



Instructions for authors, subscriptions and further details:

<http://remie.hipatiapress.com>

What is it like to grow up in a multiple-language environment? -A survey report on an international high school-

Satoshi Tamiya, Yuka Okada, Keiko Koterazawa, Hiroyoshi Miyata¹ &
Montserrat Sanz²

- 1) The Himeji City Center for Developmental Medicine, Japan.
- 2) Kobe City University of Foreign Studies, Japan.

Date of publication: October 15th, 2014

Edition period: October 2014 – February 2015

To cite this article: Tamiya, S., Okada, Y., Koterazawa, K., Miyata, H. & Sanz, M. (2014). What is it like to grow up in a multiple-language environment? -A survey report on an international high school-. *Multidisciplinary Journal of Educational Research*, 4(3), 317-338.

To link this article: <http://dx.doi.org/10.447/remie.2014.016>

PLEASE SCROLL DOWN FOR ARTICLE

The terms and conditions of use are related to the Open Journal System and to [Creative Commons Attribution License \(CC-BY\)](#).

What is it like to grow up in a multiple-language environment? -A survey report on an international high school-

Satoshi Tamiya, Yuka Okada,
Keiko Koterazawa and Hiroyoshi Miyata
The Himeji City Center for Developmental Medicine

Montserrat Sanz
Kobe City University

Abstract

In this era of globalization, Japanese teachers as well as teachers in other areas of the world have increasing chances of encountering students who grow up in multiple-language environments such as returnees and immigrants. It is important to understand the development of these students. The authors conducted a preliminary survey about a multiple language life on 60 high school students at an international school in Japan. The survey questions asked about the students' background and their experiences of growing up in a multiple-language environment. Twenty-nine students responded to the survey. The responses were classified according to whether the reported advantages/disadvantages were linguistic, socio-cultural or identity-related. Linguistic disadvantages as well as advantages were experienced by most students. Multiple-language influences on identity were mostly favorable, but some difficulties were common. Despite these disadvantages, socio-cultural advantages were prominent. It was reassuring to see that many international high school students felt they were socio-culturally advantaged and mostly felt secure about their identity as a multiple language user. However, we should not dismiss linguistic difficulties experienced by many of them and some cases of insecure identity, as these are crucially related to the mental health and creation of self-identity that is typical of adolescence.

Keywords: Bilingualism, Identity, High School, Mental Health, Multilingualism.



¿Cómo se Crece en un Contexto Multilingüe? - Informe de un Cuestionario en un Instituto de Secundaria Internacional -

Satoshi Tamiya, Yuka Okada,
Keiko Koterazawa and Hiroyoshi Miyata
The Himeji City Center for Developmental Medicine

Montserrat Sanz
Kobe City University

Resumen

En la era de la globalización, los maestros y maestras japoneses así como los de otras partes del mundo tienen posibilidades crecientes de encontrarse con estudiantes que crecen en entornos multilingües como el alumnado inmigrante o retornado. Es importante entender el desarrollo de estos estudiantes. Los autores y autoras realizaron un cuestionario sobre la vida multilingüe de 60 estudiantes de secundaria en una escuela internacional de Japón. El cuestionario pregunta sobre el contexto de los estudiantes y sus experiencias de crecimiento en un entorno multilingüe. Veintinueve estudiantes respondieron el cuestionario. Las respuestas fueron clasificadas de acuerdo con las ventajas y desventajas identificadas que fueron lingüísticas, socio-culturales o relacionadas con la identidad. Las desventajas lingüísticas así como las ventajas fueron experimentadas por muchos estudiantes. Las influencias multilingües sobre la identidad fueron mayormente favorables, pero algunas dificultades fueron comunes. Además de estas desventajas, las ventajas socio-culturales fueron prominentes. Se pudo reafirmar que muchos de los estudiantes se sentían aventajados socio-culturalmente y con seguridad sobre su identidad multilingüe. Sin embargo, no tendríamos que desestimar las dificultades lingüísticas que experimentaron muchos de ellos en relación a la inseguridad identitaria que tuvieron típica de la adolescencia y como se encuentran crucialmente relacionada con la salud mental y la construcción de una identidad propia.

Palabras clave: Bilingüismo, identidad, Instituto, salud mental, multilingüismo

Bilingualism has been an area of interest for educators, linguists, and psychologists since the early 1900s (Genesee, 2006). This interest has been heightened even more in recent years (Baker, 2001; Bialystok, 2001; García, 2009). Recent trends in bilingualism research include education programs in partial immersion and non-immersion contexts (Paradis, Genesee, & Cargo, 2011; Tabors, 2008) and advancement in research methodology such as brain imaging (Fabbro, 2001, for a review). One important reason to study bilingualism is that more and more people all over the world are moving across diverse linguistic areas for work, study, etc., resulting in themselves and their families living in dual (or multiple) language environments. This necessitates us to understand bilingualism better to improve their learning, because bilinguals' development is different from that of monolinguals (Werker, Weikum, & Yoshida, 2006). As Grosjean (1992, p.55) stated, 'The bilingual is NOT the sum of two complete or incomplete monolinguals; rather, he or she has a unique and specific linguistic configuration.'

