

Interpreting at Neuropsychological Evaluation Appointments

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Abstract

The following theoretical article/conceptual analysis offers an interpreting and translation studies perspective on the interpreter's role in a neuropsychological setting during the evaluation of bilingual patients in the United States. The paper also aims to emphasize the value of a collaboration between the foreign language interpreter, the patient, and the doctor as well as to cover the ethical issues discussed in the neuropsychological and psychological practice in connection with the use of trained and highly educated interpreters.

Interpreting at Neuropsychological Evaluation Appointments

Describing the practice of interpreting at neuropsychological evaluations is a way of looking at the interpreter's profession, its codes of ethics, the interpreter's education, and the demands of medical practitioners and patients. There is evidence in the literature of neuropsychology that suggests that testing bilinguals with the help of interpreters has become a highly debated ethical challenge as medical interpreters often lack formal academic education and an understanding of the setting itself. This paper aims to look at the setting and the role of the interpreter during the neuropsychological assessment from an interpreter's point of view. With an expected rise in bilingual patients with cognitive impairments, e.g. Alzheimer's, this paper tries to emphasize the need for highly specialized interpreters with an academic background.

The Setting

A neuropsychological assessment consists of a variety of tests to assess the cognitive functioning of a patient's brain in comparison to a reference group. The neuropsychologist can use the information from the assessment to conclude if any changes in the brain exist as a result of brain disease, brain damage or mental illness. A neuropsychological assessment is in part performance-based, and the patient's performance results are compared with the results of a respective reference group. This reference group is ideally of the same age as the patient, same sex, race, and educational background (Harvey, 2012). With so many minority groups in the United States, these comparisons alone can quickly become a challenge, not only because language plays a role but also because results must be established for a reference group and because of unique cultural determiners like the patient's educational level.

Determining the level of education of a patient who came from abroad by itself is not an easy task as educational systems vary greatly in different countries and regions of the world.

The testing portion of a neuropsychological assessment often includes several tests combined in an assessment battery. These tests are designed to test the patients' cognitive abilities in language functions, their problem-solving skills, their reasoning and processing speed, their understanding of dimensions as well as memory and attention spans (Harvey, 2012). The test results are not the only criteria used by the neuropsychologist to make a diagnosis. The approach is rather holistic, and as mentioned before, the neuropsychologist takes academic achievements, cognitive achievements and of course, language skills and the level of bilingualism into account. This holistic approach can also include reports from relatives and other individuals as well as self-reports. The self-reports, however, can be affected by certain health conditions and thus have lesser value than the performance-based testing under standardized conditions in comparison with the reference group (Harvey, 2012). While technology may show neurological disorders and changes to the brain as well, neuroimaging has its limits as it is a relatively new discipline.

Neuropsychological assessment appointments can last anywhere between two and six hours; and here, the neuropsychologist plans longer appointments with bilingual patients than with monolingual native English speakers because of the extra time it takes to work with these bilingual patients and interpreters. Neuropsychologists often work together with psychometrists, which is one reason why the patient's assessment appointment may be split into several parts. Psychometrists work under the neuropsychologist, and they received formal training in the administration and scoring of tests suitable for this setting (School of Medicine and Public Health - University of Wisconsin-Madison, 2019).

Literature in the field of neuropsychology recommends that the neuropsychologist's first assessment of the bilingual patient should be the determination of the patient's language proficiency in both languages. The patient's language proficiency will be a determining factor whether or not a monolingual neuropsychologist can and should do the neuropsychological evaluation as well as the overall assessment approach and to what reference group to compare the patient because there is often a lack of data for bilingual patients (Rivera Mindt, et al., 2008). The patient's language level also determines if an interpreter will be present during the appointment. Because they are part of a medical setting, neuropsychological assessment appointments belong to the field of liaison interpreting, meaning that "the clients' welfare is usually affected directly" (Gentile, Ozolins, & Vasilakakos, 1996; Hale, 2007, p. 34).

Interpreting at neuropsychological assessments also belongs to the consecutive interpreting settings, and the length of the appointments alone is one reason why the neuropsychologist should consider working with two interpreters if patients are not highly proficient in English; there is a significant increase in errors after 30 minutes of interpreting, which the interpreter will likely not notice (Moser-Mercer, Künzli, & Korac, 1998). Trained interpreters are aware of their limitations and should stop interpreting if they have reached their limit. Aside from the interpreter's need to take frequent breaks, the prolonged working conditions for interpreters in this setting can quickly become an ethical issue. It is easier to see that the testing is hard on the patient, but an interpreter's brain also works hard when it exercises cognitive control and when fatigue sets in, it can affect the outcome of the assessment.

