Section I: Background Information

Terminology and Perspective

Individuals born in Japan are referred to as Japanese or Japanese Nationals in the United States. Japanese Americans are individuals of Japanese descent who live in the United States. First-generation Japanese Americans are referred as Issei. Subsequent generations are chronologically referred as Nisei, Sansei, Yonsei, and Gosei. Individuals who are of mixed-race ancestry are often referred to as Haafu.

I (NT) am a Nisei Haafu, that is, a second-generation born half-Japanese American. I am also a clinical neuropsychologist who was trained in the west coast of the United States. I grew up in a bilingual and bicultural household; importantly, my Japanese grandmother, who spoke no English, helped raise me as a child. This has provided a foundation of my familiarity with the Japanese language, culture, and customs.

I (MSP) am a native Japanese and moved to the United States with a vision to study at the forefront of clinical psychology. I attended graduate school in the east coast and trained in the west coast of the United States to become a neuropsychologist. I am bilingual, with Japanese as my native tongue and English as my second. I regularly conduct neuropsychological tests in both languages. I currently reside in Japan and work in both university and hospital settings serving as an educator, researcher, and clinician.

Geography

Japan is an archipelago comprised of over 6,800 islands located in the Pacific Ocean. Four major islands comprise Japan, including Honshu (the largest), Hokkaido, Shikoku, and Kyushu. As of 2020, Japan has a population of 125,960,000 individuals, of which an estimated 97.8% are of Japanese ethnicity. This highlights the homogenous nature of Japanese society, although differences within regions and even cities persist.

The west coast of the United States is an attractive tourist spot for Japanese travelers given that it is directly across the Pacific Ocean. Perhaps not surprisingly then, many Japanese Americans, including my grandparents, made their homes in California. Hawaii is another popular tourist and immigration destination for Japanese nationals and is the site of this chapter’s clinical case. In some ways, Hawaii was a chance to revisit my roots, as my maternal grandfather was a second-generation Hawaiian-born Nisei who grew up on the island of Kauai (NT: Note that I adopt my own Nisei status as my mother was born in Japan).
History

There are various theories regarding the original inhabitants of Japan. These include the Ainu, who are associated geographically with regions of Northern Honshu, Hokkaido and even some Russian territories. Other various immigration waves include descendants from the Ryukyu region and the Korean peninsula. Others suggest that the Japanese are descended from Mongolians or that the Japanese have indigenous roots similar to the Ainu. Japanese mythology posits that Emperor Jimmu, a descendent of the sun goddess Amaterasu, ascended the throne as the first emperor around 660 BC.

Whatever the origins, Japan had established itself as a feudal nation comprised of domain lords, known as daimyo, who fought and retained territory over numerous centuries. Japan was ostensibly ruled by a Japanese emperor, although his actual power fluctuated from generation to generation. Japan was largely an isolationist country allowing only minimal trade with Europe up until the year 1853 when the United States Commodore Matthew C Perry sailed his ships to the coast of Japan. Japan subsequently opened up commerce with the rest of the global economy and quickly transformed into a modern industrialized nation in a period known as the Meiji Restoration. In the following decades, Japan was involved in multiple conflicts with other nations. The first half of the twentieth century saw an aggressive expansion of Japanese imperialism, which culminated in their defeat in 1945, marking the end of World War II.

Japan has since been rebuilt as a world power, with significant economic prosperity through the 1980s. However, a severe recession in 1991 has slowed the country’s growth, which is yet to fully recover from its losses from this period.

People

Japanese culture is internationally known to focus on aspects of honor, respect, and courtesy that has garnered the interest of many foreigners abroad. However, like all people, individual Japanese vary in their beliefs and backgrounds and have their unique perspectives in life. Furthermore, putting a “halo” over the ideas of Japanese honor, respect, and so forth silences the possible psychological challenges that come with living in a collectivist society. With that caveat, there are general cultural facets of Japanese culture that do influence people in their day-to-day interactions.

