

L2 Japanese Speaking Span Test: A Preliminary Report*

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Abstract

This paper presents a newly created L2 Japanese Speaking Span Test (L2JSST) and reports preliminary results on its validity based on ten English speaking learners of Japanese. The Intermediate High ~ Advanced Japanese learners took two Japanese language proficiency tests and L1 English Speaking Span test. All scores correlated with the scores of the L2JSST. Given this finding, we believe that the current version of JSST can be used to measure English speaking learners' working memory capacity in speech production in the same way that the L2 Japanese Reading Span Test (Itomitsu and Nakayama 2005a) does in reading.

Key words

Working memory, L2 Japanese Speaking Span Test, English Speaking Span Test, Japanese Proficiency Test, Minimum Japanese Test

*The author would like to thank the Nissen Chemitec America Scholarship at the Department of East Asian Languages and Literatures, The Ohio State University, for their support to conduct this research. I would like to thank Professors Noriko Iwasaki, Hideki Maki, and Mineharu Nakayama for helpful discussions prior to the experiment and eleven students who participated in this study. I am grateful to BEAL6 reviewers for helpful comments. All shortcomings are of course mine.

1. Introduction

The effect of working memory (WM) on L2 language skills is a controversial topic in psycholinguistics. Working memory is generally understood as memory for the temporary holding and manipulating of information during the performance of cognitive tasks such as language comprehension, reasoning, and learning (Baddeley 1986, 2000, and Baddeley and Hitch 1974). Baddeley (1986) claims that working memory plays an important role in language processing. It is normally considered that the capacity of WM differs individually, and learners with larger working memory capacity (WMC) store and process information more effectively than those with smaller working memory capacity.

Daneman and Carpenter (1980) developed the Reading Span Test (RST) as a tool to measure WMC of individuals, and RST scores have been widely used in the field of psycholinguistics as indicators of WMCs. It has been found that the RST scores correlated better with general reading ability (such as verbal SAT scores) and other reading tests, than the traditional word span test (Engle and Conway 1998). Those with high RST scores, who are “better” readers, are able to utilize semantic cues (such as animacy) in sentence ambiguity resolution better, hold multiple bits of information longer, and detect global ambiguity better, than those with low RST scores (Just and Carpenter 1992).

In L2, Wen (2012) argues that WM has variations specific to each L2 learner, and their WMC can be measured by different types of span tests. Some scholars found a positive relationship between L1 and L2 WMC by using the RST. For instance, one’s WMC is correlated with L2 vocabulary and grammar ability (Harrington 1992), and readers with higher L2 RST scores did better on the L2 reading tasks (Harrington and Sawyer 1992). There was also a correlation of WMC and grammar and reading skills in the Test of English as Foreign Language (Harrington and Sawyer 1992). In L2 Japanese, Osaka and Osaka (1992, 1994), Sawasaki (2009) and Kashiwagi (2011) support the effect of WMC on L2 Japanese reading comprehension. (Sawasaki and Kashiwagi employed Itomitsu and Nakayama’s (2005a) L2RST.) However, Sawasaki and Kashiwagi-Wood (2015) caution that the effect of working memory on L2 reading comprehension is still inconclusive.

More studies on WM have been found on reading comprehension, but what about speech production? Does an individual with smaller WMC struggle in speech production? The relationship between an individual’s WMC and L2 speech production, however, has not been studied extensively, though it is gaining more attention (e.g., Fortkamp 1999, 2000, Mota 2003, Mizera 2006, and Fortkamp and Bergsleithner 2007). Scholars who have studied the relationship between WMC and L2 speech production often use the Speaking Span Test (SST) to measure an individual’s WMC. The SST was originally created by Daneman and Green (1986). However, the correlations between L1 and L2 WMC have not been fully investigated. Among the five studies mentioned above, only Fortkamp (1999) conducted L1 (Portuguese) and L2 (English) SSTs to compare individuals’ WMC. Furthermore, to our knowledge, there is no L2 Japanese SST (L2JSST). Therefore, it is important to create a L2JSST to compare individuals’ L1 and L2 WMCs. In the current study, WMC scores measured by L1 English SST (L1ESST) will be compared with those measured by the newly created L2JSST. The L2JSST scores are also compared with the scores of two Japanese language tests, the Japanese Language Proficiency Test (PT, Itomitsu and Nakayama 2005b) and the Minimal Japanese Test (MJT, Maki, Dunton, and Obringer 1999), in order to determine the validity of the created JSST as a measuring tool of WMC.

The organization of this paper is as follows: Section 2 briefly discusses previous studies on L2 speech production and WM. Sections 3 and 4 present the creation process of the L2JSST, and

results of L2JSST, L1ESST, and two language proficiency tests with correlational analyses, respectively. Finally, concluding remarks will be provided in Section 5.

2. L2 Speech Production and Working Memory

The field of L2 speech production and WM is still young and developing. Thus far, mixed results have been reported about the correlation between L2 speech production and WMC. For example, Fortkamp (1999, 2000) used the SST (as well as the RST) to measure WMCs for Portuguese speaking learners of L2 English. She found that there was a correlation between WMC and lexical density and oral fluency. Note that oral fluency in her study included accuracy, complexity (producing a larger number of dependent clauses), pauses, and hesitations. Although Daneman (1991) suggests that there is a correlation between WMC measured by the RST and participants' oral reading fluency (L1 English), a weak correlation between them was found in Fortkamp's research (L2 English). This weak correlation might be because of the consequence of varying L2 skills at the time of testing (Harrington 1992). Individual working memory is utilized depending on the nature of the task L2 learners are performing (Daneman and Green 1986). That is, individual L2 learners may not necessarily have balanced reading and speaking skills that are required for the RST testing. Hence, more variations are observed, which weaken the correlation.

