in the U.S. The researcher provided ranges when inquiring about the length of time each participant lived in the U.S. Almost half of the participants (49.5%) lived, have lived, or currently lived in the U.S. at the time of the study for at least 21 years. Thirty-four percent ( $N = 56$ ) of participants lived in the U.S. between 10 to 20 years, 9.6% ( $N = 16$ ) lived in the U.S. between four and nine years, and 7.2% ( $N = 12$ ) lived in the U.S. between less than a year and three years. Table 5 summarizes the number of years the participants lived in the U.S.

The generational levels of overall participants were also collected, of which 58.5% ( $N = 97$ ) participants were first generation (i.e., born in the Philippines and immigrated to the U.S. older than 8 years old), 7.8% ( $N = 13$ ) were 1.5th generation (i.e., born in the Philippines and immigrated to the U.S. at younger than 8), 32.5% ( $N = 54$ ) were second generation (i.e., born in

the U.S. while one or both parents were in the Philippines); zero participants were 3rd generation (i.e., born in the U.S. and parents were born in the U.S.), one participant (0.6%) was “born outside of the Philippines and the U.S. and had never lived in the Philippines,” while 0.6% ( $N = 1$ ) was “born outside of the Philippines and the U.S. and had lived in the Philippines.” See Table 6 for a summary of the participants’ generation level.

Table 5

*Participants’ Years Lived in the United States*

<b>Years Range</b>	<b><i>N</i></b>	<b>Percentage</b>
<i>0-3 years</i>	<i>12</i>	<i>7.2%</i>
<i>4-9 years</i>	<i>16</i>	<i>9.6%</i>
<i>10-20 years</i>	<i>56</i>	<i>33.7%</i>
<i>21 or more years</i>	<i>82</i>	<i>49.5%</i>
<b>Total</b>	<b>166</b>	<b>100%</b>

Table 6

*Participants’ Generation Level*

<b>Generation Level</b>	<b><i>N</i></b>
<i>1st Generation-born in the Philippines and immigrated to the U.S. at age 8 or older</i>	<i>97</i>
<i>1.5 Generation-born in the Philippines and immigrated to the U.S. at younger than 8</i>	<i>13</i>
<i>2nd Generation-born in the U.S. while one or both parents were born in the Philippines</i>	<i>54</i>
<i>3rd Generation and above-born in the U.S. and parents were born in the U.S.</i>	<i>0</i>
<i>Other-born outside of the Philippines and the U.S. and have never lived in the Philippines</i>	<i>1</i>
<i>Other-born outside of the Philippines and the U.S. but have lived in the Philippines</i>	<i>1</i>
<b>Total</b>	<b>166</b>

While 90.4% ( $N = 150$ ) of participants reported not having a disability, 7.2% ( $N = 12$ ) of participants identified as having a disability and 2.4% ( $N = 4$ ) preferred not to answer the questions. Of the 12 participants who identified as having a disability, one reported more than one disability. These participants reported the following disabilities: mental health disorder ( $N = 6$ ), learning disability (i.e., ADHD or dyslexia) ( $N = 2$ ), communication ( $N = 1$ ), mobility impairment ( $N = 1$ ), sensory impairment (i.e., vision or hearing) ( $N = 1$ ), epilepsy ( $N = 1$ ), and diabetic ( $N = 1$ ).

The researcher also collected information on how often the participants contact their families in the Philippines (i.e., through telephone calls, e-mails, mails, texts, video calls, or social media) and results were as follows: “never” ( $N = 17$ ; 10.2%), “a couple times a year” ( $N = 52$ ; 31.3%), “monthly” ( $N = 30$ ; 18.1%), “weekly” ( $N = 34$ ; 20.5%), and “everyday” ( $N = 33$ ; 19.9%). Additionally, 22.9% ( $N = 38$ ) of participants identified themselves as “never” visited the Philippines, 68.1% (113) reported they do “every couple of years,” 4.2% ( $N = 7$ ) marked “once a year,” and 4.8% ( $N = 8$ ) who marked “more than once a year.” While the participants mostly resided in the U.S. at the time of this study, 47% ( $N = 78$ ) of them considered the Philippines to be their home and 53% ( $N = 88$ ) did not consider the Philippines to be their home.

### **Data Analysis**

To analyze the data and answer the research questions, the researcher employed the Statistical Package for Social Sciences (SPSS) for descriptive statistics and group comparisons. For each statement related to the three speech and language disorders (i.e., stuttering, speech sound disorders, and use of AAC), the researcher used SPSS to calculate the participants’ mean agreement scores.

Next, the researcher analyzed the means and standard deviation of the entire group ( $N = 166$ ) to examine if there was any variability that could present different levels of acculturation, as predicted, among the participants. After finding some demographics that demonstrated statistically significant results, the researcher then selected the ones that included only two categorical groups (e.g., 2 groups: Philippines or U.S.), which also presented patterns of significant differences across the three speech and language disorders sections.

They were grouped accordingly, and due to the ordinal scale of Likert scores, the Mann-Whitney U test was employed to investigate group differences. Laerd Statistics (2015) described that the Mann-Whitney U test was the preferred nonparametric method for investigating group differences for ordinal scale data.

The researcher followed the four assumptions that were required for a Mann-Whitney U test to provide a valid result (Laerd Statistics, 2015). First, the dependent variables were all measured at the ordinal variables, including Likert items (e.g., a 4-point scale from “strongly disagree” to “strongly agree”) (Laerd Statistics, 2015). The dependent variables for the completed analyses were the statements from each section, which participants rated using the 4-point scale.

Second, the independent variable only consisted of two categorical, independent groups (e.g., 2 groups: Philippines or U.S.) (Laerd Statistics, 2015). The researcher followed this assumption by completing data analyses that only included two independent groups. Further discussion was provided below to specifically provide more details on those categorical, independent groups.

Third, the independence of observations was required wherein no participants were placed in more than one group and participants were different in each group (Laerd Statistics, 2015).

Fourth, it involves an assumption about the data, in which the SPSS Statistics helps determine whether the distributions of scores for both groups of the independent variable have the same shapes or different shapes (e.g., “in the Philippines” or “in the U.S.” for the independent variable, “birthplace”). Laerd Statistics (2015) explained that the Mann-Whitney U test is used when comparing the dependent variable (e.g., ratings for each statement) for the two groups (e.g., “in the Philippines” or “in the U.S.”) of the independent variable (e.g., birthplace”). According to Laerd Statistics, it is common that data from the real world, when analyzed, would not have the same shapes. If that is the case, the Mann-Whitney U test can still be used to compare the mean ranks (2015).

### Chapter 3: Results

Participants completed an anonymous survey consisting of demographic information and three sections of statements about their knowledge, attitudes, and feelings about stuttering, speech sound disorders, and the use of AAC devices. For each of the three sections, participants marked their level of agreement to 20 statements, or 60 statements across the three sections, using a 4-point scale: 1 – strongly disagree; 2 – disagree; 3 – agree; 4 – strongly agree. Recall that statements 1 through 18 were similar for each section. For example, statement 1 for the stuttering section was, “I have knowledge about stuttering” but for the speech sound disorders and AAC sections it was, “I have knowledge of speech sound disorders” and “I have knowledge of AAC,” respectively. A summary of means and standard deviations of agreement scores for each statement within each section (i.e., stuttering, speech sound disorders, AAC) is provided in Tables 7, 8, and 9.

Table 7

*Means and Standard Deviations of statements related to stuttering (N = 166)*

<b>Statement</b>	<b>M</b>	<b>SD</b>
1. I have knowledge about stuttering.	3.16	.722
2. A person who stutters should go to a medical doctor for help with their speech.	2.92	.691
3. A person who stutters will have trouble getting a job.	2.33	.672
4. A person who stutters should attend a different/special school.	1.98	.687
5. I think it is fine to tease or make fun of a person who stutters.	1.10	.316
6. The family of a person who stutters is being punished (i.e., by fate or God).	1.13	.405
7. A person who stutters is likely to be less intelligent than other people.	1.21	.451
8. Praying can help cure stuttering.	2.01	.918
9. Stuttering is not a big deal.	2.34	.807
10. A person who stutters should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as “Albularyo,” or Faith Healer also known as “Espiritista”).	1.57	.681
11. A person who stutters will have trouble with making friends.	2.01	.730
12. A person’s stuttering is caused by a supernatural or a mystical being also known as “maligno” or “engkanto.”	1.20	.419
13. The family should keep the person who stutters at home to hide from other people.	1.11	.331
14. A person who stutters is treated unfairly.	2.52	.865
15. A person who stutters can improve or be better if he/she tried harder.	2.73	.812
16. Talking to a person who stutters would make me uncomfortable.	1.68	.603
17. The mom of the person who stutters likely used alcohol or drugs while she was pregnant.	1.61	.630
18. A person who stutters should get help with their speech problem at some time in their lives.	3.16	.696
19. It is okay to interrupt a child when he/she is speaking or talking.	1.71	.779
20. Everyone, regardless of the severity of their disability, has the potential to improve and learn how to communicate more effectively.	3.43	.773

Note: Mean scores represent responses using a 4-point scale (i.e., 1 for disagreement with the statement and 4 for agreement). Abbreviation: *M* = mean; *SD* = standard deviation.

Table 8

*Means and Standard Deviations of statements related to speech sound disorders (N = 166)*

<b>Statement</b>	<b>M</b>	<b>SD</b>
1. I have knowledge about speech sound disorders.	2.74	.754
2. A person with a speech sound disorder should go to a medical doctor for help with their speech.	2.88	.703
3. A person with a speech sound disorder will have trouble getting a job.	2.28	.686
4. A person who has a speech sound disorder should attend a different/special school.	1.93	.710
5. I think it is fine to tease or make fun of a person with a speech sound disorder.	1.16	.416
6. The family of a person with a speech sound disorder is being punished (i.e., by fate or God).	1.14	.370
7. A person with a speech sound disorder is likely to be less intelligent than other people.	1.28	.475
8. Praying can help cure speech sound disorders	1.96	.914
9. A speech sound disorder is not a big deal.	2.29	.839
10. A person with a speech sound disorder should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as “Albularyo,” or Faith Healer also known as “Espiritista”).	1.51	.676
11. A person with a speech sound disorder will have trouble with making friends.	1.87	.726
12. A person’s speech sound disorder is caused by a supernatural or a mystical being also known as “maligno” or “engkanto.”	1.23	.463
13. The family should keep the person with a speech sound disorder at home to hide from other people.	1.14	.364
14. A person with a speech sound disorder is treated unfairly.	2.43	.863
15. A person with a speech sound disorder can improve or be better if he/she tried harder.	2.81	.808
16. Talking to a person with a speech sound disorder would make me uncomfortable.	1.66	.628
17. The mom of the person with a speech sound disorder likely used alcohol or drugs while she was pregnant.	1.57	.654
18. A person with a speech sound disorder should get help with their speech problem at some time in their lives.	3.19	.571
19. I value spending time talking and reading to young children.	3.45	.609
20. I think a child’s hearing should be checked regularly to prevent speech sound disorders.	3.43	.616

Note: Mean scores represent responses using a 4-point scale (i.e., 1 for disagreement with the statement and 4 for agreement). Abbreviation: *M* = mean; *SD* = standard deviation.

Table 9

*Means and Standard Deviations of statements related to AAC (N = 166)*

<b>Statement</b>	<b>M</b>	<b>SD</b>
1. I have knowledge about AAC.	2.48	.851
2. A person who is nonverbal (does not talk) should go to a medical doctor for help with their speech.	3.11	.670
3. A person with an AAC need will have trouble getting a job.	2.78	.671
4. A person who uses AAC should attend a different/special school.	2.60	.771
5. I think it is fine to tease or make fun of a person who uses AAC.	1.12	.345
6. The family of a person with AAC needs is being punished (i.e., by fate or God).	1.14	.370
7. A person who uses AAC is likely to be less intelligent than other people.	1.36	.493
8. Praying can help cure a person who is nonverbal (does not talk).	1.96	.923
9. Using an AAC device is not a big deal.	2.57	.897
10. A person who is nonverbal (does not talk) should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as “Albularyo,” or Faith Healer also known as “Espiritista”).	1.49	.694
11. A person who uses AAC will have trouble with making friends.	2.23	.791
12. A person who is nonverbal (does not talk) is caused by a supernatural or mystical being also known as “maligno” or “engkanto.”	1.22	.417
13. The family should keep the person who is nonverbal (does not talk) or uses an AAC at home to hide from other people.	1.18	.386
14. A person who uses AAC is treated unfairly.	2.54	.843
15. A person who is nonverbal (does not talk) can improve/be better if he/she tried harder.	2.62	.850
16. Talking to a person who uses AAC would make me uncomfortable.	1.75	.674
17. The mom of the person with AAC needs likely used alcohol or drugs while she was pregnant.	1.63	.699
18. A person who is nonverbal (does not talk) should get help with their speech and language problem at some time in their lives.	3.31	.600
19. AAC can keep a person from talking.	2.35	.785
20. A child who is nonverbal (does not talk) has likely kissed a doll or a mirror when he/she was a baby.	1.41	.604

Note: Mean scores represent responses using a 4-point scale (i.e., 1 for disagreement with the statement and 4 for agreement). Abbreviation: *M* = mean; *SD* = standard deviation.

### **Group Comparisons**

Calculating and analyzing the means and standard deviations of the entire group ( $n = 166$ ) may represent Filipino-Americans' knowledge and perceptions of stuttering, speech sound

disorders, and use of AAC, the variability of participant demographics was vast. The researcher predicted this variability could represent different levels of acculturation among the participants. To explore these levels of acculturation and the potential impact on the participants' knowledge and perceptions of communication disorders, the researcher separated the participants based on demographic information that likely represented different levels of acculturation.

Due to the ordinal scale of Likert scores, the researcher employed the Mann-Whitney U test to investigate group differences. Laerd Statistics (2015) described that the Mann-Whitney U test was the preferred nonparametric method for investigating group differences for ordinal scale data. The researcher grouped the participants according to: (a) birthplace (Philippines or U.S.); (b) whether attended some school in the U.S.; and (c) the location of their highest level of education (Philippines or U.S.) These groups were the independent variables and the participants' ratings to each statement were the dependent variables.

### ***Place of Birth***

The Mann-Whitney U test was used to investigate group differences in agreement scores between Filipino-Americans who were born in the Philippines and those who were born in the U.S. Out of the 20 statements related to stuttering, the two groups' agreement scores were statistically different on 10 statements. Regarding speech sound disorders, the two groups' agreement scores were statistically different on 11 statements. Regarding use of AAC, the two groups' agreement scores were statistically significant on 6 statements. The Mann-Whitney U results for these statements are shown in Table 10, 11, and 12. (The Mann-Whitney U results for all 60 statements are presented in Appendix G).

Table 10

*Place of Birth Group Differences (Stuttering Statements)*

Statement	Mean	Mean Rank	Mann – Whitney U	Z – Score	Significance (2-tailed)
1. I have knowledge about stuttering.					
Philippines ( <i>n</i> = 113)	3.09	78.88	2472.500	-2.038	0.042*
U.S. ( <i>n</i> = 53)	3.3	93.35			
2. A person who stutters should go to a medical doctor for help with their speech.					
Philippines ( <i>n</i> = 113)	3.06	92.93	1928.500	-4.228	0.000*
U.S. ( <i>n</i> = 53)	2.6	63.39			
4. A person who stutters should attend a different/special school.					
Philippines ( <i>n</i> = 113)	2.1	90.93	2155.000	-3.320	0.001*
U.S. ( <i>n</i> = 53)	1.72	67.66			
6. The family of a person who stutters is being punished (i.e., by fate or God).					
Philippines ( <i>n</i> = 113)	1.16	86.42	2665.000	-2.068	0.039*
U.S. ( <i>n</i> = 53)	1.08	77.28			
8. Praying can help cure stuttering.					
Philippines ( <i>n</i> = 113)	2.19	92.77	1947.000	-3.846	0.000*
U.S. ( <i>n</i> = 53)	1.6	63.74			
9. Stuttering is not a big deal.					
Philippines ( <i>n</i> = 113)	2.25	78.35	2412.000	-2.168	0.030*
U.S. ( <i>n</i> = 53)	2.55	94.49			
11. A person who stutters will have trouble with making friends.					
Philippines ( <i>n</i> = 113)	1.86	74.49	1976.500	-3.842	0.000*
U.S. ( <i>n</i> = 53)	2.34	102.71			
14. A person who stutters is treated unfairly.					
Philippines ( <i>n</i> = 113)	2.31	72.44	1745.000	-4.714	0.000*
U.S. ( <i>n</i> = 53)	2.98	107.08			
15. A person who stutters can improve or be better if he/she tried harder.					
Philippines ( <i>n</i> = 113)	2.92	94.04	1803.000	-4.439	0.000*
U.S. ( <i>n</i> = 53)	2.32	61.02			

17. The mom of the person who stutters likely used alcohol or drugs while she was pregnant.

Philippines ( $n = 113$ )	1.69	89.14	2357.000	-2.463	0.014*
U.S. ( $n = 53$ )	1.43	71.47			

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Note: Only statements related to stuttering with significant group differences are displayed.

Table 11

*Place of Birth Group Differences (Speech Sound Disorders Statements)*

<b>Statement</b>	<b>Mean</b>	<b>Mean Rank</b>	<b>Mann – Whitney U</b>	<b>Z – Score</b>	<b>Significance (2-tailed)</b>
2. A person with a speech sound disorder should go to a medical doctor for help with their speech.					
Philippines ( <i>n</i> = 113)	2.97	89.27	2343.000	-2.677	0.007*
U.S. ( <i>n</i> = 53)	2.68	71.21			
4. A person who has a speech sound disorder should attend a different/special school.					
Philippines ( <i>n</i> = 113)	2.07	92.19	2012.000	-3.851	0.000*
U.S. ( <i>n</i> = 53)	1.62	64.96			
8. Praying can help cure speech sound disorder.					
Philippines ( <i>n</i> = 113)	2.17	93.60	1853.500	-4.206	0.000*
U.S. ( <i>n</i> = 53)	1.53	61.97			
9. A speech sound disorder is not a big deal.					
Philippines ( <i>n</i> = 113)	2.2	78.80	2463.500	-1.957	0.050*
U.S. ( <i>n</i> = 53)	2.47	93.52			
14. A person with a speech sound disorder is treated unfairly.					
Philippines ( <i>n</i> = 113)	2.28	75.86	2131.000	-3.262	0.001*
U.S. ( <i>n</i> = 53)	2.75	99.79			
15. A person with a speech sound disorder can improve/be better if he/she tried harder.					
Philippines ( <i>n</i> = 113)	2.99	93.97	1811.000	-4.488	0.000*
U.S. ( <i>n</i> = 53)	2.42	61.17			
16. Talking to a person with a speech sound disorder would make me uncomfortable.					
Philippines ( <i>n</i> = 113)	1.73	88.35	2446.500	-2.117	0.034*
U.S. ( <i>n</i> = 53)	1.51	73.16			
17. The mom of the person with a speech sound disorder likely used alcohol or drugs while she was pregnant.					
Philippines ( <i>n</i> = 113)	1.67	90.19	2238.000	-2.929	0.003*
U.S. ( <i>n</i> = 53)	1.36	69.23			

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Note: Only statements related to speech sound disorders with significant group differences are displayed.

Table 12

*Place of Birth Group Differences (AAC Statements)*

<b>Statement</b>	<b>Mean</b>	<b>Mean Rank</b>	<b>Mann – Whitney U</b>	<b>Z – Score</b>	<b>Significance (2-tailed)</b>
3. A person with an AAC need will have trouble getting a job.					
Philippines ( <i>n</i> = 113)	2.68	76.79	2236.500	-2.968	0.003*
U.S. ( <i>n</i> = 53)	3	97.80			
4. A person who uses AAC should attend a different/special school.					
Philippines ( <i>n</i> = 113)	2.69	88.98	2375.000	-2.342	0.019*
U.S. ( <i>n</i> = 53)	2.4	71.81			
5. I think it is fine to tease or make fun of a person who uses AAC.					
Philippines ( <i>n</i> = 113)	1.17	87.23	2573.500	-2.644	0.008*
U.S. ( <i>n</i> = 53)	1.02	75.56			
8. Praying can help cure a person who is nonverbal (does not talk).					
Philippines ( <i>n</i> = 113)	2.21	95.93	1590.000	-5.193	0.000*
U.S. ( <i>n</i> = 53)	1.42	57.00			
9. Using an AAC device is not a big deal.					
Philippines ( <i>n</i> = 113)	2.47	77.92	2363.500	-2.312	0.021*
U.S. ( <i>n</i> = 53)	2.79	95.41			
11. A person who uses AAC will have trouble with making friends.					
Philippines ( <i>n</i> = 113)	2.07	74.65	1994.500	-3.704	0.000*
U.S. ( <i>n</i> = 53)	2.57	102.37			
13. The family should keep the person who is nonverbal (does not talk) or uses an AAC at home to hide from other people.					
Philippines ( <i>n</i> = 113)	1.22	86.86	2614.500	-1.975	0.048*
U.S. ( <i>n</i> = 53)	1.09	76.33			
14. A person who uses AAC is treated unfairly.					
Philippines ( <i>n</i> = 113)	2.32	72.35	1735.000	-4.912	0.000*
U.S. ( <i>n</i> = 53)	3	107.26			
15. A person who is nonverbal (does not talk) can improve/be better if he/she tried harder.					

	Philippines ( <i>n</i> = 113)	2.84	95.13	1680.000	-4.841	0.000*
	U.S. ( <i>n</i> = 53)	2.15	58.70			
17. The mom of the person with AAC needs likely used alcohol or drugs while she was pregnant.						
	Philippines ( <i>n</i> = 113)	1.74	90.54	2199.500	-3.036	0.002*
	U.S. ( <i>n</i> = 53)	1.4	68.50			
19. AAC can keep a person from talking.						
	Philippines ( <i>n</i> = 113)	2.21	76.08	2155.500	-3.131	0.002*
	U.S. ( <i>n</i> = 53)	2.64	99.33			

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Note: Only statements related to AAC with significant group differences are displayed.

Upon further analysis, there were 6 statements in which there were significant group differences in all three sections: stuttering, speech sound disorder, and AAC. These statements were:

*Statement 4: A person who stutters/ who has a speech sound disorder/ who uses AAC should attend a different or special school.*

*Statement 8: Praying can help cure stuttering/ speech sound disorder/ a person who is nonverbal (does not talk.)*

*Statement 9: Stuttering/ A speech sound disorder/ Using an AAC device is not a big deal.*

*Statement 14: A person who stutters/ with a speech sound disorder/ who uses AAC is treated unfairly.*

*Statement 15: A person who stutters/ with a speech sound disorder/ who is nonverbal (does not talk) can improve or be better if he/she tried harder.*

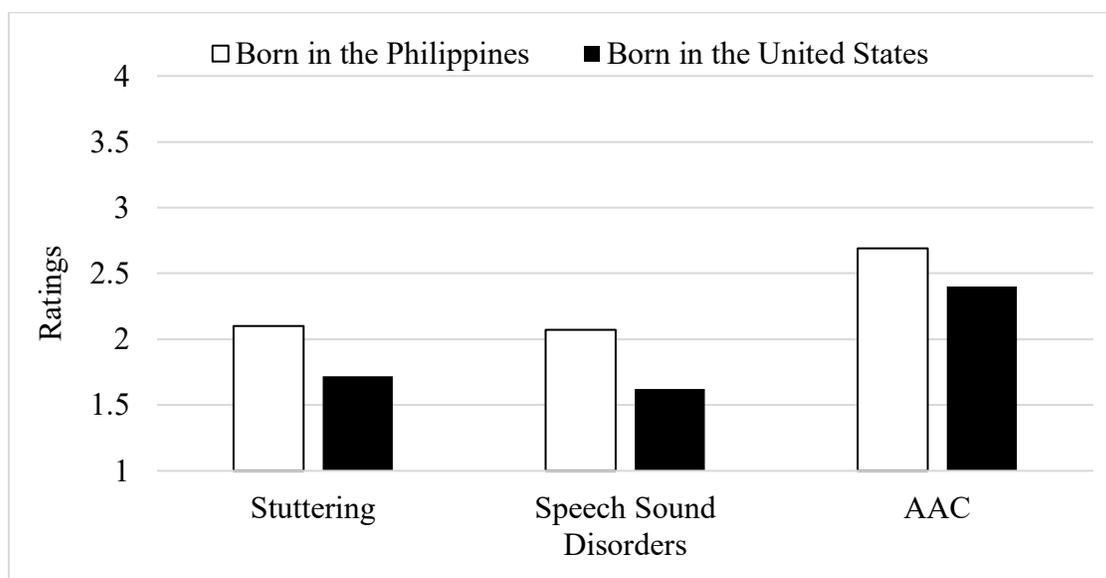
*Statement 17: The mom of the person who stutters/ with a speech sound disorder/ with AAC needs likely used alcohol or drugs while she was pregnant.*

**Statement 4: A Person Should Attend A Different or Special School.** Regarding stuttering, the 113 participants born in the Philippines had a statistically higher mean agreement score of 2.10 (mean rank = 90.93) compared to the 53 participants born in the U.S. whose mean agreement mean agreement score was 1.72 (mean rank = 67.66;  $U = 2155$ ;  $z = -3.320$ ;  $p = 0.001$ ). Those born in the Philippines disagreed that a person who stutters should attend a different school ( $m = 2.10$ ), but those born in the U.S. more strongly disagreed with the same statement ( $m = 1.72$ ).

