Watching video or studying?
An investigation of the extramural activities and Japanese language proficiency of foreign language learners of Japanese

Andreas Bengtsson
Acknowledgements

This study is dedicated to my family, without whose support I never would have been able to complete it.

I am also indebted to the participants in this study and the staff at the Department of Oriental Languages for their assistance during the data collection process.
Titta på video eller studera?
En undersökning av extramurala aktiviteter och japansk språkfärdighet hos inlärare av japanska som främmande språk

Andreas Bengtsson

Sammanfattning på svenska

Resultaten från studien indikerar att extramurala aktiviteter som ger stöd till främmandespråksinlärare i form av tid till processning av språkligt inflöde och/eller kombinerad användning av modaliteter verkar ha en positiv effekt på främmandespråksinlärning.

Nyckelord: Extramurala aktiviteter, främmandespråkfärdighet, andraspråkstillägnande, japanska, vuxna inlärare, lucktest, självbedömning, media, modalitet.
Watching video or studying?
An investigation of the extramural activities and Japanese language proficiency of foreign language learners of Japanese

Andreas Bengtsson

Abstract
This study examined the extramural activities, that is, what a language learner does with the target language outside of class time, in Japanese of adult beginner level foreign language learners of Japanese studying at Stockholm University, Sweden, and how these activities relate to Japanese language proficiency. The study looked at both extramural activities and foreign language proficiency from a holistic and quantitative perspective. The participants' extramural activities were measured through self-reported data in a questionnaire, and several measures; a cloze test, earlier grades, and self-evaluations; were triangulated and used to provide an adequate measure of general Japanese language proficiency.

The results indicate that extramural activities which provide a foreign language learner with enough time for thorough processing of input and support through the usage of several cooperating modalities seem to have a positive effect on general foreign language acquisition.

Keywords: Extramural activities, foreign language proficiency, incidental language acquisition, Japanese, adult learners, cloze test, self-evaluation, media, modality
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1 Introduction

Those who decide to learn a foreign language face a monumental task. They will be in a situation where they are trying to learn a language with little or no contact with the target language environment, and might only encounter the target language in classroom settings. Getting access to authentic target language input, as well as opportunities for producing output, is problematic in cases like these. The alternatives for getting this is using the language outside of classroom settings in different fashions, for example by watching video or reading books in the target language, or communicating with native or non-native speakers through Skype calls or chatting. The question is whether these activities have any effect of foreign language acquisition.

It has been shown that exposure to different types of media in a target language can result in incidental language acquisition (i.e. language acquisition as a result of an activity which had another goal, such as enjoyment) of vocabulary (Eckerth and Tavakoli, 2012; Ellis and He, 1999; Hulstijn, 1992; Konopak et al, 1987), listening comprehension (Hayati and Mohmedi, 2011; Mitterer and McQueen, 2009; Yoshino et al, 2000), and, to certain extents, grammar (De Jong, 2005; Lee, 2002). Most research on this has, however, been experimental. It often has a procedure where target language input is shown to language learners in a classroom context as a stimulus, for example showing a video, and pre- and posttests of a particular aspect of language proficiency to see whether there were any gains from the stimulus. In recent years, there has been some attention to the relationship between what foreign language learners do with the target language extramurally, that is to say outside of the classroom environment, and foreign language proficiency, with results pointing to gains in oral proficiency (Sundqvist, 2009), vocabulary (ibid.; Sylvén and Sundqvist, 2012), translation skills (Kuppens, 2010), as well as writing proficiency (Olsson, 2012). This research has had a holistic perspective of extramural activities in the target language, but has only looked at a specific type of proficiency in the target language. In other words, there is a lack of research which investigates both extramural activities and general target language proficiency from a holistic perspective, and there exists a need to fill this knowledge gap.

The goal of this study was to describe the extramural activities in Japanese of adult beginner level learners of Japanese as well as their Japanese language proficiency, and then look for relationships between extramural activities and Japanese language proficiency. The participants' extramural activities were measured through self-reported data, and their general Japanese language proficiency was measured through triangulation of the results from a cloze test, the participants' self-evaluations of their Japanese language proficiency, and the participants' grades from the preceding Japanese language courses.

In the following sections, the background of this study as well as research questions will be presented. Then, the methodology of the study as well as the results will be presented. Lastly, the results will be discussed and the conclusions of this study will be presented.
2 Background

In this section, earlier research on extramural activities and a definition of the term, as well as related research which has looked at the connection between media consumption in a language and proficiency in that language will be presented. Finally, the research aims, the research questions, and the research hypothesis will be presented.

2.1 Foreign language acquisition and second language acquisition

In this study, there will be a distinction between second language acquisition and foreign language acquisition. Second language acquisition is when a language learner acquires a target language in a linguistic environment where the target language is commonly found, for example in the case of an immigrant who learns the majority language of the country. Foreign language acquisition, on the other hand, is when a language learner learns a target language in a linguistic environment where the target language is not commonly found, for example when studying a language not commonly used in a country in school (Abrahamsson, 2009: 14–15; Bijvoet and Fraurud, 2011: 6). In other words, there is a difference in access to target language, outside of time in classes, as well as acquisition of language proficiency between foreign and second language acquisition. While there seems to be no difference in foreign and second language acquisition when it comes to the acquisition of morpho-syntax, differences can be found in their acquisition of pragmatics and lexicon, with the students in a target language environment achieving better in these areas (Håkansson and Norrby, 2010). In addition, the term foreign language acquisition will be used, rather than foreign language learning in this study, in order to encompass both incidental and intentional acquisition of a foreign language.

2.2 Extramural activities

Most of the research on relations between media consumption in a target language and proficiency in that language has been done in classroom contexts through the introduction of the media as a stimulus, but some research has been done on the relationship between target language proficiency and activities in that language in the participants' spare time, that is to say the participants' extramural activities. In this part, extramural activities, the origin of the term and the definition of extramural activities used in this study will be presented, as well as the major finds of research done on extramural activities.

2.2.1 A definition of extramural activities

In her doctoral dissertation, Sundqvist (2009: 25–26) coined the term extramural English. The term was used to describe situations where students of English used or were exposed to English outside of school contexts, such as when watching television shows in English. The term encompasses both input and output in the target language, and includes both activities performed alone as well as together with other people. There are no demands for intention for learning from the language learners in their extramural English, although there is room for intention. This means that even though the language learners can do activities covered by the term with the purpose of improving their English proficiency, there is no need for intent and
the language learners can also do these activities simply because they enjoy them. Furthermore, according to Sundqvist the term generally encompasses activities the language learners do voluntarily, but it can also be used for involuntary activities, or at least activities the language learner had not planned to do, such as chance encounters with tourists who ask for directions in English. Sundqvist discussed this concept in a context of acquisition of English, and she often used the phrase extramural English activities (or EE activities for short). In this study, second language acquisition is not believed to be different depending on what language is studied, although linguistic distance can matter when talking about specific cases (see for example Lindgren and Muñoz, 2012), and therefore extramural Japanese will not be used as a term in this study. Instead, the term extramural activities will be used with the same meaning as the one used by Sundqvist. Of course, this study looks at extramural activities in Japanese, and the term extramural activities will be used to indicate only those done in Japanese. However, it is important to put the focus on the activities, and not to make distinctions between languages, which is why only the term extramural activities will be used henceforth.