The bilingual and bicultural patient.

Research concerned with the assessment of bilinguals has so far focused on the cognitive mechanisms that separate bilinguals from monolinguals. Researchers try to understand what is behind the bilingual individual's cognitive control or how bilinguals make the selections within their language systems, and also how well this cognitive control works. The researchers further try to establish models of bilingualism based on the frequency of language use, and here specifically how this frequency of language use affects the outcome of neuropsychological testing. The research finding and the established degree of bilingualism can help an examiner to assess the cognitive status of a bilingual patient and also determine assessment methods to improve clinical services for linguistic minorities (Rivera Mindt, et al., 2008).

According to Rivera Mindt et al. (2008), the lack of highly fluent bilingual neuropsychologists in the current practice is a problem as patients cannot be referred to bilingual neuropsychologists, or it means an unbearable hardship for these patients to see these practitioners due to long travel requirements. According to a report with the approval of the General Inspector Daniel R. Levinson from the Department of Health & Human Services (2010), "approximately 18 percent of the U.S. population in 2000 spoke a language other than English at home" (p. 2). This number is likely to rise, which means that the aging bilingual population will require more neuropsychological evaluations.

The Alzheimer's Association predicts that there are currently 5.8 million Americans living with Alzheimer's and that this number will likely rise to 14 million by 2050 (Alzheimer's Association, 2019). The same infographic also states that 82% of seniors agree that testing cognitive functioning is important, but only 16% have cognitive assessments regularly (Alzheimer's Association, 2019). The foreign language issue is already very apparent in California, but other states face the same challenges, too. In an article, the Los Angeles Times wrote about a shortage of court interpreters and that "at least 220 languages

are spoken in California, and 44% of residents speak a language other than English at home. Seven million Californians say they cannot speak English well” (Maura, 2017). These statements are a clear indicator that a lack of trained interpreters in the neuropsychological setting is indeed a pressuring issue, not just because of all the languages spoken in the United States but also because of the projected rise of patients with Alzheimer’s.

The current practice of using untrained interpreters with neither formal training in psychology nor neuropsychology violates the American Psychological Association’s (APA) ethical standards (Rivera Mindt, et al., 2008). Therefore, the issue with the untrained interpreters can only be solved within an interdisciplinary approach that ties together psychology, neuropsychology, neurolinguistics, sociolinguistics, and the field of interpretation or translation studies as well as by means of formal education and advanced but also open codes of conduct based on medical ethics.

Bilingual patients use both languages just like professional interpreters and exercise their cognitive control. One characteristic that separates interpreters from patients in this situation is that interpreters have experience in exercising this language control when they switch between their A and B language in this consecutive interpreting setting. Interpreters continuously work on maintaining their level of language competency. When patients visit a neuropsychologist for an evaluation, it is more likely that these patients experience interferences because speaking the less dominant language often leads to slower responses due to the more difficult accessibility of two languages in one cognitive system and the inhibitory control when language switching is involved. While the activation of both languages does not always lead to interferences, it can often lead to facilitation with tasks that require comprehension (Rivera Mindt, et al., 2008).

Aphasias are possible conditions the interpreter might have to deal with as well. Aphasias are conditions where language is partially lost. Aphasias can manifest themselves differently in bilingual patients compared to monolingual patients; they can even be so severe that one language can be disproportionately recovered while another language may be lost. Researchers believe this has to do with stroke damages in the area of the brain that is responsible for language switching (Dimitrova & Hulten, n.d.). Another issue, interpreters will face during these assignments related to the nature of the setting is that they will sometimes not get through to the patient in the less dominant language when there are cognitive impairments. Here, this less dominant language can even be the native language with patients who have been in the United States for a long time.

Patients in this setting are more likely to feel shame, to be nervous and on edge. They are aware of their cognitive impairments. The interpreter will likely sense the impact of the patients' emotional state, such as shame. In her audiobook *Daring Greatly*, shame researcher Brené Brown describes shame as the fear of disconnection, and Brown points out that humans are wired to crave connection, love, and belonging (Brown, 2018, 1:42). The feeling of shame is connected to what someone does or did not do that makes that person not worthy of connection. It is an intense and painful emotion related to an individual's perception of being flawed and not worthy of connection (Brown, 2018, 1:43). Brown's research on shame categories revealed that mental and physical health are a shame category (Brown, 2018, 1:44). This intense feeling of shame over one's own cognitive abilities may not only impact the patient's self-reporting; it can, in fact, lead to a form of denial in the patient, but it also impacts the interpreter's role as well as the interpreter's emotional well-being. The feeling of shame can come up with the reporting of the patient's personal history. A display of empathy from the interpreter during these appointments and before the initial interview can improve the overall experience for the patient. After all, the interpreter will be present during the

moments when the patient experiences shame. Recalling past injuries to the brain and mental health conditions like anxiety and depression resulting from traumatizing experiences further have an impact on the patient's mental well-being.