For speech sound disorders, the participants born in the Philippines had a statistically higher mean agreement score of 2.07 (mean rank = 92.19) compared to the participants born in the U.S. whose mean agreement score was 1.62 (mean rank = 64.96;  $U = 2012$ ;  $z = -3.851$ ;  $p = 0.000$ ). Those born in the Philippines disagreed that a person who has a speech sound disorder should attend a different school ( $m = 2.07$ ), but those born in the U.S. more strongly disagreed with the same statement ( $m = 1.62$ ).

Regarding AAC users, the participants born in the Philippines had a statistically higher mean agreement score of 2.69 (mean rank = 88.98) compared to participants born in the U.S. whose mean agreement score was 2.40 (mean rank = 71.81;  $U = 2375$ ;  $z = -2.342$ ;  $p = 0.019$ ). Those born in the Philippines were more likely to agree ( $m = 2.69$ ) that a person who uses AAC should attend a different or special school, but those who were born in the U.S. were more likely to disagree with the same statement ( $m = 2.40$ ) All three of these group comparisons are illustrated in Figure 4.

Figure 4

*Group Comparisons by Place of Birth: A Person Should Attend A Different or Special School*

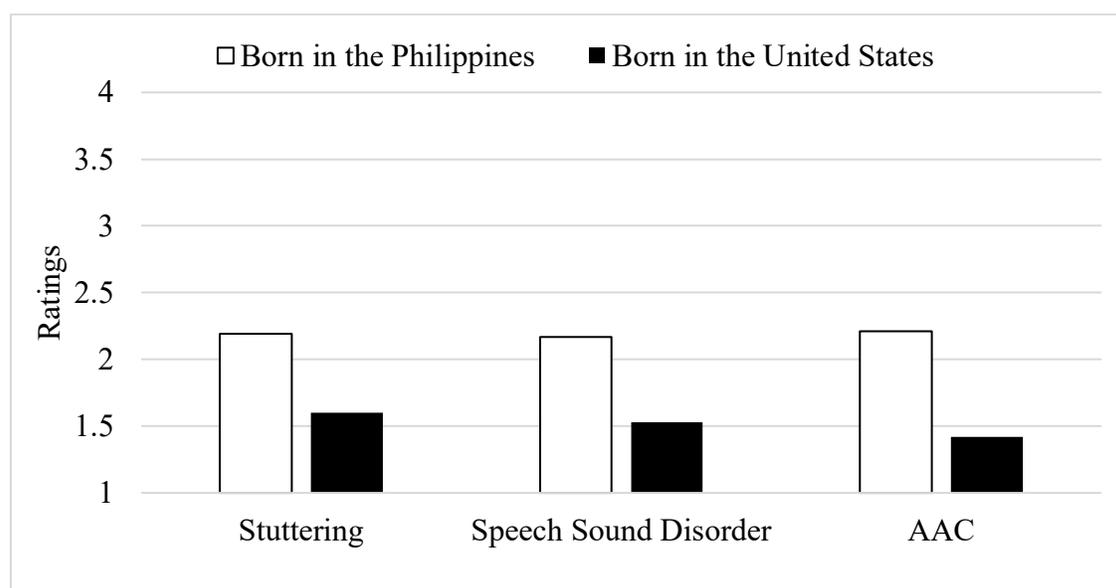
**Statement 8: Praying Can Help as A Cure.** Regarding stuttering, the 113 participants born in the Philippines had a statistically higher mean agreement score of 2.19 (mean rank = 92.77) compared to the 53 participants born in the U.S. whose mean agreement score was 1.60 (mean rank = 63.74;  $U = 1947$ ;  $z = -3.846$ ;  $p = 0.000$ ). Those born in the Philippines disagreed that praying can help cure stuttering ( $m = 2.19$ ), but those born in the U.S. more strongly disagreed with the same statement ( $m = 1.60$ ).

For speech sound disorders, the participants born in the Philippines had a statistically higher mean agreement score of 2.17 (mean rank = 93.60) compared to the participants born in the U.S. whose mean agreement score was 1.53 (mean rank = 61.97;  $U = 1853.5$ ;  $z = -4.206$ ;  $p = 0.000$ ). Those born in the Philippines disagreed that praying can help cure speech sound disorders ( $m = 2.17$ ), but those born in the U.S. more strongly disagreed with the same statement ( $m = 1.53$ ).

Regarding AAC users, the participants born in the Philippines had a statistically higher mean agreement score of 2.21 (mean rank 95.93) compared to the participants born in the U.S. whose mean agreement score was 1.42 (mean rank = 57.00;  $U = 1590$ ;  $z = -5.193$ ;  $p = 0.000$ ). Those born in the Philippines disagreed that praying can help cure a person who is nonverbal (does not talk) ( $m = 2.21$ ), but those born in the U.S. more strongly disagree with the same statement ( $m = 1.42$ ). All three of these group comparisons are illustrated in Figure 5.

Figure 5

*Group Comparisons by Place of Birth: Praying Can Help as A Cure*



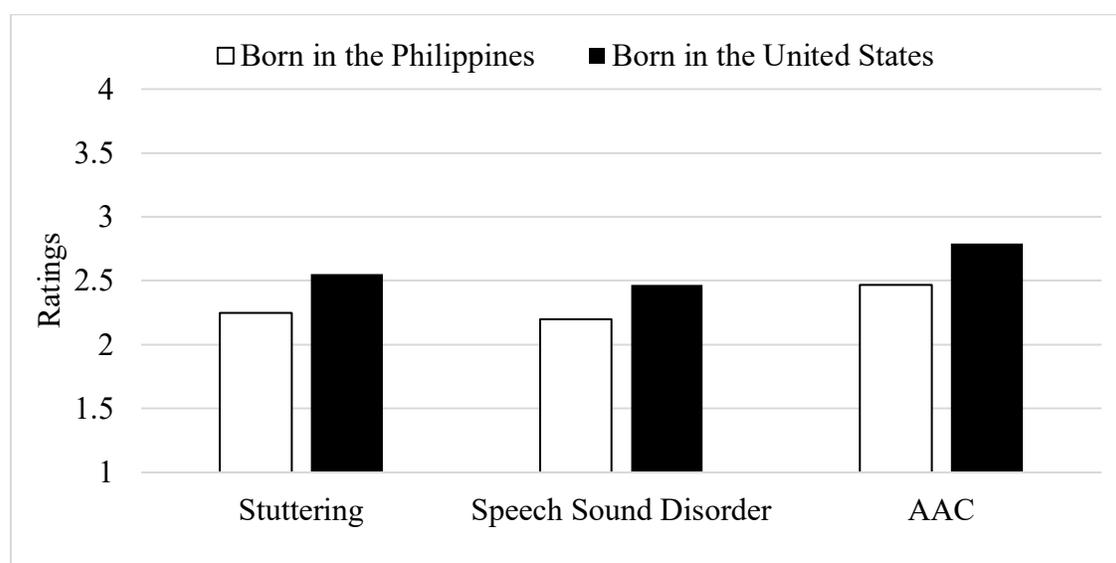
**Statement 9: It Is Not A Big Deal.** Regarding stuttering, the 113 participants born in the Philippines had a statistically lower mean agreement score of 2.25 (mean rank = 78.35) compared to the 53 participants born in the U.S. whose mean agreement score was 2.55 (mean rank = 94.49;  $U = 2412$ ;  $z = -2.168$ ;  $p = 0.030$ ). Those born in the Philippines were more likely to disagree that stuttering is not a big deal ( $m = 2.25$ ), but those born in the U.S. were slightly more likely to agree with the same statement ( $m = 2.55$ ).

For speech sound disorders, the participants born in the Philippines had a statistically lower mean agreement score 2.20 (mean rank = 78.80) compared to the participants born in the U.S. whose mean agreement score was 2.47 (mean rank = 93.52;  $U = 2463.5$ ;  $z = -1.957$ ;  $p = 0.050$ ). Those born in the Philippines were more likely to disagree that a speech sound disorder is not a big deal ( $m = 2.20$ ), but those born in the U.S. disagreed less with the same statement ( $m = 2.47$ ).

Regarding AAC users, the participants born in the Philippines had a statically lower mean agreement score of 2.47 (mean rank = 77.92) compared to the participants born in the U.S. whose mean agreement score was 2.79 (mean rank = 95.41;  $U = 2363.5$ ;  $z = -2.312$ ;  $p = 0.021$ ). Those born in the Philippines were slightly more likely to disagree that using an AAC device is not a big deal ( $m = 2.47$ ), but those born in the U.S. were more likely to agree with the same statement ( $m = 2.79$ ). All three of these group comparisons are illustrated in Figure 6.

Figure 6

*Group Comparisons by Place of Birth: It Is Not A Big Deal*

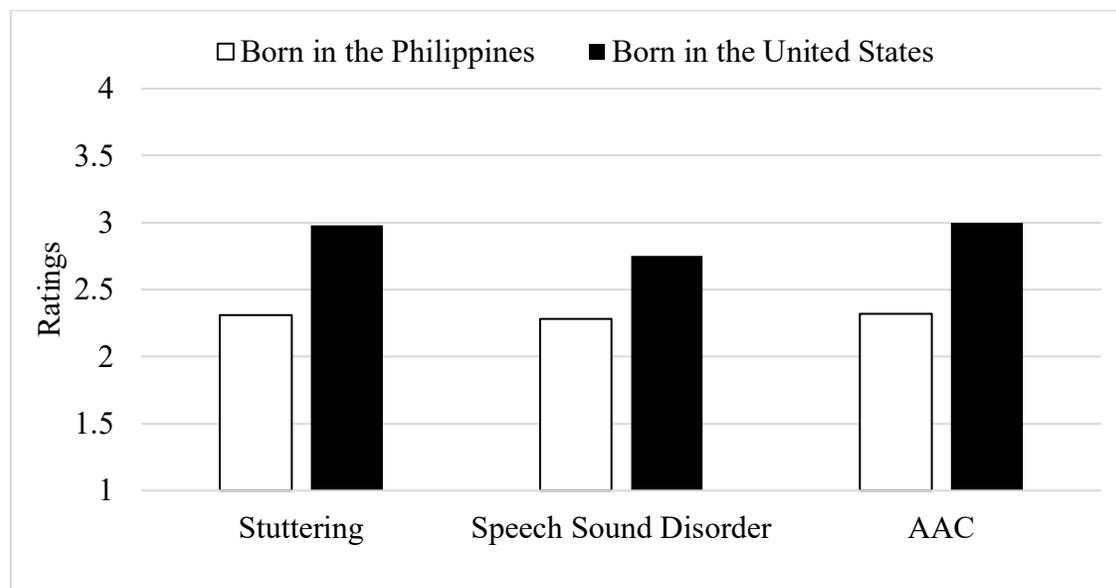


**Statement 14: A Person Is Treated Unfairly.** Regarding stuttering, the 113 participants born in the Philippines had a statistically lower mean agreement scores of 2.31 (mean rank = 72.44) compared to the 53 participants born in the U.S. whose mean agreement score was 2.98 (mean rank = 107.08;  $U = 1745$ ;  $z = -4.714$ ;  $p = 0.000$ ). Those born in the Philippines were more likely to disagree that a person who stutters is treated unfairly ( $m = 2.31$ ), but those born in the U.S. agreed with the same statement ( $m = 2.98$ ).

For speech sound disorders, the participants born in the Philippines had a statistically lower mean agreement scores of 2.28 (mean rank = 75.86) compared to the participants born in the U.S. whose mean agreement score was 2.75 (mean rank = 99.79);  $U = 2131$ ;  $z = -3.262$ ;  $p = 0.001$ ). Those born in the Philippines were more likely to disagree that a person with a speech sound disorder is treated unfairly ( $m = 2.28$ ), but those born in the U.S. were more likely to agree with the same statement ( $m = 2.75$ ).

Regarding AAC users, the participants born in the Philippines had a statistically lower mean agreement scores of 2.32 (mean rank = 72.35) compared to the participants born in the U.S. whose mean agreement score was 3 (mean rank = 107.26);  $U = 1735$ ;  $z = -4.912$ ;  $p = 0.000$ ). Those born in the Philippines were more likely to disagree that a person who uses AAC is treated unfairly ( $m = 2.32$ ), but those born in the U.S. agreed with the same statement ( $m = 3$ ). All three of these group comparisons are illustrated in Figure 7.

Figure 7

*Group Comparisons by Place of Birth: A Person Is Treated Unfairly***Statement 15: A Person Can Improve or Be Better If He/She Tried Harder.**

Regarding stuttering, the 113 participants born in the Philippines had a statistically higher mean agreement score of 2.92 (mean rank = 94.04) compared to the 53 participants born in the U.S. whose mean agreement score was 2.32 (mean rank = 61.02;  $U = 1803$ ;  $z = -4.439$ ;  $p = 0.000$ ). Those born in the Philippines agreed that a person who stutters can improve or be better if he/she tried harder ( $m = 2.92$ ), but those born in the U.S. were more likely to disagree with the same statement ( $m = 2.32$ ).

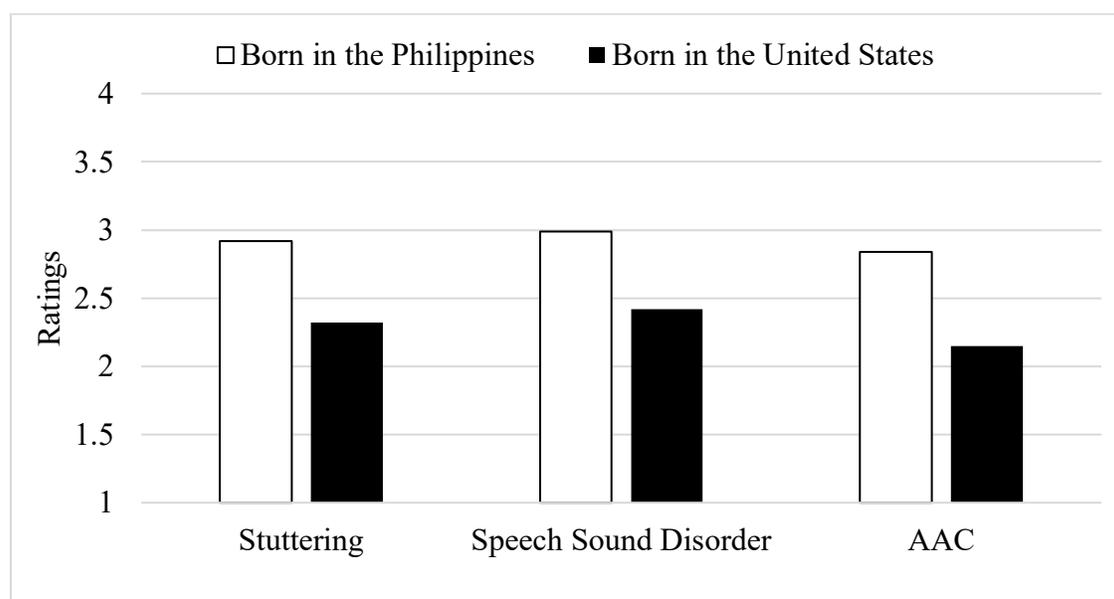
For speech sound disorders, the participants born in the Philippines had a statistically higher mean agreement scores of 2.99 (mean rank = 93.97) compared to the participants born in the U.S. whose mean agreement score was 2.42 (mean rank = 61.17;  $U = 1811$ ;  $z = -4.488$ ;  $p = 0.000$ ). Those born in the Philippines agreed that a person with a speech sound disorder can

improve or be better if he/she tried harder ( $m = 2.99$ ), but those born in the U.S. were more likely to disagree with the same statement ( $m = 2.42$ ).

Regarding AAC users, the participants born in the Philippines had a statistically higher mean agreement score of 2.84 (mean rank = 95.13) compared to the participants born in the U.S. whose mean agreement score was 2.15 (mean rank = 58.70;  $U = 1680$ ;  $z = -4.841$ ;  $p = 0.000$ ). Those born in the Philippines agreed that a person who is nonverbal (does not talk) can improve or be better if he/she tried harder ( $m = 2.84$ ), but those born in the U.S. disagreed with the same statement ( $m = 2.15$ ). All three of these group comparisons are illustrated in Figure 8.

Figure 8

*Group Comparisons by Place of Birth: A Person Can Improve or Be Better If He/She Tried Harder*



**Statement 17: The Mom Likely Used Alcohol or Drugs While She Was Pregnant.**

Regarding stuttering, the 113 participants born in the Philippines had a statistically higher mean agreement score of 1.69 (mean rank = 89.14) compared to the 53 participants born in the U.S.

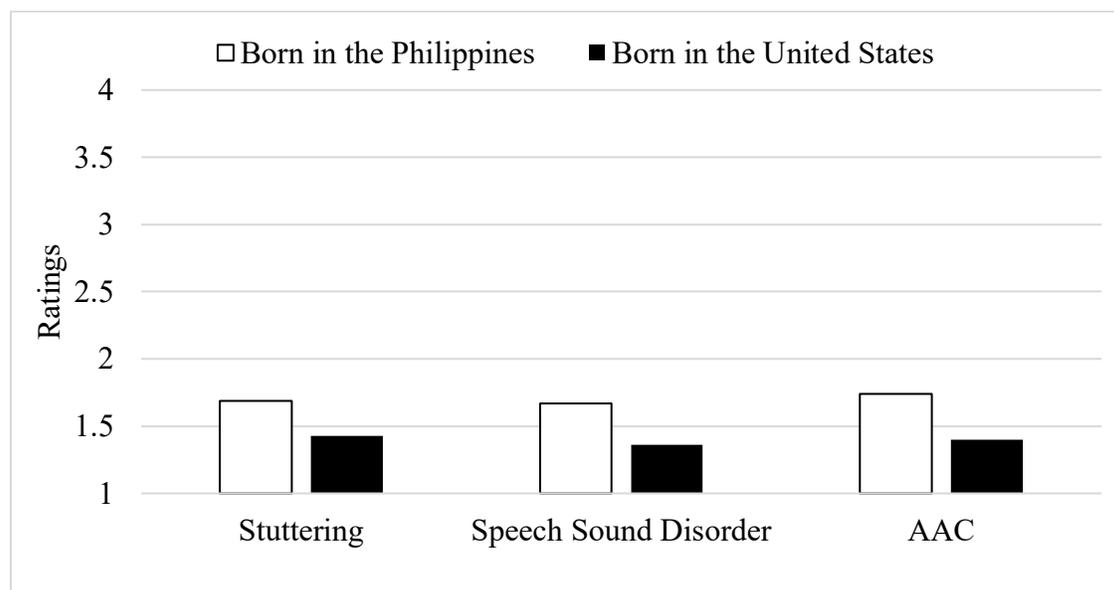
whose mean agreement score was 1.43 (mean rank = 71.47;  $U = 2357$ ;  $z = -2.463$ ;  $p = 0.014$ ). Those born in the Philippines disagreed that the mom of the person who stutters likely used alcohol or drugs while she was pregnant ( $m = 1.69$ ), but those born in the U.S. more strongly disagreed with the same statement ( $m = 1.43$ ).

For speech sound disorders, the participants born in the Philippines had a statistically higher mean agreement score of 1.67 (mean rank = 90.19) compared to the participants born in the U.S. whose mean agreement score was 1.36 (mean rank = 69.23;  $U = 2238$ ;  $z = -2.929$ ;  $p = 0.003$ ). Those born in the Philippines disagreed that the mom of the person with a speech sound disorder likely used alcohol or drugs while she was pregnant ( $m = 1.67$ ), but those born in the U.S. more strongly disagreed with the same statement ( $m = 1.36$ ).

Regarding AAC users, the participants born in the Philippines had a statistically higher mean agreement scores of 1.74 (mean rank = 90.54) compared to the participants born in the U.S. whose mean agreement score was 1.40 (mean rank = 68.50;  $U = 2199.5$ ;  $z = -3.036$ ;  $p = 0.002$ ). Those born in the Philippines disagreed that the mom of the person with AAC needs likely used alcohol or drugs while she was pregnant ( $m = 1.74$ ), but those born in the U.S. more strongly disagreed with the same statement ( $m = 1.40$ ). All three of these group comparisons are illustrated in Figure 9.

Figure 9

*Group Comparisons by Place of Birth: The Mom Likely Used Alcohol or Drugs While She Was Pregnant*



### ***Education in the United States***

The Mann-Whitney U test was used to investigate group differences in agreement scores between Filipino-Americans who only attended school in the Philippines and who attended at least some school in the U.S. Out of the 20 statements related to speech sound disorders, the two groups were statistically significant on 8 statements. Regarding speech sound disorders, the two groups were statistically different on 4 statements. Regarding use of AAC, the two groups were statistically significant on 7 statements. The Mann-Whitney U results for these statements are shown in Table 13, 14, and 15. (The Mann-Whitney U results for all statements are presented in Appendix H).

Table 13

*Education in the United States Group Differences (Stuttering Statements)*

<b>Statement</b>	<b>Mean</b>	<b>Mean Rank</b>	<b>Mann – Whitney U</b>	<b>Z – Score</b>	<b>Significance (2-tailed)</b>
2. A person who stutters should go to a medical doctor for help with their speech.					
Yes ( <i>n</i> = 46)	3.13	96.24	2174.000	-2.421	0.015*
No ( <i>n</i> = 120)	2.83	78.62			
4. A person who stutters should attend a different/special school.					
Yes ( <i>n</i> = 46)	2.39	108.30	1619.000	-4.701	0.000*
No ( <i>n</i> = 120)	1.82	73.99			
6. The family of a person who stutters is being punished (i.e., by fate or God).					
Yes ( <i>n</i> = 46)	1.24	92.02	2368.000	-2.563	0.010*
No ( <i>n</i> = 120)	1.09	80.23			
7. A person who stutters is likely to be less intelligent than other people.					
Yes ( <i>n</i> = 46)	1.35	93.00	2323.000	-2.303	0.021*
No ( <i>n</i> = 120)	1.16	79.86			
8. Praying can help cure stuttering.					
Yes ( <i>n</i> = 46)	2.46	105.55	1745.500	-3.880	0.000*
No ( <i>n</i> = 120)	1.83	75.05			
14. A person who stutters is treated unfairly.					
Yes ( <i>n</i> = 46)	2.13	62.58	1797.500	-3.782	0.000*
No ( <i>n</i> = 120)	2.68	91.52			
15. A person who stutters can improve or be better if he/she tried harder.					
Yes ( <i>n</i> = 46)	3.13	105.60	1743.500	-3.945	0.000*
No ( <i>n</i> = 120)	2.58	75.03			
20. Everyone, regardless of the severity of their disability, has the potential to improve and learn how to communicate more effectively.					
Yes ( <i>n</i> = 46)	3.15	71.14	2191.500	-2.320	0.020*
No ( <i>n</i> = 120)	3.53	88.24			

Note: Only statements related to stuttering with significant group differences are displayed.

Table 14

*Education in the United States Group Differences (Speech Sound Disorders Statements)*

<b>Statement</b>	<b>Mean</b>	<b>Mean Rank</b>	<b>Mann – Whitney U</b>	<b>Z – Score</b>	<b>Significance (2-tailed)</b>
4. A person who has a speech sound disorder should attend a different/special school.					
Yes ( <i>n</i> = 46)	2.3	103.52	1839.000	-3.760	0.000*
No ( <i>n</i> = 120)	1.78	75.83			
8. Praying can help cure speech sound disorder.					
Yes ( <i>n</i> = 46)	2.35	102.00	1909.000	-3.268	0.001*
No ( <i>n</i> = 120)	1.82	76.41			
14. A person with a speech sound disorder is treated unfairly.					
Yes ( <i>n</i> = 46)	2.07	65.14	1915.500	-3.323	0.001*
No ( <i>n</i> = 120)	2.58	90.54			
15. A person with a speech sound disorder can improve/be better if he/she tried harder.					
Yes ( <i>n</i> = 46)	3.2	105.08	1767.500	-3.920	0.000*
No ( <i>n</i> = 120)	2.66	75.23			

Note: Only statements related to speech sound disorders with significant group differences are displayed.

Table 15

*Education in the United States Group Differences (AAC Statements)*

<b>Statement</b>	<b>Mean</b>	<b>Mean Rank</b>	<b>Mann – Whitney U</b>	<b>Z – Score</b>	<b>Significance (2-tailed)</b>
3. A person with an AAC need will have trouble getting a job.					
Yes ( <i>n</i> = 46)	2.54	67.25	2012.500	-3.049	0.002*
No ( <i>n</i> = 120)	2.88	89.73			
4. A person who uses AAC should attend a different/special school.					
Yes ( <i>n</i> = 46)	2.89	99.49	2024.500	-2.897	0.004*
No ( <i>n</i> = 120)	2.48	77.37			
8. Praying can help cure a person who is nonverbal (does not talk).					
Yes ( <i>n</i> = 46)	2.48	108.46	1612.000	-4.421	0.000*
No ( <i>n</i> = 120)	1.76	73.93			
9. Using an AAC device is not a big deal.					
Yes ( <i>n</i> = 46)	2.33	71.07	2188.000	-2.183	0.029*
No ( <i>n</i> = 120)	2.67	88.27			
14. A person who uses AAC is treated unfairly.					
Yes ( <i>n</i> = 46)	2.07	59.20	1642.000	-4.541	0.000*
No ( <i>n</i> = 120)	2.72	92.82			
15. A person who is nonverbal (does not talk) can improve/be better if he/she tried harder.					
Yes ( <i>n</i> = 46)	3.07	106.59	1698.000	-4.074	0.000*
No ( <i>n</i> = 120)	2.45	74.65			
19. AAC can keep a person from talking.					
Yes ( <i>n</i> = 46)	2.11	69.39	2111.000	-2.523	0.012*
No ( <i>n</i> = 120)	2.44	88.91			

Note: Only statements related to AAC with significant group differences are displayed.