Apart from this distinction, in the operationalization of what constitutes using or being exposed to a language outside of school contexts, all activities in which an individual variation can be expected in regards to how much time is spent on the activities have been included. It can be expected that all students in a class have more or less have the same amount of lectures or similar activities, both in terms of number of lectures and how much time is spent on these lectures. It can also, for example, be expected that they have the same number of assignments to do outside of class. But it cannot be expected that they will spend the same amount of time on these assignments, since this will be affected by proficiency in the target language, available time, motivation, and so forth. In other words, it is likely that there will be an individual variation for how much time students spend on assignments, and in extension for how much time they study. Therefore, study time outside of scheduled lectures and similar activities have been included in the definition of extramural activities, along with media consumption or other usages of the target language, in this study.

2.2.2. Earlier research on extramural activities

In her dissertation, Sundqvist (2009) looked at the relationship between extramural English of Swedish ninth graders and their oral proficiency, as well as their vocabulary, in English. She found correlations between the total time spent on extramural English per week and her participants' oral proficiency in English, and when dividing her participants into groups depending on their extramural English, found that the correlation was strongest for those who had a relatively small amount of extramural English per week. Indicating that even small gains in extramural English can have an impact on the oral proficiency in cases like these. Sundqvist also found a correlation between extramural English per week and vocabulary knowledge in English. In addition, she found a positive correlation between extramural English and self-efficacy. For all of these correlations there were, however, gender differences, where correlations were significant for boys, but not girls. Sundqvist interpreted this as a result of a difference in what types of extramural English activities boys and girls take part in, and highlights that activities, "...which require learners to be active or productive
are more important for learners' oral proficiency and vocabulary..." (ibid. 203). Sundqvist identified playing video games, surfing the internet and reading as activities that fulfill the criteria set above, whereas watching video or listening to music does not fulfill the criteria and are therefore less important for oral proficiency and vocabulary knowledge in the target language.

In a later study, Sylvén and Sundqvist (2012) found that the amount of time spent gaming in English correlated with vocabulary knowledge in English, and also hypothesized that the type of game matters. Multiplayer games were evaluated to be more beneficial than single player games because they contain richer input as well as opportunities for interaction. Similarly, Kuppens (2010) found a relationship between playing games in English, as well as watching English-subtitled television and movies, and translations skills between English and Dutch for Dutch-speaking children. In addition, Olsson (2012) found a relationship between writing proficiency in English and amount of extramural English, as well as between grades in English and amount of extramural English for 16-year-old Swedish students.

2.3 Incidental foreign language acquisition

It is possible to divide foreign language acquisition, or any learning for that matter, into explicit and implicit learning. Explicit learning is learning as a result of conscious attention and effort on the part of the learner, in other words the learner actively tries to learn something, whereas implicit learning is learning without conscious attention or effort, for example when picking up words from conversations in the target language. (Ellis, 1994: 1–2). Studies looking at this implicit learning of a foreign language, or incidental foreign language acquisition as it is commonly referred to, often focus on vocabulary acquisition, but lately there have been more studies on other aspects of language learning.

In this section, which contains five parts, research looking at incidental, that is to say implicit, foreign language acquisition will be presented. In the first part, research done on incidental vocabulary acquisition, which is the field in which most research has been done will be presented. In the second part, the discussion will be widened and research done on other kinds of incidental foreign language acquisition will be presented. In the third part research on the differences between modalities will be presented. In the fourth part research on non-linguistic gains from extramural activities or consumption of target language media will be presented. Finally, in the fifth part some of the explanations for successful incidental foreign language acquisition in the research review will be summarized.

2.3.1 Incidental vocabulary acquisition

In studies looking at incidental vocabulary acquisition it has been shown that vocabulary can be acquired from a wide range of different activities. Eckerth and Tavakoli (2012) found that both receptive and productive knowledge of lexical items can occur when reading, and that both frequency and relative elaboration of word processing, which was tested by either providing the participants with glosses or through gap-filling exercises in their study, had a positive effect on word retention. Ellis and He (1999) got similar results when looking at modified input and interaction, with stronger gains from interaction. In their discussion, they indicate that the deeper processing provided by interaction could explain the difference in
gains, but that it is uncertain because interaction provided the learners with a, "...qualitatively different discourse experience" (ibid. 298). Hulstijn (1992: 121–123) also pointed to processing, or higher or lower amounts of mental effort, as a causal variable for retention of vocabulary. In addition, he raised the point that while incidental vocabulary acquisition can occur from reading, the chance of acquisition to occur after reading a text in which a word only occurs once is very low. Konopak et al (1987) compared incidental vocabulary acquisition to intentional vocabulary acquisition from reading, and found that there was less incidental acquisition than intentional acquisition, but that there was significant acquisition nonetheless. In addition to acquiring vocabulary incidentally from reading and interaction, it has been shown that it can also be acquired from watching video with subtitles (Sydorenko, 2010), or from playing video games with supplementary materials (Ranalli, 2008). In other words, it has been shown that incidental vocabulary acquisition can occur as a result of activities in several different modalities. In addition, common variables which seems to influence the retention of vocabulary seems to be the frequency of occurrence and the degree of word processing.

2.3.2 Other forms of incidental foreign language acquisition

The research presented above has looked at incidental vocabulary acquisition, but that is not the only kind of incidental foreign language acquisition which has been investigated. Video with and without subtitles has been shown to have positive effects on listening comprehension (Hayati and Mohmedi, 2011; Mitterer and McQueen, 2009; Yoshino et al, 2000), and the impact of the usage of subtitles will be discussed more in detail in the section about modalities (part 2.3.3). In addition, there has been some research on incidental acquisition of grammar. In a study on whether noun-adjective gender agreement could be acquired from receptive and productive oral tasks, De Jong (2005) found that especially receptive knowledge of grammar, but also to a certain degree productive knowledge, could be gained from listening to the target language. Similarly, Lee (2002) found short-term incidental acquisition of receptive knowledge of Spanish future-tense morphology from reading, and that the frequency of occurrences of the target form had the strongest influence on comprehension. However, Van Lommel et al (2006) did not find any incidental acquisition of grammatical rules after exposure to a 25-minute cartoon, both with L1 (first language) and L2 (second language) subtitles. They concluded that while it is possible to acquire vocabulary from a short video, grammatical rules may be too complex to be acquired in such a short time span. In other words, there is support both for and against acquisition of grammar through exposure to extramural activities in different modalities in experimental conditions.