As stated, the Japanese are a collectivist society that emphasizes harmony within the group over individual achievement. A special loyalty is often expected from children to their elders. Such loyalty historically extends toward a worker’s relationship with their boss, as some Japanese companies still guarantee lifetime financial security in exchange for one’s devotion. However, this old culture has been changing, especially after the economic bubble burst in the 90s, and younger generations are seeking out better job opportunities while enjoying hobbies and personal interests outside of work to maintain a sense of happiness and well-being.

Due to the emphasis on collectivism typically taught from school-age onwards, Japanese society prioritizes maintaining interpersonal harmony over direct confrontation. This undoubtedly can lead to challenges in conflict resolution among individuals in a social circle and within a family unit. The saying “The nail that sticks up is hammered down” reflects the predominant mentality encouraged by Japanese society, such that dissenters from the group are expected to internalize their disapproval for the betterment of the group.

Immigration and Relocation

Many Japanese nationals immigrated to the United States in the early 1900s, following an agreement between the Japanese and United States governments. Many early immigrants settled in Hawaii to work in agriculture, including my own grandfather's family (NT). However, Japanese
immigration temporarily ended after the Immigration Act of 1924, which has had downstream effects on generational cohorts up until the Immigration and Nationality Act of 1965. Because of the Immigration Act of 1924, most Japanese Americans living in the United States during World War II were of Nisei status.

Issei and Nisei Japanese Americans were subjugated to internment in relocation camps across the west coast during World War II. My (NT) own grandfather was subject to the camps and also then imprisoned by the United States government after refusing to serve for the country that stole his legacy. He was among the no-no boys, a subgroup of Japanese American men who refused to denounce the Japanese emperor to the United States government. My grandfather’s bitterness toward the United States led him to immigrate to Japan, a country he had never lived in before after World War II ended. It was there that he married my grandmother, eventually returning to the United States with two daughters in tow to resume life in California.

I never did learn much about the undoubtedly mixed feelings my grandfather held toward the United States, his country of birth and natural citizenship. But if he was like many Japanese Americans at the time, he likely felt a sense of betrayal with aspects of shame sprinkled into his cultural identity. He may never have felt like he fit in in Japan—after all, one must adhere to the Japanese way of life to be accepted there and in the end, he was American-born. Yet, this duality of straddling two cultures and experiencing rejection by both must have brought about its own form of trauma, one that would be felt generationally. Similar tales of intergenerational trauma permeate through many immigrant families across cultures.

More recent immigrants to the United States come as students or for vocational purposes. Unlike some other Asian cultures, fewer immigrants come now for the purposes of reuniting with family or to escape from harsher circumstances. These immigrants, of course, are quite distinct from the generations of Japanese Americans who grew up in the United States, of who many now identify primarily as Americans.

Language

Growing up in a bilingual household, I was exposed to the Japanese language from early on (NT). I spoke it daily with my grandmother and other relatives and was fully immersed in the language throughout my childhood up until my early 20s. In addition, I minored in the Japanese language in college and formally studied kanji, which is a written language originated in Chinese, in my early thirties. I say all this not to boast but to point out that despite all this experience, my Japanese proficiency was adequate at best and middling by most standards (as it is presently).

The Japanese language is complex. While certain phrases and even casual conversational ability can be relatively simple to learn, it is extremely challenging to master for all but the most savant polyglots. Some of this lies in the complexity of context; that is, the way you speak varies tremendously among and across groups. You may speak a certain way at work to your boss than to your coworkers and subordinates, yet a distinct way to your friends, your confidants, your spouse, and your children. Individuals who are interested in pursuing Japanese studies can seek out the Japanese Language Proficiency Test (JLPT), which has five levels of difficulty.

Further confounding matter is the often bidirectional nature of this language barrier. Many Japanese nationals find English challenging and intimidating to learn and speak. Despite the fact that all Japanese students spend years learning English in school, many do not have the confidence to speak it in Japan. This is perhaps related to the fact that Japanese nationals tend to have stronger “academic” English skills, including reading and writing, than their conversational abilities. Of course, this varies from individual to individual and fluency improves for Japanese who are living abroad. However, the neuropsychologist who expects to assess Japanese nationals
must be prepared to find an interpreter, which can be challenging in itself. As of 2021, there remains a paucity of neuropsychologists who can test fluently in Japanese.