Upon further analysis, there were 4 statements in which there were significant group differences in all three sections: stuttering, speech sound disorder, and AAC. These statements were:

*Statement 4: A person who stutters/ who has a speech sound disorder/ who uses AAC should attend a different or special school.*

*Statement 8: Praying can help cure stuttering/ speech sound disorder/ a person who is nonverbal (does not talk.)*

*Statement 14: A person who stutters/ with a speech sound disorder/ who uses AAC is treated unfairly.*

*Statement 15: A person who stutters/ with a speech sound disorder/ who is nonverbal (does not talk) can improve or be better if he/she tried harder.*

**Statement 4: A Person Should Attend A Different or Special School.** Regarding stuttering, the 46 participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.39 (mean rank = 108.30) compared to the 120 participants who attended at least some school in the U.S. whose mean agreement score was 1.82 (mean rank = 73.99;  $U = 1619$ ;  $z = -4.701$ ;  $p = 0.000$ ). Those who only attended school in the Philippines were more likely to disagree that a person who stutters should attend a different school ( $m = 2.39$ ), but those who attended at least some school in the U.S. more strongly disagreed with the same statement ( $m = 1.82$ ).

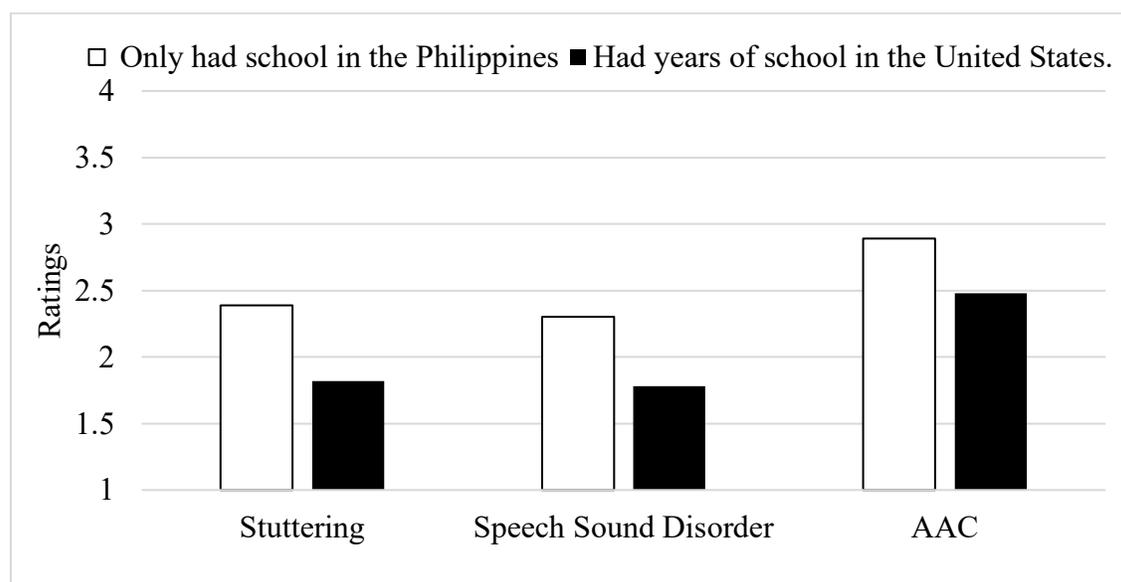
For speech sound disorders, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.30 (mean rank = 103.52) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 1.78 (mean rank = 75.83;  $U = 1839$ ;  $z = -3.760$ ;  $p = 0.000$ ). Those who only attended school in the Philippines were more likely to disagree that a person who has a speech sound disorder should

attend a different school ( $m = 2.30$ ), but those who attended at least some school in the U.S. more strongly disagreed with the same statement ( $m = 1.78$ ).

Regarding AAC users, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.89 (mean rank = 99.49) compared to participants who attended at least some school in the U.S. whose mean agreement score was 2.48 (mean rank = 77.37);  $U = 2024.5$ ;  $z = -2.897$ ;  $p = 0.004$ ). Those who only attended school in the Philippines were more likely to agree that a person who uses AAC should attend a different or special school ( $m = 2.89$ ), but those who attended at least some school in the U.S. were slightly more likely to disagree with the same statement ( $m = 2.48$ ). All three of these group comparisons are illustrated in Figure 10.

Figure 10

*Group Comparisons by Education in the U.S.: A Person Should Attend A Different or Special School*

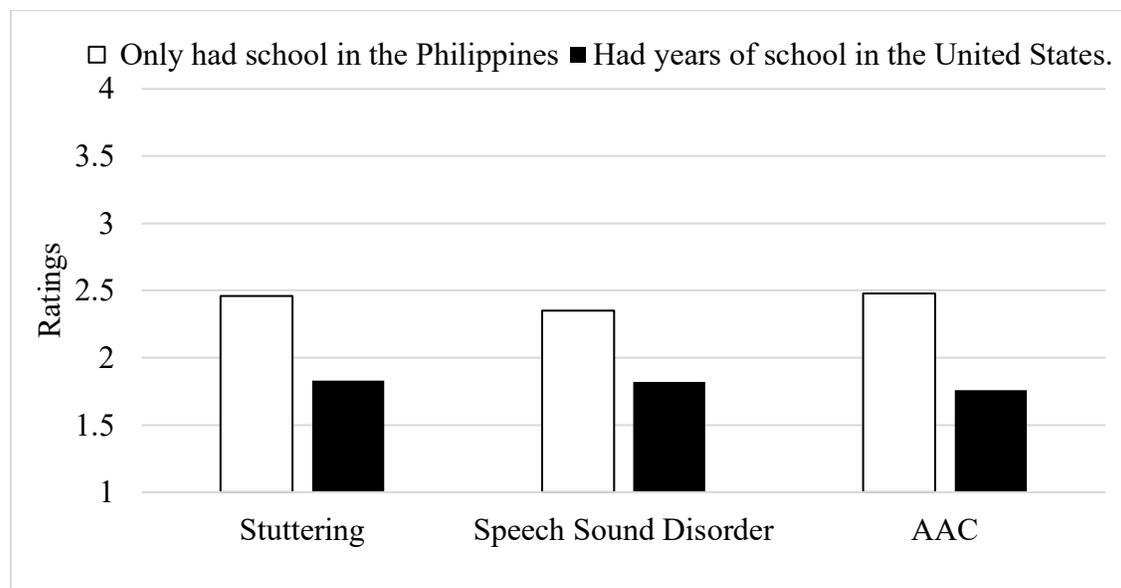


**Statement 8: Praying Can Help as A Cure.** Regarding stuttering, the 46 participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.46 (mean rank = 105.55) compared to the 120 participants who attended at least some school in the U.S. whose mean agreement score was 1.83 (mean rank = 75.05;  $U = 1745$ ;  $z = -3.880$ ;  $p = 0.000$ ). Those born in the Philippines were slightly more likely to disagree that praying can help cure stuttering ( $m = 2.46$ ), but those who attended at least some school in the U.S. more strongly disagreed with the same statement ( $m = 1.83$ ).

For speech sound disorders, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.35 (mean rank = 102) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 1.82 (mean rank = 76.41;  $U = 1909$ ;  $z = -3.268$ ;  $p = 0.001$ ). Those who only attended school in the Philippines were more likely to disagree that praying can help cure speech sound disorders ( $m = 2.35$ ), but those who attended at least some school in the U.S. more strongly disagreed with the same statement ( $m = 1.82$ ).

Regarding AAC users, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.48 (mean rank 108.46) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 1.76 (mean rank = 73.93);  $U = 1612$ ;  $z = -4.421$ ;  $p = 0.000$ ). Those who only attended school in the Philippines were slightly more likely to disagree that praying can help cure a person who is nonverbal (does not talk;  $m = 2.48$ ), but those who attended at least some school in the U.S. more strongly disagreed with the same statement ( $m = 1.76$ ). All three of these group comparisons are illustrated in Figure 11.

Figure 11

*Group Comparisons by Education in the U.S.: Praying Can Help as A Cure*

**Statement 14: A Person Is Treated Unfairly.** Regarding stuttering, the 46 participants who only attended school in the Philippines had a statistically lower mean agreement score of 2.13 (mean rank = 62.58) compared to the 120 participants who attended at least some school in the U.S. whose mean agreement score was 2.68 (mean rank = 91.52;  $U = 1797$ ;  $z = -3.782$ ;  $p = 0.00$ ). Those who only attended school in the Philippines were more likely to disagree that a person who stutters is treated unfairly ( $m = 2.13$ ), but those who attended at least some school in the U.S. were more likely to agree with the same statement ( $m = 2.68$ ).

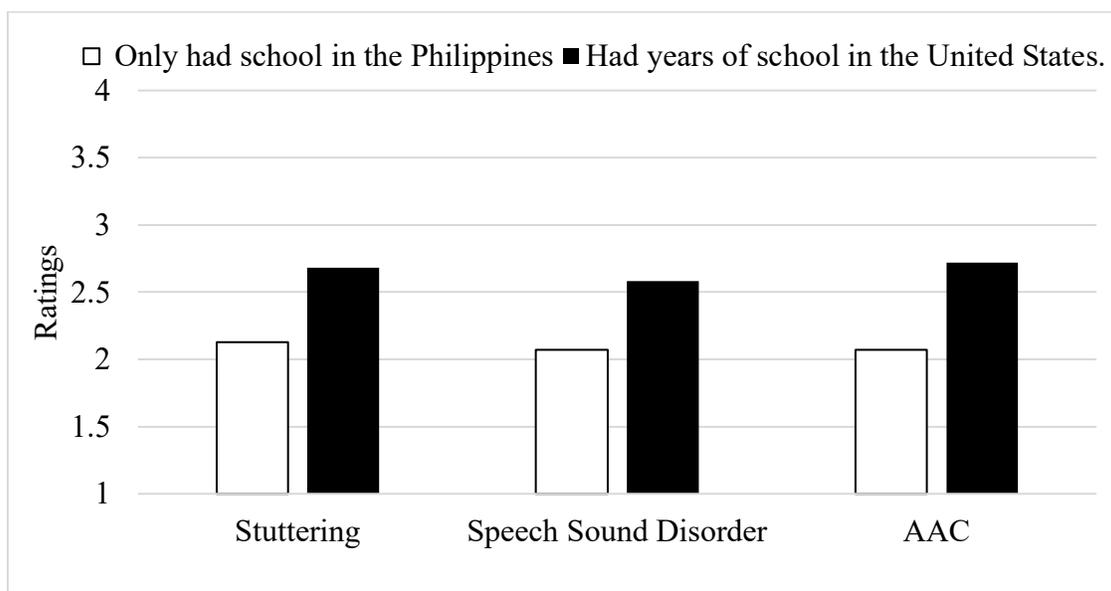
For speech sound disorders, the participants who only attended school in the Philippines had a statistically lower mean agreement score of 2.07 (mean rank = 65.14) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 2.58 (mean rank = 90.54;  $U = 1915$ ;  $z = -3.323$ ;  $p = 0.001$ ). Those who only attended school in the Philippines disagreed that a person with a speech sound disorder is treated unfairly ( $m = 2.07$ ),

but those who attended at least some school in the U.S. were more likely to agree with the same statement ( $m = 2.58$ ).

Regarding AAC users, the participants who only attended school in the Philippines had a statistically lower mean agreement score of 2.07 (mean rank = 59.20) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 2.72 (mean rank = 92.82;  $U = 1642$ ;  $z = -4.541$ ;  $p = 0.00$ ). Those who only attended school in the Philippines disagreed that a person who uses AAC is treated unfairly ( $m = 2.07$ ), but those who attended at least some school in the U.S. were more likely to agree with the same statement ( $m = 2.72$ ). All three of these group comparisons are illustrated in Figure 12.

Figure 12

*Group Comparisons by Education in the U.S.: A Person Is Treated Unfairly*



**Statement 15: A Person Can Improve or Be Better If He/She Tried Harder.**

Regarding stuttering, the 46 participants who only attended school in the Philippines had a statistically higher mean agreement score of 3.13 (mean rank = 105.60) compared to the 120

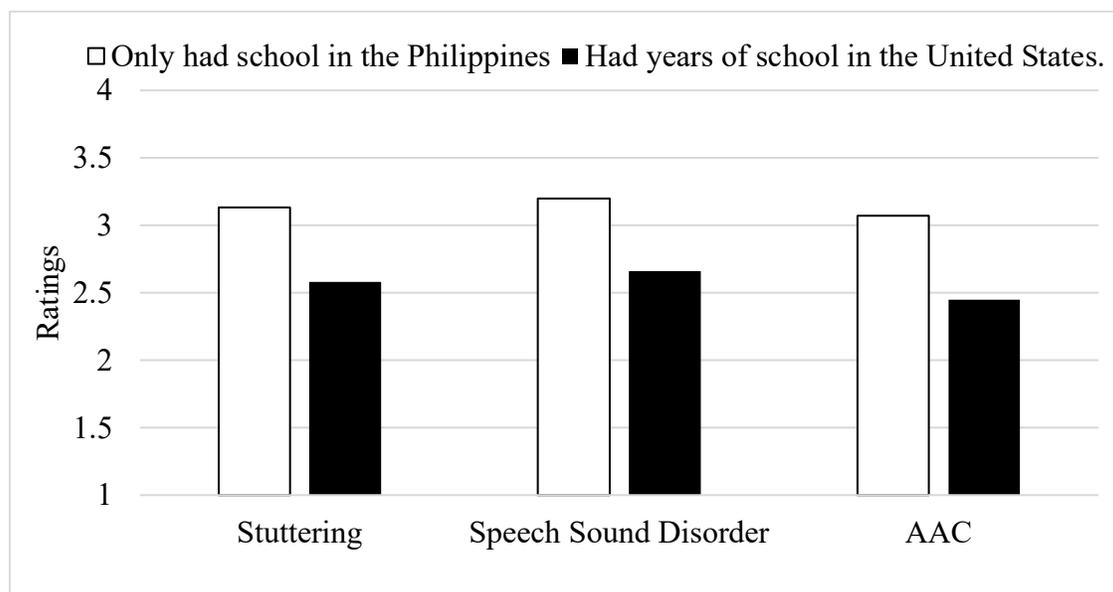
participants who attended at least some school in the U.S. whose mean agreement score was 2.58 (mean rank = 75.03);  $U = 1743.5$ ;  $z = -3.945$ ;  $p = 0.000$ ). Those who only attended school in the Philippines agreed that a person who stutters can improve or be better if he/she tried harder ( $m = 3.13$ ), but those who attended at least some school in the U.S. agreed less with the same statement ( $m = 2.58$ ).

For speech sound disorders, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 3.2 (mean rank = 105.08) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 2.66 (mean rank = 75.23;  $U = 1767.5$ ;  $z = -3.920$ ;  $p = 0.000$ ). Those who only attended school in the Philippines agreed that a person with a speech sound disorder can improve or be better if he/she tried harder ( $m = 3.2$ ), but those who attended at least some school in the U.S. agreed less with the same statement ( $m = 2.66$ ).

Regarding AAC users, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 3.07 (mean rank = 106.59) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 2.45 (mean rank = 74.65;  $U = 1698$ ;  $z = -4.074$ ;  $p = 0.000$ ). Those who only attended school in the Philippines agreed that a person who is nonverbal (does not talk) can improve or be better if he/she tried harder ( $m = 3.07$ ), but those who attended at least some school in the U.S. were slightly more likely to disagree with the same statement ( $m = 2.45$ ). All three of these group comparisons are illustrated in Figure 13.

Figure 13

*Group Comparisons by Education in the U.S.: A Person Can Improve or Be Better If He/She Tried Harder*



### ***Location of Highest Level of Education***

The Mann-Whitney U test was also run to determine if there were differences in agreement scores between those who received their highest level of education in the Philippines and those who received the highest level of education in the U.S. Out of 20 statements related to stuttering, two groups were statistically significant on 7 statements. Regarding speech sound disorders, the two groups were statistically different on 7 statements. Regarding use of AAC, the two groups were statistically significant on 10 statements. The Mann-Whitney U results for these statements are shown in Table 16, 17, and 18. (The Mann-Whitney U results for all statements are presented in Appendix I).

Table 16

*Location of Highest Level of Education Group Differences (Stuttering Statements)*

<b>Statement</b>	<b>Mean</b>	<b>Mean Rank</b>	<b>Mann – Whitney U</b>	<b>Z – Score</b>	<b>Significance (2-tailed)</b>
2. A person who stutters should go to a medical doctor for help with their speech.					
Philippines ( <i>n</i> = 54)	3.17	99.42	2164.500	-3.392	0.001*
U.S. ( <i>n</i> = 112)	2.79	75.83			
4. A person who stutters should attend a different/special school.					
Philippines ( <i>n</i> = 54)	2.31	102.95	1973.500	-4.135	0.000*
U.S. ( <i>n</i> = 112)	1.81	74.12			
6. The family of a person who stutters is being punished (i.e., by fate or God).					
Philippines ( <i>n</i> = 54)	1.22	90.87	2626.000	-2.486	0.013*
U.S. ( <i>n</i> = 112)	1.09	79.95			
8. Praying can help cure stuttering.					
Philippines ( <i>n</i> = 54)	2.43	103.87	1924.000	-4.019	0.000*
U.S. ( <i>n</i> = 112)	1.8	73.68			
14. A person who stutters is treated unfairly.					
Philippines ( <i>n</i> = 54)	2.13	64.16	1979.500	-3.921	0.000*
U.S. ( <i>n</i> = 112)	2.71	92.83			
15. A person who stutters can improve or be better if he/she tried harder.					
Philippines ( <i>n</i> = 54)	3.07	103.29	1955.500	-3.961	0.000*
U.S. ( <i>n</i> = 112)	2.56	73.96			
20. Everyone, regardless of the severity of their disability, has the potential to improve and learn how to communicate more effectively.					
Philippines ( <i>n</i> = 54)	3.22	74.19	2521.000	-1.961	0.050*
U.S. ( <i>n</i> = 112)	3.53	87.99			

Note: Only statements related to stuttering with significant group differences are displayed.

Table 17

*Location of Highest Level of Education Group Differences (Speech Sound Disorders Statements)*

<b>Statement</b>	<b>Mean</b>	<b>Mean Rank</b>	<b>Mann – Whitney U</b>	<b>Z – Score</b>	<b>Significance (2-tailed)</b>
2. A person with a speech sound disorder should go to a medical doctor for help with their speech.					
Philippines ( <i>n</i> = 54)	3.04	94.02	2456.000	-2.322	0.020*
U.S. ( <i>n</i> = 112)	2.8	78.43			
4. A person who has a speech sound disorder should attend a different/special school.					
Philippines ( <i>n</i> = 54)	2.28	103.76	1930.000	-4.267	0.000*
U.S. ( <i>n</i> = 112)	1.76	73.73			
8. Praying can help cure speech sound disorder.					
Philippines ( <i>n</i> = 54)	2.31	100.61	2100.000	-3.390	0.001*
U.S. ( <i>n</i> = 112)	1.79	75.25			
14. A person with a speech sound disorder is treated unfairly.					
Philippines ( <i>n</i> = 54)	2.15	69.70	2279.000	-2.801	0.005*
U.S. ( <i>n</i> = 112)	2.57	90.15			
15. A person with a speech sound disorder can improve/be better if he/she tried harder.					
Philippines ( <i>n</i> = 54)	3.13	101.75	2038.500	-3.719	0.000*
U.S. ( <i>n</i> = 112)	2.65	74.70			
16. Talking to a person with a speech sound disorder would make me uncomfortable.					
Philippines ( <i>n</i> = 54)	1.83	94.69	2420.000	-2.322	0.020*
U.S. ( <i>n</i> = 112)	1.58	78.11			
17. The mom of the person with a speech sound disorder likely used alcohol or drugs while she was pregnant.					
Philippines ( <i>n</i> = 54)	1.74	94.17	2448.000	-2.219	0.026*
U.S. ( <i>n</i> = 112)	1.49	78.36			

Note: Only statements related to speech sound disorders with significant group differences are displayed.

Table 18

*Location of Highest Level of Education Group Differences (AAC Statements)*

Statement	Mean	Mean Rank	Mann – Whitney U	Z – Score	Significance (2-tailed)
3. A person with an AAC need will have trouble getting a job.					
Philippines ( <i>n</i> = 54)	2.56	68.31	2204.000	-3.195	0.001*
U.S. ( <i>n</i> = 112)	2.89	90.82			
4. A person who uses AAC should attend a different/special school.					
Philippines ( <i>n</i> = 54)	2.85	97.88	2247.500	-2.922	0.003*
U.S. ( <i>n</i> = 112)	2.47	76.57			
8. Praying can help cure a person who is nonverbal (does not talk).					
Philippines ( <i>n</i> = 54)	2.43	106.15	1801.000	-4.500	0.000*
U.S. ( <i>n</i> = 112)	1.73	72.58			
9. Using an AAC device is not a big deal.					
Philippines ( <i>n</i> = 54)	2.31	70.06	2298.000	-2.647	0.008*
U.S. ( <i>n</i> = 112)	2.7	89.98			
11. A person who uses AAC will have trouble with making friends.					
Philippines ( <i>n</i> = 54)	1.93	65.89	2073.000	-3.505	0.000*
U.S. ( <i>n</i> = 112)	2.38	91.99			
14. A person who uses AAC is treated unfairly.					
Philippines ( <i>n</i> = 54)	2.06	59.31	1717.500	-5.070	0.000*
U.S. ( <i>n</i> = 112)	2.77	95.17			
15. A person who is nonverbal (does not talk) can improve/be better if he/she tried harder.					
Philippines ( <i>n</i> = 54)	2.98	102.85	1979.000	-3.830	0.000*
U.S. ( <i>n</i> = 112)	2.45	74.17			
17. The mom of the person with AAC needs likely used alcohol or drugs while she was pregnant.					
Philippines ( <i>n</i> = 54)	1.8	93.58	2479.500	-2.069	0.039*
U.S. ( <i>n</i> = 112)	1.55	78.64			
19. AAC can keep a person from talking.					
Philippines ( <i>n</i> = 54)	2.09	68.98	2240.000	-2.911	0.004*
U.S. ( <i>n</i> = 112)	2.47	90.50			

20. A child who is nonverbal (does not talk) have likely kissed a doll or a mirror when he/she was a baby.					
Philippines ( $n = 54$ )	1.28	72.70	2441.000	-2.396	0.017*
U.S. ( $n = 112$ )	1.47	88.71			

Note: Only statements related to AAC with significant group differences are displayed.

Upon further analysis, there were 4 statements in which there were significant group differences in all three sections: stuttering, speech sound disorder, and AAC. These statements were:

*Statement 4: A person who stutters/ who has a speech sound disorder/ who uses AAC should attend a different or special school.*

*Statement 8: Praying can help cure stuttering/ speech sound disorder/ a person who is nonverbal (does not talk.)*

*Statement 14: A person who stutters/ with a speech sound disorder/ who uses AAC is treated unfairly.*

*Statement 15: A person who stutters/ with a speech sound disorder/ who is nonverbal (does not talk) can improve or be better if he/she tried harder.*

**Statement 4: A Person Should Attend A Different or Special School.** Regarding stuttering, the 54 participants who received their highest level of education in the Philippines had a statistically higher mean agreement score of 2.31 (mean rank = 102.95) compared to the 112 participants who received the highest level of education in the U.S. whose mean agreement score was 1.81 (mean rank = 74.12);  $U = 1973.5$ ;  $z = -4.135$ ;  $p = 0.000$ ). Those who received their highest level of education in the Philippines were more likely to disagree that a person who

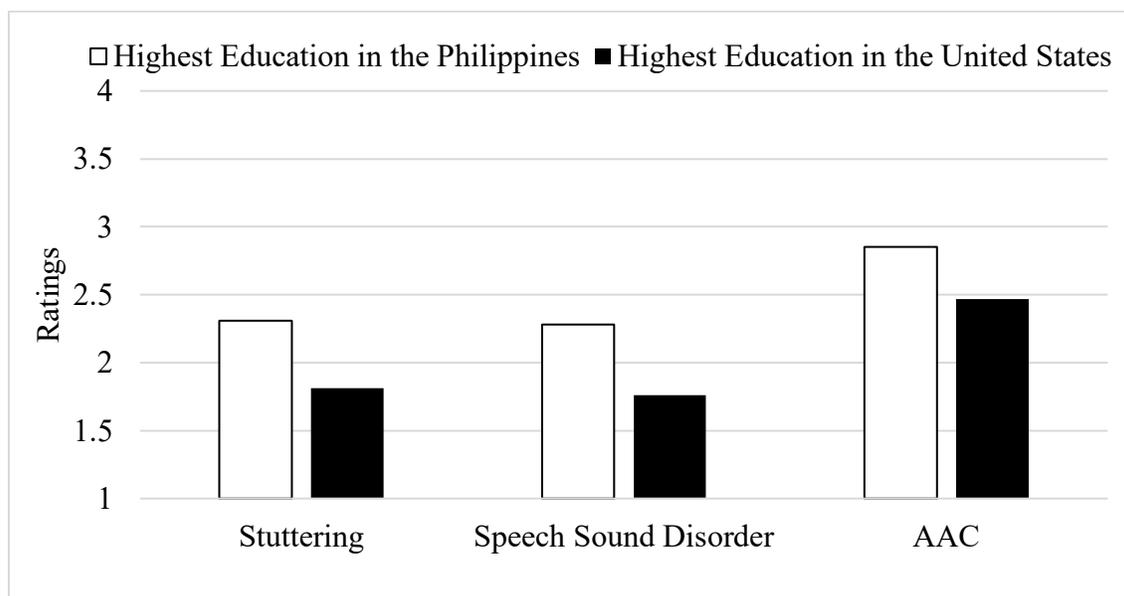
stutters should attend a different school ( $m = 2.31$ ), but those who received the highest level of education in the U.S. more strongly disagreed with the same statement ( $m = 1.81$ ).