As can be seen in the research presented above, research on incidental foreign language acquisition is often experimental and in a classroom context. Participants are, for example, given some stimulus containing unknown words, often with an accompanying pretest to see which words are unfamiliar to the participants, and are then tested on their knowledge of these words afterwards. They are not informed that they will be tested on these words beforehand, and therefore no intentional learning should take place (Laufer and Hulstijn, 2001: 10–11).
2.3.3 The impact of modality

In a study on the effect of modality of input on incidental acquisition, Sydorenko (2010) found that watching video with subtitles was beneficial for vocabulary acquisition, while watching the same video without subtitles was beneficial for improving listening. This indicates that extramural activities in different modalities can affect different kinds of language proficiencies. For example in Sydorenko's study, where watching video with speech in the target language, that is to say audio input combined with supporting video, had a different effect than hearing the same audio without video, as well as watching the video with subtitles in the target language, that is to say audio and text input combined with supporting video. Differences in results depending on modality has been reported in other studies as well, both for which modality is used, how many of them are used, and for languages used in these modalities.

Al-Seghayer (2001) found that video combined with printed text definitions were more effective for vocabulary acquisition than pictures combined with printed text definitions. This indicates that not all modalities are equally effective as input. Similarly, Guichon and McLornan (2008) found that listening comprehension was increased when the audio was combined with visual input in the form of video, and further increased with the addition of subtitles. In other words, it seems that comprehension increased as more modalities were added, as long as the information given in the different modalities was related.

When it comes to whether to include subtitles or not, it has been shown that bimodal subtitles, that is to say when both subtitles and speech in the video are in the same language, are beneficial for content comprehension of video with speech in an L2 and for vocabulary acquisition (Etemadi, 2012; Hayati and Mohmedi, 2011; Holobow et al., 1984; Mitterer and McQueen, 2009). Furthermore, so called reverse subtitling, which is when L1 speech and L2 subtitles are used in a video, has also been shown to be beneficial in this regard (Holobow et al., 1984). The issue is not as clear when it comes to standard subtitling, that is to say when a video has L2 speech and L1 subtitles. Some have argued that it is beneficial in some cases (Hayati and Mohmedi, 2011; Yoshino et al., 2000), some that it has no benefits (Holobow et al., 1984), and some that it has negative effects on vocabulary acquisition as well as listening comprehension of unfamiliar accents in the L2 (Mitterer and McQueen, 2009). Those who support the last alternative have argued that L1 subtitles act as lexical interference, and move the focus away from the L2 speech. Others have argued that the difference in effects from standard subtitling is dependent on the L2 level of the participants, where those with a low level in the L2 are helped in their content comprehension whereas those with a higher level are hindered by standard subtitling (Hayati and Mohmedi, 2011; Yoshino et al., 2000).

2.3.4 Other gains from media consumption

Apart from pure linguistic gains as a result of media consumption, it has also been shown that media consumption can influence other factors, such as motivation (Etemadi, 2012). After an extensive reading program where the students were instructed to find, and read, material by searching the internet, Arnold (2009: 360) found that the program had managed to, "...increase students' motivation to read, raise their confidence in their ability to read L2 texts, improve their reading ability, and encourage learners to read for pleasure outside of class."
Pérez Niño (2010) had similar results of increased motivation, confidence, and enjoyment of English class when music was used as part of the language learning activities. In addition, it seems like games can function as a social activity where language learners have the possibility to use the target language through repetition or expansion of utterances in the game or comments on what is happening in the game (Piirainen-Marsh and Tainio, 2009). These variables can, in turn, have positive effects on students' language acquisition (for further discussion of motivation, attitude, and language learning, see Oroujlou and Vahedi, 2011).

2.3.5 What influences incidental foreign language acquisition
Motivation was defined by Dörnyei and Ottó (1998: 65) as:

...the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritised, operationalised and... acted out.

It is commonly known that there is a relationship between success in language acquisition and motivation (see for example Abrahamsson, 2009; Lightbown and Spada, 2006; Oroujlou and Vahedi, 2011). In other words, it is possible that degree of motivation of language learners, which can have increased as a result of doing extramural activities, influences how successful those language learners are in incidental foreign language acquisition.

As can be seen in the research above, depth of processing has often been pointed out as another possible factor for successful incidental foreign language acquisition as a result of extramural activities. However, the definition of processing used in these studies is not very clear, even though many of them pointed to depth of processing as an explanation of their results. On the topic of word processing, Laufer and Hulstijn (2001) discussed the concept of involvement, which is a combination of the three factors need, search and evaluation. In other words, the experience of need a language learner has for understanding an unfamiliar word in order to comprehend linguistic input, the search for the meaning of the word (for example through usage of a dictionary or by asking someone else), and the evaluation of the meaning of a word in order to judge whether it is fitting for the context or not. The more of these three factors are present, the deeper the processing will be. In the same article, they proposed the Involvement Load Hypothesis, which theorizes that, "...higher involvement in a word induced by the task (natural or artificial) will result in better retention..." (ibid.: 20). In other words, they argued that the degree of involvement, as defined above as an operationalization of depth of processing, determines whether a word is retained or not in the long term. This definition seems to go in line with the results pointing to incidental vocabulary acquisition as a result of extramural activities discussed above. The Involvement Load Hypothesis may, however, not be valid for incidental foreign language acquisition not related to vocabulary, and it is uncertain what influences acquisition in these cases.

2.4 Summary
In this research overview, the theoretical background for this study has been discussed, the term extramural activities has been defined, and both research done within the field and related research which has looked at the connection between media consumption in a
language and proficiency in that language has been presented. This review included research about the acquisition of different types of language proficiencies as a result of exposure to different types of media, as well as possible explanations for successful incidental foreign language acquisition.

2.5 Research questions

As can be seen in the review above, some areas of incidental foreign language acquisition, especially incidental vocabulary acquisition, and the relation to extramural activities or media consumption has received much attention, whereas other areas are mostly unexplored. It is unknown what the effects are, if any, of extramural activities on speaking proficiency, writing proficiency, or overall foreign language proficiency. Most of the research that has been done was also experimental, and was done in a classroom context (Laufer and Hulstijn, 2001: 10–11). What foreign language learners do in their own time, whether it is done with the intention of learning or just for fun, and how it relates to their proficiencies in the target language is largely unknown. In other words, there is a lack of empirical data of foreign language learners’ extramural activities and how it affects their foreign language acquisition.

This is highly interesting since, in my experience, both foreign language learners and foreign language teachers seem to believe that there is a relationship between extramural activities and proficiency in the target language, despite the lack of research. As a foreign language learner of Japanese, I often heard people say how important it was to use Japanese outside of class. I heard other students say that reading in Japanese really helped them to become more proficient, or that they viewed extramural activities in Japanese as study time. I believe that every language learner is familiar with the phrase "When I am watching a movie I am actually studying, because it is in [the foreign language of study]." Considering this, it is surprising that so little research has been done on this, and there is a large discrepancy between what people seem to believe and what can be supported through empirical data. Therefore, there exists a need to explore what extramural activities foreign language students do and how these activities relate to foreign language proficiency.