Weissshemier and Mota (2009) also tested Portuguese speaking learners of L2 English and their WMCs. They measured accuracy, fluency, and complexity, and found a correlation between the WMC and the oral proficiency level, i.e., learners with a larger WMC produced sentences faster and made fewer errors. Based on the results, Weissshemier and Mota suggest that learners in the larger WMC group had a greater number of cognitive resources to obtain new pieces of information or employ speaking strategies. Mota (2003) tested ESL learners whose L1 languages were Chinese, German, Hebrew, Indonesian, Japanese, Korean, Portuguese, and Turkish, and also observed that there was a positive relationship between WMC and L2 fluency, including speech rate, pauses, accuracy, and hesitations.

As discussed in reading comprehension studies, it is generally considered that learners with larger WMC store and process information more effectively than those with smaller WMC. The larger WM group might utilize more cognitive resources in acquiring new speaking strategies. They process information automatically and produce competent speech more often. Therefore, they tend to generate more complex sentence structures with more accuracy (Daneman and Carpenter 1980, Harrington 1992). Given these previous studies, it can be assumed that L2 Japanese learners with larger WMCs (i.e., higher span test scores) are also more skilled in using the capacity effectively. In other words, speakers with larger WMC should be able to generate sentences more fluently with fewer errors compared to those with smaller WMCs.

Many scholars believe that WM affects L2 speech production, but the conclusions are hardly firm. There are no studies conducted using a Japanese Speaking Span Test as there is no Japanese Speaking Span Test (JSST) yet. Therefore, L2JSST was created based on Daneman and Green's (1986) (L1) English Speaking Span Test (ESST) and Fortkamp's (2000) (L2) ESST. Having a valid and reliable L2JSST would be the first step in investigating the correlation between one's WMC and L2 Japanese fluency.

3. L2 Japanese Speaking Span Test

Fortkamp's (2000) L2 English speaking span test (L2ESST), which was modeled after Daneman and Green's (1986) original speaking span test in English, was used to make L2JSST in this study.

In Fortkamp's, there are total of three trials and 60 unrelated words, and each trial has two-, three-, four-, five-, and six-word sets. Sample words for Fortkamp's L2ESST are listed in Appendix A.

A total of 70 unrelated words are used in our L2JSST. There are five sets of two, three, four, and five words, where each set that includes two, three, four, and five word sets is called one trial. The entire test must have five trials. The words are all nouns with three and four morae, chosen from three Japanese textbooks: *Genki I*, *GenkiII*, and *NihonGO Now!*. Although the word length varies, selected vocabularies are up to *Japanese Language Proficiency Test (Nihongo Nōryoku Shiken)* N3 level. This allows even lower proficiency level learners to understand the words used in this L2JSST. Learners were presented these words on their computer screens, displayed one at a time. Their task was to read each word silently. After ten milliseconds, the next word appeared in the same position where the previous word appeared. This procedure was to be repeated until the letter "Q" is shown. Then, participants were asked to use the words they saw in generating sentences. Each word should be included in one and only one complete sentence. Hence, for one set, learners would produce 14 different sentences. The target words in the sentences should be the same forms, and the order of the sentences must follow the order of the words as shown on the screen. The sentences produced did not have any length restrictions, but they should be syntactically correct and semantically coherent in Japanese. An example of the test is illustrated in Figure 1. The entire list of the words can be found in Appendix A. For instance, learners are presented a set of words, one by one: 掃除 (*sooji*, 'cleaning'), ズボン (*zubon*, 'pants'), 歴史 (*rekishi*, 'history'). Then, they must produce sentences with those words such as: (i) 昨日、部屋の掃除をした (*kinoo, heya-no sooji-o shita* 'Yesterday I cleaned my room'), (ii)新宿でズボンを買った (*Shinjuku-de zubon-o katta* 'I purchased a pair of pants in Shinjuku'), (iii)私の専攻は歴史だ (*Watashi-no senkoo-wa rekishida* 'My major is history.').

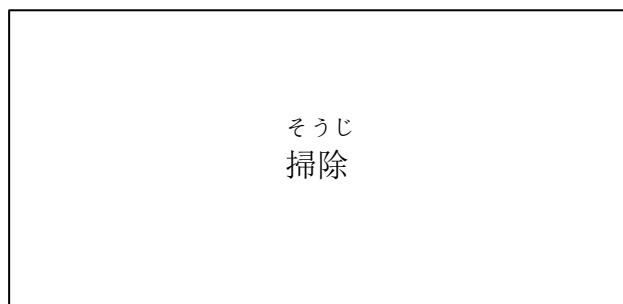


Figure 1. Speaking Span Test Example

Two types of scores were given to participants to measure their WMC: a strict and a lenient speaking span scores (Daneman and Green 1986, Daneman 1991, Weissheimer and Mota 2009). A strict speaking span score was used to count the total number of sentences participants produced. Sentences should include the same word form and order as shown in the screen. The highest possible score is 70 in this test, the total and maximum number of the words each learner will recall. A lenient speaking span was also used to determine the number of sentences participants generate, but the word form and word order in the sentence can be different (i.e., 練習 (*renshuu*) → 練習する (*renshuu-suru*)). Fourteen credits were given to the learner when they complete an

entire trial with syntactically and semantically correct sentences.¹ The grammatically accurate production of all five trials (70 words) would yield 70 credits/points.

4. Experiment

4.1 Procedure

First, learners were given two Japanese language proficiency tests. Itomitsu and Nakayama's (2005b) PT consists of three sections: *Kanji* reading (16 questions, 4 minutes maximum), Vocabulary (16 questions, 8 minutes maximum), Reading (8 questions, 18 minutes maximum). It is a multiple-choice test. The PT was created based on published sample questions of Japanese Language Proficiency Test Levels 2 and 3 (N2 and N3). Maki, Dunton, and Obringer's (1999) MJT has two versions, one was used as a practice round and a second for data analysis, where learners listened to the audio and filled in the blanks using the Japanese phonetic alphabet (hiragana). See Appendix B for these proficiency tests. The PT and MJT maximum raw scores are 40 and 42, respectively. Therefore, they were transformed to proportionate scores out of 50 in order to compare those two scores clearly. In this way, having a combined score out of 100 for the proficiency score makes it easier to compare learners. All skills except speech production were tested with the two tests. After the two proficiency tests, which took about 40 minutes, L2JSST and ESST were given. Because the entire procedure took about two hours in total, it was divided into two parts: PT and MJT were given on Day 1 (One hour) with a consent form and a background questionnaire. On Day 2, L2JSST and ESST were conducted. The latter session was approximately 30-minute long. The longest time between these two sessions was a few days except one participant who took the second session two weeks later due to the school break. The two sessions were carried out online (via Zoom) remotely.