**Education**

Education is prioritized in Japanese society, with well over 95% of the population graduating from high school. Much of the educational system is built around standardized national exams, which determine a student's eligibility for advanced education. Only the top-scoring students are eligible to attend the most prestigious universities, and thus by extension, secure the more competitive jobs in the labor market. Graduate education prioritizes the STEM fields, with comparatively fewer students enrolling in the humanities and arts.

Due to the value that Japanese society places on education and, in particular, prestigious academic credentials, the competition for university placement can be fierce. Students will spend inordinate amounts of time “cramming” for entrance exams while trying to juggle other responsibilities in their life. There is often little free time granted to Japanese adolescents, which is a likely risk factor for mental health struggles. Such struggles are all the more compounded when a child is born with learning differences.

The educational system in Japan overall has paid marginal attention to children with special educational needs. However, like other countries, the number of children with developmental disorders is increasing, possibly due to the broadening of diagnostic criteria to include a spectrum of behavioral and functional limitations, improving developmental screening and access to diagnostic and treatment services, and improving knowledge and awareness of developmental disorders in society. While the Japanese government has recognized the right for students with disabilities to receive a fair education under the Basic Act on Education, the actual implementation of practice remains mixed (to be fair, this is similar to the challenges faced in the United States and many other countries).

The Act on Support for Persons with Development Disabilities (発達障害者支援法), which became effective in 2005, aimed for early detection and intervention and providing financial and educational support for individuals with developmental disorders. To date, children with special needs (physical, mental and/or developmental disabilities) have options on whether they attend either classes catering to those needs at a regular school or a school for disabilities with medical/educational professionals’ careful evaluations. Children attending these classes at regular schools receive close attention from teachers in small classrooms that range from one to three students. Children generally belong to their “parent” or “communication” classes where they take some regular lessons and interact with children without disabilities. Additionally, children with disabilities can attend after-school programs (20–23 days/month, including holidays and weekends). This costs an estimated 4,600 yen (approximately 44 dollars) per month as this service is insured by the government. With great and long effort by families of children with special needs and school-teachers, the Japanese educational system has been improving gradually but surely.

I (NT) recall the case of a girl in her twenties who likely had a severe language delay growing up, as well as a possible mild pervasive developmental disorder. She described years of teasing and abuse by her peers. She stated that her teachers stuck her in a classroom where she had to copy sentences over and over again with little instruction, adding that the teachers would “scream” at her if she ever stopped. Her parents, who were quite invested, ultimately moved to the United States, where they hoped she would have an easier time fitting in. Sadly, the girl continued to exhibit signs of trauma while recounting her childhood in Japan, at times pausing to bite her tongue and cry during the interview.

This case is an example of the challenges that children with special needs must navigate in Japan. Such challenges are inherently linked to the pressures of Japanese society toward academic
excellence. Such excellence is expected of the dutiful child in honoring their family and their society, with failure often interpreted as a characterological flaw. Thus, the high standards of academic prowess and output that characterize the Japanese educational system must be viewed within the context of the individual cost that comes for those who fall by the wayside.

**Literacy**

The Japanese reading and writing system relies on three systems; hiragana, katakana, and kanji. Kanji can be read from their original Chinese or indigenous Japanese pronunciations. There are currently 2,136 regular-use kanji which are considered necessary for high school literacy. Along with kanji are two phonetic alphabets: **hiragana** which breaks up all Japanese words into their phonemic components, and **katakana** which breaks up imported words into their phonemic components. **Katakana** is often used for loan words which have no direct Japanese translation, such as foreign names and titles. Most elementary-school children can read hiragana and katakana by the end of their first year of school.