For speech sound disorders, the participants who received their highest level of education in the Philippines had a statistically higher mean agreement score of 2.28 (mean rank = 103.76) compared to the participants who received their highest level of education in the U.S. whose mean agreement score was 1.76 (mean rank = 73.73;  $U = 1930$ ;  $z = -4.267$ ;  $p = 0.000$ ). Those who received their highest level of education in the Philippines were more likely to disagree that a person who has a speech sound disorder should attend a different school ( $m = 2.28$ ), but those who received the highest level of education in the U.S. more strongly disagreed with the same statement ( $m = 1.76$ ).

Regarding AAC users, the participants who received their highest level of education in the Philippines had a statistically higher mean agreement score of 2.85 (mean rank = 97.88) compared to participants who received the highest level of education in the U.S. whose mean agreement score was 2.47 (mean rank = 76.57;  $U = 2247.5$ ;  $z = -2.922$ ;  $p = 0.003$ ). Those who received their highest level of education in the Philippines were more likely to agree that a person who uses AAC should attend a different or special school ( $m = 2.85$ ), but those who received the highest level of education in the U.S. were slightly more likely to disagree with the same statement ( $m = 2.47$ ) All three of these group comparisons are illustrated in Figure 14.

Figure 14

*Group Comparisons by Location of Highest Level of Education: A Person Should Attend A Different or Special School*



**Statement 8: Praying Can Help as A Cure.** Regarding stuttering, the 54 participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.43 (mean rank = 103.87) compared to the 112 participants who attended at least some school in the U.S. whose mean agreement score was 1.80 (mean rank = 73.68;  $U = 1924$ ;  $z = -4.019$ ;  $p = 0.000$ ). Those who only attended school in the Philippines were slightly more likely to disagree that praying can help cure stuttering ( $m = 2.43$ ), but those who attended at least some school in the U.S. more strongly disagreed with the same statement ( $m = 1.80$ ).

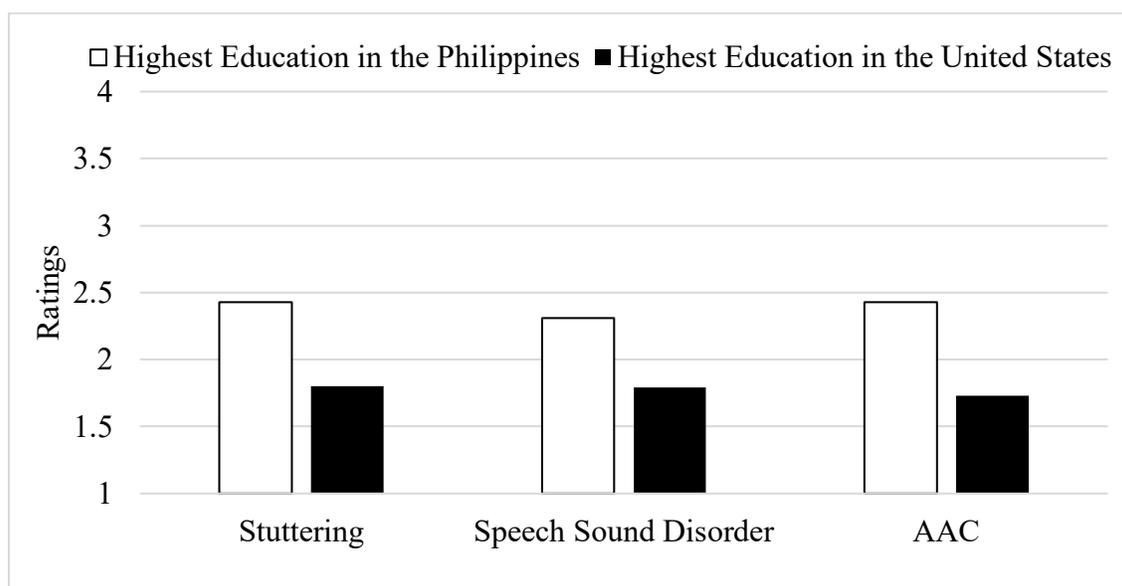
For speech sound disorders, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.31 (mean rank = 100.61) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 1.79 (mean rank = 75.25);  $U = 2100$ ;  $z = -3.390$ ;  $p = 0.001$ ). Those who only attended school in the

Philippines were more likely to disagree that praying can help cure speech sound disorders ( $m = 2.31$ ), but those who attended at least some school in the U.S. more strongly disagreed with the same statement ( $m = 1.79$ ).

Regarding AAC users, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.43 (mean rank = 106.15) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 1.73 (mean rank = 72.58;  $U = 1801$ ;  $z = -4.500$ ;  $p = 0.000$ ). Those who only attended school in the Philippines were slightly more likely to disagree that praying can help cure a person who is nonverbal (does not talk;  $m = 2.43$ ), but those who attended at least some school in the U.S. more strongly disagreed with the same statement ( $m = 1.73$ ). All three of these group comparisons are illustrated in Figure 15.

Figure 15

*Group Comparisons by Location of Highest Level of Education: Praying Can Help as A Cure*

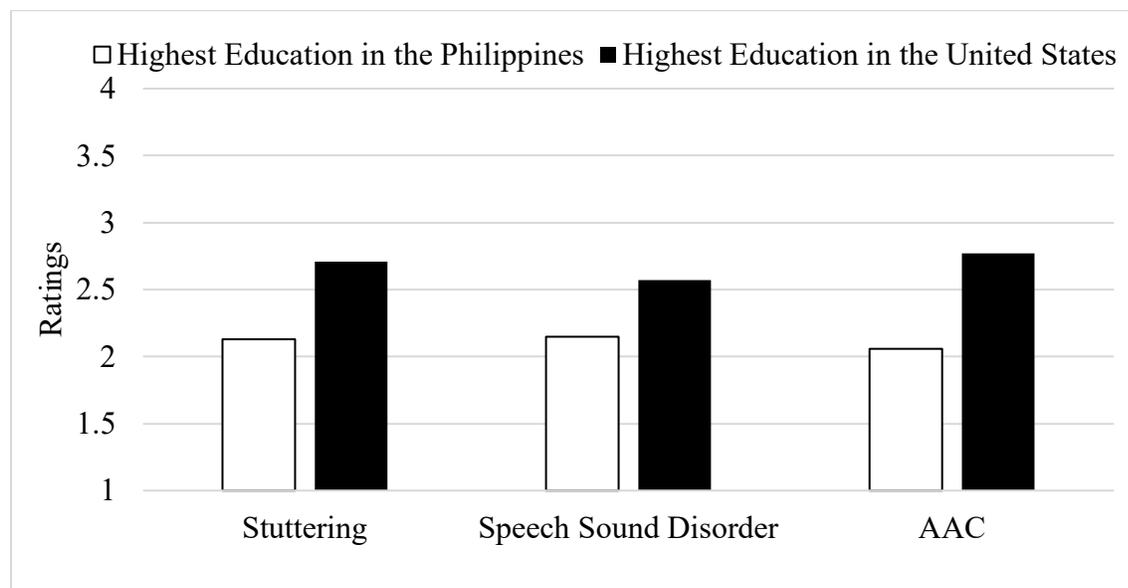


**Statement 14: A Person Is Treated Unfairly.** Regarding stuttering, the 54 participants who only attended school in the Philippines had a statistically lower mean agreement score of 2.13 (mean rank = 64.16) compared to the 112 participants who attended at least some school in the U.S. whose mean agreement score was 2.71 (mean rank = 92.83;  $U = 1979.5$ ;  $z = -3.921$ ;  $p = 0.000$ ). Those who only attended school in the Philippines disagreed that a person who stutters is treated unfairly ( $m = 2.13$ ), but those who attended at least some school in the U.S. were more likely to agree with the same statement ( $m = 2.71$ ).

For speech sound disorders, the participants who only attended school in the Philippines had a statistically lower mean agreement score of 2.15 (mean rank = 69.70) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 2.57 (mean rank = 90.15;  $U = 2279$ ;  $z = -2.801$ ;  $p = 0.005$ ). Those who only attended school in the Philippines were more likely to disagree that a person with a speech sound disorder is treated unfairly ( $m = 2.15$ ), but those who attended at least some school in the U.S. were slightly more likely to agree with the same statement ( $m = 2.57$ ).

Regarding AAC users, the participants who only attended school in the Philippines had a statistically lower mean agreement score of 2.06 (mean rank = 59.31) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 2.77 (mean rank = 95.17;  $U = 1717.5$ ;  $z = -5.070$ ;  $p = 0.000$ ). Those who only attended school in the Philippines disagreed that a person who uses AAC is treated unfairly ( $m = 2.06$ ), but those who attended at least some school in the U.S. were more likely to agree with the same statement ( $m = 2.77$ ). All three of these group comparisons are illustrated in Figure 16.

Figure 16

*Group Comparisons by Location of Highest Level of Education: A Person Is Treated Unfairly*

**Statement 15: Person Can Improve or Be Better If He/She Tried Harder.** Regarding stuttering, the 54 participants who only attended school in the Philippines had a statistically higher mean agreement score of 3.07 (mean rank = 103.29) compared to the 112 participants who attended at least some school in the U.S. whose mean agreement score was 2.56 (mean rank = 73.96;  $U = 1955.5$ ;  $z = -3.961$ ;  $p = 0.000$ ). Those who only attended school in the Philippines agreed that a person who stutters can improve or be better if he/she tried harder ( $m = 3.07$ ), but those who attended at least some school in the U.S. agreed less with the same statement ( $m = 2.56$ ).

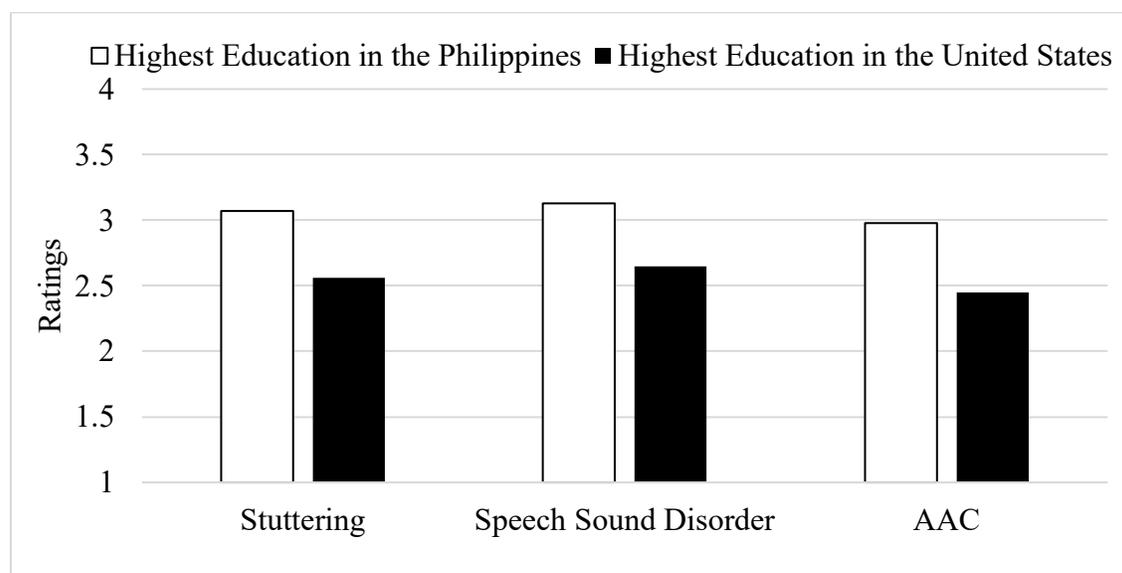
For speech sound disorders, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 3.13 (mean rank = 101.75) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 2.65 (mean rank = 74.70;  $U = 2038.5$ ;  $z = -3.719$ ;  $p = 0.000$ ). Those who only attended school in the

Philippines agreed that a person with a speech sound disorder can improve or be better if he/she tried harder ( $m = 3.13$ ), but those who attended at least some school in the U.S. agreed less with the same statement ( $m = 2.65$ ).

Regarding AAC users, the participants who only attended school in the Philippines had a statistically higher mean agreement score of 2.98 (mean rank = 102.85) compared to the participants who attended at least some school in the U.S. whose mean agreement score was 2.45 (mean rank = 74.17;  $U = 1979$ ;  $z = -3.830$ ;  $p = 0.000$ ). Those who only attended school in the Philippines agreed that a person who is nonverbal (does not talk) can improve or be better if he/she tried harder ( $m = 2.98$ ), but those who attended at least some school in the U.S. were slightly more likely to disagree with the same statement ( $m = 2.45$ ). All three of these group comparisons are illustrated in Figure 17.

Figure 17

*Group Comparisons by Location of Highest Level of Education: Person Can Improve or Be Better If He/She Tried Harder*



## Chapter 4: Discussion

This study investigated Filipino-Americans' knowledge and cultural perspectives on the causes and treatment of speech and language disorders. It was expected that the findings would add new cultural information on public knowledge about speech and language disorders. At the same time, it was expected to spread awareness about the profession of speech-language pathology (SLP) and the disorders or conditions that speech-language pathologists (SLPs) can support. The study also explored different levels of acculturation within the Filipino-American community and potential differences in their knowledge and perspectives towards stuttering, speech sound disorders, and use of AAC based on three different demographic groups. The researcher also anticipated that this study would contribute to the limited research on the cultural attitudes and perspectives of speech-language disorders and support SLPs' demonstration of cultural competency by familiarizing or considering Filipino-American culture as a component of their services to the Filipino-American community. Results from the anonymous survey were used to examine three research questions:

- (1) How familiar are Filipino-Americans with speech and language disorders?
- (2) What are their cultural ideas of etiology of speech and language disorders?
- (3) What are the cultural beliefs regarding the treatment of stuttering, speech sound disorders, and the use of AAC?

### **Knowledge and Familiarity (*N* = 166)**

Statements from the anonymous survey were categorized into three groups of statements: knowledge and familiarity with speech and language disorders, etiology of speech and language disorders, and treatment of speech and language disorders. The participants used a 4-point Likert

scale to provide their agreement score with each statement (1-strongly disagree, 2-disagree, 3-agree, 4-strongly agree).

The first research question examined the level of familiarity and knowledge of all the participants with speech and language disorders. There were nine statements associated with knowledge and familiarity of stuttering, speech sound disorders, and the use of AAC that were similarly worded:

*Statement 1: I have knowledge about stuttering/ speech sound disorders/ AAC.*

*Statement 2: A person who stutters/ with a speech sound disorder/ who is nonverbal (does not talk) should go to a medical doctor for help with their speech.*

*Statement 3: A person who stutters/ with a speech sound disorder/ with an AAC need will have trouble getting a job.*

*Statement 5: It is fine to tease or make fun of a person who stutters/ with a speech sound disorder/ who uses an AAC.*

*Statement 7: A person who stutters/ with a speech sound disorder/ who uses AAC is likely to be less intelligent than other people.*

*Statement 9: Stuttering/ A speech sound disorder/ Using an AAC device is not a big deal.*

*Statement 11: A person who stutters/ with a speech sound disorder / who uses an AAC will have trouble making friends.*

*Statement 14: A person who stutters/ with a speech sound disorder/ who uses AAC is treated unfairly.*

*Statement 16: Talking to a person who stutters/ with a speech sound disorder/ who uses an AAC would make me uncomfortable.*

The participants' responses were analyzed to find their mean level of agreement (see Tables 7, 8, and 9 above). As a group ( $N = 166$ ), Filipino-Americans agreed that they had knowledge about stuttering ( $M = 3.16$ ) and speech sound disorders ( $M = 2.74$ ). However, Filipino-Americans were neutral (between agree and disagree on the Likert scale) about their knowledge of AAC ( $M = 2.48$ ).

While there were some slight differences in their perceived knowledge of these conditions, Filipino-Americans had similar perceptions of people with these conditions. Filipino-Americans disagreed that it was "fine to tease or make fun" of people who have speech and language disorders (stuttering,  $m = 1.10$ ; speech sound disorder,  $m = 1.16$ ; AAC user,  $m = 1.12$ ), and that people with these conditions are "less intelligent than other people" (stuttering,  $m = 1.21$ ; speech sound disorder,  $m = 1.28$ ; AAC user,  $m = 1.36$ ). Additionally, the participants disagreed that the people with these conditions "will have trouble with making friends" (stuttering,  $m = 2.01$ ; speech sound disorder,  $m = 1.87$ ; AAC user,  $m = 2.23$ ) as well as "talking to a person who stutters/ with a speech sound disorder/ who uses an AAC would make them uncomfortable" (stuttering,  $m = 1.68$ ; speech sound disorder,  $m = 1.66$ ; AAC user,  $m = 1.75$ ).

There were two statements that Filipino-Americans were more likely to disagree with the statement as it related to stuttering and speech sound disorders but were more likely to agree when it related to AAC users. For the statement that "a person who stutters/with a speech sound disorder will have trouble getting a job," Filipino-Americans were more likely to disagree with the statement (stuttering,  $m = 2.33$ ; speech sound disorder,  $m = 2.28$ ). Filipino-Americans were also more likely to disagree that these conditions are "not a big deal" (stuttering,  $m = 2.34$ ; speech sound disorder,  $m = 2.29$ ). However, Filipino-Americans were more likely to agree with

this statement as it related to AAC users (“...have trouble getting a job”  $m = 2.78$ ; “...not a big deal,  $m = 2.57$ ).

While there were several statement related to knowledge and familiarity that Filipino-Americans disagreed on, they only consistently agreed about one statement, that “a person should go to a medical doctor for help with their speech” (stuttering,  $m = 2.92$ ; speech sound disorder,  $m = 2.88$ ; AAC user,  $m = 3.11$ ).

There was also one statement that their mean agreement score was near 2.5, meaning they neither disagreed nor agreed with the statement. and that the people with these conditions are “treated unfairly” (stuttering,  $m = 2.52$ ; speech sound disorder,  $m = 2.43$ ; AAC user,  $m = 2.54$ ).

### **Etiology ( $N = 166$ )**

The second research question examined the cultural ideas of all the participants regarding the etiology of speech and language disorders. There were three statements associated with the etiology of stuttering, speech sound disorders, and the use of AAC. While they were presented on their own section, they were similarly worded:

*Statement 6: The family of a person who stutters/ with a speech sound disorder/ with AAC needs is being punished (i.e., by fate or God).*

*Statement 12: A person’s stuttering/ speech sound disorder/ who is nonverbal (does not talk) is caused by a supernatural or mystical being also known as “maligno” or “engkanto.”*

*Statement 17: The mom of the person who stutters/ with a speech sound disorder/ with AAC needs likely used alcohol or drugs while she was pregnant.*

Responses were analyzed and all participants consistently disagreed with these three statements. Filipino-Americans disagreed that the families of people who stutter, with speech

sound disorders, and who use AAC are being punished (i.e., by fate or God) (stuttering,  $m = 1.13$ ; speech sound disorder,  $m = 1.14$ ; AAC user,  $m = 1.14$ ). They also disagreed that these conditions are “caused by a supernatural or mystical being also known as “maligno” or “engkanto” (stuttering,  $m = 1.20$ ; speech sound disorder,  $m = 1.23$ ; AAC user,  $m = 1.22$ ). Further, Filipino-Americans also disagreed that the mom of the person with these conditions likely used alcohol or drugs while pregnant (stuttering,  $m = 1.61$ ; speech sound disorders,  $m = 1.57$ ; AAC user,  $m = 1.63$ ). Given that the Philippines was colonized by different countries, a number of different religious practices continue in the country, such as the Catholicism, which was heavily influenced from the colonization of the Spaniards. Therefore, a variety of beliefs and values could influence views on the etiology of various communication disorders but the Filipino-Americans in this study consistently disagreed with some traditional beliefs about disability.

### **Treatment ( $N = 166$ )**

The third research question examined the cultural beliefs of all participants regarding the treatment of stuttering, speech sound disorders, and the use of AAC. There were six statements associated with the treatment of stuttering, speech sound disorders, and the use of AAC that were similarly worded:

*Statement 4: A person who stutters/ who has a speech sound disorder/ who uses AAC should attend a different or special school.*

*Statement 8: Praying can help cure stuttering/ speech sound disorder/ a person who is nonverbal (does not talk.)*

*Statement 10: A person who stutters/ with a speech sound disorder/ who is nonverbal (does not talk) should go to someone who cures or helps people (not a doctor) for help*

(e.g., Herb Doctor also known as “Albularyo” or Faith Healer also known as “Espiritista”).

*Statement 13: The family should keep the person who stutters/ with a speech sound disorder/ who is nonverbal (does not talk) or uses an AAC at home to hide from other people.*

*Statement 15: A person who stutters/ with a speech sound disorder/ who is nonverbal (does not talk) can improve or be better if he/she tried harder.*

*Statement 18: A person who stutters/ with a speech sound disorder/ who is nonverbal (does not talk) should get help with their speech and language problem at some time in their lives.*

As a group ( $N = 166$ ), Filipino-Americans presented consistency with some statements. All disagreed that praying (stuttering,  $m = 2.01$ ; speech sound disorder,  $m = 1.96$ ; AAC user,  $m = 1.96$ ) can help as a cure and disagreed with the statement that seeking someone who is not a doctor to help cure speech and language disorders (e.g., Herb Doctor also known as “Albularyo” or Faith Healer also known as “Espiritista”) (stuttering,  $m = 1.57$ ; speech sound disorder,  $m = 1.51$ ; AAC user,  $m = 1.49$ ). Additionally, Filipino-Americans disagreed that “the family should keep the person at home to hide them from other people (stuttering,  $m = 1.11$ ; speech sound disorder,  $m = 1.14$ ; AAC user,  $m = 1.18$ ). Again, the Filipino-Americans in this study consistently disagreed with traditional Filipino beliefs about the cause and treatment of individuals with disabilities. These unexpected findings could be an indication of a biased sample or the effects of western (e.g., American) influence on Filipino-Americans.

Unfortunately, the demographic questionnaire section did not inquire about religious practices to

determine if the religious practices of the study participants were representative of the larger Filipino-American population.

Filipino-Americans also indicated that they were more likely to agree that people who stutter ( $m = 2.73$ ), with speech sound disorders ( $m = 2.81$ ), or AAC users ( $m = 2.62$ ) “can improve or be better if they tried harder.” They also agreed that anyone with speech and language disorders “should get help ... at some time in their lives” (stuttering,  $m = 3.16$ ; speech sound disorder,  $m = 3.19$ ; and AAC user,  $m = 3.31$ ). Although Filipino-Americans agreed with these two statements, a slight contradiction is present, particularly with the idea that “a person should get help at some time in their lives;” however, “a person can improve or be better if the person tried harder.” Therefore, upon further conceptualization of the consistent agreement of these two statements, it could be assumed that Filipino-Americans may view “getting help” could be associated with trying harder. Another potential explanation could be that someone might not seek treatment because they worry that they may be perceived as not trying hard enough.

Further, Filipino-Americans also presented a slight difference in their level of agreement on one statement. Filipino-Americans seemed neutral or more likely to agree that “a person who uses AAC should attend a different or special school ( $m = 2.60$ ). However, they disagreed with similar statements related to stuttering ( $m = 1.98$ ) and speech sound disorders ( $m = 1.93$ ). While this demonstrated that the participants were more likely to believe that going to a different or special school was not necessary for those who stutter or present speech sound disorders, a different or special school may be appropriate for those who use AAC. The researcher looked to levels of acculturation and group comparisons to determine if traditional Filipino culture could help explain some of the variability.

## Group Comparisons

While the results for all the participants ( $N = 166$ ) demonstrated the difference of knowledge and perspectives towards stuttering, speech sound disorders, and use of AAC, the researcher also explored the variability in the participants' level of agreement to the statements. Recall that all of the study's participants live in the U.S. yet 68.1% of participants were born in the Philippines, 27.7% never attended school in the U.S. and 32.5% completed their highest degree in the Philippines. These individuals may be more culturally connected with the Philippines compared those who were born in the U.S., attended school, in the U.S., and completed their highest degree in the U.S. These groups of participants may have different knowledge and cultural perspectives of stuttering, speech sound disorders, and the use of AAC that may reflect participants' identity and level of acculturation.