4.2 Results

Eleven English speaking learners of Japanese participated in this study, and they were nominally compensated. However, one participant's data were not included due to a technical issue. Thus, the scores of 10 learners were analyzed here. They were taking the 4th and 5th level of Japanese language classes at a US midwestern university when the experiments were conducted. Table 1 illustrates each participant's living experiences abroad. Eight of the 10 participants have lived in Japan for more than 5 months. Most of them lived in Japan as part of a study abroad program or for work. There were two students who had not been to Japan, and one of them had lived in China for more than 3 years because her family is originally from China. Another participant lived in Ukraine for about 2 years due to his family's job and lived in Russia for 2 years to study and work.

¹ Note that whether prosody is correct is disregarded for giving a credit to a sentence, the same protocol as in the previous studies.

Table 1. Summary of participants' abroad experiences

Learner #	Japan	Duration	Purpose ²	Other Countries	Duration	Purpose
1		2 years	SA			
2		3 years	SA/Work			
3		6 weeks	HS			
4		5 months	SA			
5		4 years	SA/Work			
6		2.5 years	Family			
7				China	3 years	Family
8						
9		4 years	Work			
10		3 years	Work	Ukraine	1-2 years	Family
				Russia	1-2 years	SA/Work

The summary of the participants' scores and the summary of the data analysis are listed in Tables 2 and 3 below. In Table 1, ESST/JSST(S) is a score counted strictly while ESST/JSST(L) is a lenient score. ESST has a maximum of 60 points while JSST has a maximum of 70 points. ESST/JSST(100) means the converted score of the mean score of ESST/JSST(S) and ESST/JSST(L), respectively. Each of PT and MJT has a maximum of 50 points, and JLPT indicates the sum of PT and MJT scores (maximum 100 points).

The average score of ESST (42.4 out of 60, which is 70.6 out of 100) was higher than JSST (37.9 out of 70, which is 54.1 out of 100). In Table 3, a regression analysis shows that there is a highly significant correlation between the ESST and the JSST scores (Multiple $r=0.809$). The learners with larger WMCs in their native tongue of English tend to have larger WMCs in Japanese as well. This is not surprising because speakers can produce sentences in their L1 more efficiently (memory-wise) whereas recalling words and generating sentences in L2 Japanese consumes more WM. It is not unusual at all for learners to find speaking in L2 Japanese more difficult than in their L1 because L2 speech production cannot be automatized easily compared to L1 speech production. It demands more cognitive controls (Guará-Tavares 2013), especially, in this proficiency level. The regression analysis also revealed that there is a significant correlation between the PT and the MJT scores (Multiple $r=0.702$), indicating that both tests were similar enough to measure individual's proficiency level even though the tasks in each test were different. There is a positive correlation between Japanese proficiency level (JLPT scores) and JSST scores (Multiple $r=0.644$), indicating that the learners with a higher proficiency level are likely to have higher JSST scores (i.e., larger L2WMCs). In other words, the learners whose proficiency levels are higher could recall target words and produce sentences better. They can exploit their WMC better. It is important to note that larger L1WMC does not necessarily bring higher L2 proficiency. As a matter of fact, JLPT scores were not correlated with ESST scores (Multiple $r=0.39$).

² SA: study abroad, HS: home stay

Table 2. Summary of the scores by the participants

Learner#	ESST(S)	ESST(L)	ESST (100)	JSST(S)	JSST(L)	JSST (100)	PT(50)	MJT(50)	JLPT(100)
1	53	55	90	45	52	69.3	50	48.8	98.8
2	49	53	85	47	47	67.1	42.5	50	92.5
3	45	49	78.3	38	39	55	22.5	46.4	68.9
4	42	44	71.7	37	39	54.3	43.8	48.8	92.6
5	39	41	66.7	44	46	64.3	43.8	46.4	90.2
6	39	40	65.8	33	33	47.1	36.3	46.4	82.7
7	33	45	65	31	38	49.3	37.5	42.9	80.4
8	37	39	63.3	35	42	55	41.3	46.4	87.7
9	35	37	60	30	30	42.9	43.8	48.8	92.6
10	30	42	60	25	27	37.1	22.5	35.7	58.2
Average	40.2	44.5	70.6	36.5	39.3	54.1	38.4	46.1	84.4

Table 3. Summary of the data analysis

Data 1		Data 2	Multiple r
ESST	vs	JSST	0.809
PT	vs	MJT	0.702
JLPT	vs	JSST	0.644
JLPT	vs	ESST	0.39
JSST Correct Sentences #	vs	ESST	0.922
JSST Downsteps #	vs	JSST	0.25

Since previous reading span tests reported a correlation with language proficiency (Harrington and Sawyer 1992) and L2 speaking span test scores were also correlated with L1 speaking span test scores (Fortkamp 1999), this version of JSST is promising. Both the proficiency and the ESST scores were correlated with the JSST scores, though the number of the participants is small in this study.

4.3 Produced Sentences in JSST

This section discusses a few characteristics observed in the produced L2 Japanese sentences. Note that they do not directly reflect the validity of the JSST we created. Table 4 shows each learners' total number of sentences and the number of correct sentences.³

In the current study, the sentences which are appropriate both semantically and syntactically are counted as correct sentences. The number of the correct sentences correlate with the JSST scores (Multiple $r=0.922$).