One can posit that kanji is difficult to learn for students with learning differences. Referring back to the girl with the language delay we discussed in the prior section, I recall that she could not read even the simplest of kanji on a mental status examination (e.g., “father”). This was unlikely related to volitional factors, as she passed the effort measures, but highlights the near illiterate status she had despite spending her childhood years in the Japanese school system. Research on the impact that learning disabilities and other delays in educational advancement has on Japanese literacy remains lacking.

**Socio-Economic Status**

Most Japanese nationals can secure basic needs such as housing, education, and medicine, and an estimated 90% of the population are considered to be in the middle class. However, despite some degree of evident security provided, cracks exist. It has become increasingly difficult for adults to strike out on their own, with increasing numbers of Japanese men and women in their 30s and 40s still living with their parents. Women used to be expected to sacrifice their education and career when starting a family; however, the culture is changing. More and more women attend college and remain working after marriage to contribute to essential family needs, such as their child’s education and college funding, housing loans, and so forth. The Act on the Promotion of Women’s Participation and Advancement in the Workplace (女性活躍推進法), the law which aims to create a better working environment for women, became effective in 2016. Given declining birth rates and a super-aging society, the Japanese government is trying to use the women’s labor force by providing opportunities to both work and have children.

**Values and Customs**

Traditional Japanese values follow many other Asian values, which highlight collectivism, respect, honor, humility, and hospitality. Doctors often are viewed as absolute authorities in their field, with expected deference toward their expertise (it is perhaps no coincidence that doctors are referred to as sensei, or teacher, in Japan). However, this deference does not necessarily reflect a positive experience for the patient, and practitioners must be mindful that their words and advice can be taken poorly if delivered in a harsh or insensitive manner. Furthermore, patients may not always self-advocate their needs if they feel that the doctor will judge them. Even Japanese patients who feel comfortable with their provider may still withhold information due to an internalized pressure to remain stoic about one’s ailments.
Many psychological symptoms in Japanese patients might emerge as somatic physical and cognitive complaints, which are typically viewed as more acceptable to share due to their “medical” basis. The astute clinician must be aware when their patients present with a host of ailments that essentially serve a sign of psychological distress, or as it manifested in my patient, grief.

**Gender and Sexuality**

Japan remains a patriarchal society, with such values taught in early childhood. Following Confucian values, the eldest son is often the favored child as he is expected to carry on the family legacy. With such attention comes the pressure to academically and financially thrive and eventually care for his family. Although this culture is swiftly fading, daughters and younger sons typically receive less of this undivided attention, with daughters in particular encouraged to primarily prepare for a domestic lifestyle. As discussed earlier, more women keep jobs after having a family; however, the expectation of raising the children and keeping the house still remains. As a result, this unbalanced expectation has led to a reluctance toward marriage for some women. Men, in turn, face the burden of providing for a family with little time to actually bond with them, and so also may find marriage undesirable. There is also a unique situation with Japanese couples, where they experience long-distance marriages (単身赴任), in which the husbands relocate to different prefectures for business purposes, and wives and children remain in their current location due to educational and financial reasons.

Unfortunately, Japanese society is at times still quite inimical toward women’s rights. Sexual assault is often silenced and women who speak out may find their career opportunities dry up. Systemic issues still persist, with a pervasive gender wage gap and disparate job prospects. Outright scandals, including a test scandal that weighted scores in favor of boys, highlight the institutionalized sexism sometimes tolerated in Japan. Such lingering intolerance in a first-world country is perhaps explained by the pressure that Japanese people have against speaking out for their needs and rights. On the positive side, sexism in Japan has been getting more attention and acknowledgment by the media and government.

The patriarchal foundation in Japan has allowed for disparities in sexual activities as well. Married men have been allowed and at times encouraged to engage in prostitution, while pornography is widely tolerated, even finding itself in comic books and video games. Homosexuality has been largely met with disapproval, though perhaps less hostile than that seen in Judeo-Christian societies. However, Confucianism does frown upon homosexual activity and many gay and lesbian Japanese still elect to hide their sexuality, with some entering traditional marriages to maintain a façade of “normalcy.” However, homosexual activity has never been outright outlawed in Japan and in modern times, laws recognizing transgender rights have passed.