Cajilog (2018) defined acculturation as being the process that results when someone has to interact and adapt to two different cultures. It is the ability of an individual to process two cultures coming together while maintaining and preserving one culture in the face of another culture. Accordingly, acculturation can be developed in three different phases: contact, conflict, and adaptation (Muega, 2016). The acculturation contact phase occurs when cultural groups interact (e.g., a student entering a school in the U.S. without any American educational background). The acculturation conflict phase then shows when there is a struggle of power between two belief systems (e.g., parents who were born and raised in the Philippines may be unfamiliar with developmental milestones for speech and language or not understand why their child is being referred for speech-language pathology services in the United States). With this example, the parents' belief about the normalcy of their growing child was challenged, which could then result with both experiencing acculturative stress (Muega, 2016). Further, the

adaptation phase is another way that acculturation can develop. For example, the parents of the child who was referred to a speech-language pathologist for a comprehensive speech and language evaluation can eventually accept the situation just to comply with the educational system in the U.S., but only doing so to reduce conflict.

Given these explanations of the development of acculturation, the researcher explored the levels of acculturation of the participants who are currently living in the U.S. based on their place of birth, education in the U.S., and location of their highest education. After conducting group comparisons, patterns of results emerged across groups and four statements (i.e., Statements 4, 8, 14, and 15) as having consistent group differences across stuttering, speech sound disorders, and use of AAC.

### ***Knowledge and Familiarity***

For Statement 14 (i.e., “is treated unfairly”), Filipino-Americans who were born in the Philippines, who only attended education in the Philippines, and who completed their highest degree in the Philippines were more likely to disagree that a person who stutters ( $m = 2.31$ ), has a speech sound disorder ( $m = 2.28$ ), or who uses AAC ( $m = 2.32$ ) “is treated unfairly.” Those who were born in the U.S., who attended at least some school in the U.S., or who received their highest level of education in the U.S. all agreed (stuttering,  $m = 2.98$ ; speech sound disorder,  $m = 2.75$ ; AAC user,  $m = 3$ ) with the same statement.

### ***Treatment***

There were three statements (i.e., Statements 4, 8, and 15) where there was variability and patterns in the group comparisons. For Statement 4, while those who were born in the Philippines, only attended education in the Philippines, and completed their highest degree in the Philippines disagreed that people who stutters ( $m = 2.07$ ) or have speech sound disorders ( $m$

=2.1) “should attend a different or special school”, those who were more closely connected with the U.S. disagreed more strongly (stuttering,  $m = 1.72$ ; speech sound disorder,  $m = 1.62$ ). However, when the same statement was directed at people who use AAC, the group differences may reflect some component of acculturation. For example, the groups who may be more closely connected with the Philippines (i.e., those born, attended all school, and attended the highest level of school in the Philippines) were more likely to be agree that “a person who uses AAC should attend a different or special school ( $m = 2.69$ ). However, those who were born in the U.S., who attended at least some school in the U.S., and who received their highest level of education in the U.S. were more neutral or slightly disagreed ( $m = 2.4$ ) that “a person who uses AAC should attend a different or special school.”

While the different perspective of schooling for AAC users could be interpreted in several ways, this could be related to differences in inclusive education in the Philippines compared to the U.S. The U.S. has more available resources, and hence, those in the education field are likely more knowledgeable about inclusive educational practices for those who were born and attended school in the U.S. On the other hand, a bill intended to provide a high-quality inclusion in the Philippine schools called Special Education Act has been pending since 2011, and as of the time of the study, the Senate of the Philippines has yet to review this (Muega, 2016). While this is another potential reason, it would be best to study this topic specifically and how it affects those who were just starting the process of their acculturation.

For Statement 8 (“praying can help as a cure”), Filipino-Americans who were born in the Philippines, only attended school in the Philippines, and completed their highest degree in the Philippines all disagreed that prayer could help cure stuttering ( $m = 2.19$ ), speech sound disorder ( $m = 2.17$ ), and an AAC user ( $m = 2.21$ ). However, those who were born in the U.S., attended at

least some school in the U.S., and who received their highest level of education in the U.S. disagreed more strongly with the same statement (stuttering,  $m = 1.6$ ; speech sound disorder,  $m = 1.53$ ; and AAC user,  $m = 1.42$ ). Statement 8 was the only statement where there were consistent group differences and included an element of religious influence (e.g., prayer) on disability (e.g., communication disorders). While there was a consistent disagreement with the statement, those who were more closely connected with the U.S. disagreed more strongly, indicating potential effects of acculturation. However, once again, this study did not inquire about religious practices to determine if the religious practices of the study participants were representative of the larger Filipino-American population

For Statement 15 (“a person can improve or be better if they tried harder,”) Filipino-Americans who were born in the Philippines, who only attended education in the Philippines, or who completed their highest degree in the Philippines agreed that a person who stutters ( $m = 2.92$ ), has a speech sound disorder ( $m = 2.99$ ), or uses AAC ( $m = 2.84$ ) “can improve or be better if they tried harder.” However, those who were born in the U.S., attended at least some school in the U.S., or who received their highest level of education in the U.S. were more likely to disagree with the same statement (stuttering,  $m = 2.32$ ; speech sound disorder,  $m = 2.42$ ; and AAC user,  $m = 2.15$ ).

### **Clinical Implications**

While the study highlighted the attitudes and perspectives of Filipino-Americans towards knowledge, causes, and treatment of speech and language disorders, it also brought to light the potential influences of the acculturation process of Filipino-Americans. SLPs in the U.S. are surrounded by the cultural and linguistic diversity of the country and are more likely to face the task of providing effective services to clients with cultural and linguistic backgrounds different

from their own (Bebout & Arthur, 1997). With consistent immigration, the population of Filipino-Americans is growing, and this occurrence suggests clinical implications for the SLPs working with the Filipino-American population in the U.S. (Hamilton et al., 2018).

### ***Role of the Speech-Language Pathologists***

ASHA Principle of Ethics, Rule D indicates that “individuals shall enhance and refine their professional competence and expertise through engagement in lifelong learning applicable to their professional activities and skills” (ASHA, 2017). This brought the importance of lifelong learning and how it is required in order to develop the individual’s knowledge and skills that can help to provide culturally and linguistically appropriate services. In this study, the researcher showed Filipino-Americans’ knowledge and perspectives on speech and language disorders that will help SLPs better understand their Filipino-American clients, patients, or students. The knowledge and perspectives of Filipino-Americans may differ from the clinician reading this information and may influence how they interact with, refer, and treat Filipino-Americans with speech and language disorders.

**Collaboration and Referral/Seeking Services.** When clinicians are serving Filipino-American population, it is important to consider their knowledge and familiarity of their concern. One example that this study found was Filipino-Americans consistently agreed that “a person who stutters/ with speech sound disorder/ who uses an AAC should go to a medical doctor for help with speech.” While this could be interpreted in several ways, it could be related to the recent origination of the SLP profession and access to SLP services in the Philippines, as discussed in the first chapter of this study. This could be interpreted that many do not know where communication disorders are assessed and treated. Therefore, they may hold limited knowledge about speech and language disorders and the existence of speech-language

pathologists who treat these disorders, especially those who were more closely connected with the Philippines.

Agreement scores for another statement led to similar interpretations. Filipino-Americans ( $N = 166$ ) tended to be neutral about the statements that “a person who stutters/with a speech sound disorder/uses AAC is treated unfairly.” However, during group comparisons, those who were born in the Philippines, attended schools only in the Philippines, or received their highest level of education in the Philippines were more likely to disagree with the statement and those who were born in the U.S., attended school in the U.S., or received their highest degree in the U.S. opposed the view. While this could be interpreted in several ways, it is possible that Filipino-Americans might not seek professional help (e.g., SLP services) because they did not attribute to communication disorders to being treated unfairly. This could also support another potential interpretation that Filipino-Americans have limited knowledge about SLP services, as well as access to SLP services.

Therefore, clinicians might expect to educate Filipino-Americans about the role of the SLPs in assessing and treating speech and language disorders. At the same time, clinicians and other providers often initiate clinical services by building rapport with their clients. Clinicians could emphasize the importance of collaboration with the family or guardians during the gathering of information. The clinician could include questions related to knowing more information about their culture such as asking about what they believe is the cause of the impairment. While the researcher was surprised that the participants consistently disagreed with the statements addressing traditional cultural perspectives on the causes of disability (e.g., A person’s stuttering/ speech sound disorder/ who is nonverbal (does not talk) is caused by a

supernatural or mystical being also known as “maligno” or “engkanto), this could be evidence of a biased sample that will be discussed in the study limitations below.

**Treatment.** As previously discussed, the SLP profession was relatively new in the Philippines. As a result, many Filipinos do not have access to SLP services in the Philippines. This reality could impact how the participants, who are currently residing in the U.S., responded to some of the statements for this study. For the statement, “A person can improve or be better if they tried harder,” Filipino-Americans as a whole ( $N = 166$ ) agreed with this statement. Further, during group comparisons, those who were born in the Philippines, attended schools only in the Philippines, or received their highest level of education in the Philippines agreed with the same statement that “A person can improve or be better if they tried harder,” while those who were more associated with the U.S. disagreed. With this, a potential example that could occur for the treatment process is the family not following up to receive treatment. A family who recently moved to the U.S. may believe that their child is not trying hard enough rather than needing treatment for a speech-language disorder.

As previously discussed above, Filipino-Americans tended to agree more about their knowledge of stuttering and speech sound disorders compared to their knowledge of AAC users. Therefore, when Filipino-Americans disagreed that a person who stutters or has a speech sound disorder “should attend a different or special school,” but agreed that those who use AAC “should attend a different or special school,” it may be a difference in knowledge or familiarity with these conditions. Due to differences in the U.S. and Philippine school systems, Filipino-Americans may be more knowledgeable and familiar with those who stutter and have speech sound disorders compared to those who use AAC. Also, they may perceive stuttering and speech sound disorders as less severe compared to a person who uses AAC, thus, a different or special

school (e.g., a school where special education services are available) is for those who only use AAC or with AAC needs. Clinicians may need to educate families about the assessment and treatment processes that occur within the U.S. school system, including inclusive education options or receiving speech-language services in conjunction with their general education curriculum.

Furthermore, Filipino-Americans consistently disagreed that “praying can help as a cure,” which suggests that religious treatments may not be a priority for many Filipino-Americans as they are for some Asian cultures (e.g., Hmong). However, this statement was difficult to interpret because the researcher did not ask demographic questions related to religion. Future studies should include demographic questions related to religion so that religious components to acculturation could be investigated.

In summary, based on the study results, SLPs should consider the following when working with a Filipino-American client, patient, student, and even with their family or guardians:

- Filipino-Americans may have limited knowledge about AAC than stuttering or speech-sound disorders and may need more education in the area of AAC.
- Filipino-Americans may seek medical doctor for help with their speech rather than SLPs due to their limited knowledge and/or recent origination of SLP as a profession in the Philippines. Therefore, it may be necessary to educate them about the roles of SLPs in terms of assessment and treatment of speech and language disorders.
- Filipino-Americans may find it necessary for someone who uses AAC to go to a different or special school than those who stutter or present speech sound disorders due to limited utilization of inclusive education in the Philippines.

- Filipino-Americans may see no unfair treatment occurs for those with speech and language disorders and this could impact their decision to seek professional help (e.g., SLP services).
- Filipino-Americans may believe that improvement of speech and language disorders is largely on their own willpower and might less likely seek professional help such as speech and language services when needed.
- Due to the multiple religious influences from the history of colonization of the Philippines and immigration to the U.S., Filipino-Americans may not hold some traditional beliefs on the cause and treatment of those with disability (e.g., communication disorders).

As these considerations may illustrate valid information about the Filipino-American population, it is not recommended that a clinician generalize this information to every Filipino-American client, patient, or family.

### **Limitations of the Study**

As in all studies, strengths and weaknesses exist. This study is no exception and presents its own limitations. First, the study employed snowball sampling which likely impacted the demographics of the sample. Recall the dissemination of the survey link to recruit participants was completed by contacting the leaders of Filipino-American Associations/Organizations across the nation. Not only might these participants already be interested in topics related to Filipino-Americans, but they may also value maintaining their connections to their Filipino heritage which could possibly mean that they still practice cultural values and beliefs despite being in the U.S. At the same time, Laerd Statistics described snowball sampling as sampling that “does not select units for inclusion in the sample based on random selection, unlike probability sampling

techniques.” Therefore, it is impossible to determine the possible sampling error and make statistical inferences from the sample to the population. As such, snowball samples may not represent the population being studied. In sum, the recruitment strategy used in this study limits the generalizability of the results to the overall Filipino-American population in the U.S.

One example of the potential effects of snowball sampling on this study’s sample was the gender imbalance. Recall that leaders of the Filipino-American Associations were the initial contacts to recruit and distribute the survey. They were mostly female which likely lead to an oversampling female Filipino-Americans in this study. There were 119 (71.7%) female participants and 47 (28.3%) male participants, which were not representative of Filipino’s gender distribution in the U.S. (51% female and 49% male; Migration Policy Institute, 2013). The gender imbalance in this study may be a representative of a bias sample.

While the measure was provided in both English and Tagalog languages, the sample might not represent all Filipino-Americans because the survey was only provided and conducted online. There may have been some potential participants who did not have access to the internet or computer/cellphones as well as those who may have needed other modes of accessibility (e.g., printed copies, written, audio, braille, sign language, etc.).

Last, there may be validity concerns regarding the participants’ answers when completing the anonymous survey. Even though the survey was anonymous and clearly indicated in the introduction letter, invitation letter, and informed consent, 40.2% of participants reported they lived in the state of Kansas, which was the same as the researcher. Some participants may know the researcher and have been skeptical of true anonymity. Moreover, the researcher employed a 4-point scale which did not include a “neutral” option and forced participants to “agree” or

“disagree.” Participants may interpret the word “strongly” to some different degrees, which may have impacted the way they answered.

Notwithstanding the limitations presented, results still have implications for clinical practice by highlighting the need for SLPs’ to demonstrate cultural competency by familiarizing or considering Filipino-American culture as a component of their services to Filipino-American community. It is also contributing to the limited research on the cultural attitudes and perspectives of speech-language disorders.

### **Considerations for Future Research**

Given the results of this study, the researcher recommends additional research of Filipino-Americans’ knowledge and perspectives of speech and language disorders. First, while this study provided information regarding the place of birth, education in the U.S., and location of their highest education, future research could explore and analyze other subgroups of Filipino-American, including but not limited to age differences, variation of their socioeconomic status, different levels of education completed, length of their residence in the U.S., different generation levels, and religious differences.

Additionally, since the study started the discussion about levels of acculturation, it would also be favorable to further this topic by integrating and utilizing a standardized measure for acculturation while also finding if there is any correlation between their attitudes and perspectives toward other speech and language disorders (e.g., aphasia, apraxia, dysphagia, etc.).

Due to the recent origination of SLP as a profession in the Philippines, another area of future research would be to conduct a similar study and target participants residing in the Philippines to compare their knowledge and perspectives of speech and language disorders to Filipino-Americans. Comparing the results to the results of this study would also be insightful

and could benefit the dearth of research about Filipino-Americans and speech and language disorders.

Given this study's participants were all residing in the U.S., it would also be beneficial to conduct a similar study but targeting participants from different countries where Filipino immigration has also taken place (e.g., Canada, Singapore, Qatar, Australia, etc.). This could heighten the understanding of this population and the cultural distinction within the Filipino diaspora.

### **Conclusion**

Due to the importance of addressing the differences and relevancy of providing culturally and linguistically appropriate services for clients, patients, or students, this study was conducted to examine Filipino-American's knowledge and perspectives towards stuttering, speech sound disorders, and use of AAC. Examination of their cultural beliefs was completed while also considering the potential variant levels of their acculturation process related to their place of birth, education in the U.S., and location of the highest level of education. With this, research questions targeting the knowledge and familiarity, etiology, and treatment were explored using statements that probe ideas related to their cultural beliefs. Through this study, SLPs can provide services to the growing population of Filipinos in the U.S. more effectively while being clinically prepared as well as culturally competent toward their clients, patients, or students who are from different backgrounds or cultures.

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## Appendix A: Human Research Protection Program (HRPP) Approval



Date: December 9, 2019  
 TO: Anna Nicole Aniel, ([REDACTED]@ku.edu)  
 FROM: Alyssa Haase, IRB Administrator ([REDACTED]@ku.edu), [irb@ku.edu](mailto:irb@ku.edu)

RE: **Approval of Initial Study**

The IRB reviewed the submission referenced below on 12/9/2019. The IRB approved the protocol, effective 12/9/2019.

IRB Action: APPROVED	Effective date: 12/9/2019	Expiration Date : 12/8/2024
<b>STUDY DETAILS</b>		
Investigator:	<a href="#">Anna Nicole Aniel</a>	
IRB ID:	STUDY00144947	
Title of Study:	The Attitudes and Perspectives of Filipino-American Regarding Speech and Language Disorders	
Funding ID:	None	
<b>REVIEW INFORMATION</b>		
Review Type:	Initial Study	
Review Date:	12/9/2019	
Documents Reviewed:	<ul style="list-style-type: none"> <li>• Anna Nicole C. Aniel_KU HRPP Human Research Protocol (updated 12.02.2019), • Anna Nicole C. Aniel-End Qualtrics Survey Messages, • Anna Nicole C. Aniel-Introduction letter, • Anna Nicole C. Aniel-QUALTRICS Survey Draft (TAGALOG &amp; ENGLISH Versions) (updated 12.02.2019), • ENGLISH-Informed Consent_Information Statement-Anna Nicole C. Aniel (updated 12/9/2019), • TAGALOG-Informed Consent_Information Statement-Anna Nicole C. Aniel (updated 12/9/2019)</li> </ul>	
Exemption Determination:	• (2)(i) Tests, surveys, interviews, or observation (non-identifiable)	
Additional Information:		

**KEY PROCEDURES AND GUIDELINES.** Consult our website for additional information.

1. **Approved Consent Form:** You must use the final, watermarked version of the consent form, available under the “Documents” tab, “Final” column, in eCompliance. Participants must be given a copy of the form.
2. **Continuing Review and Study Closure:** You are required to provide a project update to HRPP before the above expiration date through the submission of a Continuing Review. Please [close your study](#) at completion.
3. **Modifications:** Modifications to the study may affect Exempt status and must be submitted for review and approval before implementing changes. For more information on the types of modifications that require IRB review and approval, [visit our website](#).
4. **Add Study Team Member:** [Complete a study team modification](#) if you need to add investigators not named in original application. Note that new investigators must take [the online tutorial](#) prior to being approved to work on the project.
5. **Data Security:** [University data security and handling requirements](#) apply to your project.
6. **Submit a Report of New Information (RNI):** If a subject is injured in the course of the research procedure or there is a breach of participant information, an RNI must be submitted immediately. Potential non-compliance may also be reported through the RNI process.
7. **Consent Records:** When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity.
8. **Study Records** must be kept a minimum of three years after the completion of the research. Funding agencies may have retention requirements that exceed three years.



## Appendix C: Informed Consent and Authorization Form

### INFORMED CONSENT AND AUTHORIZATION FORM

The Attitudes and Perspectives of the Filipino-Americans Regarding Speech and Language Disorders

**INTRODUCTION:** The Department of Speech-Language-Hearing: Sciences & Disorders at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate or not in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time. Your withdrawal from this study will not affect any relationship with the researcher, department, the services it may provide to you, or the University of Kansas.

**PURPOSE OF THE STUDY:** The purpose of this study is to investigate and address the familiarity of the Filipino-Americans regarding speech and language disorders, including their cultural ideas or cultural beliefs of the causes and treatment of these disorders.

**PROCEDURES:** If you choose to participate in this study, you will be asked to complete an anonymous survey consisting of demographic questionnaire and sections about communication disorders. The survey is expected to take no more than 20 minutes to complete. As this survey is anonymous, your answers will be kept confidential and no identifiable information of you will be saved, collected, or associated with the research findings. It is possible, however, with internet communications, that through intent or accident, someone other than the intended recipient may see your response.

**RISKS AND BENEFITS:** The risks involved in this study are minimal. The survey responses may involve your personal or sensitive information regarding your thoughts indicating the level of agreement on each statement. Otherwise the content of the survey should cause no more discomfort that you experience in your everyday life. By your participating in this study, you may find enjoyment and interest that you will be helping contribute to the limited number of studies of speech-language pathology within the minority groups in the United States. This may also encourage you to spread awareness about the Speech-Language Pathology as a profession and the disorders or conditions that a Speech-Language Pathologist can treat or help with. Otherwise, no other personal benefits are expected.

**PARTICIPANT CERTIFICATION:** Completion of this survey indicates your willingness to take part in this study and that you are at least 18 years old. Only completed surveys will be used in this study and incomplete surveys will be removed. If you have any questions about the study and your rights as a research participant, you can contact any of the persons listed below or write to the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7568, or e-mail [irb@ku.edu](mailto:irb@ku.edu).

**Anna Nicole C. Aniel, B.S.**  
Principal Investigator  
Department of Speech-Language-Hearing: Sciences and Disorders  
University of Kansas  
2201 Haworth Hall, Lawrence, KS 66045  
[REDACTED]

**W. Matt Gillispie, Ph.D., CCC-SLP**  
Faculty Supervisor  
Department of Speech-Language-Hearing: Sciences and Disorders  
University of Kansas  
2201 Haworth Hall, Lawrence, KS 66045  
[REDACTED]



### PAHINTULOT NANG PAGSANG AYON

*The Attitudes and Perspectives of the Filipino-Americans Regarding Speech and Language Disorders (Ang mga Saloobin at Pag-Unawa ng mga Pilipino sa Amerika sa mga Karamdaman ng Komunikasyon)*

**PANIMULA:** Ang Departamento ng Speech-Language-Hearing: Sciences & Disorders ng Unibersidad ng Kansas ay sumusuporta sa pagsasagawa ng proteksyon para sa mga pantao na makikisali sa pag-aaral. Ang sumusunod na impormasyon ay ibinibigay upang magpasya kung nais mong sumali o hindi sa kasalukuyang pag-aaral. Dapat malaman mo rin na kahit na sumang-ayon nang sumali, malaya ka pa ring umurong kahit kailan. Ang pag-urong mo ay hindi makakaapekto sa anumang kaugnayan sa nag-aaral, departamento, mga serbisyong maaring ibigay, o sa Unibersidad ng Kansas.

**LAYUNIN:** Ang layuning ng pag-aaral na ito ay siyasatin at matuguman kung gaano kapamilyar ang mga Pilipino sa Amerika sa mga karamdamang pangkomunikasyon, kasama ang kanilang mga ideyang pangkulturang o paniniwala na maaring sanhi o gamot sa mga karamdamang ito.

**PAMAMARAAN:** Ikaw ay magku-kumpleto ng survey na binubuo ng mga tanong tungkol sa iyo at mga karamdamang komunikasyon. Ang pagkumpleto ng survey na ito ay inaasahang hindi hihigit sa 20 minutos. Ang mga sagot mo ay mananatiling kumpidensyal at walang makikilalang impormasyon na maaring iugnay sayo. Subalit, dahil sa koneksyon sa internet, hangarin man o aksidente, maari paring makita ang iyong mga sagot ng ibang tao maliban sa inaasahan lang.

**MGA PANGANIB AT PAKINABANG:** Walang panganib ang pag-aaral na ito kundi ang pag-tugon mo sa survey ay maaring iugnay sa personal or sensitibong impormasyon tungkol sa saloobin mo. Kundi, ang survey na ito ay hindi dapat magbigay ng hirap na maaring maranasan sa pang-araw-araw. Sa pagsali mo, maaring magbigay ng kasiyahan ang pag-aaral na ito lalo't makakatulong ka na mag-ambag sa nabibilang na pag-aaral tungkol sa mga grupong minority sa Estados Unidos tungkol sa Speech-Language Pathology pati na rin dagdagan ang impormasyon ng publiko tungkol dito at mga karamdamang ng komunikasyon na maaring matulungan ng isang Speech-Language Pathologist. Kundi, walang ibang personal na mapapakinabangan sa pag-aaral na ito.