The average number of produced sentences was 45.1 sentences per learner, and of those, the correct sentences were 40.7 (90.2%). It seems that learners produced sentences appropriately at a relatively high rate when they recalled the words successfully. The sentences they uttered often were simplex and did not include overt subjects as in (1). The examples in (1) include the most common error type made by the learners, i.e., the misuse of particles.

³ Note that these numbers do not match JSST scores because they do not include those with the strict word order (Strict speaking span).

Table 4. Number of produced sentences

Learner#	Total Number of Sentences Produced (out of 70)	Correct Sentences
1	55 (78.6%)	53 (96.4%)
2	51 (72.9%)	48 (94.1%)
3	44 (62.9%)	38 (86.4%)
4	44 (62.9%)	41 (93.2%)
5	52 (74.3%)	45 (86.5%)
6	37 (52.9%)	36 (97.3%)
7	47 (67.1%)	42 (89.4%)
8	47 (67.1%)	43 (91.5%)
9	35 (50%)	29 (82.9%)
10	38 (54.3%)	32 (84.2%)
Average	45.1 (64.4%)	40.7 (90.2%)

- (1) a. Keitai-de takusan apuri-ga arimasu. (de → ni)
cellphone with many application-Nom exist
'There are many application programs in my cellphone.'
- b. Honya-ni hon-o kaimashoo. (ni → de)
bookstore at book-Acc buy let's
'Let's buy a book at a bookstore.'
- c. Jitensha-o noru-no-ga suki-desu. (o → ni)
bicycle-Acc ride-NM-Nom like
'I like riding on a bicycle.'

In (1a), the postposition *de* should be *ni* while *ni* should be *de* in (1b). In (1c) accusative case marker *o* should be dative case marker *ni* (1b). The particle drops such as (2) were not regarded as ungrammatical as one can drop topic marker or case markers in speech.

- (2) a. Kono kooen shizuka desu-ne.
this park quiet be SFP
'This park is quiet, isn't it?'
- b. Kono kanji doo yomimasuka.
this how read Q
'How do you read this kanji?'

Other errors include lexical choice or some usage errors like (3). *Hairu* 'enter' selects a place. If *kaigi-shitsu* 'meeting room' is used, (3a) becomes fine. On the other hand, if *kaigi* 'meeting' is kept, either *iku* 'go' or *deru* 'attend' should have been used. As for (3b), *osusume-na* should be *osusume-no* and *nan* 'what' should be *doko* 'where' or *donna omise* 'what kind of shop'.

- (3) a. Kaigi-ni hairu. → kaigi-ni iku or kaigi-ni deru.
meeting to enter meeting to go meeting in attend
'I attend a meeting.'

- b. Ichiban osusume-na omise-wa nan desu-ka. osusume-na → osusume-no
 No.1 recommend shop-Top what is Q recommending
 ‘Where is the shop you recommend most?’ nan-desu-ka → doko-desu ka
 what is Q where is Q

Although no phonetic errors were reflected in the JSST scores, we note some observations on fluency in speech production. The majority of studies with SST mentioned above measured individuals’ fluency to see the correlation with their WMC. The definition of fluency varies from researcher to researcher. Some include accuracy and structural complexity while others refer to different elements such as speech rate. Although fluency also depends on a listener’s perception and opinions, producing sentences that are semantically and syntactically correct does not always mean learners are fluent in the target language. As mentioned in Footnote 1, whether or not the produced sentence is counted as correct in above tables did not include prosody, but in L2 Japanese, many studies showed the difficulty of acquiring prosodic features (Ayusawa 2003, Shport 2008, Lee and Mok 2018, and Nozouri 2018, etc.). Venditti (2006) claims that understanding the prosody is the important element in speech. Downstep is one of the most important prosodic features in the Japanese language. It is a phonological process in which F0 declines gradually after the first highest pitch (Venditti 2006). Prosodic resetting may happen within spoken phrases, but the remainder of the pitch never rises higher than the first one. Accented words, single words, or compound chunks in sentences, show downstep while unaccented words do not. According to Venditti, downstep helps individuals’ language processing, especially for complex language structures. Listeners can resolve ambiguity smoothly by paying attention to downstep. Thus, it would be beneficial to include a prosodic feature like downstep as an important component for fluency and examine it in L2 Japanese learners’ speech production.

Table 5 illustrates the number of the correct sentences and downsteps produced by each learner. In the current study, all learners produced some sentences with downstep. As seen in Table 5, most learners did not show downstep successfully, indicating the difficulty of acquiring downstep even for intermediate and advanced learners. Figures 2 and 3 are examples with downstep while Figure 4 is without it. Note that our regression analysis did not show correlation between the JSST scores and the number of downsteps (Multiple $r= 0.25$).

Table 5. Number of downstep (raw #)

Learner#	Correct sentences	Downstep	Downstep (%)
1	53	24	45.2%
2	48	21	43.8%
3	38	17	44.7%
4	41	33	80.5%
5	45	10	22.2%
6	36	21	58.3%
7	42	17	40.5%
8	43	13	30.2%
9	29	11	37.9%
10	32	17	53.1%
Average	40.7	18.4	45.2%

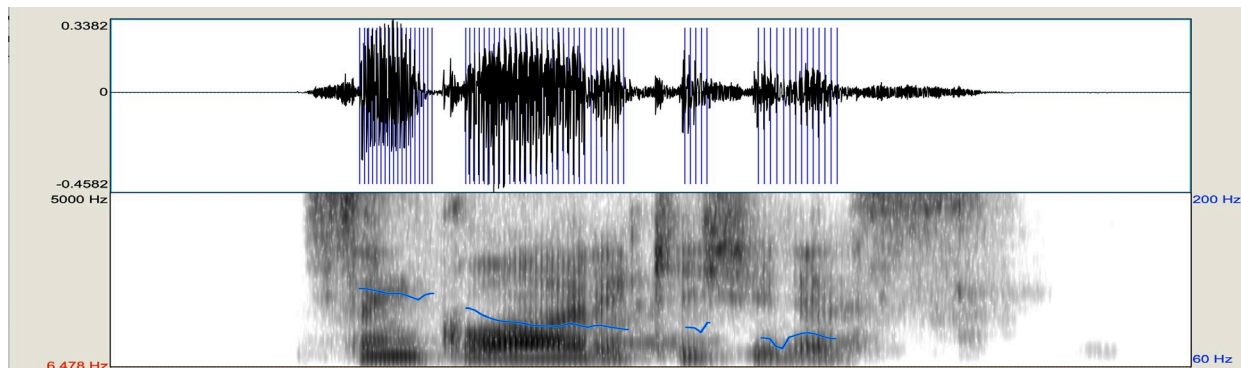


Figure 2. Example utterance with downstep: *Senkoo-wa rekishi desu.* ‘(My) major is History.’