The aim of this study is to describe the extramural activities in Japanese of foreign language learners of Japanese, as well as to look at the relationship between these extramural activities and the participants’ proficiency in Japanese. These two different groups of variables will be investigated from a holistic viewpoint, as opposed to earlier research that has mostly focused on a certain extramural activity and a certain language proficiency. Because of this, the current study will not use any experimental methods. Instead, information about the participants' extramural activities will be gathered through the usage of a questionnaire and a language diary, whereas their proficiency in Japanese will be measured with a cloze test, self-evaluations, and their grades. By using different measures for extramural activities and the participants' proficiency in Japanese, it is possible to increase the validity of the measures through triangulation. This study has a quantitative approach, and will focus on how much time is spent of different types of extramural activities, but no claims in regards to the quality of that time will be made.

This study has two major research questions, with accompanying supplement questions. They are as follow:
1. What kinds of extramural activities in Japanese do beginner level learners of Japanese who study at a university do? How many hours per week and for how long have they been doing these activities?

2. What is the relationship between extramural activities in Japanese and Japanese language proficiency? Are there any differences depending on the type of activity and the measure of Japanese language proficiency, and what are they?

It is hard to say to what extent the population investigated in this study will do extramural activities in Japanese since no similar research has been done. However, in my experience as a foreign language learner of Japanese it is common for students of Japanese to watch anime, read manga, listen to Japanese music, or consume other types of media produced in Japan. These media are also easily accessible through the internet and students of Japanese can consume these with little effort. Therefore, the hypothesis to the first research question is that the participants will do a wide range of extramural activities in Japanese and spend a large amount of hours per week on these extramural activities. In addition, they will have been doing some extramural activities for a long time. I believe that especially watching video in Japanese is an activity that many of the participants will have started doing even before starting to study Japanese.

Earlier research has found positive correlations between certain areas of language proficiency and total number of hours spent on extramural activities. Furthermore, differences have been found for different types of extramural activities (see for example Sundqvist, 2009). Experimental research where an extramural activity is introduced to language learners has also shown gains in different types of foreign language proficiency as a result of this. Therefore, the hypothesis for the second research question is that there will be a positive correlation between overall time spent on extramural activities in Japanese and Japanese language proficiency. In addition, it is hypothesized that there will be differences depending on extramural activity, with a higher correlation for activities which requires the language learner to be actives such as reading or playing video games.

3 Method

In this section, the criteria set for the participants and the reasons for choosing the criteria, as well as a brief summary of the characteristics of the participants will be discussed. Secondly, the data collection process and the different kinds of data collected will be discussed. Two different kinds of data were collected for this study. Information about the participants' extramural activities and other background variables, collected through a questionnaire, and measures of the participants' Japanese language proficiency, collected through the participants' earlier grades in Japanese, a cloze test, and a self-assessment. Finally, the analysis of the data will be discussed.
3.1 Participants

Earlier studies about the impact of extramural activities in Sweden have focused on extramural English and elementary and high school students (see Olsson, 2012; Sundqvist, 2009; Sylvén and Sundqvist, 2012). While of great importance, it is possible that the results of these studies are influenced by factors other than extramural activities. When comparing the situation of extramural English for four different European countries, Sylvén (2013: 309–310) brought up the point that English is very common in Sweden. English language television shows and films are generally subtitled rather than dubbed, and English is commonly used in music, commercials, etc. English is also a dominant language globally as well as in Sweden (Hyltenstam, 2004: 36–38) and has a high status. There are even some claims that English has taken the characteristics of a second language in Sweden, rather than a foreign language, in out of school settings (Phillipson, 1992: 25; Viberg, 2000: 30). In other words, it is likely that the participants in the studies mentioned above have been exposed to a large amount of English from an early age, which means that there might be less individual variation in regards to extramural English, as well as a relatively low amount of individuals with little or no extramural English. Apart from the amount of potential extramural English, a related factor is the age of onset for the participants. Earlier research have shown that, in general, those with a lower age of onset achieve a higher level in the L2 than those with a higher age of onset (Abrahamsson and Hyltenstam, 2009; Hyltenstam and Abrahamsson 2003). Since English is abundant in Sweden, we cannot be certain that the results of the studies above are not influenced by a difference in age of onset for the participants.

In order to lessen the potential impact of these other variables, it was decided that the target language of the participants should be a language which is not commonly encountered in Sweden, and that the participants should be adults studying at a beginner level in a Swedish university. While this limits the population and the number of potential participants, it provides the opportunity to study the effects of extramural activities on foreign language learning without interference from the factors mentioned above.

It was decided that the target language should be Japanese. In part because it is a language which is very different from Swedish, and in part because there is a large variety of accessible media in Japanese (such as manga, anime, films, music, and so forth) through usage of the internet, even though they are not commonly available in Sweden. This means that those who want to access Japanese language media can do so even though it is unlikely for a person to encounter Japanese language media accidentally.

A beginner level Japanese language course at Stockholm University was identified as fitting and data was collected on the first day of the second semester, or Japanese 2 as it is called. The first semester, Japanese 1, consisted of full time studies, that is to say 30 credits or 800 hours spread out over 20 weeks, divided into four courses: Basic grammar 1, 10 credits; Basic writing 1, 7.5 credits; Practical language usage 1, 5 credits; and Introduction to the Study of Japanese, 7.5 credits (my translations). The course Introduction to the Study of Japanese 1 dealt with a historical, cultural, and political overview of Japan and not with language studies. Therefore it will not be dealt with further in this study. In the course Basic grammar 1, the students were supposed to learn basic knowledge of, and gain proficiency in, Japanese grammar and syntax and it consisted of both theoretical and practical parts. In the course
Basic writing 1, the students were supposed to learn basic knowledge of, and gain proficiency in, the two phonetic writing systems *hiragana* and *katakana* as well as about 200 of the signs in the ideographic *kanji* writing system. It also consisted of both theoretical and practical parts. In the course Practical language usage 1, the students were supposed to acquire basic practical proficiency in written and spoken Japanese, and it only consisted of practical parts (Department of Oriental Languages, 2013). In total, 600 hours of the first semester was spent on Japanese language studies.

42 of the participants responded to the questionnaire and cloze test in paper form at the same time, after the first lecture of Japanese 2. Two participants were unfortunately not able to respond at that time and therefore completed the questionnaire on their own by filling in an electronic pdf-file and e-mailing it to the author. No significant differences were found for how the questionnaire was filled in and all participants are treated as one group in the analysis.

### 3.2 Data collection

In this part, the data collection process and the different tools used in data collection will be discussed. The different tools were a questionnaire, a language diary, a cloze test, and the participants' grades from the course Japanese 1 which was held during the autumn semester 2013.

#### 3.2.1 Questionnaire

The questionnaire (which can be found in appendix 1) contained five different parts and was five pages long. The first part contained information for the participants, such as the purpose of the study, how and what data was collected, how the data would be treated after collection, the rights of the participants in the study, as well as information about how to contact the author. The participants were asked to provide contact information, in the form of an e-mail address, and write their signature to show that they agreed to the conditions of the study and allowed the author to acquire their earlier grades in Japanese. In addition, the participants were able to mark whether they wanted the results of the study upon completion, and if they were interested in take part in further data collection if necessary.