One area that has received media attention is the decreasing sexual activity observed in Japan. The reasons for this are likely multifaceted. Adults struggle maintaining a work-life balance and may simply have few opportunities to meet partners. The diminishing prospects of marriage, as viewed by modern-day men and women, have already been discussed. In addition, there is some indication that pornography has served as a substitute for actual sexual activity in younger people. The longstanding implications of decreasing sexual activity, with a corresponding declining birth rate, raise some concerns for the future.

**Spirituality and Religion**

In general, the Japanese follow a more spiritual rather than explicitly religious path. The two primary faiths that Japanese follow are Shinto and Buddhism, which have overlapping yet distinct features. Per the Agency for Cultural Affairs, approximately 65%–70% of Japanese nationals...
report that they follow one or both of these faiths, in contrast to 1.5% who identify as Christian and 6.2% who identify with other religions. Somewhat curiously, other surveys have suggested that up to 70% of the country self-reported that they do not follow any particular religion. This highlights the contrast between the cultural and customary practices of Shinto and Buddhism and the more traditional organized religions often seen in other cultures.

Shinto is the original indigenous religion in Japan that focuses on kami, or “spirits” that rest in virtually all physical forms. Buddhism is a global religion that the Japanese likely adopted from China. The dual beliefs of Shinto and Buddhism align with several aspects of Japanese culture. There is a sense of “letting go” tied to these religions, such that material objects and indeed life itself are deemed transitory, while spirits and gods beyond our understanding dwell in the very rocks we step on. In this sense, some Japanese may turn to religion to help cope with the stresses of modern life or otherwise find solace and meaning in a world that may be filled with, at times, arbitrary and restrictive rules and customs.

**Acculturation and Systemic Barriers**

When considering neuropsychological practice with a Japanese national, I (NT) think back to my early visits to Japan as an adult. In my opinion, there are few places in the world that are simultaneously so familiar and yet so different from the United States as Japan. As a Westerner might feel a familiar yet alienating feeling when exploring Japan, so might a Japanese national feel the same while exploring the United States. Consider the unacculturated patient who works with a Western doctor. There is already an inculcated deference toward physicians that likely would apply to the neuropsychologist. Testing is both familiar and yet unfamiliar, as testing in Japan is typically academic in nature and designed to separate groups by ability. This may not transfer as readily to neuropsychological tests, which are designed to assess for and diagnose pathology.

**Health Status**

Life expectancy in Japan is about 84 years, longer than in many developed countries. By contrast, the United States currently has a life expectancy of 78 years. Diet and low obesity rates likely contribute to the longer lifespan of Japanese citizens. Furthermore, Japan has one of the lowest levels of dementia in the world. Of concern in Japan is the high incidence of suicide rates throughout the country, with an estimated 30,000 suicides a year. Excessive alcohol and tobacco use are also public health concerns in the country.

**Mental Health Views**

Mental health awareness in Japan has improved over time, although some gaps still persist. Japanese medicine is a highly respected field of study and physicians often are the initial providers who detect mental illness in the general population. However, more acute psychiatric illnesses, such as schizophrenia and bipolar disorder tend to receive more medical attention, in part because of the usual need for psychopharmacologic intervention. This “medicalization” of mental illness carries over the stigma that individuals with a psychological disorder must have a particularly severe one. Thus, milder cases of depression and anxiety may be overlooked (or even met with disapproval as a “characterological weakness”) and untreated. Mental awareness has increased of late, perhaps in response to the spread of culturally bound syndromes such as *hikikomori*, (i.e., severe social withdrawal and self-isolation) observed in some Japanese youth.
History of and Approach to Neuropsychological Evaluations

Neuropsychology arrived in Japan along with the rest of Western medicine in the late 1800s. However, the process of credentialing neuropsychologists is still absent. Doctoral-level psychologists in Japan primarily do research and the only neuropsychologists who received doctoral training likely trained outside of Japan. Their role there is often based in research with little opportunity for clinical practice. Indeed, most “neurocognitive” examinations completed in Japan are carried out by physicians and their technicians. Their exposure to neuropsychology training, including psychometrics, is not yet at the level of Western standards.