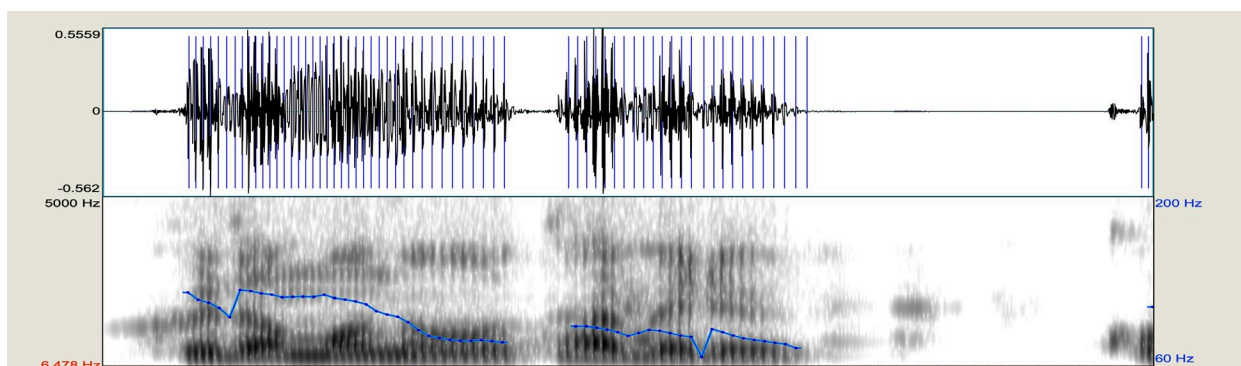


Figure 3. Example utterance with downstep: *Kudamono-wo taberu.* ‘(I) eat fruit.’

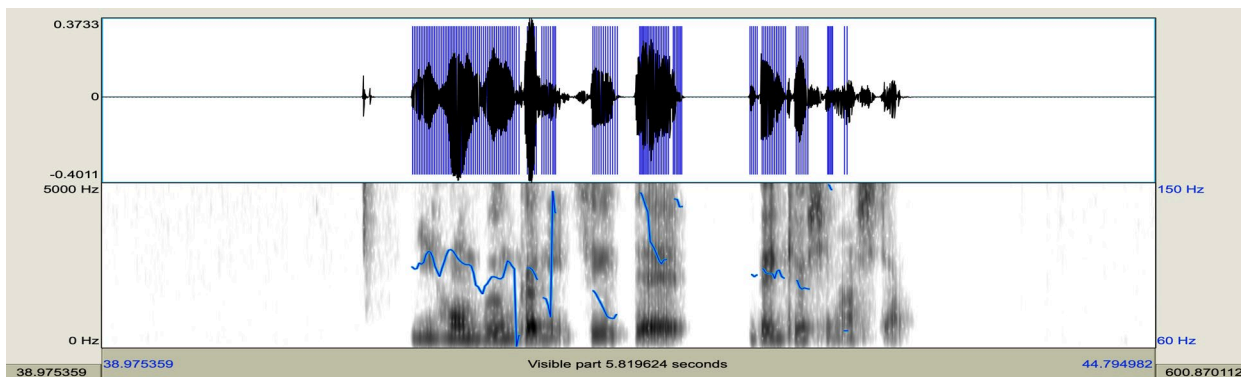


Figure 4. Example utterance without downstep: *Nihonbunka-ni tsuite benkyo shimashita.* ‘(I) studied about Japanese culture.’

5. Conclusion

The relationship between working memory and individual language skills has received much more attention recently. A significant correlation of individuals’ WMC and reading comprehension skills has been established. Individuals with larger WMC measured by L1 Speaking Span Test should also have larger WMC in their L2. Though preliminary, the current study presented a newly created L2 Japanese Speaking Span Test and documented its correlations with ESST scores and Japanese proficiency test scores. Individuals with larger WMC in English tend to have larger

WMC in Japanese. These findings appear to indicate that the Japanese version of SST that we created is very promising and functions as a viable test.

However, despite the positive outcomes of the present study, there are limitations to be noted. It may be too early to conclude the validity of JSST and its correlation with WMC due to the small number of participants. This is something to address in the future if findings from this study are to be generalized. Utilizing the JSST in future trials with additional participants can help shed more light on the validity of the test and the relationship between WMC and Japanese proficiency level.

Finally, the learners of this study produced grammatical sentences with a relatively high correction rate with the JSST. However, when prosody is considered, this “grammatical” picture of the produced utterances changed, especially, as correct downstep was observed in less than half of the correct sentences produced. Although this will be a different topic from the topic of the current paper, the acquisition of prosody seems difficult as the participants of this study were speakers of intermediate high to advanced Japanese. The finding needs to be investigated more in a separate study.