Theoretical Framework

There have been many studies demonstrating this 'unique and specific linguistic configuration' of bilinguals, including profile effects, interference, and code-switching (Grosjean, 1992; Grosjean, 2013; Kaushanskaya, & Marian, 2007; Malakoff, & Hakuta, 1991; Marian, & Spivey, 2003; Oller, Pearson, & Cobo-Lewis, 2007; Werker, Weikum, & Yoshida, 2006). The profile effects (Oller, Pearson, & Cobo-Lewis, 2007) refer to the fact that the development in some linguistic domains tends to lag behind others in bilinguals. Typically, a smaller size of vocabulary than that of monolinguals of the same language has been reported. But the total size of vocabulary acquired in both languages of a bilingual is usually no less than that of a monolingual. Interference means that the construct of one language influences that of the other language unintentionally (Grosjean, 2013; Harding-Esch, & Riley, 2003). Foreign accent is an example of phonological interference. It was thought in the past that interference between two languages would gradually diminish as a person's bilingualism matures to be more balanced. This 'unitary language system hypothesis' has recently been

challenged (Genesee, 2006) and new thinking claims that the two language systems in a bilingual influence each other even in a balanced bilingual (a balanced bilingual is a person whose command of two languages is almost equally achieved). Code-switching is the mixing of two languages of a bilingual, which can sometimes be intentional and used for many purposes (Malakoff, & Hakuta, 1991; Paradis, Genesee, & Crago, 2011) including a secret talk, a sign of group identity, compensation for a forgotten (or unknown) expression in one language, etc. When a bilingual switches languages due to a situational demand, it is called situational code-switching. When a bilingual deliberately chooses to code-switch in order to convey a specific message, it is called metaphorical code-switching (Trask, & Stockwell, 2007).

In addition to these linguistic characteristics of bilinguals, many researchers explored psychological aspects of bilingualism (Eilers, Pearson, & Cobo-Lewis, 2006; Hornberger, 2007; Martin, & Stuart-Smith, 1998; Toppelberg, & Collins, 2010; Toppelberg, Hollingshead, Collins, & Nieto-Castañón, 2013). Especially, the issue of identity establishment for bilinguals is so important that numerous studies explored it (Akhtar, 1999; Ayres, 2003; Gérin-Lajoie, 2005; Mahootian, 2002; Spotti, 2005; Williams, 2005; Yoshida, 1999). Many authors seem to conclude that bilinguals' identity formation processes can be different from those of monolinguals. For example, Spotti (2005, p. 2172) describes these processes as 'continuous negotiation across national and/or ethnic "borders".' Likewise, Gérin-Lajoie (2005, p.910) states that 'identity paths are neither static, nor linear, and consist of moving back and forth between two [...]' Akhtar (1999, pp.103-104) refers to what he called 'hybrid identity' which 'may be accompanied by a mixed sense of belonging to multiple places while at the same time not truly belonging to any of them.'

These data indicate that living as a bilingual in a multiple language environment can be a very unique situation. And this might be even truer especially for developing children and adolescents, because environmental influences on their development are more robust than for adults (King, 2002). There have been some authors (Bialystok, 2006; Tabors, 2008) who discussed the issue of bilingualism in school settings, but mainly focusing on early childhood. Related literature on late childhood or adolescence is sparse

to our knowledge. In this context, the authors conducted a preliminary survey at an international school in Japan (hereafter School X), in order to understand adolescents' subjective experiences of growing up and living in a multilingual environment from a psychiatric/psychological standpoint. There have already been some publications reporting the influence of bilingualism on self-image (e.g. Ayres, 2003), cognition (e.g. Bialystok, & Barac, 2013), linguistic characteristics (e.g. Marian, & Spivey, 2003), and so on, as described above, although studies focusing in Japan are scarce. The objectives of the current survey were to see if similar results were replicated in the School X community and to describe the experiences of the students in a multiple-language environment.

Contextualization

Japan is basically a monolingual country with only one official language; Japanese. English classes are introduced at the junior high school level, but many Japanese natives do not feel competent enough to conduct everyday oral communication in English as adults. Foreign languages other than English are less commonly used. As a result, bilingualism tends to be seen as something very special, oftentimes with envy, in Japan.

The subjects of the current study were both Japanese and foreign adolescents who attended an international school. Although they had different levels of bilingualism, they were all multiple language users and lived in multilingual family and educational contexts. The results of this study must be considered preliminary, given the individual differences among the subjects involved. Considering, however, that there are no two people who can be considered to have the same level of bilingualism, studies of this nature will most of the time suffer from this shortcoming. Nevertheless, we think that the results are of some value for educators and researchers. Please note that the term 'bilingual(ism)' in this report is used synonymously with 'multilingual(ism)' and includes trilingual(ism), quadrilingual(ism), etc.

Method

Setting

We targeted high school students, not youths of other ages, to ensure that they had attained a certain level of multiple language use and had cognitive capacities and writing skills mature enough to give reliable responses to a written survey.