Just like many other medical interpreting appointments, neuropsychological assessment appointments require more than just the direct interpreting approach. According to Hale (2007), advocates of this approach argue that it is the interpreter's role "to interpret each utterance accurately to allow the doctor and the patient to communicate with each other" (p. 43). Hale points out that with this approach the direction of the consultation remains with the physician which includes that the physician picks up cues from the patient's utterances, and patients decide as well how to communicate, meaning that the responsibility of each utterance always remains with the speakers. Ultimately, a conversation like that is supposed to resemble a conversation of two; however, critics claim that this type of interaction does not "resemble a monolingual interaction" (Hale, 2007, p. 43). On top of simply accurately interpreting utterances from one language to another, neuropsychologists and patients need more than just a direct interpreting approach. The challenges that these patients experience, as well as the neuropsychologist's task and expectations, seem to agree with this.

Neuropsychologists working with Interpreters.

Neuropsychologists will follow specific guidelines when selecting interpreters but also use their professional judgment on an interpreter's competency. Searight and Searight (2009) suggest the following criteria for selecting and hiring interpreters; certification and/or training in mental health, knowledge of the U.S. culture and the patient's culture and language of origin, the terminology of the medical field, knowledge on ethics applied in the field, and professionalism. Searight and Searight (2009) further mention personal characteristics such as respect and empathy, and also the ability "to facilitate communication

between the client and psychologist without becoming a barrier” (Buwalda, 2009; Mailloux, 2004; Searight and Searight, 2009).

Criticism of using interpreters in this setting can reveal what is expected of the interpreter as well. Paradis (2008) quotes Marcos (1979) who wrote that “translators¹ often alter the symptomatology being expressed by the patient, as well as the questions asked by the clinician (Marcos, 1979). They tend to limit their translation to *what* the patient says, neglecting *how* the patient says it, that is, ignoring paralanguage, from intonation to gestures (Marcos, 1979)” (Marcos, 1979; Paradis 2008, p. 214). Paradis (2008) further quotes Oquendo (1996a) who described that “culture is encoded in language in a way that cannot be uncovered through direct translation¹ of content but must be understood by attending to how and when language is used” (Quendo, 1996a, Paradis 2008, p. 214). Paradis (2008) also writes “language differences in cognitive organization may have an impact on symptom expression” (Pérez Foster, 2001; Paradis 2008, p. 209). Cultural norms and the language in which developmental moments are encoded influence the patient’s worldviews and psychological structures” (Javier, 1989; Paradis, 2009, p. 209).

Worth noting here is Angelelli’s, Agger-Gupta’s, Green’s, and Okahara’s (2004) reference to Argyris and Schön’s theory; they suggested that the behavior of others is judged by people on the bases of “culturally-learned expectations of ‘right’ and ‘wrong’” (Argyris & Schön 1992, 1974: 6-12; Angelelli et al., 2004, p. 168). Reality is constructed, linguistically and socially. Interpreters without any professional training may assume things and to some degree edit what is being said in an interpreting assignment based on their cultural context experiences (Flores et al. 2003; Putsch 1925; Jacobs, Agger-Gupta, Chen Piotrowski & Hardt, 2004; Angelelli et al., 2004). Understanding the medical culture, its ethics, and the

¹ It can be assumed that translator/translation is used here as a synonym for interpreter/interpreting

social surroundings is necessary to facilitate the practitioner's work and also to accept the social milieu of the patient (Angelelli et al., 2004). In short, if the monolingual neuropsychologist works with interpreters who are not aware of the fallacies in their own reasoning and the bias they experience because of their cultural context and language but who are also unaware of the neuropsychologists expectations or the communication struggles of the patient in terms of cultural appropriation or even the degree of potential involvement and decision-making patients often enjoy in the United States, the appointment will be unsuccessful. Another issue is the structure of the healthcare system and the interpreter's level of understanding of the healthcare system.