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Appendix A

English Speaking Span Test in Fortkamp (2000) modeled after Daneman and Green (1986)

<i>Trial 1</i>	<i>Trial 2</i>	<i>Trial 3</i>
cake	week	bird
hand	rain	cup
duck	club	snow
pen	spring	pepper
gas	knife	cheese
desk	table	blouse
road	sky	class
glass	deer	farm
brain	ball	letter
sun	bank	day
mouth	shirt	arm
key	egg	water
bag	date	box
file	hair	mall
clock	cow	dog
wave	pair	room
tool	church	night
coat	sea	spoon
map	bus	woman
year	dinner	butter

Japanese Speaking Span Test

<i>Trial 1</i>	<i>Trial 2</i>	<i>Trial 3</i>	<i>Trial 4</i>	<i>Trial 5</i>
ホテル	電話	アプリ	病気	ノート
薬	メール	ご飯	テスト	車
公園	教師	ポスター	鉛筆	電車
アパート	果物	写真	仕事	スーパー
文化	コンビニ	友達	イギリス	宿題
飲み物	ケーキ	番号	地下鉄	一番
病院	練習	買い物	カレー	消しゴム
スマホ	休み	会議	時間	ドイツ
歴史	入り口	ビール	留学	授業
正月	学校	経済	パソコン	紅茶
復習	午前	ニュース	教室	予習
かばん	自転車	学生	韓国	弁当
銀行	一緒	日本	財布	みんな
名前	おととい	漢字	本屋	図書館

Appendix B

Japanese Language Proficiency Test (Itomitsu and Nakayama 2005b)

Name: _____

Date: _____

This test consists of three sections:

Part 1: Kanji reading (16 questions; 4 minutes maximum)

Part 2: Vocabulary (16 questions; 8 minutes maximum)

Part 3: Reading Comprehension (8 questions; 18 minutes maximum)

When you finish working on one section, turn it in to continue on to the next section. You are not allowed to go back to the previous sections, or spend more than the maximum minutes assigned for each section.

Part 1: Kanji reading (16 questions; 4 minutes maximum)

DIRECTIONS: Choose the correct reading for the underlined kanji words, and circle the correct reading.

1 私の 姉は 花屋で 仕事を しています。

- (i) 私 a わだし b かれ c わたし d はは
 (ii) 姉 a あね b あに c おとうと d いもうと
 (iii) 花屋 a はや b ほや c はなや d かや
 (iv) 仕事 a ようじ b しこと c ようし d しごと

2 入院していた 父の 病気が よくなったので 安心しました。

- (i) 入院 a にゅいん b にゅういん c いいん d はいいん
 (ii) 父 a ちち b はち c はは d とう
 (iii) 病気 a びよき b ひようき c びようき d びようけ
 (iv) 安心 a あしん b やんしん c あんしん d やすしん

3 この地域の人口が増えるのはよくないという意見が出ている。

- (i) 地域 a じいき b ちいき c じき d ちきゅう
 (ii) 人口 a にんこう b にんごう c じんこう d じんご
 (iii) 増える a こえる b ふえる c もえる d はえる
 (iv) 意見 a いみ b いけん c いげん d いっけん

4 やる気のある人を募集しているので、男女の別、年齢、経験は問わない。

- (i) 募集 a もうじゅう b もしょう c ぼうしゅう d ぼしゅう
 (ii) 男女 a だんじょ b だんじょう c なんぼく d なんの
 (iii) 年齢 a とし b ねんれい c ねんさい d としより
 (iv) 経験 a しけん b きけん c けいけん d たいけん

Part 2 : Vocabulary (16 questions; 8 minutes)

DIRECTIONS: Choose the most appropriate word for the parentheses, by circling the best option.

5 ()に なりたくないので、食べたあとには、歯を みがくようにしています。

- a やけど b むしば c きず d かぜ

6 となりの 家の 赤ちゃんが 1時間ぐらい () ないている。

- a そっと b たいへん c あまり d ずっと

7 コピーの 色が () ので、よく 見えません。

- a かたい b いそがしい c こまかい d うすい

- 8 こんにちは。はじめまして、山田と（ ）。
 a おもいます b もうします c おっしゃいます d いらっしゃいます
- 9 友だちが 日本へ 来たら 京都へ（ ）いこうと 思っています。
 a あそんで b つれて c もって d みて
- 10 せきが（ ）なるかもしれないから、たばこは すわないほうがいいですよ。
 a まずく b ひどく c いたく d むずかしく
- 11 父は 健康のために 毎朝（ ）を している。
 a レポート b ストーブ c ドラマ d ジョギング
- 12 彼が話しはじめると、がまんできずにみんな大声で（ ）笑った。
 a ひそひそ b にこにこ c げらげら d ごろごろ
- 13 大きな魚がつれた。何キロあるか重さを（ ）みよう。
 a はらって b はかって c かかえて d かけて
- 14 何度もかぞえたけど、やっぱりコピーが一枚（ ）。
 a たりない b みない c まちがない d かまわない
- 15 このワインは（ ）高かったにちがいない。
 a 簡単に b 完全に c 相当に d 勝手に
- 16 私の（ ）で壊してしまったので、新しいものを買って返します。
 a 無責任 b 不注意 c ご迷惑 d ご苦労
- 17 言葉が通じない国へ一人で旅行に行くのは（ ）ものだ。
 a 心づよい b 心やすい c 心やさしい d 心ぼそい
- 18 国に帰ってからぜんぜん連絡がない。トマスさんは（ ）何をしているのだろう。
 a いったい b いったん c ちょっと d けっこう
- 19 夜道の一人歩きはあぶないから、（ ）気をつけてください。
 a ぞんぶんに b じゅっぶんに c じゅうぶんに d よぶんに
- 20 病気にならないように、（ ）のとれた食事をするようにしている。
 a バランス b ビタミン c ブレーキ d メニュー

Part 3: Reading Comprehension (8 questions; 18 minutes)

DIRECTIONS: Read the texts carefully, and answer the following questions by choosing the best option.