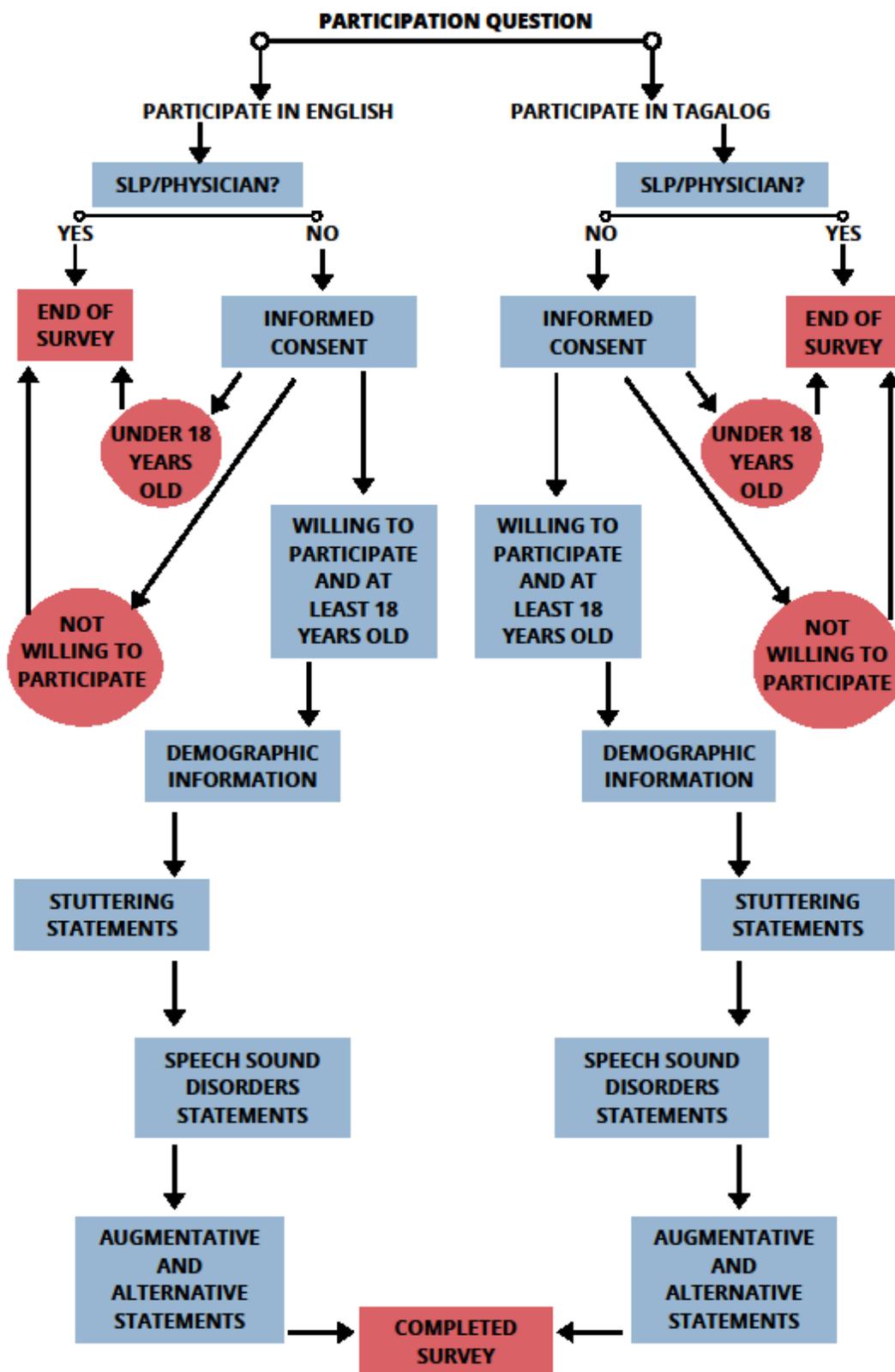
**SERTIPIKO NG PAGSALI:** Ang pagkumpleto ng survey na ito ay nagpapahiwatig ng pagsali mo sa pag-aaral na ito at na edad ay hindi bababa sa 18 taong gulang. Mga kumpletong survey lang ang gagamitin sa pag-aaral na ito at ang mga hindi kumpleto ay aalisin. Kung mayroong tanong tungkol sa pag-aaral ang karapatan ng pagsali mo, maaring makipagugnayan sa mga taong nakalista or sumulat sa Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7568, o e-mail [urb@ku.edu](mailto:urb@ku.edu).

**Anna Nicole C. Aniel, B.S.**  
Principal Investigator  
Department of Speech-Language-Hearing: Sciences and Disorders  
University of Kansas  
2201 Haworth Hall, Lawrence, KS 66045

**W. Matt Gillispie, Ph.D., CCC-SLP**  
Faculty Supervisor  
Department of Speech-Language-Hearing: Sciences and Disorders  
University of Kansas  
2201 Haworth Hall, Lawrence, KS 66045



## Appendix D: Survey Flow Chart



## Appendix E: Qualtrics Anonymous Survey



### Participation\_Question

Thank you for your participation.

This survey is offered in either English or Tagalog. In what language would you like to continue? (Please select one.)

---

Maraming salamat po sa inyong partisipasyon.

Ang survey na ito ay maaring ipagpatuloy gamit ang wikang Ingles o Tagalog. Sa anong wika nais mong magpatuloy? (Pumili ng isa.)

English / Ingles

Tagalog

### TAGALOG\_profession

Ikaw ba ay isang doktor o speech-language pathologist?

Oo

Hindi

### TAGALOG-Informed Consent

### PAHINTULOT NANG PANGSANG AYON

*The Attitudes and Perspectives of the Filipino-Americans Regarding Speech and Language Disorders (Ang mga Saloobin at Pag-Unawa ng mga Pilipino sa Amerika sa mga Karamdaman ng Komunikasyon)*

**PANIMULA:** Ang Departamento ng Speech-Language-Hearing: Sciences & Disorders ng Unibersidad ng Kansas ay sumusuporta sa pagsasagawa ng proteksyon para sa mga pantao na makikisali sa pag-aaral. Ang sumusunod na impormasyon ay ibinibigay upang magpasya kung nais mong sumali o hindi sa kasalukuyang pag-aaral. Dapat malaman mo rin na kahit na sumang-ayon nang sumali, malaya ka pa ring umurong kahit kailan. Ang pag-urong mo ay hindi makakaapekto sa anumang kaugnayan sa nag-aaral, departamento, mga serbisyong maaring ibigay, o sa Unibersidad ng Kansas.

**LAYUNIN:** Ang layuning ng pag-aaral na ito ay siyasatin at matuguman kung gaano kapamilyar ang mga Pilipino sa Amerika sa mga karamdamang pangkomunikasyon, kasama ang kanilang mga ideyang pangkulturang o paniniwala na maaring sanhi o gamot sa mga karamdamang ito.

**PAMAMARAAN:** Ikaw ay magku-kumpleto ng survey na binubuo ng mga tanong tungkol sa iyo at mga karamdamang komunikasyon. Ang pagkumpleto ng survey na ito ay inaasahang hindi hihigit sa 20 minutos. Ang mga sagot mo ay mananatiling kumpidensyal at walang makikilalang impormasyon na maaring iugnay sayo. Subalit, dahil sa koneksyon sa internet, hangarin man o aksidente, maari paring makita ang iyong mga sagot ng ibang tao maliban sa inaasahan lang.

**MGA PANGANIB AT PAKINABANG:** Walang panganib ang pag-aaral na ito kundi ang pag-tugon mo sa survey ay maaring iugnay sa personal or sensitibong impormasyon tungkol sa saloobin mo. Kundi, ang survey na ito ay hindi dapat magbigay ng hirap na maaring maranasan sa pang-araw-araw. Sa pagsali mo, maaring magbigay ng kasiyahan ang pag-aaral na ito lalo't makakatulong ka na mag-ambag sa nabibilang na pag-aaral tungkol sa mga grupong minority sa Estados Unidos tungkol sa Speech-Language Pathology pati na rin dagdagan ang impormasyon ng publiko tungkol dito at mga karamdamang ng komunikasyon na maaring matulungan ng isang Speech-Language Pathologist. Kundi, walang ibang personal na mapapakinabangan sa pag-aaral na ito.

**SERTIPIKO NG PAGSALI:** Ang pagkumpleto ng survey na ito ay nagpapahiwatig ng pagsali mo sa pag-aaral na ito at na edad ay hindi bababa sa 18 taong gulang. Mga kumpletong survey lang ang gagamitin sa pag-aaral na ito at ang mga hindi kumpleto ay aalisin. Kung mayroong tanong tungkol sa pag-aaral ang karapatan ng pagsali mo, maaring makipagugnayan sa mga taong nakalista or sumulat sa Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7568, o e-mail [urb@ku.edu](mailto:urb@ku.edu).

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Sumasang-ayon akong sumali sa pag-aaral na ito at ang edad ko ay hindi bababa sa 18 taong gulang. Nauunawaan ko ang mga layunin, pamamaraan, panganib, at pakinabang ng pag-aaral na ito.

Ako ay mas bata sa 18 taong gulang.

Hindi ako sumasang-ayon na sumali sa pag-aaral na ito.

Ano ang petsa ngayon? (MM/DD/YYYY)

### **TAGALOG\_Demographic Information Form**

Alin sa mga sumusunod ang tumutugma sa iyo? (Maaring pumili ng higit sa isa).

American Indian o Alaska Native

Asian

Black o African American

Hispanic o Latino

Middle Eastern o North African

Native Hawaiian o Other Pacific Islander

White

Sabihin kung mayroong iba pa

Ilang taon ka na?

18-29 taong gulang

30-45 taong gulang

46-60 taong gulang

Higit sa 61 taong gulang

Ang iyong kasarian ay \_\_\_\_\_.

Babae

Lalaki

Sabihin kung mayroong iba pa

Mas nais na hindi sabihin

Ano ang pinakamataas na antas ng edukasyon ang iyong narating? (Kung kasalukuyang naka-enrol, markahan ang nakaraang grade o pinakamataas na pag-aaral na natapos).

Mas mababa sa high school diploma

High school diploma o katumbas

Associate's Degree

Bachelor's Degree

Graduate Degree (e.g., M.A., M.S., MBA., M.Ed., Ph.D., Ed.D., MD., JD., etc)

Sabihin kung mayroong iba pa

Saan ka nagtapos at nakamit ito? (Saan mo makukumpleto o makakamit ito kung kasalukuyang naka-enrol?)

Pilipinas

Estados Unidos

Sabihin kung mayroong iba pa

Ano ang klasipikasyon ng trabaho mo?

Nagtatrabaho/Sariling Negosyo (40 oras sa isang Linggo)

Nagtatrabaho/Sariling Negosyo (20 oras sa isang Linggo)

Walang trabaho

Estudyante

Retirado

Anong wika ang gingagamit mo sa pakikipag-usap? (Maaring pumili ng higit sa isa).

Ingles

Tagalog

Sabihin kung mayroong iba pa

Saang bansa ka namamalagi ngayon?

Pilipinas

Estados Unidos

Sabihin kung mayroong iba pa

Saan sa Estados Unidos ka namamalagi ngayon?

Bansa ng kapanganakan.

Pilipinas

Estados Unidos

Ilang taon ka ng naninirahan sa Estados Unidos?

Ilang taon?

Gaano ka na katagal nag-aaral o nag-aral sa Estados Unidos?

Hindi ako nag-aral sa Estados Unidos

Ilang taon?

Sa mga sumusunod na pahayag, alin ang pinaka tugma na naglalarawan sa iyo?

1 Henerasyon - ikaw ay ipinanganak sa Pilipinas at lumipat sa Estados Unidos sa edad na 8 o mas matanda.

1.5 Henerasyon- ikaw ipinanganak sa Pilipinas at lumipat sa Estados Unidos sa edad na mas bata sa 8.

2 Henerasyon- ikaw ipinanganak sa Estados Unidos at parehong magulang ay ipinanganak sa Pilipinas.

3 Henerasyon - ikaw at parehong magulang ay ipinanganak din sa Estados Unidos.

At iba pa - ipinanganak sa sa labas ng Pilipinas at Estados Unidos at hindi pa nakatira sa Pilipinas.

At iba pa - ipinanganak sa labas ng Pilipinas at Estados Unidos at nakatira na sa Pilipinas.

Masasabi mo bang meron kang kapansanan o karamdaman?

Oo

Hindi

Mas nais na hindi sabihin

Aling sa mga sumusunod ang tugma na naglalarawan sa iyong kapansanan o karamdaman?

Komunikasyon

Learning Disabilities (ADHD o Dyslexia)

Sakit sa kaisipan (Mental Health Disorder)

Kakulangan sa pagkilos (Mobility Impairment)

Sakit sa pangitain o pakikinig (Sensory)

Walang Karamdaman

Sabihin kung mayroong iba pa

Nakakausap ko pa rin ang aking pamilya at kamaganak sa Pilipinas sa pamamagitan ng mga tawag sa telepono, e-mail, mail, text, video call, o social media.

Hindi nangyayari

Paminsan-minsan sa isang taon

Buwan-buwan

Linggo-linggo

Araw-araw

Madalas akong bumisita sa Pilipinas.

Hindi nangyayari

Tuwing ilang taon.

Isang beses sa isang taon.

Mahigit sa isang beses sa isang taon

Habang hindi ako kasalukuyang nakatira sa Pilipinas, itinuturing ko parin na Pilipinas ay aking tahanan.

Oo

Hindi

### **TAGALOG\_Stuttering**

Ang "Stuttering" ay isang uri ng karamdaman sa pagsasalita kung saan ang isang tao ay "naa-at-at"at maaring nahihirapan na mahanap ang salita. Dahil dito, ang isang tao ay maaring huminto ng mahabang panahon habang nagsasalita, pahabain ang isang tunog ng isang salita, o kaya ay paulit-ulitin ang ibang bahagi ng mga salita. Halimbawa, maaring sabihin ng isang tao na at-at ay "pahingi ..... ng tinapay" o kaya'y, "naaaaang tinapay" o kaya naman ay, "na-na-na-nang tinapay."

Basahing mabuti ang sumusunod na mga pangungusap o pahayag at mangyaring markahan upang maipahiwatig ang iyong saloobin tungkol sa bawat pangungusap o pahayag.

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Mayroon akong kaalaman tungkol sa karamdamang ito.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Ang taong naa-at-at ay dapat pumunta sa isang doktor para matulungan sa kanyang pagsasalita.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong naa-at-at ay mahirap makahanap ng isang magandang trabaho.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong naa-at-at ay dapat pumasok sa iba o espesyal na eskwelahan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Palagay ko ayos lang tukuhin o pagtawanan ang taong naa-at-at.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pinaparusahan ng kapalaran o ng Diyos ang pamilya ng taong naa-at-at.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong naa-at-at ay malamang hindi matalino kaysa sa ibang tao.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang pagdarasal ay makakatulong na pagalingin ang taong naa-at-at.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Hindi malaking bagay ang kapag ang tao ay naa-at-at.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong naa-at-at ay dapat pumunta sa isang taong nagpapagaling o tumutulong sa mga tao (hindi isang doktor) kundi isang Albularyo o Espiritista.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong naa-at-at ay mahirap makahanap ng mga kaibigan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malamang ang taong naa-at-at ay na-maligno o na-engkanto.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong naa-at-at ay dapat panatalihin sa bahay ng kanyang pamilya upang itago mula sa ibang tao.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mababa ang pagturing sa taong naa-at-at.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Kung magsu- sumikap o magpipilit ng lubha ang taong naa-at-at, maaring mapabuti nito o maging maayos ang kanyang pagsasalita.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mahihirapan ako makipag-usap sa taong naa-at-at.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malamang ang ina ng taong naa-at-at ay gumamit ng alak o droga habang siya ay nagbubuntis dito.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dapat humingi ng tulong ang taong naa-at-at kahit isa manlang sa tanan ng kanyang buhay.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang bawat tao, anuman ang kalubhaan ng kanilang kapansanan o kasakitan, ay may potensyal na malaman kung paano mapabuti ang kanilang pakikipag-usap.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Maaring gambalain o pahintuin ang isang bata kapag ito ay nagsasalita.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### **TAGALOG\_Speech Sound Disorders**

Ang pagiging “bulol” ay isang uri ng sakit sa pagsasalita kung saan ang isang tao ay maaring mahirapan maunawan ng ibang tao. Ang isang bulol ay maaring magpalit ng isang tunog ng letra para sa isa pa, mag-iwan ng tunog ng letra, magdagdag ng mga tunog, o magbago ng isang tunog. Halimbawa, maaring sabihin ng isang tao na “wabbit” kesa sa “rabbit” dahil sa pagpalit nito ng tunog na /w/ para sa tunog na /r/.

Basahing mabuti ang sumusunod na mga pangungusap o pahayag at mangyaring markahan upang maipahiwatig ang iyong saloobin tungkol sa bawat pangungusap o pahayag.

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Mayroon akong kaalaman tungkol sa pagiging bulol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Ang isang bulol ay dapat pumunta sa isang doktor para matulungan sa kanyang pagsasalita.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang isang bulol ay mahirap makahanap ng isang magandang trabaho.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang isang bulol ay dapat pumasok sa iba o espesyal na eskwelahan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Palagay ko ayos lang tukuhin o pagtawanan ang isang bulol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pinaparusahan ng kapalaran o ng Diyos ang pamilya ng isang bulol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang isang bulol ay malamang hindi matalino kaysa sa ibang tao.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang pagdarasal ay makakatulong na pagalingin ang isang bulol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Hindi malaking bagay ang pagiging bulol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang isang bulol ay dapat pumunta sa isang taong nagpapagaling o tumutulong sa mga tao (hindi isang doktor) kundi isang Albularyo o Espiritista.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang isang bulol ay mahirap makahanap ng mga kaibigan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malamang ang isang bulol ay namaligno o nangkanto.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang isang bulol ay dapat panatalihin sa bahay ng kanyang pamilya upang itago mula sa ibang tao.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mababa ang pagturing sa isang bulol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Kung magsu- sumikap o magpipilit ng lubha ang isang bulol, maaring mapabuti nito o maging maayos ang kanyang pagsasalita.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mahihirapan ako makipag-usap sa isang bulol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malamang ang ina ng isang bulol ay gumamit ng alak o droga habang siya ay nagbubuntis dito.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dapat humingi ng tulong ang isang bulol kahit isa manlang sa tanan ng kanyang buhay.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pinahahalagahan ko ang pakikipag-usap at pagbabasa sa mga bata.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sa palagay ko, ang pandinig ng isang bata ay dapat surin parati upang maiwasan ang pagkautal ng isang bata.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### TAGALOG\_Augmentative and Alternative Communication

Ang Augmentative and Alternative Communication o AAC (o ang ibig sabihin kapag isinalin sa ating wika ay pagpapalaki at alternatibo na komunikasyon) ay isang paraan upang mapunan ang kahirapan ng isang tao na mayroong pansamantala o permanenteng kasakitan o kapansanan na magsalita. Ito ay ginagamit ng isang tao na mayroong limitasyon na makisalamuyo sa ibang tao sa mga aktibidad at iba pang gawain dahil sa malubha o kumplikadong sakit na maaring naapektuhan ang kanyang pagsasalita at pagunawa. Ito ay isang paraan para maiparating ng isang tao ang kanilang pang-araw-araw na pangangailangan gamit ang isang bagay na maaring magsalita para sa kanila kagaya ng notebook, sign language o ibang mga kilos, o paggamit ng isang device o kaya ay kompyuter.

Basahing mabuti ang sumusunod na mga pangungusap o pahayag at mangyaring markahan upang maipahiwatig ang iyong saloobin tungkol sa bawat pangungusap o pahayag.

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Mayroon akong kaalaman tungkol sa AAC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong hindi nagsasalita o hindi makapagsalita ay dapat pumunta sa isang doktor para matulungan sa kanyang pagsasalita.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Ang taong hindi nagsasalita o hindi makapagsalita ay mahirap makahanap ng isang magandang trabaho.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong gumagamit ng AAC ay dapat pumasok sa iba o espesyal na eskwelahan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Palagay ko ayos lang tuksohin o pagtawanan ang taong gumagamit ng AAC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pinaparusahan ng kapalaran o ng Diyos ang pamilya ng taong hindi nagsasalita o hindi makapagsalita.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong gumagamit ng AAC ay malamang hindi matalino kaysa sa ibang tao.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang pagdarasal ay makakatulong na pagalingin ang taong hindi nagsasalita o hindi makapagsalita.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Hindi malaking bagay ang paggamit ng AAC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong hindi nagsasalita o hindi makapagsalita ay dapat pumunta sa taong nagpapagaling o tumutulong sa mga tao (hindi isang doktor) kundi isang Albularyo o Espiritista.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong gumagamit ng AAC ay mahihirapan makahanap ng mga kaibigan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malamang ang taong hindi nagsasalita o hindi makapagsalita ay na-maligno o na-engkanto.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ang taong gumagamit ng AAC ay dapat panatalihin sa bahay ng kanyang pamilya upang itago mula sa ibang tao.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Mababa ang pagturing sa taong gumagamit ng AAC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kung magsu-sumikap o magpipilit ng lubha ang taong hindi nagsasalita o hindi makapagsalita, maaring mapabuti nito o maging maayos ang kanyang pagsasalita.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mahihirapan ako makipag-usap sa taong gumagamit ng AAC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malamang ang ina ng taong hindi nagsasalita o hindi makapagsalita ay gumamit ng alak o droga habang siya ay nagbubuntis dito.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dapat humingi ng tulong ang taong hindi nagsasalita o hindi makapagsalita kahit isa manlang sa tanan ng kanyang buhay.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Sobrang Hindi Sumasang- ayon	Hindi Sumasang- ayon	Sumasang- ayon	Sobrang Sumasang- ayon
Pinipigilan ng AAC ang pag-unlad ng pagsasalita ng isang tao.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malamang ang taong hindi nagsasalita o hindi makapagsalita ay hinalikan ang isang manika o salamin noon siya ay bata pa.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### **ENGLISH\_profession**

Are you a physician or a speech-language pathologist?

Yes

No

### **ENGLISH\_Informed Consent**

### INFORMED CONSENT AND AUTHORIZATION FORM

The Attitudes and Perspectives of the Filipino-Americans Regarding Speech and Language Disorders

**INTRODUCTION:** The Department of Speech-Language-Hearing: Sciences & Disorders at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate or not in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time. Your withdrawal from this study will not affect any relationship with the researcher, department, the services it may provide to you, or the University of Kansas.

**PURPOSE OF THE STUDY:** The purpose of this study is to investigate and address the familiarity of the Filipino-Americans regarding speech and language disorders, including their cultural ideas or cultural beliefs of the causes and treatment of these disorders.

**PROCEDURES:** If you choose to participate in this study, you will be asked to complete an anonymous survey consisting of demographic questionnaire and sections about communication disorders. The survey is expected to take no more than 20 minutes to complete. As this survey is anonymous, your answers will be kept confidential and no identifiable information of you will be saved, collected, or associated with the research findings. It is possible, however, with internet communications, that through intent or accident, someone other than the intended recipient may see your response.

**RISKS AND BENEFITS:** The risks involved in this study are minimal. The survey responses may involve your personal or sensitive information regarding your thoughts indicating the level of agreement on each statement. Otherwise the content of the survey should cause no more discomfort that you experience in your everyday life. By your participating in this study, you may find enjoyment and interest that you will be helping contribute to the limited number of studies of speech-language pathology within the minority groups in the United States. This may also encourage you to spread awareness about the Speech-Language Pathology as a profession and the disorders or conditions that a Speech-Language Pathologist can treat or help with. Otherwise, no other personal benefits are expected.

**PARTICIPANT CERTIFICATION:** Completion of this survey indicates your willingness to take part in this study and that you are at least 18 years old. Only completed surveys will be used in this study and incomplete surveys will be removed. If you have any questions about the study and your rights as a research participant, you can contact any of the persons listed below or write to the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7568, or e-mail [irb@ku.edu](mailto:irb@ku.edu).

**Anna Nicole C. Aniel, B.S.**  
Principal Investigator  
Department of Speech-Language-Hearing: Sciences and Disorders  
University of Kansas  
2201 Haworth Hall, Lawrence, KS 66045

**W. Matt Gillispie, Ph.D., CCC-SLP**  
Faculty Supervisor  
Department of Speech-Language-Hearing: Sciences and Disorders  
University of Kansas  
2201 Haworth Hall, Lawrence, KS 66045



KU Lawrence IRB # STUDY00144947 | Approval Period 12/9/2019 – 12/8/2024

I am at least 18 years old and I am willing to take part in this study. I understand the purpose, procedure, risks, and benefits of this study.

I am under 18 years old.

I am not willing to take part in this study.

Today's date. (MM/DD/YYYY)

### **ENGLISH\_Demographic Information Form**

Which of the following best describes you? (You may choose more than one).

American Indian or Alaska Native

Asian

Black or African American

Hispanic or Latino

Middle Eastern or North African

Native Hawaiian or Other Pacific Islander

White

**Other (please specify)**

What is your age?

18-29 years old

30-45 years old

46-60 years old

Over 61 years old

Your identified gender is \_\_\_\_\_.

Female

Male

Other (please specify)

Prefer not to say

What is the highest level of school you have completed? (If currently enrolled, mark the previous grade or highest degree received).

Less than a high school diploma

High school degree or equivalent

Associate's Degree

Bachelor's Degree

Graduate Degree (e.g., M.A., M.S., MBA., M.Ed., Ph.D., Ed.D., MD., JD., etc)

Other (please specify)

Where did you complete or receive this? (Where are you completing or receiving this if currently enrolled?)

Philippines

U.S.A.

Other (please specify)

Employment status:

Employed/Self-Employed full time (40 hours a week)

Employed/Self-Employed part time (less than 40 hours a week)

Unemployed

Student

Retired

What language(s) do you speak? (You may choose more than one).

English

Tagalog

Other (please specify)

In which country do you currently reside?

Philippines

U.S.A.

Other (please specify)

In which state do you currently reside?

Where were you born?

Philippines

U.S.A.

In years, how long have you lived in the United States?

(#)

How many years of school have you had in the US?

I did not go to school in the US

Years

Which of the following statements best defines you?

1st Generation - born in the Philippines and immigrated to the U.S. at age 8 or older.

1.5 Generation- born in the Philippines and immigrated to the U.S. at younger than 8.

2nd Generation- born in the U.S. while one or both parents were born in the Philippines.

3rd Generation and above- born in the U.S. and parents were born in the U.S.

Other- born outside of the Philippines and the U.S. and have never lived in the Philippines.

Other- born outside of the Philippines and the U.S. but have lived in the Philippines.

Do you identify as having a disability?

Yes

No

Prefer not to answer

Which of the following describes your disability? (You may choose more than one).

Communication

Learning disability (adhd or dyslexia)

Mental health disorder

Mobility impairment

Sensory impairment (vision or hearing)

Not Applicable

Disability or impairment not listed above:

I contact my family in the Philippines through telephone calls, emails, mail, text, video call, or social media.