Rudvin and Tomassini (2011) write that for a healthcare system it does matter whether it is a public or private system as this not only impacts payment and appointment options but also the patient-doctor rapport. Most Western countries have a mixed private and public system. Patients in the United States are more likely resembling paying clients for a service and therefore enjoy specific rights and treatments and also have options as far as their treatment plans go and the distribution of information. This, however, might be different in a culture that has a public healthcare system. A lot of Americans grow up learning that they are active and equal participants in many situations regardless of what social or income class they belong to. In less individualistic cultures there is a larger gap in the power distance between the patient and the doctor, and the doctor might just give orders without much patient involvement in the decision-making process. This does not only affect the patient's understanding of the system but also understanding what is available to them (Rudvin & Tomassini, 2011).

The fact that the majority of neuropsychologists are monolinguals, on the other hand, should also confirm the following of Hale's (2007) viewpoints; she writes that professionals who work with interpreters "rarely understand the complexity of the task and the interpreter's

needs in producing an accurate rendition” (Hale, 2007, p. 35). This possibly includes misunderstandings of how languages work, e.g., understanding differences in grammatical structures and concepts of equivalence on different levels. It is safe to assume that a lack of understanding in terms of equivalence is what not only leads to problems with interpreting utterances but also to an unjust judgment of the interpreter’s abilities by others. The interpreter must know *how* to interpret in a given situation, but without advanced knowledge of the field, this should soon become a challenge. Hale also points out that there is a lack of training opportunities for interpreters, and that even when training opportunities exist, it does not change the fact that the pay rates for professional interpreters remain low and the working conditions are less than satisfactory (Hale, 2007).

Roles, education, culture, and ethical issues.

An interpreter with an academic background in interpreting/translation studies or a related field will be aware of these issues described above as they are discussed in the field of interpreting/translation theory as well as in many interpreters’ codes of ethics and in particular in literature dealing with interpreting in a healthcare setting. Hale, for example, discusses how there is “a misunderstanding about each other’s tasks, roles, needs and expectations” (Hale, 2007, p. 35). So, of course, relevant to the interpreter’s work is research into the medical discourse because the interpreter is involved in the consultation between the health care professional and the patient (Hale 2007).

In fact, the complexity of the neuropsychological testing assignments, the ethical requirements, and the needed communication skills require an academic interpreter education. Baker, a translation studies theorist, writes that while practical skills are necessary, a strong theoretical component “encourages students to reflect on what they do, how they do it and why they do it in one way rather than another” (Baker, 2018). This is also consistent

with Hale's (2007) description of medical interpreting and its challenges. There is no doubt that untrained interpreters will not achieve success in this setting, as they do not understand the reasoning behind procedures, why the neuropsychologist asks a specific question in one way or another or why the way the patient responds to these questions is of significance.

Interpreting within the neuropsychological assessment setting also highlights the complexity of interpreting in the American healthcare system and the need for academically trained interpreters who can fall back on ethical decision-making models to live up to the patients' and practitioners' expectations as codes of ethics and standards can never cover all instances that can come up in the healthcare setting. Interpreters also must have the skills to prepare for these settings through research and by identifying the assessment's overall goal with the focus on the patient's needs. The Interpreter is in a position where showing the foreign, the difference in culture, and use of language is vital; the interpreter is taunted to step outside of his or her "invisible" role and to function as a cultural adviser with expert knowledge on culture.

Even though most neuropsychologists are monolinguals, they are aware that culture plays an important factor in the way patients communicate. The question is how much of an awareness an untrained interpreter has when it comes to culture and language and what models should serve as a justification to interrupt the flow of the doctor-patient consultation. The CHIA Standards, for example, state under the headline *performance measures* that it is the interpreter's responsibility to clarify forms of non-verbal expressions, and differences in culture. The Standards also consider register, accent, and dialect. They state that it is the interpreter's responsibility to continue learning about patients' cultures and the culture of the healthcare system. Culture determines behavior, decision-making, and communication (CHIA Standards and Certification Committee, 2002). The standards mention that "culture and language are inseparable" (CHIA Standards and Certification Committee, 2002, p. 43).

Worth noting are also the endnotes of the CHIA Standards referring to the field of sociolinguistic literature and noting that the interpreter “may be the only person able to identify the emergence of potentially critical patient health and safety issues’ (Kaufert & Koolage, 1984; Kaufert, Koolage, Kaufert, & D., 1984; Kaufert, Medd, & Mills, 1981; Kaufert & Putsch, 1997; Kaufert, Putsch, & Lavalee, 1999; Putsch, 1985; CHIA Standards and Certification Committee, 2002, p. 48).