The second part was about the background information of the participant and contained questions about the participant's gender; the participant’s mother tongue, as judged by self-evaluation; how long the participant had studied Japanese, and the participant’s age of onset (which was defined as when they started to study Japanese in this study, since the chance of encountering authentic Japanese in Sweden is very low); whether the participant had lived in Japan or not, and how long they had lived there; and if the participant had studied Japanese somewhere other than at Stockholm University, with the possibility of noting down where they studied Japanese in regards to school and country, as well as how much time they studied there.

The third part was about the participant's extramural Japanese and was subdivided into two sections. The first section contained questions about how long time, answered in years and months, the participant had done certain activities in Japanese. The activities were watching video with Japanese speech, reading in Japanese, writing in Japanese, playing games in
Japanese, and communicating in Japanese. There was a divide between using written Japanese for real-time, or close to, communication with another person, and activities where the participant is not communicating with another person directly, such as when reading a book or writing a diary. This divide was explained in the questionnaire through the usage of examples and in the wording of the question, since the question about communicating with others specified that it included both written and spoken communication. This divide was used to separate situations where input can be made more comprehensible to a language learner through modified interaction from situations where interaction cannot be easily modified (for a further discussion on input and modified interaction, see Long, 1981).

The second section of the third part contained questions about how much time per week, answered in hours and minutes, the participant did certain activities in Japanese on average. The activities were divided into nine categories, which were then divided into sub-categories in some cases. In these cases, the first question was about the total time spent on a certain activity, and the following questions were about how much of that time they spent on certain variations of the activity. The first category was watching video with Japanese speech, which was then divided into watching video without any subtitles, with subtitles in Japanese, and with subtitles in a language other than Japanese. The second category was reading Japanese text, which was then divided into reading text in combination with contextual pictures (such as graphic novels or picture books) or without contextual pictures (such as books, news articles, or Facebook). The third category was writing in Japanese. The fourth category was listening to music with Japanese lyrics. The fifth category was listening to recorded speech in Japanese (for example podcasts or radio shows). The sixth category was playing games in Japanese, which was then divided into playing alone (i.e. single player) and playing with others (i.e. multiplayer). The seventh category was communicating with others in writing. The eighth category was communicating with others in speech. The ninth category was studying Japanese outside of lectures and the like, which was then divided into studying grammar, practicing writing and reading (for example memorizing kanji signs), practicing speaking Japanese, and memorizing Japanese words. It was decided to have practicing writing and reading in one category, since the two activities are often done together when studying. Lastly, there was space to report on other activities which the participant felt did not fit into any of the present categories.

In earlier research (see for example Olsson, 2012; Sundqvist, 2009), questions used for measuring extramural activities have mostly focused on different kinds of media. For example, there has been a distinction between watching television programs and watching films, or between reading books, reading newspapers, and surfing on the internet. However, the rationale for this division is never clearly explained. It is unclear in what way it is significantly different for second language speakers to watch films as compared to watching television programs. Furthermore, Sundqvist (2009: 206–207) states that the measures she used for extramural activities in 2009 needs to be adapted to new technology and new developments in future use, and proposes the addition of new categories such as watching YouTube, writing a blog, and using Facebook. In other words, it seems like the methods used for measuring extramural activities in earlier research are not able to provide a clear enough picture of participants’ extramural activities.
Because of this, extramural activities was divided into modalities, and combinations thereof, in this study rather than media by looking at what kind of linguistic input and output can be found in the activity. The different types of input are reading text; hearing; and seeing non-linguistic contextual information, for example the pictures accompanying text in graphic novels. The different types of output are producing text, and speaking. Furthermore, information about how much time the participants are studying, and what they are studying was added, since we can expect a degree of individual variation. Study activities do not always fit the categories described above, which is why they are grouped in a separate way. The grouping was decided by combining factors from linguistic input and output, and the different courses in Japanese 1.

The fourth part of the questionnaire contained questions regarding the participant's motivation, in regards to Japanese language studies. The questions had the form of a 4 scale likert scale, on which the participant was instructed to indicate to which degree they agreed with a statement. Both intrinsic and extrinsic motivation was measured in this part with two statements for each type of motivation. Intrinsic motivation applies to behaviour or activities done for the sake of enjoyment or pleasure, whereas extrinsic motivation applies to behaviour done for the sake of external reward, or any other type of gain from an external source (Dörnyei and Ushioda, 2011: 23–24). In addition, there was also a statement about the general difficulty of studying Japanese.

The fifth and final part contained a self-evaluation of the participant's proficiency in the Japanese language. It used the same format as part four, that is to say a combination of a statement and a likert scale. The statements were about general Japanese language proficiency, writing proficiency, reading proficiency, and speaking proficiency, and were comparative with the other students in the participant's courses. For example, one of the statements was, "Compared to the other people in my courses, I am good at reading in Japanese." The purpose of this part was to measure relative Japanese language proficiency within the sample. Therefore, the results do not give information about whether a participant considers themselves to be good or bad at Japanese, only whether they consider themselves to be better or worse than the other students in their courses. It was determined that it was problematic to separate the participants' listening proficiency from their speaking proficiency because auditory output is often combined with auditory input in communication. Therefore, no questions specifically about the participant’s listening proficiency in Japanese were used in the questionnaire.

The wording of all questions and the design of the questionnaire was tested by asking former and current students of Japanese for feedback, and then adapted according to the feedback.

3.2.2 Language diary
One of the potential problems with measuring the participants' extramural activities in Japanese in the questionnaire is the fact that the data is entirely self-reported. Although it has been shown that self-reported data of average time spent on activities which are performed on a regular basis is reliable (Smith and Jobe, 1994: 139–140), there is a certain degree of uncertainty since the possibility that the participants' recollections are incorrect exists.
Therefore, a one week language diary (which can be found in appendix 2) designed to measure the participants' extramural activities in Japanese was administered to the participants in order to test the reliability of the questionnaire, and its ability to measure the participants' extramural activities in Japanese. Filling out the language diary was explained to be non-mandatory in the instructions, since it was not designed to be used as a measure of extramural activities, but rather to validate the questionnaire. Because of this, only a few participants filled in the language diary.

The language diary contained the same questions as the ones in the second section of part three in the questionnaire, that is to say the section about how much time on an average week the participant performed a certain activity. However, there was no overall question for watching video with Japanese speech, reading Japanese text, playing games in Japanese, or studying Japanese outside of lectures. Rather, the sub-categories were used and the overall time spent on these categories was calculated manually by the author. The format of the language diary was a one page table, with extramural activities in rows and seven days in columns, with room for both hours and minutes spent on an activity.

3.2.3 Grades from earlier courses

The participants' grades for the courses Basic grammar 1, Basic writing 1, Practical language usage 1, as well as the overall grade for Japanese 1, were collected from the department responsible for the courses. Only grades from courses completed in the fall semester 2013 were used in this study, in order to limit the time that passed from completion of the courses, and therefore the grading of the participants, and all other data collection. Some of the participants' had completed the courses at an earlier point of time, and their grades were therefore omitted in the analysis.