Never

A couple times a year

Monthly

Weekly

Daily

I visit the Philippines often.

Never

Every couple of years

Once a year

More than once a year

While I currently do not live in the Philippines, I consider the Philippines to be my home.

Yes

No

### **ENGLISH\_Stuttering**

Stuttering is a type of speech disorder where a person may have a hard time getting the word out by pausing for a long time, stretching a sound out for a long time, or repeating parts of words. For example, this person may say “I want a ..... cookie” or say “cooooooookie” or “co-co-co-cookie” (American Speech-Language-Hearing Association (ASHA)).

Please read each of the following statements carefully and indicate your level of agreement with each statement using a 4-point scale.

	Strongly Disagree	Disagree	Agree	Strongly Agree
I have knowledge about stuttering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who stutters should go to a medical doctor for help with their speech.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who stutters will have trouble getting a job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
A person who stutters should attend a different/special school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think it is fine to tease or make fun of a person who stutters.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The family of a person who stutters is being punished (i.e., by fate or God).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who stutters is likely to be less intelligent than other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Praying can help cure stuttering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stuttering is not a big deal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who stutters should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
A person who stutters will have trouble with making friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person's stuttering is caused by a supernatural or a mystical being also known as "maligno" or "engkanto."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The family should keep the person who stutters at home to hide from other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who stutters is treated unfairly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who stutters can improve or be better if he/she tried harder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talking to a person who stutters would make me uncomfortable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mom of the person who stutters likely used alcohol or drugs while she was pregnant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
A person who stutters should get help with their speech problem at some time in their lives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is okay to interrupt a child when he/she is speaking or talking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyone, regardless of the severity of their disability, has the potential to improve and learn how to communicate more effectively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### **ENGLISH\_Speech Sound Disorders**

Speech Sound Disorders, where a person may not say sound clearly and may be hard for others to understand due to different reasons, including substituting one sound for another, leaving sounds out, adding sounds, or changing a sound. For example, a person may say “wabbit” for “rabbit” because he/she makes a /w/ sound instead of an /r/ sound (American Speech-Language-Hearing Association (ASHA)).

Please read each of the following statements carefully and indicate your level of agreement with each statement using a 4-point scale.

	Strongly Disagree	Disagree	Agree	Strongly Agree
I have knowledge about speech sound disorder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person with a speech sound disorder should go to a medical doctor for help with their speech.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person with a speech sound disorder will have trouble getting a job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who has a speech sound disorder should attend a different/special school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think it is fine to tease or make fun of a person with a speech sound disorder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The family of a person with a speech sound disorder is being punished (i.e., by fate or God).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
A person with a speech sound disorder is likely to be less intelligent than other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Praying can help cure speech sound disorder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A speech sound disorder is not a big deal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person with a speech sound disorder should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person with a speech sound disorder will have trouble with making friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person's speech sound disorder is caused by a supernatural or mystical being also known as "maligno" or "engkanto."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
The family should keep the person with a speech sound disorder at home to hide from other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person with a speech sound disorder is treated unfairly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person with a speech sound disorder can improve/be better if he/she tried harder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talking to a person with a speech sound disorder would make me uncomfortable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mom of the person with a speech sound disorder likely used alcohol or drugs while she was pregnant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person with a speech sound disorder should get help with their speech problem at some time in their lives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
I value spending time talking and reading to young children.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think a child's hearing should be checked regularly to prevent speech sound disorders.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### **ENGLISH\_Augmentative and Alternative Communication**

Augmentative and Alternative Communication (AAC) is a means to compensate for temporary or permanent impairments, limitations of activity, and restriction of participation of people who cannot meet their daily speech and language needs. This is a way for a person can communicate their daily needs using a notebook, sign language or other gestures, or pushing buttons on a computer that speaks for them (American Speech-Language-Hearing Association (ASHA)).

Please read each of the following statements carefully and indicate your level of agreement with each statement using a 4-point scale.

	Strongly Disagree	Disagree	Agree	Strongly Agree
I have knowledge about AAC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
A person who is nonverbal (does not talk) should go to a medical doctor for help with their speech.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person with an AAC need will have trouble getting a job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who uses AAC should attend a different/special school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think it is fine to tease or make fun of a person who uses AAC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The family of a person with AAC needs is being punished (i.e., by fate or God).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who uses AAC is likely to be less intelligent than other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Praying can help cure a person who is nonverbal (does not talk).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
Using an AAC device is not a big deal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who is nonverbal (does not talk) should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as “Albularyo,” or Faith Healer also known as “Espiritista”).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who uses AAC will have trouble with making friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who is nonverbal (does not talk) is caused by a supernatural or mystical being also known as “maligno” or “engkanto.”	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The family should keep the person who is nonverbal (does not talk) or uses an AAC at home to hide from other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who uses AAC is treated unfairly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Agree	Strongly Agree
A person who is nonverbal (does not talk) can improve/be better if he/she tried harder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talking to a person who uses AAC would make me uncomfortable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mom of the person with AAC needs likely used alcohol or drugs while she was pregnant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A person who is nonverbal (does not talk) should get help with their speech and language problem at some time in their lives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
AAC can keep a person from talking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A child who is nonverbal (does not talk) has likely kissed a doll or a mirror when he/she was a baby.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



END BLOCK Message - COMPLETION MESSAGE (TAGALOG)

**Maraming salamat po sa pagkumpleto ng survey na ito!**

Ang mga sagot mo ay mananatiling kumpidensyal at walang makikilalang impormasyon na maaring iugnay sa iyo. Maaring i-share ang survey na ito sa iba pang kapwa nating Filipino dito sa Estados Unidos sa pamamagitan ng link na ito:

**[www.tinyurl.com/Fil-AmsurveySLP](http://www.tinyurl.com/Fil-AmsurveySLP)**

Taimtim naming pinapahalagahan ang iyong pagtulong na i-share ang survey na ito! Kung mayroong ka pang tanong tungkol sa pag-aaral na ito o gustong makita ang kopya ng resulta, maaring makipagugnayan sa amin.

Muli, maraming, maraming salamat po!

**Anna Nicole C. Aniel, B.S.**

Principal Investigator

Department of Speech-Language-Hearing: Sciences and Disorders

University of Kansas

2201 Haworth Hall

Lawrence, KS 66045

[REDACTED]

**W. Matt Gillispie, Ph.D., CCC-SLP**

Faculty Supervisor

Department of Speech-Language-Hearing: Sciences and Disorders

University of Kansas

2201 Haworth Hall

Lawrence, KS 66045

[REDACTED]

END BLOCK Message - UNQUALIFIED MESSAGE (ENGLISH)

**Thank you for your willingness to participate. Unfortunately, you do not qualify for this study.**

If it is fine, we kindly ask that you share this survey to other Filipino(s) you know who are residing in the United States by using the link below:

**[www.tinvurl.com/Fil-AmsurveySLP](http://www.tinvurl.com/Fil-AmsurveySLP)**

We sincerely appreciate your assistance in sharing this survey! If you have any additional questions about this study, please do not hesitate to contact us.

Thank you so much for your time.

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Lawrence, KS 66045

[REDACTED]

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Faculty Supervisor

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2201 Haworth Hall

Lawrence, KS 66045

[REDACTED]

END BLOCK Message - UNQUALIFIED MESSAGE (TAGALOG)

**Hindi ka po kwalipikado para sa pag-aaral na ito. Salamat po sa pagsali at inyong oras.**

Maaring i-share ang survey na ito sa iba pang kapwa nating Filipino dito sa Estados Unidos sa pamamagitan ng link na ito:

**[www.tinvurl.com/Fil-AmsurveySLP](http://www.tinvurl.com/Fil-AmsurveySLP)**

Taimtim naming pinapahalagahan ang iyong pagtulong na i-share ang survey na ito! Kung mayroong ka pang tanong tungkol sa pag-aaral na ito, maaring makipagugnayan sa amin.

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Lawrence, KS 66045

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**W. Matt Gillispie, Ph.D., CCC-SLP**

Faculty Supervisor

Department of Speech-Language-Hearing: Sciences and Disorders

University of Kansas

2201 Haworth Hall

Lawrence, KS 66045

[REDACTED]

END BLOCK Message - NOT PARTICIPATING (ENGLISH)

**Thank you for your time.**

If it is fine, we kindly ask that you share this survey to other Filipino(s) you know who are residing in the United States by using the link below:

**[www.tinyurl.com/Fil-AmsurveySLP](http://www.tinyurl.com/Fil-AmsurveySLP)**

We sincerely appreciate your assistance in sharing this survey! If you have any additional questions about this study, please do not hesitate to contact us.

**Anna Nicole C. Aniel, B.S.**

Principal Investigator

Department of Speech-Language-Hearing: Sciences and Disorders

University of Kansas

2201 Haworth Hall

Lawrence, KS 66045



**W. Matt Gillispie, Ph.D., CCC-SLP**

Faculty Supervisor

Department of Speech-Language-Hearing: Sciences and Disorders

University of Kansas

2201 Haworth Hall

Lawrence, KS 66045



END BLOCK Message - NOT PARTICIPATING (TAGALOG)

**Salamat po sa inyong oras.**

Maaring i-share ang survey na ito sa iba pang kapwa nating Filipino dito sa Estados Unidos sa pamamagitan ng link na ito:

**[www.tinyurl.com/Fil-AmsurveySLP](http://www.tinyurl.com/Fil-AmsurveySLP)**

Taimtim naming pinapahalagahan ang iyong pagtulong na i-share ang survey na ito! Kung mayroong ka pang tanong tungkol sa pag-aaral na ito, maaring makipagugnayan sa amin.

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Principal Investigator

Department of Speech-Language-Hearing: Sciences and Disorders

University of Kansas

2201 Haworth Hall

Lawrence, KS 66045

[REDACTED]

**W. Matt Gillispie, Ph.D., CCC-SLP**

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Department of Speech-Language-Hearing: Sciences and Disorders

University of Kansas

2201 Haworth Hall

Lawrence, KS 66045

[REDACTED]

## Appendix G: The Mann-Whitney U Results of Groups Related to Place of Birth

*The Mann-Whitney U Results of Groups Related to Place of Birth (Stuttering)*

Statement	Mean	Mean Rank	Mann-Whitney U	Z-Score	Significance (2-tailed)
1. I have knowledge about stuttering.					
Philippines (n = 113)	3.09	78.88	2472.500	-2.038	0.042*
U.S. (n = 53)	3.3	93.35			
2. A person who stutters should go to a medical doctor for help with their speech.					
Philippines (n = 113)	3.06	92.93	1928.500	-4.228	0.000*
U.S. (n = 53)	2.6	63.39			
3. A person who stutters will have trouble getting a job.					
Philippines (n = 113)	2.26	79.24	2513.000	-1.852	0.064
U.S. (n = 53)	2.47	92.58			
4. A person who stutters should attend a different/special school.					
Philippines (n = 113)	2.1	90.93	2155.000	-3.320	0.001*
U.S. (n = 53)	1.72	67.66			
5. I think it is fine to tease or make fun of a person who stutters.					
Philippines (n = 113)	1.12	84.83	2844.500	-1.046	0.296
U.S. (n = 53)	1.06	80.67			
6. The family of a person who stutters is being punished (i.e., by fate or God).					
Philippines (n = 113)	1.16	86.42	2665.000	-2.068	0.039*
U.S. (n = 53)	1.08	77.28			
7. A person who stutters is likely to be less intelligent than other people.					
Philippines (n = 113)	1.19	82.21	2848.500	-0.739	0.460
U.S. (n = 53)	1.25	86.25			
8. Praying can help cure stuttering.					
Philippines (n = 113)	2.19	92.77	1947.000	-3.846	0.000*
U.S. (n = 53)	1.6	63.74			
9. Stuttering is not a big deal.					
Philippines (n = 113)	2.25	78.35	2412.000	-2.168	0.030*
U.S. (n = 53)	2.55	94.49			
10. A person who stutters should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").					
Philippines (n = 113)	1.57	82.50	2882.000	-0.437	0.662
U.S. (n = 53)	1.58	85.62			
11. A person who stutters will have trouble with making friends.					
Philippines (n = 113)	1.86	74.49	1976.500	-3.842	0.000*
U.S. (n = 53)	2.34	102.71			

12. A person's stuttering is caused by a supernatural or a mystical being also known as "maligno" or "engkanto."	Philippines ( <i>n</i> = 113)	1.21	83.94	2945.000	-0.248	0.804
	U.S. ( <i>n</i> = 53)	1.19	82.57			
13. The family should keep the person who stutters at home to hide from other people.	Philippines ( <i>n</i> = 113)	1.12	83.84	2956.500	-0.251	0.802
	U.S. ( <i>n</i> = 53)	1.09	82.78			
14. A person who stutters is treated unfairly.	Philippines ( <i>n</i> = 113)	2.31	72.44	1745.000	-4.714	0.000*
	U.S. ( <i>n</i> = 53)	2.98	107.08			
15. A person who stutters can improve or be better if he/she tried harder.	Philippines ( <i>n</i> = 113)	2.92	94.04	1803.000	-4.439	0.000*
	U.S. ( <i>n</i> = 53)	2.32	61.02			
16. Talking to a person who stutters would make me uncomfortable.	Philippines ( <i>n</i> = 113)	1.73	86.75	2627.000	-1.448	0.147
	U.S. ( <i>n</i> = 53)	1.58	76.57			
17. The mom of the person who stutters likely used alcohol or drugs while she was pregnant.	Philippines ( <i>n</i> = 113)	1.69	89.14	2357.000	-2.463	0.014*
	U.S. ( <i>n</i> = 53)	1.43	71.47			
18. A person who stutters should get help with their speech problem at some time in their lives.	Philippines ( <i>n</i> = 113)	3.12	81.85	2807.500	-0.755	0.450
	U.S. ( <i>n</i> = 53)	3.25	87.03			
19. It is okay to interrupt a child when he/she is speaking or talking.	Philippines ( <i>n</i> = 113)	1.72	83.24	2965.500	-0.110	0.912
	U.S. ( <i>n</i> = 53)	1.7	84.05			
20. Everyone, regardless of the severity of their disability, has the potential to improve and learn how to communicate more effectively.	Philippines ( <i>n</i> = 113)	3.38	81.73	2794.500	-0.784	0.433
	U.S. ( <i>n</i> = 53)	3.53	87.27			

\**p* < .05.

*The Mann-Whitney U Results of Groups Related to Place of Birth (Speech Sound Disorders)*

Statement	Mean	Mean Rank	Mann-Whitney U	Z-Score	Significance (2-tailed)
1. I have knowledge about speech sound disorder.					
Philippines ( <i>n</i> = 113)	2.73	83.31	2973.500	-0.081	0.935
U.S. ( <i>n</i> = 53)	2.75	83.90			
2. A person with a speech sound disorder should go to a medical doctor for help with their speech.					
Philippines ( <i>n</i> = 113)	2.97	89.27	2343.000	-2.677	0.007*
U.S. ( <i>n</i> = 53)	2.68	71.21			
3. A person with a speech sound disorder will have trouble getting a job.					
Philippines ( <i>n</i> = 113)	2.27	83.25	2966.500	-0.107	0.915
U.S. ( <i>n</i> = 53)	2.3	84.03			
4. A person who has a speech sound disorder should attend a different/special school.					
Philippines ( <i>n</i> = 113)	2.07	92.19	2012.000	-3.851	0.000*
U.S. ( <i>n</i> = 53)	1.62	64.96			
5. I think it is fine to tease or make fun of a person with a speech sound disorder.					
Philippines ( <i>n</i> = 113)	1.16	83.87	2953.000	-0.236	0.813
U.S. ( <i>n</i> = 53)	1.17	82.72			
6. The family of a person with a speech sound disorder is being punished (i.e., by fate or God).					
Philippines ( <i>n</i> = 113)	1.15	83.78	2962.500	-0.185	0.853
U.S. ( <i>n</i> = 53)	1.13	82.90			
7. A person with a speech sound disorder is likely to be less intelligent than other people.					
Philippines ( <i>n</i> = 113)	1.27	82.74	2908.500	-0.389	0.697
U.S. ( <i>n</i> = 53)	1.3	85.12			
8. Praying can help cure speech sound disorder.					
Philippines ( <i>n</i> = 113)	2.17	93.60	1853.500	-4.206	0.000*
U.S. ( <i>n</i> = 53)	1.53	61.97			
9. A speech sound disorder is not a big deal.					
Philippines ( <i>n</i> = 113)	2.2	78.80	2463.500	-1.957	0.050*
U.S. ( <i>n</i> = 53)	2.47	93.52			
10. A person with a speech sound disorder should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").					
Philippines ( <i>n</i> = 113)	1.57	86.45	2661.000	-1.320	0.187
U.S. ( <i>n</i> = 53)	1.4	77.21			
11. A person with a speech sound disorder will have trouble with making friends.					
Philippines ( <i>n</i> = 113)	1.8	79.41	2532.500	-1.729	0.084

	U.S. ( <i>n</i> = 53)	2.02	92.22			
12. A person's speech sound disorder is caused by a supernatural or mystical being also known as "maligno" or "engkanto."	Philippines ( <i>n</i> = 113)	1.23	83.62	2981.000	-0.066	0.947
	U.S. ( <i>n</i> = 53)	1.23	83.25			
13. The family should keep the person with a speech sound disorder at home to hide from other people.	Philippines ( <i>n</i> = 113)	1.14	84.18	2917.500	-0.454	0.650
	U.S. ( <i>n</i> = 53)	1.13	82.05			
14. A person with a speech sound disorder is treated unfairly.	Philippines ( <i>n</i> = 113)	2.28	75.86	2131.000	-3.262	0.001*
	U.S. ( <i>n</i> = 53)	2.75	99.79			
15. A person with a speech sound disorder can improve/be better if he/she tried harder.	Philippines ( <i>n</i> = 113)	2.99	93.97	1811.000	-4.488	0.000*
	U.S. ( <i>n</i> = 53)	2.42	61.17			
16. Talking to a person with a speech sound disorder would make me uncomfortable.	Philippines ( <i>n</i> = 113)	1.73	88.35	2446.500	-2.117	0.034*
	U.S. ( <i>n</i> = 53)	1.51	73.16			
17. The mom of the person with a speech sound disorder likely used alcohol or drugs while she was pregnant.	Philippines ( <i>n</i> = 113)	1.67	90.19	2238.000	-2.929	0.003*
	U.S. ( <i>n</i> = 53)	1.36	69.23			
18. A person with a speech sound disorder should get help with their speech problem at some time in their lives.	Philippines ( <i>n</i> = 113)	3.19	83.08	2947.500	-0.198	0.843
	U.S. ( <i>n</i> = 53)	3.21	84.39			
19. I value spending time talking and reading to young children.	Philippines ( <i>n</i> = 113)	3.42	81.42	2760.000	-0.919	0.358
	U.S. ( <i>n</i> = 53)	3.51	87.92			
20. I think a child's hearing should be checked regularly to prevent speech sound disorders.	Philippines ( <i>n</i> = 113)	3.42	84.11	2926.000	-0.269	0.788
	U.S. ( <i>n</i> = 53)	3.43	82.21			

\**p* < .05.

*The Mann-Whitney U Results of Groups Related to Place of Birth (AAC)*

Statement	Mean	Mean Rank	Mann-Whitney U	Z-Score	Significance (2-tailed)
1. I have knowledge about AAC.					
Philippines ( <i>n</i> = 113)	2.49	83.93	2945.500	-0.181	0.856
U.S. ( <i>n</i> = 53)	2.47	82.58			
2. A person who is nonverbal (does not talk) should go to a medical doctor for help with their speech.					
Philippines ( <i>n</i> = 113)	3.15	86.43	2663.000	-1.326	0.185
U.S. ( <i>n</i> = 53)	3.02	77.25			
3. A person with an AAC need will have trouble getting a job.					
Philippines ( <i>n</i> = 113)	2.68	76.79	2236.500	-2.968	0.003*
U.S. ( <i>n</i> = 53)	3	97.80			
4. A person who uses AAC should attend a different/special school.					
Philippines ( <i>n</i> = 113)	2.69	88.98	2375.000	-2.342	0.019*
U.S. ( <i>n</i> = 53)	2.4	71.81			
5. I think it is fine to tease or make fun of a person who uses AAC.					
Philippines ( <i>n</i> = 113)	1.17	87.23	2573.500	-2.644	0.008*
U.S. ( <i>n</i> = 53)	1.02	75.56			
6. The family of a person with AAC needs is being punished (i.e., by fate or God).					
Philippines ( <i>n</i> = 113)	1.17	85.24	2797.500	-1.140	0.254
U.S. ( <i>n</i> = 53)	1.09	79.78			
7. A person who uses AAC is likely to be less intelligent than other people.					
Philippines ( <i>n</i> = 113)	1.35	82.50	2881.500	-0.473	0.636
U.S. ( <i>n</i> = 53)	1.38	85.63			
8. Praying can help cure a person who is nonverbal (does not talk).					
Philippines ( <i>n</i> = 113)	2.21	95.93	1590.000	-5.193	0.000*
U.S. ( <i>n</i> = 53)	1.42	57.00			
9. Using an AAC device is not a big deal.					
Philippines ( <i>n</i> = 113)	2.47	77.92	2363.500	-2.312	0.021*
U.S. ( <i>n</i> = 53)	2.79	95.41			
10. A person who is nonverbal (does not talk) should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").					
Philippines ( <i>n</i> = 113)	1.53	85.21	2801.000	-0.775	0.438
U.S. ( <i>n</i> = 53)	1.42	79.85			
11. A person who uses AAC will have trouble with making friends.					

	Philippines ( <i>n</i> = 113)	2.07	74.65	1994.500	-3.704	0.000*
	U.S. ( <i>n</i> = 53)	2.57	102.37			
12. A person who is nonverbal (does not talk) is caused by a supernatural or mystical being also known as "maligno" or "engkanto."	Philippines ( <i>n</i> = 113)	1.24	84.83	2844.000	-0.723	0.470
	U.S. ( <i>n</i> = 53)	1.19	80.66			
13. The family should keep the person who is nonverbal (does not talk) or uses an AAC at home to hide from other people.	Philippines ( <i>n</i> = 113)	1.22	86.86	2614.500	-1.975	0.048*
	U.S. ( <i>n</i> = 53)	1.09	76.33			
14. A person who uses AAC is treated unfairly.	Philippines ( <i>n</i> = 113)	2.32	72.35	1735.000	-4.912	0.000*
	U.S. ( <i>n</i> = 53)	3	107.26			
15. A person who is nonverbal (does not talk) can improve/be better if he/she tried harder.	Philippines ( <i>n</i> = 113)	2.84	95.13	1680.000	-4.841	0.000*
	U.S. ( <i>n</i> = 53)	2.15	58.70			
16. Talking to a person who uses AAC would make me uncomfortable.	Philippines ( <i>n</i> = 113)	1.79	85.62	2754.500	-0.914	0.361
	U.S. ( <i>n</i> = 53)	1.68	78.97			
17. The mom of the person with AAC needs likely used alcohol or drugs while she was pregnant.	Philippines ( <i>n</i> = 113)	1.74	90.54	2199.500	-3.036	0.002*
	U.S. ( <i>n</i> = 53)	1.4	68.50			
18. A person who is nonverbal (does not talk) should get help with their speech and language problem at some time in their lives.	Philippines ( <i>n</i> = 113)	3.28	82.21	2848.500	-0.590	0.555
	U.S. ( <i>n</i> = 53)	3.36	86.25			
19. AAC can keep a person from talking.	Philippines ( <i>n</i> = 113)	2.21	76.08	2155.500	-3.131	0.002*
	U.S. ( <i>n</i> = 53)	2.64	99.33			
20. A child who is nonverbal (does not talk) has likely kissed a doll or a mirror when he/she was a baby.	Philippines ( <i>n</i> = 113)	1.38	80.74	2683.000	-1.287	0.198
	U.S. ( <i>n</i> = 53)	1.47	89.38			

\**p* < .05.