With culture, it can be difficult for untrained interpreters to make a sound assessment of arising issues and whether or not they relate to culture or personality. The interpreter must be able to discuss culture and know when and if there is a need to interfere for the benefit of the patient’s wellbeing. One concept that can help to talk about culture is Geert Hofstede’s work, but knowledge of other concepts frequently covered in culture or communication studies can help the interpreter as well. Of course, Hofstede’s work certainly has its critics. Hofstede’s model on dimensions of national culture such as individualism vs. collectivism, power distance, masculinity versus femininity, uncertainty avoidance, long-term vs. short-term orientation, and indulgence versus restraint (Hofstede, n.d.) can still help the interpreter to find ways to think and talk about cultural differences. Mette and Tomassini (mentioned above) used these concepts in their paper, and psychologists, in general, see a connection between culture and how and when language is used as the Quendo and Paradis quote is showing, and there is this expectation that the interpreter clarifies culture.

Another way for the interpreter to talk about cultural differences and to make selections on how to talk about differences is language itself. The interpreter (translator) must be able to discuss culture-specific concepts which fall under non-equivalence at the word level, differences in expressive meaning or form or register among other things (Baker, 2007). Again, this can only be achieved with a strong educational background and when the neuropsychologist sees the interpreter as an expert in his own right and respects the

interpreter. The challenges of this setting further indicate the need for highly specialized interpreters, which can only be satisfied if institutions work together in one way or another and develop theories on interpreting but also educate interpreters so that the interpreters can meet the respective expectations.

An outsider to the practice of interpreting or even a less experienced interpreter may simply refer to current codes of ethics for medical interpreters to deal with the challenges of interpreting in a healthcare setting and thus in the field of neuropsychology. An example of codes of ethics is the California Standard for Healthcare Interpreters, published by the California Healthcare Interpreters Association. Angelelli et al., (2004) call this standard groundbreaking in ethical decision-making within the medical setting. “The Standards are based on the concept that appropriate actions for medical interpreters should be based on principles of medical ethics” (Angelelli et al., 2004, p. 168) For example, the California Standard for Healthcare Interpreters considers these verbal and non-verbal messages in their definition of accuracy and completeness as mentioned above under the criticism interpreters receive from neuropsychologists. Included is also the clarification of non-verbal language in the form of expressions and gestures with source-culture meaning. The standards also advise healthcare interpreters on how to deal with differences in “accent, dialect, register and culture (California Healthcare Interpreters Association, 2002, p. 30).

The California Healthcare Interpreters Association (CHIA) aims to increase healthcare access for linguistic and cultural minorities and to advocate for services that are appropriate for these groups (CHIA Standards and Certification Committee, 2002). The CHIA Standards also serve as the basis for educating healthcare interpreters since they are based on ethical standards of medicine, and they can be used as a reference when conflicting ethical situations come up. They include “confidentiality, impartiality, respect for individuals and their communities, professionalism and integrity, accuracy and completeness, and

cultural responsiveness (Angellelli et al., 2004). As mentioned before, these ethical challenges come up, for example, when interpreters rely on their own cultural and linguistic context (Angellelli et al., 2004). As mentioned before, this can be the case when interpreters without ethical training make judgments based on their cultural experience context when ethical dilemmas occur (CHIA Standards and Certification Committee, 2002; Angellelli, p. 171).

Confidentiality.

The CHIA Standards clearly state that professional medical interpreters must “treat all information learned during the interpreting as confidential” (CHIA Standards and Certification Committee, 2002, p. 25). They also state that interpreters must advise all parties that everything that they say will be interpreted, and therefore, the parties should refrain from giving information they do not want to be interpreted. And since cultural and linguistic communities are small and often tight-knit, the CHIA Standards declare that information that the interpreter learned about the patient within the community setting must be kept confidential. Hale (2007), however, quotes an interpreter respondent to a survey who disagreed with confidentiality clauses in some cases, saying that “these are the situations when interpreters need to make a professional decision to flout that aspect of the code for a greater good” (Hale, 2007, p. 130). This could be information that could potentially lead to a negative impact on the patient’s health. The CHIA Standards also mention a moral and legal obligation on reporting “suicidal/homicidal intent, child/senior abuse, or domestic violence” (CHIA Standards and Certification Committee, 2002, p. 25). Recent developments and heightened awareness about workplace violence is another example where professionals have the moral obligation to report certain incidents.

Impartiality.