School X is an international school located in a middle-size Japanese city that offers an advanced college preparatory education based on International Baccalaureate programs taught in English. There are approximately 650 students enrolled from age three through 12th grade, made up of as many as 35 different nationalities with about 18% North American, 8% European, 56% Asian (including 25% Japanese), and 18% representing the rest of the world. The enrollment at the time of this survey in the high school was around 210. Considerable use of code-switching by students has been noticed on the School X campus (authors' personal observation). The School X was chosen for the study because of the large number of students from diverse backgrounds to be targeted, easily accessible location to conduct the study, and the personal connection of the first author with the school.

Participants

Sixty students in the ninth through 12th grades enrolled in Japanese classes at School X were identified as potential participants for this survey. This group of students was assumed to be English/Japanese bilinguals and selected for this survey based on the following reasons: 1) all high school subjects except for foreign language classes were taught in English at School X, 2) the surveyed students took the Japanese classes that were considered to be at a relatively high level as evidenced by class assignments such as reading Japanese newspaper editorials and classical novels by Japanese authors (e.g. *Soseki Natsume* and *Kenzaburo Oe*), writing extended essays, and in-class discussions on these materials, and 3) Japanese was the community language where they lived.

Material

The questionnaire used for the survey was developed exclusively for this study. Students were to report their age and gender, and answer the following six open-ended questions:

1. Please list all languages you usually use in your everyday life.
2. Please describe how you grew up to be bilingual.
3. Please describe your experiences of growing up to be bilingual (What you enjoyed, what you found difficult, etc.).
4. How do you feel now about being bilingual?
5. Please describe what you think are advantages of being bilingual.
6. Please describe what you think are disadvantages of being bilingual.

Because of the preliminary nature of the current study, we chose to use rather global and general questions to cover broad varieties of multiple-language experiences and not to lead the respondents into any specific areas of interest.

Procedure

A set of a cover letter that explained the study, a consent form, and the two-page questionnaire was distributed to the identified students and their guardians. These were all prepared in both English and Japanese separately. It was clearly stated in the cover letter that participation in this study was absolutely optional, and that the data gathered would be analyzed anonymously for publication and not be used for any other purposes. The guardians were informed about the nature and the purpose of the study and invited to sign the consent form if they would allow their adolescent to participate. Students were also informed about the nature and the purpose of the study, invited to sign the consent form if they would agree to participate, and respond to and return either the English version or the Japanese version of the questionnaire, but not both. They were also specifically informed that they could write answers in any languages and that mixing was permitted.

The questionnaires were distributed in Japanese classes by the students' teachers in October, 2012. The participation was optional and not required. The questionnaires were to be completed outside the class so that the students would not feel forced to participate in the study in their teacher's presence. All consent forms and questionnaires (even if not responded) were collected by the class teachers, which took a few months until February, 2013.

Background information

Out of the sixty distributed questionnaires, thirty were collected with both the students' and the guardians' written consent. (All the remaining thirty were responded and returned, but only with the students' consent. They were excluded from further analysis). One questionnaire was returned with no responses and excluded from the data analysis. As a result, 29 questionnaires were analyzed.

Participating students' ages were as follows: three fourteen-year-olds, six fifteen-year-olds, 12 sixteen-year-olds, six seventeen-year-olds and two eighteen-year-olds. There were 17 females and 12 males.

Nineteen students returned the English version and 10 returned the Japanese version of the questionnaire. Four students used code-switching in their responses. Of these four, one student returned the Japanese version, but answered the first three questions in English and the last three in Japanese. Another student returned the Japanese version and answered one question in English and the rest in Japanese. The remaining two cases were switching within a sentence (Japanese words embedded in a sentence constructed in English). All responses in Japanese are translated into English by the authors for this report. No other languages were used in the responses.

Data analysis

The questionnaire used for this survey was designed only for a qualitative analysis, not for a quantitative, statistical treatment. Therefore, descriptive results will be reported below. All responses were reviewed anonymously.

Results

Responses to Question 1

'Please list all languages you usually use in your everyday life'

Twenty-one students reported they spoke two languages and seven reported three. Spoken languages other than English and Japanese were: Chinese (three students), Korean (two), and German (one). One student reported only one language: Japanese. This student was still deemed a bilingual and was included in the analysis because he went to an international school since the age of four and learned Japanese and English simultaneously, according to his response to Question 2 (See below).

Responses to Question 2

'Please describe how you grew up to be bilingual'

There were 17 students who reported growing up bilingual because of school life, mostly international school. Eight reported they became bilingual through living abroad. International marriage of parents (and each parent speaking a different language) was reported by four. Although there can be any combinations of the above (going to an international school abroad, for example), only one was counted that seemed the main contributing factor.

Relatively few students explicitly mentioned when they started learning the second language (L2), but in some cases the age of L2 introduction could be estimated reasonably from other information (parents' mother tongues being different, for example). The directly mentioned ages and estimated ages were combined in the following counts since precise determination of L2 acquisition age is irrelevant for this qualitative analysis. Seven students were judged to have been in a dual language environment from birth. Including these seven, 10 reported L2 introductions before the age of three years. There is no consensus as to the cut-off age of L2 introduction to distinguish simultaneous bilinguals from sequential (or successive) bilinguals, but the age of three is used in many cases. According to this cut-

off, these 10 students were judged to be simultaneous bilinguals. However, any interruption in the periods of exposure/use of a language (returning to the home country and no use of L2 for a while, for example) cannot be assessed based on the current data. Therefore, the reader needs to keep in mind that this estimation of the extent of language exposure is only a rough approximation.