The grading system for Japanese 1 follows a seven grade system, with five passing grades and two non-passing grades. The distance between each grade is not fixed, meaning that they are rank scale variables. For the passing grades, the lowest grade is E and the highest is A. The two non-passing grades, Fx and F, are given when there is not enough material to set a passing grade, for example when a student has not completed all assignments, or are otherwise unable to complete the course. This includes students who dropped out of the course. Due to the large range of possible reasons for not completing a course, these grades have not been included in the final analysis. It is simply impossible to judge whether a student has a non-passing grade because of a lower proficiency in the target language, missed exams or inability to complete assignment due to sickness, or any other plausible reason. In addition, they represent a very large range of possible proficiencies, stretching from no proficiency in Japanese to almost enough proficiency for a passing grade (or indeed even enough proficiency for a passing grade which was not demonstrated to the teacher due to other circumstances), which makes these two grades even more problematic as measures of Japanese language proficiency. Instead, only the passing grades were used in the analysis, since they at least represent a clear minimum proficiency and possible range.

Grades from these courses were chosen as one of the measures of language proficiency because they provide insight into the participants' overall performance from a longitudinal perspective. It is for example, possible for a participant to be sick while doing the cloze test,
and the participant could therefore perform worse than expected. The grades, on the other hand, are determined on the base of a larger pool of data collected from a longer period of time, that is to say the full length of the course, by a professional. All courses contained minor tests administered on a regular basis (Department of Oriental Languages, 2013), and lecturers at Stockholm University are required to have completed a minimum of 15 credits of courses in university pedagogy (Stockholm University, 2013). While it can be argued that grades are a poor indicator of language proficiency, for example because the course goals can differ from skills directly related to language proficiency such as meta-linguistic knowledge, it can also be argued that they at the very least give indications. Furthermore, they are complemented by other measures of Japanese language proficiency in this study, therefore providing a stronger overall measure of the participants' Japanese language proficiency through the use of triangulation.

3.2.4 Cloze test
The cloze test (which can be found in appendix 3) was constructed from a text used for reading on level 4 of the Japanese-Language Proficiency Test (JLPT N4). The Japanese Language Proficiency Test ranges from 5, the lowest level, to 1, the highest level. Level 4 is defined as the level where, "[o]ne is able to read and understand passages on familiar daily topics written in basic vocabulary and kanji." (Japanese-Language Proficiency Test, 2012). It consisted of a short self-introduction from a male American student studying in Japan where he briefly talks about why he decided to study in Japan, and about his life. The text was used without any alterations, and furigana, that is to say text which shows the pronunciation of the ideographical signs kanji, was added to each kanji.

When constructing a cloze test, there are several ways to determine test items in the text. One is to delete every Nth item, such as every fifth or every seventh item. Another is to do a rational deletion of items according to their role in the text. When doing this, it is possible to delete items from different categories, for example content words, such as nouns; items related to textual cohesion, such as conjunctions; and items related to syntax, such as verbs. By doing a rational deletion of items, the cloze test becomes more demanding in regards to overall comprehension of the test (Gellert and Elbro 2012: 17–20). Therefore, rational deletion of items was used in the construction of the cloze test used in this study.

The text consisted of 156 lexical items, with word boundaries defined on a morpheme level (for further discussion about word boundaries in Japanese, see Douglas, 1994: 118, 120–122), and 19 lexical items were deleted in the construction of the test. These 19 lexical items consisted of 7 content words, 6 items related to textual cohesion, and 6 items related to syntax. Shahnazari-Dorchech et al (2012: 147) found that the number of test items on a cloze test for beginning and intermediate levels should be no more than 20–25 items. In order to not exceed this limit and provide enough information for the decoding of test items from the different categories, the number of deleted items was set at 19, with approximately every eighth item in the text deleted.

The gaps in the cloze test were open ended, and the participants were instructed to fill the gaps with a suitable lexical item. They were then graded on the acceptability of the filled gaps. In other words, whether the participants had written an item that was syntactically and
semantically fitting. This method of grading was chosen over an exact word method, where an item is only graded as correct if it is the same item as the one used in the original text, since the acceptable method correlates more highly with other tests of language proficiency and comprehension than the exact method (Douglas, 1994: 126).

The cloze test was administered and collected with the questionnaire. If constructed in the manners described above, it has been shown that a cloze test is a valid measure of general language proficiency, often correlating strongly with longer tests of language proficiency (Gamaroff, 1998; Gellert and Elbro, 2012).

3.3 Analysis
Correlations are a measure of the relationship between two variables, where a positive correlation means that high values of variable A coincides with high values of variable B, and a negative correlation means that high values of variable A coincides with low values of variable B. The strength of the correlation is denoted by the correlation coefficient which stretches from -1 for the strongest possible negative correlation to 1 for the strongest possible positive correlation, with 0 showing no correlations. What constitutes a strong or weak correlation will be dependent on the research field, however, in research on applied linguistics “...we find meaningful correlations of as low as 0.3–0.5 and if two tests correlate with each other in the order of 0.6 we can say that we measure more or less the same thing...” (Dörnyei, 2007: 223). The statistical significance of the correlations in this study will be denoted by one star (*) for alpha levels smaller than 0.05, two stars (**) for alpha levels smaller than 0.01, and three stars (***) for alpha levels smaller than 0.001. When both of the investigated variables are of the ratio or interval type it is possible to talk about a linear relationship, meaning that the increase in variable A is constant for each increase in variable B. For example, if variable B increases from 5 to 10 and variable A increases from 5 to 8 at the same time, it means that variable A will increase from 8 to 11 if variable B increases from 10 to 15. For calculating correlations of this type, Pearson product-moment correlation coefficient is used. When at least one of the variables is of the ordinal type, it is not possible to talk about a linear relationship because there is not a set distance between any two ranks. It is possible to say that rank three is higher than rank two, but not that the difference between rank two and rank three is equal to the difference between rank three and four. Therefore, correlations are calculated differently when ordinal variables are used, namely with Spearman rank correlation coefficient (Butler, 1985). Both of these tests were used in this study, and in addition, partial correlations were calculated in some cases which means that a correlation between two variables is calculated after the influence of a third variable has been removed. By doing this, it is possible to control for the effects of a certain variable when looking at correlations, for example when investigating the relationship between length of residence in a target language environment and proficiency in the target language or between the age of the participant and proficiency in the target language.

In order to analyze the relationship between the results of the cloze test and the participants’ extramural activities, correlations were calculated using Pearson product-moment correlation coefficient using the statistical software SPSS. For the analysis of ordinal scale variables in this study, such as the participants’ motivation, Spearman’s rank correlation coefficient was
used. In addition, partial correlations were calculated in some cases to control for other variables.

When analysing nominal variables, it is not possible to talk about correlations because there is no ranking between the different values, as is the case with gender. Different tests are therefore needed to look at the relationship between nominal variables and other variables. When looking at the relationships between a nominal variable and ratio or interval variables, a parametric test is used, where comparisons are made between the means of the different groups. Results of parametric tests are the only ones presented in this study. When there are two independent groups, an independent t-test is used to calculate whether there are significant differences in the means for the groups or not (Butler, 1985).