The careful clinician is encouraged to monitor the comfort level of the patient in the testing environment. It may be worth spending additional time ensuring that patients fully understand the nature and purpose of the tests so that they do not feel pressured to attempt a “perfect” score. Anxiety may manifest through a reluctance to guess or a proclivity to give up early, as disengagement may be “safer” than a wrong answer. I (NT) recall working with at least one older patient who would silently shake their head when they felt their capacity had met. Only quiet encouragement and patience elicited further responding, though it remains unknown if the patient’s full capacity on some tests was accurately ascertained.

Section II: Case Study—“… and he Talks Like a Cartoon Character Now”

Note: Identifying information and other details have been altered to protect the family’s identity. As with the rest of this chapter, the following case study is an admixture of narrative and fact.

Background and Behavioral Observations

I (NT) received word from a colleague that there was a need for a medical-legal pediatric neuropsychologist who speaks Japanese. A young boy, “Ken,” was visiting Hawaii with his family from Japan when he was struck by a motor vehicle, resulting in a traumatic brain injury (TBI) with lesions to the left hemisphere about three years prior, when he was three years of age. At that time, my Japanese was about as proficient as it ever would be, and I recently had the privilege of assessing several Japanese patients at the University of California, Los Angeles medical center, as well as in my private practice. I had memorized approximately 1,500 kanji and had administered batteries developed in Japan for Japanese populations. Thus, I felt equipped to approach this evaluation with the caveat that we would still rely on an interpreter for the parent interview.

I considered whether or not to rely on an interpreter for this case. I had used them before with my clinical cases, but there were times that no interpreter was readily available, in which case I worked with my own Japanese skills. I was at that time fluent enough to carry on conversations with friends and colleagues and was reading books at about an eighth-grade level. At the same time, I was not born in Japan and had not lived in the country for years. My familiarity with the language was primarily academic (e.g., stiff, not up to date on colloquialisms), and I felt some reservation about conversing with parents about something as intensely emotional as their son’s tragedy and making a verbal error.

So, with interpreter in tow, the assessment commenced. The parents were highly educated and worldly; the father owned several businesses that often took him overseas and Ken had an older sister who was in graduate school. Of interest, the boy also attended an international school in Japan that exposed him to the English language. Right away, it was clear that this was a family of a higher SES status, which granted them some of the privileges associated with wealth including education and travel.

It is worth taking a minute to consider the medical-legal nature of this assessment. Japanese nationals, in general, are not particularly litigious in the personal injury arena. This ties with the cultural beliefs discussed in this chapter about accepting one’s personal loss for the good of
The parents were polite and deferential. The interview went well, with them taking their time to consider before answering each question. “He’s different now,” said the mother at one point. “He used to be so sweet. Now he’s angry all the time, yelling and hitting me, saying the worst things. He doesn’t listen and can’t sit still. And,” she added with some confusion in her voice, “he talks like a cartoon character now.” When pressed for more information, she was specifically speaking of Doraemon, a Japanese cartoon robot cat from the future who assists a feeble, bullied boy by using futuristic gadgets. Doraemon’s voice is famously idiosyncratic, often speaking bluntly and with a nasally and raspy tone. In those words, she captured the essence of how she viewed her son since his TBI. The father was no less descriptive. “I can’t help it,” he said at one point. “I spoil him so much now. I feel so guilty for what happened. What could I have done? Now,” he added, “now, I give him everything.”