The father's nationality of nine students was Japanese, followed by three Chinese and three Korean. The mother's nationalities were 12 Japanese, followed by three Chinese and two Korean. There were some other nationalities mentioned by one each; Australian, German, British, and Canadian.

Nine students reported their home language to be Japanese. Seven reported dual home languages: Japanese/ English (four students), Japanese/ Korean (one), Japanese/ German (one), and Japanese/ unknown language (one). Thus, Japanese was used at least partly at home by 16 students. Other single home languages included Chinese (three students) and Korean (two).

Responses to Question 3

'Please describe your experiences of growing up to be bilingual (What you enjoyed, what you found difficult, etc.)'

The initial review of the responses to Questions 3 through 6 revealed that most responses could be grouped into three categories according to their contents: socio-cultural, linguistic, and identity-related. Responses related to socio-cultural aspect discussed such experiences as friendship, cultural events, and traveling. Those related to linguistic aspect discussed studying and using languages. Those related to identity discussed feelings about being a bilingual and living in a monolingual culture. Also, most responses mentioned specific or non-specific advantages and/or disadvantages of being bilingual, even to the more general questions such as Questions 3 and 4. Accordingly, the following analyses are based on reported advantages and disadvantages in the three categorical aspects of the students' lives mentioned above (i.e. socio-cultural, linguistic, and identity-related). Unspecific responses or those unrelated to the three aspects are omitted for

this report. Please note that these counts indicate the number of students, not the number of responses.

Question 3 asked about actual experiences of growing up to be a bilingual. Many responses to the question were related to the linguistic aspect (Table 1). Twelve students reported that being bilingual helped their communication with others. One student said he enjoyed translating for his (monolingual) teacher. Secret talk reported by one student was probably related to metaphorical code-switching. Even more linguistic disadvantages were reported. As many as sixteen students reported that their skills in multiple languages were unbalanced or imperfect. There were four responses that indicated difficulties of learning multiple languages. There were two responses each, that described more specific locus of difficulties: writing, especially Japanese *kanji* (Chinese characters), and languages getting confused and/or mixed inadvertently.

Table 1
Responses to Question 3

	Socio-cultural	Linguistic	Identity-related
Advantage	Friend/People (5) Culture (3) Travel (1)	Communication (12) Translation (1) Secret talk (1)	Proud/Praised (2)
Disadvantage		Unbalanced/Imperfect (16) Hard to learn (4) Kanji/Writing (2) Mix (2)	Isolated/Different (1)

Note: Number of responding students in parentheses.

Responses to Question 3 that were related to the socio-cultural advantages included the ease making new friends or meeting people (five students), different cultures being more accessible (three), and usefulness for traveling (one). Of note, there were no reported socio-cultural disadvantages. Identity-related advantages included being proud or praised by others (two students). Identity-related disadvantages were feeling isolated or/and different (one student).

Responses to Question 4

'How do you feel now about being bilingual?'

In contrast to Question 3 that elicited many responses related to the linguistic aspect of bilingual lives, more responses in relation to the socio-cultural and identity-related aspects were reported to Question 4 which asked about the students' subjective feelings about being a bilingual (Table 2). Nine students reported that they felt more job and future opportunities would be available to them thanks to being bilingual. Two reported the ease making new friends and meeting people. Usefulness for traveling and for other experiences was reported by four. Easier access to diverse cultures and information was reported by one each. Again, no socio-cultural disadvantage was mentioned by any student. Identity-related advantages were: feeling proud (nine students), having a wider view of the world (four), and feeling unique or special (two). On the other hand, two students reported that they felt isolated, which was an identity-related disadvantage.

Table 2

Responses to Question 4

	Socio-cultural	Linguistic	Identity-related
Advantage	Job/Future (9)	Communication (4)	Proud (9)
	Friend/People (2)		Wider view (4)
	Experience/Travel		Unique/Special

(4)	(2)
Culture (1)	
Information (1)	
Disadvantage	Unbalanced/Imperfect (4)
	Isolated (2)
	Hard to learn (1)

Note: Number of responding students in parentheses.

Responses to Questions 5 and 6

‘Please describe what you think are advantages of being bilingual’

‘Please describe what you think are disadvantages of being bilingual’

Many responses to Questions 5 and 6 overlapped those to Questions 3 and 4, and are summarized in Table 3.

Many reported feeling socio-cultural advantages about future occupational life, friendships, cultural activities, access to information, and opportunities for various experiences. No socio-cultural disadvantages were reported.

Reported linguistic advantages included: usefulness for communication, ability to translate, secret talk, and enhancement of learning another (third) language. Many reported multiple languages being unbalanced or mixed as linguistic disadvantages. Some felt they particularly suffer from weakness in conversational skills and smaller vocabulary. Still others felt multiple languages were too much to learn and hard to maintain the skill levels achieved.

In terms of the identity-related aspect, reported advantages were having a more global world-view and feeling proud. On the other hand, some felt disadvantaged due to feelings of isolation and cultural gap.