Impartiality in any medical interpreting setting can quickly become an ethical dilemma. In practice, patients may display behaviors indicating that they see the interpreter in another role, sometimes in a difficult medical situation as an advocate or a friend because of the shared country of origin and the language (Hale, 2007). Rudvin & Tomassini (2011) write that medical settings are putting a non-native patient in a vulnerable situation. They state that the interpreter is often the only person who understands the native heritage and who is also familiar with how things work in the foreign environment. Sometimes things also get physical and elderly patients in the neuropsychological setting, for example, may attempt to use the interpreter to aid them when walking.

Overall there are many roles the interpreter is acting out in these settings. Hale (2007) quotes Roberts (1997:20-1) “The interpreter ...is often expected to be not only a mediator between languages but also a helpmate and guide, cultural broker and even advocate or conciliator. In other words, he wears many hats” (p. 45). The CHIA Standards state that awareness of “potential or actual conflicts of interests as well as any judgments, values, beliefs or opinions that may lead to preferential behavior or bias affecting the quality and accuracy of the interpreting performance” (CHIA Standards and Certification Committee, 2002, p. 26) are part of impartiality. It is clear that the role of the cultural broker could quickly become a minefield under the impartiality emphasis. Hale (2007) writes that it is impossible for any interpreter’s code of ethics to cover every scenario. She even calls the over-reliance on a code of ethics risky and states that interpreters “cannot apply abstract ethical principles to every situation that may arise” (Hale, 2007, p. 114). An educated and experienced interpreter is certainly capable of solving ethical dilemmas through the application of learned ethical decision-making models.

Culture and Language.

In terms of language skills in connection with untrained interpreters, issues arising from this combination were highlighted by a professional interpreter at the American Translators Association's yearly conference in New Orleans in 2018. Eby (2018) discussed the extent of written and sight translations, which interpreters had to prepare during their medical interpretation assignments based on the results and an analysis of 808 answers from medical interpreters on a questionnaire by the Certification Commission for Healthcare Interpreters, and it quickly became apparent that many healthcare interpreters are in fact doing sight translations, e.g., for prescription information and instructions. However, as Eby pointed out, many interpreters are not capable of producing accurate and error-free written instructions in the patient's A language, which is, however, critical for the patient's care as this includes instructions for how to take medications (Eby, 2018). While other interpreters at the conference pointed out that many hospitals had adopted systems that allowed practitioners to print instructions in a few other languages, it is an apparent sign of how much the interpreter's training must still improve in the United States.

There is no doubt that professional interpreters have the responsibility to acquire the necessary skills and ethical knowledge to work in a medical setting, and they need to make sure they understand the respective situation in which they will be working and also bring with them a professional and confident attitude.

As Hale (2007) points out:

interpreters can go a long way in asserting their needs to those who speak through them, by explaining the procedures of speaking through interpreters, controlling the length of speaker's turns, arranging to seating in the most effective way, asking for breaks when needed and requesting background information in order to prepare for

the job. However, confidence comes with competence, status and a strong professional identity, and these characteristics are normally a natural consequence of compulsory University training (Hale 2005; Hale 2007).

These interpreters also need to know what use and purpose language has in the setting (Hale, 2007). Communication between the health care professional and the patient determines the success in the patient's treatment (Hale 2007). Of course, the interpreter cannot impact the doctors questioning style and the communication technique necessary to have a successful outcome. There is much research on patient-doctor communication and how the respective communication techniques can lead to an understanding of the patient's medical problem (Hale 2007).

Bilingual Testing

As previously stated, there are currently only a few options available to test the cognitive abilities of bilingual patients as there are no specific tests for all the linguistic and cultural minorities in the United States. Assessment translations and cultural adaptations do, however, exist. The scientific publisher Hogrefe, for example, is active in several markets around the world. These markets include Europe and the Americas, and many assessments can be found in different languages. Hogrefe focuses on psychiatry and psychology and some of the following tests published in the United States are also available in German and in other languages, for example, the Alzheimer's Disease Assessment Scale (ADAS), the Benton Visual Retention Test, the California Verbal Learning Test, the Location Learning Test, and the Mini-Mental Status Test and many more. Hogrefe has a global company website (<https://eu.hogrefe.com/>) that lists all the local websites with their specific target-market language versions and adaptations. The neuropsychologist, therefore, has some options as far as language-specific versions of tests that are common in the United States.

Because there are ethical concerns with the application of neuropsychological assessment tests by interpreters who have no training in the administration of these test, this paper only covers neuropsychological assessments with bilingual patients where testing takes place in English and the patient's native language with the help of the interpreter. This is part of the holistic approach that so far appears to be the only option with bilingual patients as interferences or facilitation with the patient's non-dominant language may not be present in the native language. Overall, scores may be different in a second language versions compared to the respective reference groups. This is the reason why the first task of the neuropsychologist should be an assessment of the patient's language skills and whether or not working with the patient and an interpreter can be justified.