3.4 Summary
In this part, the methodology used in this study has been discussed. First, the criteria set for the participants and the reasons for choosing the criteria were discussed, and a brief summary of the characteristics of the participants was presented. Then, the data collection process, the different kinds of data collected, and the analysis of the data were presented.

4 Results
This section includes both descriptive information about the participants and their extramural activities in Japanese, as well as the results of the analysis. When discussing the analysis, correlations between extramural activities, background variables, and measures of Japanese language proficiency will be presented.

4.1 Descriptives
In this part, descriptives of the data will be presented. In the first section of this part, the participants' background variables and extramural activities, as well as their motivation will be presented. In the second section of this part, the results of the cloze test, the participants' grades, and the participants' self-evaluations will be presented.

4.1.1 Background information, extramural activities, and motivation
Due to the strict criteria set for participants, only 44 participants were found in this study. In addition, not all participants completed the cloze test and not all participants had finished all courses in Japanese 1 (see Table 1 for more detailed information). However, there were more than 30 participants for each measure of Japanese language proficiency, and each subset therefore constitutes a large sample (Butler 1985: 55). 28 of the participants were female, 15 were male, and one person was neither (the gender of the participants was self-reported). The mean age was 22.9 years, ranging from 18 to 50 with a standard deviation of 6.1 years. The vast majority of the participants (N=36) were younger than 30 years old. On average, they had been studying Japanese for 17 months. As many as 19 of the participants had studied Japanese before starting Japanese 1 at Stockholm University, and it had at most been six years since they started studying Japanese. Four of them had studied Japanese in Japan, and had studied Japanese between twelve and eighteen months before starting studying at Stockholm.
University. In total, seven of the participants had lived in Japan at some point in their lives, ranging from 2 to 30 months in Japan. The lowest reported age of onset was 15, and judging from the reported data in the questionnaire it seems like the individuals with an age of onset lower than 18 started studying Japanese in high school. 39 of the participants had Swedish as their mother tongue, and the mother tongue of the remaining five participants were Tigrinya, Hungarian, Chinese, Spanish, and Finnish (the mother tongue of the participants was self-reported).

Table 1: Number of participants who completed each measure of Japanese language proficiency.

<table>
<thead>
<tr>
<th>Measure of Japanese Language Proficiency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloze test</td>
<td>36</td>
</tr>
<tr>
<td>Self-evaluation of overall proficiency in Japanese</td>
<td>44</td>
</tr>
<tr>
<td>Self-evaluation of writing proficiency in Japanese</td>
<td>44</td>
</tr>
<tr>
<td>Self-evaluation of reading proficiency in Japanese</td>
<td>44</td>
</tr>
<tr>
<td>Self-evaluation of speaking proficiency in Japanese</td>
<td>44</td>
</tr>
<tr>
<td>Overall grade from Japanese 1</td>
<td>32</td>
</tr>
<tr>
<td>Grade from Basic Grammar 1</td>
<td>36</td>
</tr>
<tr>
<td>Grade from Basic writing 1</td>
<td>35</td>
</tr>
<tr>
<td>Grade from Practical language usage 1</td>
<td>39</td>
</tr>
</tbody>
</table>

The participants participated in all categories of extramural Japanese used in the questionnaire. Although only very few participated in some activities, for example "Playing games in Japanese (N=14) or "Listen to recorded Japanese speech" (N=15), half or more of the participants participated in the vast majority of activities. See Table 2 for a list of number of participants, mean, standard deviation, and range for each extramural activity.

The most common extramural activities were watching video with Japanese speech (\(\bar{x}=7.1\) h/week, N=41), listening to Japanese music (\(\bar{x}=8.5\) h/week, N=36), reading in Japanese (\(\bar{x}=3.9\) h/week, N=36), and studying Japanese (\(\bar{x}=9.5\) h/week, N=41). In these larger categories, there were sub-categories with varying popularity. For example, the category "Watching video with Japanese speech" was subdivided into the categories "Videos without any subtitles" (\(\bar{x}=1\) h/week, N=21), "Videos with translated subtitles" (\(\bar{x}=5.8\) h/week, N=40), and "Videos with subtitles in Japanese" (\(\bar{x}=0.3\) h/week, N=12). In other words, there is a large variance in regards to what written linguistic supports are available, although all sub-categories fulfills the criteria for the main category, that is, a combination of video and Japanese speech. See Table 2 for more information about the participants' extramural activities (note that data for their total time spent on extramural activities was calculated after data collection and it is possible that some activities are done simultaneously, meaning that the actual value might be lower than presented here). There were no significant differences between the questionnaire and the language diary in regards to how much time the participants reported they spend on extramural categories. This strengthens the validity of the questionnaire as a measure of extramural activities.
Table 2: Number of participants, mean time, standard deviation, and range for each extramural activity.

<table>
<thead>
<tr>
<th>Extramural Activity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months doing activity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching video with Japanese speech</td>
<td>42</td>
<td>70.71</td>
<td>47.86</td>
<td>240</td>
</tr>
<tr>
<td>Reading in Japanese</td>
<td>38</td>
<td>21.91</td>
<td>33.57</td>
<td>180</td>
</tr>
<tr>
<td>Writing in Japanese</td>
<td>22</td>
<td>12.86</td>
<td>25.94</td>
<td>120</td>
</tr>
<tr>
<td>Playing games in Japanese</td>
<td>17</td>
<td>15.23</td>
<td>32.99</td>
<td>168</td>
</tr>
<tr>
<td>Communicating in Japanese</td>
<td>29</td>
<td>8.9</td>
<td>14.38</td>
<td>60</td>
</tr>
<tr>
<td>Hours per week doing activity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extramural activities in Japanese</td>
<td>44</td>
<td>38.11</td>
<td>34.65</td>
<td>147</td>
</tr>
<tr>
<td>- Without subtitles</td>
<td>41</td>
<td>7.14</td>
<td>8.82</td>
<td>36</td>
</tr>
<tr>
<td>- With translated subtitles</td>
<td>21</td>
<td>1.04</td>
<td>1.77</td>
<td>7</td>
</tr>
<tr>
<td>- With Japanese subtitles</td>
<td>40</td>
<td>5.77</td>
<td>7.21</td>
<td>30</td>
</tr>
<tr>
<td>- With Japanese subtitles</td>
<td>12</td>
<td>0.33</td>
<td>1.09</td>
<td>7</td>
</tr>
<tr>
<td>Reading Japanese text</td>
<td>36</td>
<td>3.93</td>
<td>7.00</td>
<td>40</td>
</tr>
<tr>
<td>- With pictures</td>
<td>27</td>
<td>2.06</td>
<td>5.01</td>
<td>30</td>
</tr>
<tr>
<td>- Without pictures</td>
<td>27</td>
<td>1.45</td>
<td>2.46</td>
<td>13</td>
</tr>
<tr>
<td>Writing in Japanese</td>
<td>26</td>
<td>2.6</td>
<td>6.35</td>
<td>40</td>
</tr>
<tr>
<td>Listening to Japanese music</td>
<td>36</td>
<td>8.51</td>
<td>12.73</td>
<td>56</td>
</tr>
<tr>
<td>Listening to recorded Japanese speech</td>
<td>15</td>
<td>1.28</td>
<td>2.87</td>
<td>12</td>
</tr>
<tr>
<td>Playing games</td>
<td>14</td>
<td>1.64</td>
<td>3.39</td>
<td>14</td>
</tr>
<tr>
<td>- Single player</td>
<td>14</td>
<td>1.6</td>
<td>3.36</td>
<td>14</td>
</tr>
<tr>
<td>- Multiplayer</td>
<td>2</td>
<td>0.03</td>
<td>0.17</td>
<td>1</td>
</tr>
<tr>
<td>Communicating in writing</td>
<td>25</td>
<td>1.31</td>
<td>3.44</td>
<td>21</td>
</tr>
<tr>
<td>Communicating in speech</td>
<td>25</td>
<td>2.04</td>
<td>4.89</td>
<td>28</td>
</tr>
<tr>
<td>Studying Japanese</td>
<td>41</td>
<td>9.51</td>
<td>7.97</td>
<td>27</td>
</tr>
<tr>
<td>- Grammar</td>
<td>38</td>
<td>3.15</td>
<td>3.36</td>
<td>18</td>
</tr>
<tr>
<td>- Reading and writing</td>
<td>41</td>
<td>3.86</td>
<td>4.43</td>
<td>21</td>
</tr>
<tr>
<td>- Speaking</td>
<td>32</td>
<td>1.62</td>
<td>2.63</td>
<td>12</td>
</tr>
<tr>
<td>- Words</td>
<td>38</td>
<td>3.02</td>
<td>5.1</td>
<td>21</td>
</tr>
</tbody>
</table>