TEXT 1

一郎くん、小学校入学おめでとう。毎朝、ひとりでおきられるように、一郎くんが大好きないぬの目覚まし時計をおくります。このいぬは とても早おきですから、まけないように一郎くんも がんばれ。

おじいさんより

Q21 一郎くんはおじいさんに何をもらいましたか。

- 1 いぬ 2 いぬと目覚まし時計 3 目覚まし時計 4 小学校の本

Q22 ただしい文はどれですか。

- 1 いままで、一郎くんはひとりでおきられませんでした。
- 2 おじいさんは一郎くんより早くおきられなくなってきました。
- 3 小学校にはいったら、一郎くんはおじいさんよりはやくおきなればなりません。
- 4 いぬはおじいさんからのバースデープレゼントです。

TEXT 2

小さくて、いつでもどこでもつかえるケータイ(携帯電話)は、いまでは子どもからお年よりまでもっています。そして、ケータイはどんどん新しく、便利になってきています。特に最近ではカメラがついたケータイをたくさんの人がつかうようになりました。しかし、そのために本屋では本や雑誌が売れなくなってきたそうです。なぜかという、本屋にきても、本を買わないで、ケータイのカメラで必要なページの写真をとっていつてしまう人がいるからです。店の人はこれはどろぼうと同じだとおこっています。便利になるのはいいことですが、こまることも多くなってきました。このままでは本屋は()。

Q23 「これ」はどんなことですか。

- 1 いつでもどこでもつかえるケータイを、子どもからお年よりまでもっていること
- 2 カメラがついたケータイをたくさんの人をつかうようになったこと
- 3 本屋で本や雑誌が売れなくなってきたこと
- 4 ケータイのカメラで必要なページの写真をとること

Q24 ()にはいることばはどれですか。

- 1 なくならないはずです
- 2 なくなってしまうかもしれません
- 3 なくならなければなりません
- 4 なくなったところです

TEXT 3

イヌは飼い主が「こっちへおいで」と呼べば、たいていはちゃんとやってくるが、ネコはそんなことはないいくら「おいで、おいで」といっても、ちよつとこっちを見るくらいが関の山*。で、さつぱり寄ってこようとはしない。

ぼくの家にも五匹も六匹もネコがいたころ、春や秋の日曜日の昼には、庭の奥でバーベキューをすることがよくあった。するとまもなくネコたちはみんな家の中から出てきて、ぼくらのいる庭の隅にやってくる。けれどイヌのようにぼくらの足もとに(2)。近くの物置や塀の上に、てんでに*すわりこんだり、寝そべって*ぼくらのほうを見ている。そして、とても満足そうな顔をしているのだ。

彼らは人間といっしょにといつか、人間の近くにいたいのである。だからぼくらが留守中のネコの世話を近所の知り合いに頼んで二日ばかり旅行に出かけようとしていると、非常に一(2)になる。ぼくらの気配で何か察知*しているとしか思えないのである。

(日高敏隆『ネコはどうしてわがままか』法研より)

*a 関の山(せきのやま):それ以上は無理という限界

*b てんでに・思い思いに

*c 寝そべる・横になる

*d 察知(さつち):外にあらわれた様子から感じ取る

Q25 「そんなことはない」とは、どのような意味か。

- 1 呼べばちゃんとやってくる
- 2 呼んでもたいていはやっこない
- 3 人間の言葉があまりわからない。
- 4 呼んでも高いところにいて聞こえない。

Q26 ()に入る言葉は次のどれか。

- 1 寄ってくるわけではない
- 2 寄ってくるというわけだ
- 3 寄ってくるわけではない
- 4 寄ってくるわけにはいかない

Q27 「不安そうな様子₍₂₎」なのはどれか。

- 1 近所の知り合い
- 2 ぼくの家族
- 3 ネコ
- 4 イヌ

Q28 筆者が考えるネコはどのような動物か。

- 1 呼んでも寄ってはこないが、飼い主の家族といっしょにすることで満足する動物である。
- 2 人といっしょにすることに幸せを感じ、飼い主の命令に従う動物である。
- 3 飼い主のことを理解することができる、とても頭のいい動物である。
- 4 イヌほど命令に従わず、何を考えているか分からない飼いにくい動物である。

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Minimal Japanese Test (Maki, Dunton, and Obringer 1999)

Part 1

Example: Listen to the audio and fill in the ()s with the Japanese phonetic alphabet (hiragana).

京都(きょうと)に行(い)ったことがあります()a ですか?
京都(きょうと)には世界(せかい)遺産(いさん)が()b たくさんあります。

Q: Listen to the audio and fill in the ()s using the Japanese phonetic alphabet (hiragana).

- 1 ()の人(ひと)は、町田(まちだ)さんです。
- 2 これは、だれ()セーターですか
- 3 図書館(としょかん)は、()そこです。
- 4 ()ここで昼(ひる)ごはんを食(た)べますか?
- 5 その大学(だいがく)は、あまり有名(ゆうめい)()やありません。
- 6 うちに、犬(いぬ)が()ます。
- 7 銀行(ぎんこう)は、どこに()りますか?
- 8 ブラウンさんのみ()に川村(かわむら)さんがいます。
- 9 テーブルの上(うえ)にバナナが五(ご)()んあります。
- 10 どんなスポーツが()きですか。
- 11 シュミットさんは、日本語(にほんご)を話(はな)さ()い。
- 12 今日(きょう)の午後(ごご)、山田(やまだ)さんに会(あ)()ます。
- 13 昨日(きのう)、日本語(にほんご)のクラスがありまし()か?