Table 3
Responses to Questions 5 and 6

	Socio-cultural	Linguistic	Identity-related
Advantage	Job (9) Friend (7) Culture (6) Information (4) Experience (3)	Communication (10) Translation (3) Secret talk (1) Other language (1)	Global (9) Proud (1)
Disadvantage		Unbalanced (13) Mix (6) Conversation/ Vocabulary (4) Hard to maintain (4) Much to learn (2)	Isolated (5) Cultural gap (1)

Note: Number of responding students in parentheses.

Discussion

Students' bilingualism

It is important in this type of investigation to define the nature and the extent of bilingualism of the students. Ideally, this can be done with objective measurements on their linguistic skills, which were not included in the procedures of this survey. The students' bilingualism might have been somewhat objectively assessed if they had been required to respond to both the English and Japanese versions of the questionnaire, but this option was considered too much of a burden on them. Detailed language history was not

obtained for the same reason. Therefore, we can only roughly estimate their linguistic skills in the languages used from circumstantial data.

Many of the participating students were English/Japanese users who lived outside their home countries and/or went to international schools since early childhood. It appeared that about a third of the students were Japanese born to Japanese parents, so it was somewhat surprising that approximately two thirds of the returned questionnaires were completed in English. This probably indicates the high level of English writing skills they achieved relative to Japanese writing, being scholarized in English at School X. Another index of these students' bilingualism is considerable use of code-switching, reported and observed on and off the School X campus among English/Japanese speaking students, which indicates their daily use of both languages. To quote Gérin-Lajoie (2005, p. 904), '(T)he language practices that take place in the school reflect the duality of living continually in between two languages.' Thus, it can be assumed that this survey possibly reflects experiences of early bilinguals who have used and are currently using multiple languages on a daily basis. But still caution is warranted that the subjects of the current study may not represent bilingual youths in general.

Socio-cultural aspect

All students reported only advantages of being bilingual in terms of socio-cultural experiences and no socio-cultural disadvantages were mentioned. This appears intuitively sound because bilingualism opens to a variety of experiences that are unavailable to monolinguals without necessarily sacrificing any opportunities available to monolinguals. Many students reported bilingualism was helpful in meeting people and making friends. This is particularly important for youngsters of this age when the importance of peer relationships almost exceeds that of family relationships (King, 2002). Similar survey results were reported on college students who showed 'a strong preference for speaking English with peers' (Eilers, Pearson, & Cobo-Lewis, 2006, p. 77).

Linguistic aspect

On the other hand, most students reported disadvantages as well as advantages of bilingualism in regard to their language learning. This might surprise many monolinguals who may naively assume that bilinguals make use of more than one language without an effort. But this finding is in line with other studies (e.g. Ayres, 2003) that demonstrated considerable difficulties experienced by bilingual students in achieving balanced linguistic skills. Many bilingual students in the current survey felt their mastery of their two languages was unbalanced. Some even mentioned that certain linguistic domains were specifically affected. These domains included conversational skills, writing, and vocabulary, which respectively correspond to pragmatics, orthography, and lexicon in linguistic terms. One possible reason for the reported unbalanced linguistic development is the profile effects. As explained in the Theoretical Framework section, the profile effects typically entail unbalanced vocabulary sizes of the two languages, which may cause the students to feel they do not possess enough lexical knowledge in each language.

Many students reported experiences of feeling confusion in using two languages. The confusion might be the result of interference or negative transfer (Genesee, 2006; Grosjean, 2013). Any constructs of two languages can consciously or unconsciously influence each other in a bilingual's mind (Kaushanskaya, & Marian, 2007; Marian, & Spivey, 2003). Cook proposes the concept of 'multi-competence,' defined as the knowledge of one or more languages in the same mind, and posits that these languages are connected to each other (Cook, 2006). The fact that many bilingual high school students in the current survey still experience interference in some linguistic domains seems to support this new theory.

The confusion about writing is a complex issue because this depends on how different writing systems (orthography) of the involved languages are (Bialystok, 2006). The issues surrounding bilingualism are generally not specific to any particular combination of languages as far as oral communication is concerned. For example, a Chinese/English bilingual is essentially no different from, say, a Swedish/Finnish bilingual (Harding-Esch, & Riley, 2003). But this does not hold true for writing and reading (Bialystok, & Barac, 2013). The more different writing systems of the two languages are, the more challenging it can be to master both simultaneously.

Most of the students in the current survey were thought to be English/Japanese bilinguals and these two languages have remarkably different writing systems. Therefore, it is very understandable to find learning to write in these two languages at the same time difficult, especially *kanji* in Japanese.

Lastly, the confusion felt in conversational skills might be related to a more social issue. Bilinguals need to make on-line adjustment to conversational partners' language use and understanding, which requires close monitoring of the discourse that is taking place (Genesee, 2006). This may not be easy for less experienced bilingual students. In particular, as with the previous point, the differences between conversation styles between the English-speaking culture and the Japanese culture are considerable (for example, more subtle differentiation of politeness in Japanese), and may play a role in the confusion reported by many of our subjects.

Interestingly, one student reported, 'Our language is many times referred to as being Jinglish.' This comment can be compared to a statement by a French/English bilingual participant in Gérin-Lajoie's study (2005, p. 908); '(Y)ou get confused, [...], more like *franglais*.' 'Jinglish' is, of course, made from a combination of Japanese and *English*, and 'franglais' from *French* or *Français* ('French' in French) and *Anglais* ('English' in French). These creatively constructed words show the difficulties bilinguals encounter in keeping a balance of two languages and how easily they get 'confused' and mix languages.