Interpreting Protocol.

Codes of Ethics, interpreting agencies, and hospitals outline basic interpreting protocols, and the healthcare interpreter is expected to follow these protocols. The CHIA Standards include the following pre-encounter guidelines that can also be found in other organizational guidelines. Before the session starts, interpreters are encouraged to provide their names and their organizational affiliation. They can set the right expectations and guiding principles such as confidentiality requirements of the healthcare sector, impartiality or that everything that is being said will be interpreted, and the emphasis on the medical practitioner-patient interaction.

In other medical settings where the patients are not proficient in English, this would also include the need that all parties frequently pause, so that the interpreter can render the utterances accurately and completely. The CHIA Standards also state that the interpreter should advise the parties that the need for clarification could come up during the session. The interpreter should also inquire if there is anything that needs clarification or concerns from

the practitioner's side (California Healthcare Interpreters Association, 2002). In the pre-encounter, the interpreter can also use the few minutes before the appointment with the neuropsychologist to get familiar with the patient's language level or baseline way of communication.

The neuropsychological assessment will start with a general consultation and an interview. Here, the communication between the neuropsychologist and the patient during the initial interview is different from other medical appointments in that way that the neuropsychologist received a referral from the patient's primary care doctor, and therefore, the neuropsychologist may already be somewhat familiar with the symptoms. It could be true as described by Hale (2007) that the doctor will not have a specific set of questions but ask questions that can evoke answers that can lead to other questions, which may also lead to a change of direction; however, some assessment batteries include predetermined and very specific questions. In the neuropsychological setting, the neuropsychologist will take detailed notes during the interview, and the interpreter will support all involved parties and facilitate communication.

The interpreter may have to follow organizational guidelines on the seating arrangement. In other healthcare sessions with limited-English patients (LEPs), the interpreter may need to remind the involved parties frequently to address each other, and the interpreter then renders the utterances by using first-person sentences. The interpreter will consider non-verbal messages as well and also check for any confusions or misunderstandings and speak on the patient's behalf if there is a need to intervene (California Healthcare Interpreters Association, 2002). With the bilingual patients, there are usually only a few minor communication barriers as their language skills allow them to communicate with the neuropsychologist directly. Considering the length of the neuropsychological assessment appointment, this also helps the interpreters as they will be able to preserve their mental

capacity for the testing session. And because the interpreter's mental capacity is limited, the CHIA Standards refer to the American Society for Testing and Materials and their recommendation that "interactions lasting more than 45 minutes" should include two interpreters, "and that interpreters be given a 10-15 minute break after working continuously for an hour (CHIA Standards and Certification Committee, 2002, p. 38).

During the interview with the neuropsychologist, the interpreter will function as a cultural broker, as mentioned above, and this also relates to briefing the neuropsychologist on the education system in the patient's country of origin. The patient's educational background is of importance in this setting as performance is also judged in comparison to education levels of the reference groups. Therefore, the interpreter must be prepared to clarify when the patient lists educational achievements. It helps to understand both educational systems in principle to explain the differences. Interpreters who maintain contact to their respective language and cultural communities usually know what a credential evaluation is and what a broad equivalent in a professional comparison report by an evaluation provider looks like, at least for primary and secondary education.

The interpreter may also render questions or utterances when it becomes clear that the bilingual patient has problems with meaning. Interpreters will experience situations where patients suffer from impairments that hinder communication, such as hearing loss. It does not belong to the interpreter's role to make up for these difficulties. Departments in hospitals offering neuropsychological assessments often have devices to assist the client with impairments, as for example, a special headphone that allows the patient to hear better if the patient's own hearing aids cannot achieve clear understanding. Proper hearing is a requirement for the testing, but because it is a controlled setting where results are compared to reference groups, the interpreter cannot create conditions that are more favorable for patients with hearing impairments.

In the next part of the appointment, the neuropsychologist or the psychometrist usually start applying the tests. The neuropsychologist will determine in what language to test first. Ideally, there are longer breaks between different language testing sessions. The interpreter is only needed for the foreign language portion; however, it makes sense to have the interpreter present for the entire assessment as it helps the interpreter to understand the complexity of the situation or to help with the clarification of any cultural issues that could come up. Testing is the challenging part of the evaluation because the tests are standardized and time constraints or considerations, as well as the very specific instructions, must be considered. Some instructions the patient receives for performing certain tasks can be repeated multiple times, and others cannot even be repeated once.