- 14 ここからあそこ()で二時間(にじかん)かかります。
- 15 わたしが、ワインを買(か)いま()ようか？
- 16 机(つくえ)の上(うえ)にペン()ノートがあります。
- 17 大野先生(おおのせんせい)は、とてもきび()かったです。
- 18 今年(ことし)の冬(ふゆ)は、去年(きょねん)の冬(ふゆ)()り雨(あめ)がたくさん降(ふ)りました。
- 19 強(つよ)い風(かぜ)が、一日中(いちにちじゅう)吹(ふ)()た。
- 20 なぜ顔(かお)が赤(あか)い()ですか？
- 21 川村(かわむら)さんは、東京大学(とうきょうだいがく)の学生(がくせい)()、専攻(せんこう)は、工学(こうがく)です。
- 22 ここに名前(なまえ)を書(か)い()下(くだ)さい。
- 23 明日(あした)は、雪(ゆき)が降(ふ)るかもし()ません。
- 24 この三(み)つつの中(なか)から()れか選(えら)んで下(くだ)さい。
- 25 歌(うた)がじょうず()人(ひと)は、だれですか？
- 26 漢字(かんじ)を書(か)く()は、おもしろいです。
- 27 クラシック音楽(おんがく)()ロックもあまり好(す)きじゃありません。
- 28 山口(やまぐち)さんは、昨日(きのう)来(こ)()れなかった。
- 29 川村(かわむら)さんは、毎日(まいにち)ジョギングをし()います。
- 30 昨日(きのう)食(た)べ()ピザはおいしかったですか？
- 31 掃除(そうじ)をしたので、部屋(へや)がきれいに()った。
- 32 十年前(じゅうねんまえ)にカナダへ行(い)った()とがあります。
- 33 妹(いもうと)は、あまりお金(かね)をほし()らない。
- 34 その日(ひ)は、レストランで食事(しょくじ)をしたと()もいます。
- 35 この部屋(へや)は、ちょっと暑(あつ)す()ますね。
- 36 日本人(にほんじん)は、これをたこ()言(い)います。
- 37 チンさんの誕生日(たんじょうび)にすしを作(つく)る()もりです。
- 38 一度(いちど)すしを食(た)べて()ました。
- 39 コーヒーを飲(の)みな()ら、ブラウンさんと話(はな)した。
- 40 買(か)い物(もの)をする()き、クレジットカードを使(つか)います。
- 41 もっと地味(じみ)な()はありませんか？
- 42 お金(かね)があつた()、いいコンピューターを買(か)いたい。
- 43 服(ふく)を着替(きが)え()、アパートに帰(かえ)りました。
- 44 あの魚屋(さかなや)は、とても安(やす)い()うです。
- 45 その車(くるま)を買(か)うか()うかまだわからない。
- 46 買(か)い物(もの)もした()、映画(えいが)も見(み)たし、もう帰(かえ)りましょうか？

Part 2

- 1 温泉(おんせん)に行(い)ったら()うですか？
- 2 毎日(まいにち)牛乳(ぎゅうにゅう)を飲(の)むこ()にしています。
- 3 この神社(じんじゃ)を見(み)た()とで、旅館(りょかん)を探(さが)しましょう。
- 4 電卓(でんたく)を使(つか)う()、便利(べんり)ですよ。
- 5 もっと野菜(やさい)を食(た)べ()さい。
- 6 芝生(しばふ)の中(なか)に入(はい)ってはい()ません。
- 7 もう少(すこ)し小(ちい)さ()切(き)って下(くだ)さい。
- 8 海外(かいがい)旅行(りょこう)には、パスポートを持(も)って行(い)()なければならない。
- 9 休(やす)みの日(ひ)は、洗濯(せんたく)をした()、掃除(そうじ)をしたりする。
- 10 新(あたらしい)ステレオを買(か)う()めに、お金(かね)を貯(た)めているんです。
- 11 先生(せんせい)から本(ほん)をいた()きました。
- 12 2、3日(にち)休(やす)みを取(と)って()よろしいですか？
- 13 そこに車(くるま)を止(と)め()いで下(くだ)さい。

- 14 来月(らいげつ)は混(こ)みますから、早(はや)く予約した()うがいいですよ。
- 15 お客(きゃく)さんが来(く)るので、玄関(げんかん)を掃(は)いていると()ろです。
- 16 肉(にく)を炒(いた)める前(まえ)に、野菜(やさい)を切(き)ってお()ました。
- 17 あの人(ひと)の話(はな)し()たは、ちょっと変(か)わっている。
- 18 授業(じゅぎょう)は、毎日(まいにち)八時(はちじ)に始(はじ)()ります。
- 19 テーブルの上(うえ)に箸(はし)が出(だ)し()ある。
- 20 歌(うた)を歌(うた)()うとしましたが、声(こえ)が出(で)ませんでした。
- 21 車(くるま)にガソリンを入(い)れた()かりです。
- 22 本(ほん)を見(み)()いで、答(こた)えてください。
- 23 私(わたし)が発音(はつおん)する()うに、発音(はつおん)して下(くだ)さい。
- 24 この机(つくえ)は、脚(あし)()長(なが)くて、不安定(ふあんてい)です。
- 25 私(わたし)の言(い)ったことが、正(ただ)しかった()うですね。
- 26 大輔(だいすけ)に取(と)りに行(い)か()ましょう。
- 27 「キリキリ」痛(いた)むとは、()ういうことですか？
- 28 その薬(くすり)は、ドイツ製(せい)だから、高(たか)いは()だ。
- 29 ニュース放送(ほうそう)がわかるよう()なって、よかった。
- 30 これは、部長(ぶちょう)が()書(か)きになったんですか？
- 31 社長(しゃちょう)、高田(たかだ)さんをお呼(よ)び()たします。
- 32 自転車(じてんしゃ)に乗(の)っていたら、車(くるま)にぶつけら()たんです。
- 33 航空便(こうくうびん)で出(だ)せ()、間(ま)に合(あ)うでしょう。
- 34 難波(なにわ)産業(さんぎょう)の平井(ひらい)さんと話(はな)してきて()しんだけど。
- 35 出張(しゅっちょう)で今朝(けさ)、金沢(かなざわ)へ行(い)か()ました。
- 36 その男(おとこ)に無理矢理(むりやり)名前(なまえ)を書(か)か()れました。
- 37 橋本(はしもと)さんのお宅(たく)に何度(なんど)電話(でんわ)して()、誰(だれ)も出(で)ないんですが。
- 38 子供(こども)の頃(ころ)は、ここでよく虫(むし)を取(と)った()のですよ。
- 39 三村(みむら)さんに図書館(としょかん)の前(まえ)で待(ま)つ()うに言(い)われた。
- 40 おなかがいっぱいなら、無理(むり)して食(た)べ()くてもいいです。
- 41 ストライキだから、電車(でんしゃ)が走(はし)っていない()けですね。
- 42 今日(きょう)は日曜日(にちようび)な()に、お仕事(しごと)ですか。