There is the other side of the coin to the linguistic disadvantages of bilingualism, though. Some reported enjoying translating for others and code-switching. Code-switching is observed not only in oral communication, but also in written text. It is sometimes used for 'the rapport between bilingual writer and bilingual readers' (Mahootian, 2002, p. 1498). Probably the four students who code-switched in their responses in this survey felt they could communicate better that way with the investigators who they probably thought were bilingual and who would read the returned questionnaires. Another advantage of having two sets of vocabulary is related to emotion words. It has been shown that specific emotion can be attached to abstract words (Vigliocco et al., 2013). So, knowing different languages confers the users more ways of expressing subtle nuances of their feelings.

Identity-related aspect

In terms of the identity-related aspect, about a half of the participating students reported advantages and about a quarter reported disadvantages. We should pay careful attention to this issue since the central theme of the adolescents' psychological development is the establishment of self-identity (Erikson, 1950/1993). This is an especially important area for bilingualism research because adolescents who grow up to be a bilingual oftentimes live across different cultures, which can complicate the process of identity establishment (Yoshida, 1999). Therefore, it is reassuring that many bilingual high school students in this survey felt positively about their dual language use.

But negative feelings such as isolation are too common to be lightly dismissed. It is particularly striking that many students felt negatively about their identity, despite the socio-cultural advantages reported by the most. That is, many mentioned how easy it would be for bilinguals to meet people and fit better, while a lack of sense of belonging was common. This sounds somewhat paradoxical at a first glance, but the former is probably more related to overt behavior and the latter more to inner feelings. This, in fact, coincides with the other reports such as bilingual subjects of McCarty's study who stated that their repertoire of thinking and behaving had expanded, but that they did not go so far as to say that they had acquired a bicultural identity (Yoshida, 1999). This means that we cannot assume that cultural competence automatically translates to identity establishment. By the same token, one of the participants of Ayres's study (2003, p. 52) felt that 'the language one speaks does not help to determine one's identity.' Williams (2005, p. 2353), too, states that their 'questionnaires responses suggest that language use does not have an influence on ethnic identity [...]' Thus, the categorization of responses of the current survey into three groups seems valid since these aspects of the students' outer and inner lives are closely connected, yet independent to each other to some extent. So the bilingual students face the task of keeping a balance (Williams, 2005), not only of the two languages they use, but also of these different aspects in their psychological development. And Williams' emphasis on 'how identity is

fluid and socially constructed in many ways' (Williams, 2005, p.2349) might explain at least partly why many of the bilingual students of this survey felt their identity to be less than established.

Of course, this may not be only a linguistic problem, but also a cultural one. Student living at an international school like School X are exceptional and different from, say, ordinary local school experiences. How School X students perceive these special experiences may depend on multiple factors. For example, the age of School X entrance and previous experiences of living in English may affect adaptation. Or students coming from outside Japan may have a hard time adjusting to the new community as a whole, not just school (Hornberger, 2007).

We would like to mention how these bilingual students can be helped before concluding the discussion. So called DSM-5 (American Psychiatric Association, 2013), which lists diagnostic criteria for all psychiatric disorders, recognizes that bilingual environment is related to some disorders such as language disorder and selective mutism. In addition, psychological difficulties including linguistic problems and identity confusion may be a cause of a psychiatric disorder like adjustment disorder (Collins, Toppelberg, Suárez-Orozco, O'Connor, & Nieto-Castañón, 2011). Therefore, it will be extremely important to understand experiences of young bilingual students and to make sure that they obtain as much emotional and linguistic assistance as possible. Some of the environmental factors are amenable to manipulation, some are not. One of the changeable factors is the emotional support the School X community can provide. Some authors have pointed out the importance of environmental support for linguistic and emotional growth of bilingual children (Collins, O'Connor, Suárez-Orozco, Nieto-Castañón, & Toppelberg, 2012; Eilers, Pearson, & Cobo-Lewis, 2006; Hayashi, 2005; Toppelberg, Hollingshead, Collins, & Nieto-Castañón, 2013). Other School X students and parents as well as school staff can be of great help to promote the bilingual students' self-identity growth by understanding how they feel and what they think about being bilingual (Martin, & Stuart-Smith, 1998). One way they can help is, for example, to support the development of both the mother tongue and L2 at school which 'may prove to be beneficial to children's linguistic, psychosocial, and academic development' (Toppelberg, 2010).

Conclusions

In conclusion, despite some confusion and difficulty in linguistic and identity-related aspects, most students reported that their socio-cultural experiences as a bilingual were positive. It is extremely important to make sure they gain the most out of this very special situation of bilingual lives. Teachers and parents need to understand these experiences of bilingual youths to be helpful in regard to their mental health issues. For instance, they could capitalize on the reported benefits of being multilingual that some adolescents feel: being special or feeling proud. They could emphasize these aspects at home from an early age and teachers could resort to them in order to contribute to the healthy mental development of teenagers.