On top of that, the interpreter is expected to record answers with some tests in a certain way. The neuropsychologist or the psychometrist will go over the tests with the interpreter before testing the patient. Some tests may still be in English and require a sight translation. Sight translation may be challenging even for interpreters who also work as translators because there are rules regarding the neuropsychological testing materials. The testing materials cannot be removed from the testing room because the illegal distribution would make them ineffective. Translating them without proper software or access to references can be a challenge.

While applying the tests, the neuropsychologist or the psychometrist guides and assists the interpreter. This can take place in the form of nonverbal communication so that the patient is not unnecessarily distracted. Nonverbal communication is especially helpful when applied to tests that require timing. The neuropsychologist or psychometrist will record answers as well. The patient answer recordings in the foreign language also recorded by the neuropsychologist or psychometrist can be surprisingly accurate phonetically. The neuropsychologist or psychometrist and the interpreter will compare the recorded answers,

and the interpreter will clarify what the answers mean as it can impact the scoring when the patient repeats words or uses words that represent intrusions of any kind. Overall it makes sense to continue using the same interpreter for this setting because the interpreter has to “learn” the complexity of applying these tests to aid in the assessment of the bilingual patient.

After the testing, the neuropsychologist makes his diagnosis and writes his report. The neuropsychologist will then meet with the patient and also involve family members in the consultation either on the same day or later if there are time constraints. It is the neuropsychologist’s task to pinpoint what regions of the brain are affected by a condition and how the patient’s performance compares to each reference group, e.g., brain regions related to comprehension and language. The test results will allow the neuropsychologist to have a set of measurements under defined conditions. This will allow the neurologist to repeat the test after some time to assess the progression of a disease or a condition.

A diagnosis will also allow the neuropsychologist to make predictions about the progression of a condition and determine what measures need to be taken to slow down progression or to keep the patient safe, e.g., installing door alarms with Alzheimer patients, etc., and the further course of treatment. Interpreter should stay during the final consultation in case there are any cultural issues or language problems but also to get some closure as the patients will be taken care of and receive the help they need. The CHIA Standards even cover the topic of emotional well-being of the interpreter.

The CHIA Standards further recommend a post-interview session to close the appointment. This can include covering any questions or concerns that may have come up or even scheduling follow-up appointments (CHIA Standards and Certification Committee, 2002). Scheduling follow-up appointments will likely not occur in the neuropsychological assessment setting as the neuropsychologist is the specialty doctor, and the patient will

simply continue treatment with his or her primary care doctor. The interpreter will also present the time-sheet from the agency if he or she is not a staff interpreter. While the CHIA Standards recommend that interpreters and providers should share concerns that came up in the session, this by itself could become another ethical issue rather quickly if either one of the parties brings up issues concerning the patient or the patient's condition. The interpreter should refrain from offering opinions. The debriefing session, however, could serve as a closure with difficult diagnoses and frustrating experiences.

Conclusion.

Critics arguing against the use of interpreter with neuropsychological testing ignore the fact that neuropsychologists in the United States are almost always monolinguals and that the problem of bilingualism in individuals with degenerative conditions is on the rise. Especially healthcare services relying on publicly funded healthcare plans cannot ignore the needs of these bilingual and cultural minorities. These insurance plans or services with government involvement, for example, Medicaid or Veteran care, will add another requirement level to this setting as official guides and standards exist that include recommendations for providers on language access services so that they can provide services to linguistic and cultural minority groups. The issue with public funding is, of course, that those language barriers should not determine the outcome of medical care. Of course, the intent of using an interpreter should always be for the benefit of the patient and not to fulfill government guidelines or to offer additional chargeable services. While attempts to have more bilingual neuropsychologists is a step in the right direction, the only way to meet the bilingual cognitive assessment demands is to have well-trained interpreters.

Even with a proper university degree, interpreters should always continue their education and also aim for better pay as interpreters rarely can make a living from

interpreting in just one type of interpreting setting alone. Academic education and in this case, specific knowledge about interpreting in the neuropsychological setting and an understanding of the bilingual brain and certain medical conditions can enrich the interpreter's work and help the interpreter to succeed. This knowledge can also highlight the importance of self-care for bilinguals. An interpreting specialization in a field like neuropsychology and the neuropsychological testing of bilinguals can further help interpreters to stay in the industry as face-to-face communication and interpreting are critical for the successful outcome of this type of doctor-patient interaction.

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