## Appendix H: The Mann-Whitney U Results of Groups Related to Education in the U.S.

*The Mann-Whitney U Results of Groups Related to Education in the United States (Stuttering)*

Statement	Mean	Mean Rank	Mann-Whitney U	Z-Score	Significance (2-tailed)
1. I have knowledge about stuttering.					
Philippines (n = 46)	3.09	75.91	2411.000	-1.419	0.156
U.S. (n = 120)	3.18	86.41			
2. A person who stutters should go to a medical doctor for help with their speech.					
Philippines (n = 46)	3.13	96.24	2174.000	-2.421	0.015*
U.S. (n = 120)	2.83	78.62			
3. A person who stutters will have trouble getting a job.					
Philippines (n = 46)	2.3	82.87	2731.000	-0.116	0.907
U.S. (n = 120)	2.33	83.74			
4. A person who stutters should attend a different/special school.					
Philippines (n = 46)	2.39	108.30	1619.000	-4.701	0.000*
U.S. (n = 120)	1.82	73.99			
5. I think it is fine to tease or make fun of a person who stutters.					
Philippines (n = 46)	1.11	84.97	2692.500	-0.490	0.624
U.S. (n = 120)	1.09	82.94			
6. The family of a person who stutters is being punished (i.e., by fate or God).					
Philippines (n = 46)	1.24	92.02	2368.000	-2.563	0.010*
U.S. (n = 120)	1.09	80.23			
7. A person who stutters is likely to be less intelligent than other people.					
Philippines (n = 46)	1.35	93.00	2323.000	-2.303	0.021*
U.S. (n = 120)	1.16	79.86			
8. Praying can help cure stuttering.					
Philippines (n = 46)	2.46	105.55	1745.500	-3.880	0.000*
U.S. (n = 120)	1.83	75.05			
9. Stuttering is not a big deal.					
Philippines (n = 46)	2.22	77.07	2464.000	-1.147	0.251
U.S. (n = 120)	2.39	85.97			
10. A person who stutters should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").					
Philippines (n = 46)	1.48	76.40	2433.500	-1.321	0.187
U.S. (n = 120)	1.61	86.22			
11. A person who stutters will have trouble with making friends.					
Philippines (n = 46)	1.96	80.59	2626.000	-0.527	0.598
U.S. (n = 120)	2.03	84.62			

12. A person's stuttering is caused by a supernatural or a mystical being also known as "maligno" or "engkanto."	Philippines ( <i>n</i> = 46)	1.2	83.14	2743.500	-0.086	0.931
	U.S. ( <i>n</i> = 120)	1.21	83.64			
13. The family should keep the person who stutters at home to hide from other people.	Philippines ( <i>n</i> = 46)	1.15	85.95	2647.500	-0.773	0.440
	U.S. ( <i>n</i> = 120)	1.09	82.56			
14. A person who stutters is treated unfairly.	Philippines ( <i>n</i> = 46)	2.13	62.58	1797.500	-3.782	0.000*
	U.S. ( <i>n</i> = 120)	2.68	91.52			
15. A person who stutters can improve or be better if he/she tried harder.	Philippines ( <i>n</i> = 46)	3.13	105.60	1743.500	-3.945	0.000*
	U.S. ( <i>n</i> = 120)	2.58	75.03			
16. Talking to a person who stutters would make me uncomfortable.	Philippines ( <i>n</i> = 46)	1.78	91.75	2380.500	-1.558	0.119
	U.S. ( <i>n</i> = 120)	1.64	80.34			
17. The mom of the person who stutters likely used alcohol or drugs while she was pregnant.	Philippines ( <i>n</i> = 46)	1.7	89.18	2498.500	-1.052	0.293
	U.S. ( <i>n</i> = 120)	1.58	81.32			
18. A person who stutters should get help with their speech problem at some time in their lives.	Philippines ( <i>n</i> = 46)	3.15	83.18	2745.500	-0.061	0.951
	U.S. ( <i>n</i> = 120)	3.16	83.62			
19. It is okay to interrupt a child when he/she is speaking or talking.	Philippines ( <i>n</i> = 46)	1.8	86.40	2626.500	-0.528	0.597
	U.S. ( <i>n</i> = 120)	1.68	82.39			
20. Everyone, regardless of the severity of their disability, has the potential to improve and learn how to communicate more effectively.	Philippines ( <i>n</i> = 46)	3.15	71.14	2191.500	-2.320	0.020*
	U.S. ( <i>n</i> = 120)	3.53	88.24			

\**p* < .05.

*The Mann-Whitney U Results of Groups Related to Education in the United States (Speech Sound Disorders)*

Statement	Mean	Mean Rank	Mann-Whitney U	Z-Score	Significance (2-tailed)
1. I have knowledge about speech sound disorder.					
Philippines (n = 46)	2.83	88.88	2512.500	-0.998	0.319
U.S. (n = 120)	2.71	81.44			
2. A person with a speech sound disorder should go to a medical doctor for help with their speech.					
Philippines (n = 46)	2.96	89.15	2500.000	-1.113	0.266
U.S. (n = 120)	2.85	81.33			
3. A person with a speech sound disorder will have trouble getting a job.					
Philippines (n = 46)	2.28	84.09	2733.000	-0.107	0.914
U.S. (n = 120)	2.28	83.28			
4. A person who has a speech sound disorder should attend a different/special school.					
Philippines (n = 46)	2.3	103.52	1839.000	-3.760	0.000*
U.S. (n = 120)	1.78	75.83			
5. I think it is fine to tease or make fun of a person with a speech sound disorder.					
Philippines (n = 46)	1.13	82.13	2697.000	-0.373	0.709
U.S. (n = 120)	1.18	84.03			
6. The family of a person with a speech sound disorder is being punished (i.e., by fate or God).					
Philippines (n = 46)	1.2	86.60	2617.500	-0.859	0.390
U.S. (n = 120)	1.13	82.31			
7. A person with a speech sound disorder is likely to be less intelligent than other people.					
Philippines (n = 46)	1.35	88.72	2520.000	-1.130	0.258
U.S. (n = 120)	1.25	81.50			
8. Praying can help cure speech sound disorder.					
Philippines (n = 46)	2.35	102.00	1909.000	-3.268	0.001*
U.S. (n = 120)	1.82	76.41			
9. A speech sound disorder is not a big deal.					
Philippines (n = 46)	2.13	74.43	2343.000	-1.601	0.109
U.S. (n = 120)	2.35	86.98			
10. A person with a speech sound disorder should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").					
Philippines (n = 46)	1.57	85.00	2691.000	-0.284	0.776
U.S. (n = 120)	1.49	82.93			
11. A person with a speech sound disorder will have trouble with making friends.					
Philippines (n = 46)	1.78	78.72	2540.000	-0.857	0.391

	U.S. ( <i>n</i> = 120)	1.9	85.33			
12. A person's speech sound disorder is caused by a supernatural or mystical being also known as "maligno" or "engkanto."	Philippines ( <i>n</i> = 46)	1.17	78.78	2543.000	-1.106	0.269
	U.S. ( <i>n</i> = 120)	1.25	85.31			
13. The family should keep the person with a speech sound disorder at home to hide from other people.	Philippines ( <i>n</i> = 46)	1.13	83.26	2749.000	-0.068	0.946
	U.S. ( <i>n</i> = 120)	1.14	83.59			
14. A person with a speech sound disorder is treated unfairly.	Philippines ( <i>n</i> = 46)	2.07	65.14	1915.500	-3.323	0.001*
	U.S. ( <i>n</i> = 120)	2.58	90.54			
15. A person with a speech sound disorder can improve/be better if he/she tried harder.	Philippines ( <i>n</i> = 46)	3.2	105.08	1767.500	-3.920	0.000*
	U.S. ( <i>n</i> = 120)	2.66	75.23			
16. Talking to a person with a speech sound disorder would make me uncomfortable.	Philippines ( <i>n</i> = 46)	1.78	91.33	2400.000	-1.449	0.147
	U.S. ( <i>n</i> = 120)	1.62	80.50			
17. The mom of the person with a speech sound disorder likely used alcohol or drugs while she was pregnant.	Philippines ( <i>n</i> = 46)	1.72	93.80	2286.000	-1.912	0.056
	U.S. ( <i>n</i> = 120)	1.52	79.55			
18. A person with a speech sound disorder should get help with their speech problem at some time in their lives.	Philippines ( <i>n</i> = 46)	3.17	84.41	2718.000	-0.185	0.854
	U.S. ( <i>n</i> = 120)	3.2	83.15			
19. I value spending time talking and reading to young children.	Philippines ( <i>n</i> = 46)	3.46	82.40	2709.500	-0.206	0.837
	U.S. ( <i>n</i> = 120)	3.45	83.92			
20. I think a child's hearing should be checked regularly to prevent speech sound disorders.	Philippines ( <i>n</i> = 46)	3.41	83.12	2742.500	-0.071	0.943
	U.S. ( <i>n</i> = 120)	3.43	83.65			

\**p* < .05.

*The Mann-Whitney U Results of Groups Related to Education in the United States (AAC)*

Statement	Mean	Mean Rank	Mann-Whitney U	Z-Score	Significance (2-tailed)
1. I have knowledge about AAC.					
Philippines (n = 46)	2.63	92.38	2351.500	-1.575	0.115
U.S. (n = 120)	2.42	80.10			
2. A person who is nonverbal (does not talk) should go to a medical doctor for help with their speech.					
Philippines (n = 46)	3.11	85.34	2675.500	-0.352	0.725
U.S. (n = 120)	3.11	82.80			
3. A person with an AAC need will have trouble getting a job.					
Philippines (n = 46)	2.54	67.25	2012.500	-3.049	0.002*
U.S. (n = 120)	2.88	89.73			
4. A person who uses AAC should attend a different/special school.					
Philippines (n = 46)	2.89	99.49	2024.500	-2.897	0.004*
U.S. (n = 120)	2.48	77.37			
5. I think it is fine to tease or make fun of a person who uses AAC.					
Philippines (n = 46)	1.15	86.55	2619.500	-0.919	0.358
U.S. (n = 120)	1.11	82.33			
6. The family of a person with AAC needs is being punished (i.e., by fate or God).					
Philippines (n = 46)	1.13	82.76	2726.000	-0.205	0.838
U.S. (n = 120)	1.15	83.78			
7. A person who uses AAC is likely to be less intelligent than other people.					
Philippines (n = 46)	1.43	89.21	2497.500	-1.145	0.252
U.S. (n = 120)	1.33	81.31			
8. Praying can help cure a person who is nonverbal (does not talk).					
Philippines (n = 46)	2.48	108.46	1612.000	-4.421	0.000*
U.S. (n = 120)	1.76	73.93			
9. Using an AAC device is not a big deal.					
Philippines (n = 46)	2.33	71.07	2188.000	-2.183	0.029*
U.S. (n = 120)	2.67	88.27			
10. A person who is nonverbal (does not talk) should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").					
Philippines (n = 46)	1.52	83.17	2745.000	-0.063	0.950
U.S. (n = 120)	1.48	83.63			
11. A person who uses AAC will have trouble with making friends.					

	Philippines ( <i>n</i> = 46)	2.04	73.22	2287.000	-1.825	0.068
	U.S. ( <i>n</i> = 120)	2.3	87.44			
12. A person who is nonverbal (does not talk) is caused by a supernatural or mystical being also known as "maligno" or "engkanto."	Philippines ( <i>n</i> = 46)	1.17	79.43	2573.000	-0.936	0.349
	U.S. ( <i>n</i> = 120)	1.24	85.06			
13. The family should keep the person who is nonverbal (does not talk) or uses an AAC at home to hide from other people.	Philippines ( <i>n</i> = 46)	1.2	84.74	2703.000	-0.309	0.758
	U.S. ( <i>n</i> = 120)	1.18	83.03			
14. A person who uses AAC is treated unfairly.	Philippines ( <i>n</i> = 46)	2.07	59.20	1642.000	-4.541	0.000*
	U.S. ( <i>n</i> = 120)	2.72	92.82			
15. A person who is nonverbal (does not talk) can improve/be better if he/she tried harder.	Philippines ( <i>n</i> = 46)	3.07	106.59	1698.000	-4.074	0.000*
	U.S. ( <i>n</i> = 120)	2.45	74.65			
16. Talking to a person who uses AAC would make me uncomfortable.	Philippines ( <i>n</i> = 46)	1.8	86.79	2608.500	-0.601	0.548
	U.S. ( <i>n</i> = 120)	1.73	82.24			
17. The mom of the person with AAC needs likely used alcohol or drugs while she was pregnant.	Philippines ( <i>n</i> = 46)	1.7	88.62	2524.500	-0.937	0.349
	U.S. ( <i>n</i> = 120)	1.61	81.54			
18. A person who is nonverbal (does not talk) should get help with their speech and language problem at some time in their lives.	Philippines ( <i>n</i> = 46)	3.3	83.14	2743.500	-0.069	0.945
	U.S. ( <i>n</i> = 120)	3.31	83.64			
19. AAC can keep a person from talking.	Philippines ( <i>n</i> = 46)	2.11	69.39	2111.000	-2.523	0.012*
	U.S. ( <i>n</i> = 120)	2.44	88.91			
20. A child who is nonverbal (does not talk) has likely kissed a doll or a mirror when he/she was a baby.	Philippines ( <i>n</i> = 46)	1.3	75.33	2384.000	-1.618	0.106
	U.S. ( <i>n</i> = 120)	1.45	86.63			

\**p* < .05.

## Appendix I: The Mann-Whitney U Results of Groups Related to Location of Highest Level of Education

*The Mann-Whitney U Results of Groups Related to Location of Highest Level of Education (Stuttering)*

Statement	Mean	Mean Rank	Mann-Whitney U	Z-Score	Significance (2-tailed)
1. I have knowledge about stuttering.					
Philippines (n = 54)	3.09	76.72	2658.000	-1.422	0.155
U.S. (n = 112)	3.19	86.77			
2. A person who stutters should go to a medical doctor for help with their speech.					
Philippines (n = 54)	3.17	99.42	2164.500	-3.392	0.001*
U.S. (n = 112)	2.79	75.83			
3. A person who stutters will have trouble getting a job.					
Philippines (n = 54)	2.26	79.26	2795.000	-0.877	0.381
U.S. (n = 112)	2.36	85.54			
4. A person who stutters should attend a different/special school.					
Philippines (n = 54)	2.31	102.95	1973.500	-4.135	0.000*
U.S. (n = 112)	1.81	74.12			
5. I think it is fine to tease or make fun of a person who stutters.					
Philippines (n = 54)	1.11	85.17	2934.000	-0.625	0.532
U.S. (n = 112)	1.09	82.70			
6. The family of a person who stutters is being punished (i.e., by fate or God).					
Philippines (n = 54)	1.22	90.87	2626.000	-2.486	0.013*
U.S. (n = 112)	1.09	79.95			
7. A person who stutters is likely to be less intelligent than other people.					
Philippines (n = 54)	1.26	86.20	2878.000	-0.735	0.462
U.S. (n = 112)	1.19	82.20			
8. Praying can help cure stuttering.					
Philippines (n = 54)	2.43	103.87	1924.000	-4.019	0.000*
U.S. (n = 112)	1.8	73.68			
9. Stuttering is not a big deal.					
Philippines (n = 54)	2.19	75.02	2566.000	-1.696	0.090
U.S. (n = 112)	2.42	87.59			
10. A person who stutters should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").					
Philippines (n = 54)	1.46	75.82	2609.500	-1.602	0.109
U.S. (n = 112)	1.63	87.20			
11. A person who stutters will have trouble with making friends.					
Philippines (n = 54)	1.85	74.07	2515.000	-1.912	0.056
U.S. (n = 112)	2.09	88.04			

12. A person's stuttering is caused by a supernatural or a mystical being also known as "maligno" or "engkanto."	Philippines ( <i>n</i> = 54)	1.19	82.28	2958.000	-0.329	0.742
	U.S. ( <i>n</i> = 112)	1.21	84.09			
13. The family should keep the person who stutters at home to hide from other people.	Philippines ( <i>n</i> = 54)	1.15	85.85	2897.000	-0.833	0.405
	U.S. ( <i>n</i> = 112)	1.09	82.37			
14. A person who stutters is treated unfairly.	Philippines ( <i>n</i> = 54)	2.13	64.16	1979.500	-3.921	0.000*
	U.S. ( <i>n</i> = 112)	2.71	92.83			
15. A person who stutters can improve or be better if he/she tried harder.	Philippines ( <i>n</i> = 54)	3.07	103.29	1955.500	-3.961	0.000*
	U.S. ( <i>n</i> = 112)	2.56	73.96			
16. Talking to a person who stutters would make me uncomfortable.	Philippines ( <i>n</i> = 54)	1.7	85.86	2896.500	-0.500	0.617
	U.S. ( <i>n</i> = 112)	1.67	82.36			
17. The mom of the person who stutters likely used alcohol or drugs while she was pregnant.	Philippines ( <i>n</i> = 54)	1.69	88.31	2764.500	-0.998	0.318
	U.S. ( <i>n</i> = 112)	1.57	81.18			
18. A person who stutters should get help with their speech problem at some time in their lives.	Philippines ( <i>n</i> = 54)	3.24	89.18	2717.500	-1.231	0.218
	U.S. ( <i>n</i> = 112)	3.12	80.76			
19. It is okay to interrupt a child when he/she is speaking or talking.	Philippines ( <i>n</i> = 54)	1.74	82.70	2981.000	-0.162	0.871
	U.S. ( <i>n</i> = 112)	1.7	83.88			
20. Everyone, regardless of the severity of their disability, has the potential to improve and learn how to communicate more effectively.	Philippines ( <i>n</i> = 54)	3.22	74.19	2521.000	-1.961	0.050*
	U.S. ( <i>n</i> = 112)	3.53	87.99			

\**p* < .05.

*The Mann-Whitney U Results of Groups Related to Location of Highest Level of Education (Speech Sound Disorders)*

Statement	Mean	Mean Rank	Mann-Whitney U	Z-Score	Significance (2-tailed)
1. I have knowledge about speech sound disorder.					
Philippines (n = 54)	2.83	89.01	2726.500	-1.146	0.252
U.S. (n = 112)	2.7	80.84			
2. A person with a speech sound disorder should go to a medical doctor for help with their speech.					
Philippines (n = 54)	3.04	94.02	2456.000	-2.322	0.020*
U.S. (n = 112)	2.8	78.43			
3. A person with a speech sound disorder will have trouble getting a job.					
Philippines (n = 54)	2.3	84.74	2957.000	-0.255	0.799
U.S. (n = 112)	2.28	82.90			
4. A person who has a speech sound disorder should attend a different/special school.					
Philippines (n = 54)	2.28	103.76	1930.000	-4.267	0.000*
U.S. (n = 112)	1.76	73.73			
5. I think it is fine to tease or make fun of a person with a speech sound disorder.					
Philippines (n = 54)	1.13	82.06	2946.500	-0.438	0.661
U.S. (n = 112)	1.18	84.19			
6. The family of a person with a speech sound disorder is being punished (i.e., by fate or God).					
Philippines (n = 54)	1.17	84.44	2973.500	-0.291	0.771
U.S. (n = 112)	1.13	83.05			
7. A person with a speech sound disorder is likely to be less intelligent than other people.					
Philippines (n = 54)	1.28	83.17	3006.000	-0.081	0.935
U.S. (n = 112)	1.28	83.66			
8. Praying can help cure speech sound disorder.					
Philippines (n = 54)	2.31	100.61	2100.000	-3.390	0.001*
U.S. (n = 112)	1.79	75.25			
9. A speech sound disorder is not a big deal.					
Philippines (n = 54)	2.13	74.92	2560.500	-1.700	0.089
U.S. (n = 112)	2.37	87.64			
10. A person with a speech sound disorder should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").					
Philippines (n = 54)	1.52	82.43	2966.000	-0.228	0.819
U.S. (n = 112)	1.51	84.02			
11. A person with a speech sound disorder will have trouble with making friends.					

	Philippines ( <i>n</i> = 54)	1.76	76.98	2672.000	-1.311	0.190
	U.S. ( <i>n</i> = 112)	1.92	86.64			
12. A person's speech sound disorder is caused by a supernatural or mystical being also known as "maligno" or "engkanto."	Philippines ( <i>n</i> = 54)	1.17	78.40	2748.500	-1.341	0.180
	U.S. ( <i>n</i> = 112)	1.26	85.96			
13. The family should keep the person with a speech sound disorder at home to hide from other people.	Philippines ( <i>n</i> = 54)	1.13	83.19	3007.500	-0.097	0.923
	U.S. ( <i>n</i> = 112)	1.14	83.65			
14. A person with a speech sound disorder is treated unfairly.	Philippines ( <i>n</i> = 54)	2.15	69.70	2279.000	-2.801	0.005*
	U.S. ( <i>n</i> = 112)	2.57	90.15			
15. A person with a speech sound disorder can improve/be better if he/she tried harder.	Philippines ( <i>n</i> = 54)	3.13	101.75	2038.500	-3.719	0.000*
	U.S. ( <i>n</i> = 112)	2.65	74.70			
16. Talking to a person with a speech sound disorder would make me uncomfortable.	Philippines ( <i>n</i> = 54)	1.83	94.69	2420.000	-2.322	0.020*
	U.S. ( <i>n</i> = 112)	1.58	78.11			
17. The mom of the person with a speech sound disorder likely used alcohol or drugs while she was pregnant.	Philippines ( <i>n</i> = 54)	1.74	94.17	2448.000	-2.219	0.026*
	U.S. ( <i>n</i> = 112)	1.49	78.36			
18. A person with a speech sound disorder should get help with their speech problem at some time in their lives.	Philippines ( <i>n</i> = 54)	3.22	87.54	2806.000	-0.915	0.360
	U.S. ( <i>n</i> = 112)	3.18	81.55			
19. I value spending time talking and reading to young children.	Philippines ( <i>n</i> = 54)	3.5	85.71	2904.500	-0.466	0.641
	U.S. ( <i>n</i> = 112)	3.43	82.43			
20. I think a child's hearing should be checked regularly to prevent speech sound disorders.	Philippines ( <i>n</i> = 54)	3.48	88.07	2777.000	-0.964	0.335
	U.S. ( <i>n</i> = 112)	3.4	81.29			

\**p* < .05.

*The Mann-Whitney U Results of Groups Related to Location of Highest Level of Education (AAC)*

Statement	Mean	Mean Rank	Mann-Whitney U	Z-Score	Significance (2-tailed)
1. I have knowledge about AAC.					
Philippines (n = 54)	2.54	86.82	2844.500	-0.661	0.508
U.S. (n = 112)	2.46	81.90			
2. A person who is nonverbal (does not talk) should go to a medical doctor for help with their speech.					
Philippines (n = 54)	3.13	87.51	2807.500	-0.862	0.389
U.S. (n = 112)	3.1	81.57			
3. A person with an AAC need will have trouble getting a job.					
Philippines (n = 54)	2.56	68.31	2204.000	-3.195	0.001*
U.S. (n = 112)	2.89	90.82			
4. A person who uses AAC should attend a different/special school.					
Philippines (n = 54)	2.85	97.88	2247.500	-2.922	0.003*
U.S. (n = 112)	2.47	76.57			
5. I think it is fine to tease or make fun of a person who uses AAC.					
Philippines (n = 54)	1.17	87.75	2794.500	-1.434	0.152
U.S. (n = 112)	1.1	81.45			
6. The family of a person with AAC needs is being punished (i.e., by fate or God).					
Philippines (n = 54)	1.15	84.22	2985.000	-0.225	0.822
U.S. (n = 112)	1.14	83.15			
7. A person who uses AAC is likely to be less intelligent than other people.					
Philippines (n = 54)	1.39	85.59	2911.000	-0.471	0.638
U.S. (n = 112)	1.34	82.49			
8. Praying can help cure a person who is nonverbal (does not talk).					
Philippines (n = 54)	2.43	106.15	1801.000	-4.500	0.000*
U.S. (n = 112)	1.73	72.58			
9. Using an AAC device is not a big deal.					
Philippines (n = 54)	2.31	70.06	2298.000	-2.647	0.008*
U.S. (n = 112)	2.7	89.98			
10. A person who is nonverbal (does not talk) should go to someone who cures or helps people (not a doctor) for help (e.g., Herb Doctor also known as "Albularyo," or Faith Healer also known as "Espiritista").					
Philippines (n = 54)	1.5	82.60	2975.500	-0.193	0.847
U.S. (n = 112)	1.49	83.93			
11. A person who uses AAC will have trouble with making friends.					

	Philippines ( <i>n</i> = 54)	1.93	65.89	2073.000	-3.505	0.000*
	U.S. ( <i>n</i> = 112)	2.38	91.99			
12. A person who is nonverbal (does not talk) is caused by a supernatural or mystical being also known as "maligno" or "engkanto."	Philippines ( <i>n</i> = 54)	1.19	80.37	2855.000	-0.808	0.419
	U.S. ( <i>n</i> = 112)	1.24	85.01			
13. The family should keep the person who is nonverbal (does not talk) or uses an AAC at home to hide from other people.	Philippines ( <i>n</i> = 54)	1.2	85.41	2921.000	-0.533	0.594
	U.S. ( <i>n</i> = 112)	1.17	82.58			
14. A person who uses AAC is treated unfairly.	Philippines ( <i>n</i> = 54)	2.06	59.31	1717.500	-5.070	0.000*
	U.S. ( <i>n</i> = 112)	2.77	95.17			
15. A person who is nonverbal (does not talk) can improve/be better if he/she tried harder.	Philippines ( <i>n</i> = 54)	2.98	102.85	1979.000	-3.830	0.000*
	U.S. ( <i>n</i> = 112)	2.45	74.17			
16. Talking to a person who uses AAC would make me uncomfortable.	Philippines ( <i>n</i> = 54)	1.8	86.30	2873.000	-0.572	0.567
	U.S. ( <i>n</i> = 112)	1.73	82.15			
17. The mom of the person with AAC needs likely used alcohol or drugs while she was pregnant.	Philippines ( <i>n</i> = 54)	1.8	93.58	2479.500	-2.069	0.039*
	U.S. ( <i>n</i> = 112)	1.55	78.64			
18. A person who is nonverbal (does not talk) should get help with their speech and language problem at some time in their lives.	Philippines ( <i>n</i> = 54)	3.35	86.60	2856.500	-0.674	0.500
	U.S. ( <i>n</i> = 112)	3.29	82.00			
19. AAC can keep a person from talking.	Philippines ( <i>n</i> = 54)	2.09	68.98	2240.000	-2.911	0.004*
	U.S. ( <i>n</i> = 112)	2.47	90.50			
20. A child who is nonverbal (does not talk) has likely kissed a doll or a mirror when he/she was a baby.	Philippines ( <i>n</i> = 54)	1.28	72.70	2441.000	-2.396	0.017*
	U.S. ( <i>n</i> = 112)	1.47	88.71			

\**p* < .05.