Ken was a delight. At six, he carried the exuberance and joy many of his same-age peers possess. He had a cherubic quality, with a hint of mischief in his actions. He was also completely unable to focus on anything for more than a minute. Japanese children are taught to respect their elders, to defer to teachers and doctors and never question them. This boy, within seconds, started to treat me as a favored uncle, cackling and running around the table, at times trying to climb into my lap or smack my stomach. Despite his attentional issues, he was enthused enough with the tests that he completed many of them rapidly, if in a somewhat disorganized and haphazard fashion. He espoused a real joy with the testing process and clearly worked very hard, with little concern for motivational factors. Of course, attentional issues undoubtedly impacted his test scores.

Test and Norm Selection

The battery included the Japanese Wechsler Intelligence Scale for Children, Fourth Edition (JWISC-IV⁸), which was designed and normed for students living in Japan (of note, some subtests such as Comprehension and Picture Completion are fascinating cultural glimpses into the differences between Western and Japan beliefs). The rest of the battery relied on a somewhat cobbled together battery of measures normed in the United States and translated into Japanese. The Test of Memory Malingering (TOMM¹⁰) was used as a measure of effort. The California Verbal Learning Test for Children (CVLT-C¹¹) was translated into Japanese yet scored with English norms.

This boy’s academic exposure in an international setting allowed for some testing in English as a comparison; thus, the Wide Range Assessment of Memory and Learning, Second Edition (WRAML-2¹²) was administered in its entirety in English. Academic testing was limited, although some of the reading and mathematical subtests in the Woodcock-Johnson Tests of Achievement, Fourth Edition (WJ-IV¹³) were administered. Other measures included the Connor’s Continuous Performance Test, Third Edition (CPT-3¹⁴), the Developmental Neuropsychology Assessment, Second Edition (NEPSY-II¹⁵) subtests, the Rey Complex Figure Test (RCFT¹⁶) and the Beery Visual-Motor Integration (BVMI¹⁷) test were administered. In this manner, a mix of Japanesenormed, Japanese-translated, and visual measures were administered. Parent reports included a translated adaptation of the Behavior Assessment System for Children, Third Edition (BASC-3¹⁸), while a BASC-3 in English was sent to Ken’s teacher.

Test Results and Impressions

Ken performed in the average range on the JWISC-IV Verbal Comprehension Index and Working Memory Index. In contrast, his Processing Speed Index was in the low average range, with the
Coding subtest falling below expectations. His Working Memory Index was in the low average range, with average performance on the two subtests. Furthermore, the Picture Completion subtest fell well below expectations.

Scores on the neuropsychological measures confirmed struggles on measures of sustained attention and visuospatial functioning. Ken's struggles on visuospatial testing generally supported that he had difficulty processing the details of images rather than the overall gestalt; for example, he flipped Block Design images, had distorted details within the RCFT, and could not complete the Picture Completion subtest. His processing speed was highly variable, fluctuating from the 5th to 75th percentile across subtests with more trouble on highly visual subtests (e.g., Coding). Japanese verbal and English reading skills were within expectations. Memory testing in Japanese and English generally reviewed struggles in free recall with better recognition scores. Motor testing was bilaterally within expectations. Parent and teacher-rating scores converged to support significant externalizing problems; furthermore, Ken's mother rated severe anxiety and atypical behaviors in her son.

Overall, there was considerable evidence that Ken had developed cognitive struggles in visuospatial and the frontal/executive systems. Of particular note, Ken was reportedly using his right hand prior to the accident yet switched to his left hand upon recovery. This type of “pathological left-handedness” often emerges in youth who sustain left-hemisphere lesions at a very young age. Research supports that the language systems switch over to the right hemisphere, “crowding out” visuospatial skills. This laterality was seen with Ken (although not on fine motor testing). Social skills can also be impacted, which may explain some of Ken’s overfamiliarity with me during testing.

Diagnostically, I determined that Ken met the criteria for a Mild Neurocognitive Disorder secondary to his TBI with neurobehavioral features including impulsivity, emotional lability, and a personality change.