Limitations of the current study include a small sample size from only one school, some uncertainty about the students' bilingualism, and the qualitative nature of the data analysis. This was a preliminary survey conducted at one particular international school. The results cannot be generalized to bilinguals in other situations: those in a regular (not international) school, those from other part of the world (Asians predominated in this study), etc. Likewise, the nature of the students' bilingualism could not be clearly defined in this study, so the findings may not apply to all types of bilinguals. Lastly, since no statistical treatment of the data was conducted, we know nothing about correlations between variables; for example, how the responses vary according to the students' family background.

Suggestions for future research include an examination of possible correlations between bilingual students' identity development and the nature of their lives as a bilingual. For example, some of the students in the current study were native Japanese whose parents chose to educate them in an international education system. Their subjective experiences as a bilingual might differ from foreign students who happen to live in Japan for various reasons and whose bilingual life is more or less 'forced' and not chosen. Another suggestion is a study on the family environment that influences children's bilingual development. A supportive familial environment would be extremely important for positive bilingual experiences (Gérin-Lajoie, 2005; Toppelberg, 2010).

Acknowledgments

The authors express their gratitude to the support and cooperation for this survey by the students, their families, and the staff at School X.

References

- Akhtar, S. (1999). *Immigration and identity: turmoil, treatment, and transformation*. Northvale, NJ: Jason Aronson Inc.
- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. Arlington, VA: American Psychiatric Association.
- Ayres, J. (2003). “In the middle”: Language attitudes and identity among bilingual Hispanic-American college students. *A Journal of the Céfiro Graduate Student Organization*, 4, 46-59.
- Baker, C. (2001). *Foundations of Bilingual Education and Bilingualism*. 3rd edition, 1st edition 1993. Clevedon: Multilingual Matters.
- Bialystok, E. (2001). *Bilingualism in Development: Language, Literacy, and Cognition*. New York: Cambridge University Press
- Bialystok, E. (2006). Bilingualism at school: effect on the acquisition of literacy. In P. McCardle, & E. Hoff (Eds.), *Childhood Bilingualism: Research on Infancy through School Age* (pp.107-124). New York: Multilingual Matters Ltd.
- Bialystok, E., & Barac, R. (2013). Cognitive Effects. In F. Grosjean, & P. Li (Eds.). *The Psycholinguistics of Bilingualism* (pp.192-213). Malden, MA: Wiley-Blackwell.
- Collins, B.A., O’Connor, E.E., Suárez-Orozco, C, Nieto-Castañon, A, & Toppelberg, C. (2012). Dual language profiles of Latino children of immigrants: Stability and change over the early school years. *Applied Psycholinguistics*, 35, 581-620, 2014.
- Collins, B.A., Toppelberg, C.O., Suárez-Orozco, C., O’Connor, E, & Nieto-Castañon, A. (2011). Cross-sectional associations of Spanish and English competence and well-being in Latino children of immigrants in kindergarten. *International Journal of the Sociology of Language*, 208, 5-23.
- Cook, V. (2006). Interlanguage, multi-competence and the problem of the “second” language. *Rivista di Psicolinguistica Applicata*, VI, 3, 39-52.
- Eilers, R.E., Pearson, B.Z., & Cobo-Lewis, A.B. (2006). Social factors in bilingual development: the Miami experience. In P. McCardle, & E.

- Hoff (Eds.), *Childhood Bilingualism: Research on Infancy through School Age* (pp.68-90). New York: Multilingual Matters Ltd.
- Erikson, E. (1950/1993). *Childhood and Society*. N.Y.: W.W.Norton & Company, Inc.
- Fabbro, F. (2001). The Bilingual Brain: Cerebral Representation of Languages. *Brain and Language*, 79, 211-222.
- García, O. (2009). *Bilingual Education in the 21st Century*. Hoboken, NJ: Wiley-Blackwell.
- Genesee, F. (2006). Bilingual first language acquisition in perspective. In P. McCardle, & E. Hoff (Eds.), *Childhood Bilingualism: Research on Infancy through School Age* (pp.45-67). New York; Multilingual Matters Ltd.
- Gérin-Lajoie, D. (2005). Bilingual identity among youth in minority settings: a complex notion. In J. Cohen, K.T. McAlister, K. Rolstad, & J. MacSwan (Eds.), *ISB4: Proceedings of the 4th International Symposium on Bilingualism* (pp.902-913). Somerville, MA: Cascadilla Press.
- Grosjean, F. (1992). Another View of Bilingualism. In R.J. Harris (Ed.), *Cognitive Processing in Bilinguals* (pp.51-62). Amsterdam: Elsevier Science Publishers B.V.
- Grosjean, F. (2013). Bilingualism: A Short Introduction. In F. Grosjean, & P. Li (Eds.), *The Psycholinguistics of Bilingualism* (pp.5-25). Malden, MA: Wiley-Blackwell.
- Harding-Esch, E., & Riley, P. (2003). *The Bilingual Family. A Handbook for Parents. Second Edition*. Cambridge: Cambridge University Press.
- Hayashi, A. (2005). Japanese English bilingual children in three different educational environments. In J. Cohen, K.T. McAlister, K. Rolstad, & J. MacSwan (Eds.), *ISB4: Proceedings of the 4th International Symposium on Bilingualism* (pp.1010-1033). Somerville, MA: Cascadilla Press.
- Hornberger, N. (2007). Biliteracy, transnationalism, multimodality, and identity: Trajectories across time and space. *Linguistics and Education*, 8, 325-334.
- Kaushanskaya, M., & Marian, V. (2007). Bilingual Language Processing and Interference in Bilinguals: Evidence From Eye Tracking and Picture Naming. *Language Learning*, 57, 119-163.

- King, R.A. (2002). Chapter 24. Adolescence. In M. Lewis (Ed.), *Child and Adolescent Psychiatry ~A Comprehensive Textbook, Third Edition* (pp. 332-342). Philadelphia: Lippincott Williams & Wilkins.
- Mahootian, S. (2002). Sending a message: Code-switching and the bilingual identity. *Actas/Proceedings II Simposio Internacional Bilingüismo* (pp.1493-1499). Vigo: Servicio de Publicacións da Universidad de Vigo.
- Malakoff, M., & Hakuta, K. (1991). Translational skill and metalinguistic awareness in bilinguals. In E. Bialystok (Ed.), *Language Processing in Bilingual Children* (pp.141-166). Cambridge: Cambridge University Press.
- Marian, V., & Spivey, M. (2003). Competing activation in bilingual language processing: Within- and between-language competition. *Bilingualism: Language and Cognition*, 6, 97-115.
- Martin, D., & Stuart-Smith, J. (1998). Exploring bilingual children's perceptions of being bilingual and biliterate: implications for educational provision. *British Journal of Sociology of Education*, 19, 237-254.
- Oller, D.K., Pearson, B.Z., & Cobo-Lewis, A.B. (2007). Profile effects in early bilingual language and literacy. *Applied Psycholinguistics*, 28, 191-230. doi: 10.1017.S0142716407070117
- Paradis, J, Genesee, F, & Crago, M.B. (2011). *Dual Language Development & Disorder* (pp.88-108). Baltimore: Paul H. Brookes Publishing Co.
- Spotti, M. (2005). Bilingual identities in question: social identity construction in a Dutch Islamic primary classroom. In J. Cohen, K.T. McAlister, K. Rolstad, & J. MacSwan (Eds.), *ISB4: Proceedings of the 4th International Symposium on Bilingualism* (pp. 2165-2179). Somerville, MA: Cascadilla Press.
- Tabors, P.O. (2008). *One Child, Two Languages: A Guide for Early Childhood Educators of Children Learning English as a Second Language, 2nd ed.* Baltimore: Paul H. Brookes Publishing Co.
- Toppelberg, C.O., & Collins, B.A. (2010). Language, culture, and adaptation in immigrant children. *Child & Adolescent Psychiatric Clinics of North America*, 19, 697-717. doi: 10.1016/j.chc.2010.07.003

- Toppelberg, C.O., Hollingshead, M.O., Collins, B.A., & Nieto-Castañon, A. (2013). Cross-Sectional Study of Unmet Mental Health Need in 5- to 7-Year Old Latino Children in the United States: Do Teachers and Parents Make a Difference in Service Utilization? *School Mental Health*, 5, 59-69
- Trask, R.L., & Stockwell, P. (2007). *Language and Linguistics. The Key Concepts. Second Edition*. New York: Routledge.
- Vigliocco, G., Kousta, S., Della Rosa, P.A., Vinson, D.P., Tettamanti, M, Devlin, J.T., & Cappa, S.F. (2013). The neural representation of abstract words: The role of emotion. *Cerebral Cortex*. Published online on Feb 13. doi: [10.1093/cercor/bht025](https://doi.org/10.1093/cercor/bht025)
- Werker, J.F., Weikum, W.M., & Yoshida, K.A. (2006). Bilingual speech processing in infants and adults. In P. McCardle, & E. Hoff (Eds.), *Childhood Bilingualism: Research on Infancy through School Age* (pp.1-18). New York: Multilingual Matters Ltd.
- Williams, A.M. (2005). Constructing and reconstructing Chinese American bilingual identity. In J. Cohen, K.T. McAlister, K. Rolstad, & J. MacSwan (Eds.), *ISB4: Proceedings of the 4th International Symposium on Bilingualism* (pp.2349-2356). Somerville, MA: Cascadilla Press.
- Yoshida, K. (1999). Socio-cultural and psychological factors in the development of bilingual identity. *Bilingual Japan*, 8, 5-9.

Satoshi Tamiya is Child Psychiatrist in The Himeji City Center for Developmental Medicine (Japan).

Yuka Okada is Pediatrician in The Himeji City Center for Developmental Medicine (Japan).

Keiko Koterazawa is Pediatrician in The Himeji City Center for Developmental Medicine (Japan).

Hiroyoshi Miyata is Director in The Himeji City Center for Developmental Medicine (Japan).

Montserrat Sanz is professor in Kobe City University of Foreign Studies, (Japan).

Contact Address: Satoshi Tamiya (Corresponding Author). *The Himeji City Center for Developmental Medicine*. 2-37, Masuishinmachi, Himeji 670-0806 Hyogo-ken, Japan. Email address:

satoshi_tamiya@city.himeji.hyogo.jp