Treatment Considerations

If Ken lived in the United States, there would be some straightforward recommendations to provide. Assuming he attended a public school, an Individualized Educational Program (IEP) would be recommended so that he could have access to a specialized learning environment with smaller class sizes. If he attended a private school, as he did in Japan, then the school would work with the family to determine if Ken could stay or if he would require a different setting. Ultimately, I learned that Ken's family was asked to leave the international school he was attending as the principal felt that his needs would be better suited elsewhere. Japan does have specialized schools for children with neurodevelopmental disorders, and it is possible that Ken enrolled in one of those. Alternatively, as the parents were of a higher SES, they may have had access to additional resources.

His visuospatial struggles are of some concern for his academics. Two kanji may differ only by a single stroke yet have completely different meanings. Ken had yet to learn much kanji given his age, but with his visuospatial struggles, one could imagine that he might have an acquired reading disability that is specifically linked to his written language. His frontal/executive struggles, of course, have profound implications in a society that emphasizes blending in. Children, in particular, are expected to obey without question, and so Ken's prognosis in the strict setting of his home country could be poor without adequate interventions and accommodations.

In some ways, Ken has a number of advantages including invested parents of a higher SES who are well-traveled (indeed, their cosmopolitan lifestyle likely led them to me in the first place). He likely will receive adequate medical care, educational support, and, if necessary, assistance when he is an adult. At the same time, his TBI clearly has both immediate and long-term implications...
for his cognitive and emotional functioning. The degree to which he and his family will be able to navigate the complexities of Japanese society remains to be seen.

Section III: Lessons Learned

• Japan is a relatively homogenous and collectivist society that emphasizes group harmony over the individual.
• This has the advantage of providing a safe and organized society, yet the disadvantage of overlooking or dismissing the needs of those who do not fall easily within its boundaries.
• Effects of this collectivist attitude are felt in the family, which remains patriarchal and deferential to elders, the school system (which emphasizes conformity and obedience) and the workplace (which expects lifelong loyalty to the company).
• The Japanese language is highly contextual, where the way you phrase something carries enormous weight in how it is communicated. In addition, language must consider the audience, whether you are speaking to a superior, colleague, inferior, intimate, etc.
• Japanese patients are likely to be deferential to doctors, to the point where their ailments may easily be missed or dismissed if the clinician is not carefully attuned to their own cultural biases.
• Like many East Asian cultures, psychological language is often absent or inadequate in capturing the subtleties of a person’s distress. Somatic ailments may be a common expression of psychological distress.
• On the other hand, psychological distress may be minimized in an effort to maintain a stoic attitude and avoid disrupting the harmony of their community. Further confounding this is the misconception that mental illness is by definition severe and debilitating (e.g., uncontrolled schizophrenia).
• Neuropsychological testing may prove a familiar avenue for Japanese patients, as they are likely to accept the medical basis for such tests and have been regularly exposed to examinations throughout their schooling.
• However, clinicians must take care to ensure that the patient does not confuse the scholastic aptitude nature of the tests they took in school with the diagnostic testing used in our assessments.
• Patients may find testing to be anxiety-provoking or elect to give up or profess ignorance rather than risk a wrong guess.
• At this time, there remain relatively few neuropsychological measures normed for Japanese patients. However, some IQ and additional batteries are available through testing companies.
• Pertaining to the above point, a mixed model of using both Japanese and English-normed tests is required to obtain a comprehensive neuropsychological evaluation. However, this comes with numerous limitations, highlighting the need for developing additional neuropsychological tests for Japanese populations.
• While the cognitive aspect of testing may be accepted by the medical community, the psychological aspect may not be. Confounding this issue are the roles that psychologists play in Japan, as they are typically Master’s level clinicians who defer to the medical doctors.
• Pediatric testing comes with its own challenges. Ken’s case was striking for some of the universal medical findings that emerged from his case (e.g., pathological left-handedness) along with the cultural issues that he and his family will have to navigate with his long-term cognitive and neurobehavioral deficits.
• Japanese-normed adaptations of common neuropsychological assessments are available at https://www.nichibun.co.jp/english/products/
References