In addition, there is a large variance in regards to how much time per week each participant performs an extramural activity. The standard deviation exceed the mean for almost all extramural activities, which indicates that the majority of the participants are centered around the mean in regards to time spent on the extramural activities, while a minority spend much more time on the activities. In addition, the range is very large for all extramural activities, confirming that a minority seem to spend an exceedingly large amount of time on extramural activities. The same pattern can be seen when looking at how long time the participants have done different extramural activities. The one exception is for how long time they have watched video with Japanese speech, where the standard deviation is actually lower than the mean, suggesting fewer outliers.

The participants had a high level of motivation, but there is a difference between intrinsic and extrinsic motivation. Almost everyone had the highest possible score for intrinsic motivation, but for the questions about extrinsic motivation, the majority of the participants chose an alternative that was only slightly more positive than a neutral option. It should be noted that only two questions were used for each type of motivation, meaning that their motivation might not have been measured properly. The questions were added to give
indications about the participants' motivation, rather than to measure it as exactly as possible. Nonetheless, these results seem to indicate that the participants' motivation is of an intrinsic, rather than extrinsic, nature. In other words, the participants seem to be motivated to study Japanese because they enjoy it, rather than for external gains.

4.1.2 Measures of Japanese language proficiency
Even though all 44 participants filled in the questionnaire, only 36 filled in any of the blanks in the cloze test. Since there were no indications in the comment field after or in the questionnaire about why 8 participants did not fill in anything in the cloze test, it was impossible to know if they were unable to fill any of the blanks or if they just did not want to answer any of them. Therefore, analysis was only done on the results of the 36 who did the cloze test. The lowest score was 1, meaning that all who wrote anything had at least one correct answer, and the highest score was 18, out of a possible 19. The mean score was 6.69 and the standard deviation was 4.03. In other words, the majority of the results were centered in the lower half of the potential score with a few outliers who got higher scores. Frequencies of scores can be seen in Figure 1. There were no significant differences between the different categories of deleted lexical items when it comes to how many correct answers the participants had in each category.

Figure 1: Frequencies of the results of the cloze test
Table 3 shows the number of participants who completed the various courses in Japanese 1, the median, mode, and range for each grade. For the majority of the grades, it seems as if the participants are centered around the lower grades, especially when considering the modes. The medians are slightly higher than the modes, meaning that we have some outliers with better scores in this case as well. It is impossible to know why, but none of the participants had the highest possible grade in Practical language usage 1.

Table 3: Number of participants, median, mode, and range for the grades of each course.

<table>
<thead>
<tr>
<th>Course</th>
<th>N</th>
<th>Median</th>
<th>Mode</th>
<th>Lowest</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese 1</td>
<td>32</td>
<td>D - C</td>
<td>D</td>
<td>E</td>
<td>A</td>
</tr>
<tr>
<td>Basic grammar 1</td>
<td>36</td>
<td>D</td>
<td>E</td>
<td>E</td>
<td>A</td>
</tr>
<tr>
<td>Basic writing 1</td>
<td>35</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>A</td>
</tr>
<tr>
<td>Practical language usage 1</td>
<td>39</td>
<td>D</td>
<td>D</td>
<td>E</td>
<td>B</td>
</tr>
</tbody>
</table>

Table 4 shows the number of self-evaluations for each of the different proficiencies and the most common self-evaluation. This self-evaluation is relative to the other students taking the same course, and is therefore not a measure of absolute proficiency. Rather, it gives indications as to whether participants on average believe themselves to be better or worse than the rest of the participants in one or several of the different types of proficiencies asked about. As we can see, most of the participants believe that they are either slightly better or slightly worse than the rest, and this is also confirmed by looking at the raw frequencies where only a few participants chose one of the stronger alternatives. It is interesting to note that the majority of the participants believe themselves to be slightly better at reading and writing, and slightly worse at speaking and overall proficiency, compared to their peers.

Table 4: Number of self-evaluations and most common self-evaluation for each proficiency.

<table>
<thead>
<tr>
<th>Type of proficiency</th>
<th>N</th>
<th>Most common self-evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall proficiency</td>
<td>44</td>
<td>Slightly worse than others</td>
</tr>
<tr>
<td>Writing proficiency</td>
<td>44</td>
<td>Slightly better than others</td>
</tr>
<tr>
<td>Reading proficiency</td>
<td>44</td>
<td>Slightly better than others</td>
</tr>
<tr>
<td>Speaking proficiency</td>
<td>44</td>
<td>Slightly worse than others</td>
</tr>
</tbody>
</table>

4.2 Relationships between variables

In this part, the different correlations and relationships between variables will be presented. It includes correlations within groups of variables, that is to say correlations between background variables and extramural activities, correlations between different extramural activities, and correlations between measures of Japanese language proficiency, as well as correlations between the measures of Japanese language proficiency and all other variables.

4.2.1 Relationships between extramural activities

If we look at the relationships between different extramural activities in Table 5, in regards to how long time the participants have been doing them, we find very strong and highly significant correlations between how long the participants have been reading in Japanese and
writing in Japanese, how long time they have been writing in Japanese and communicating in Japanese, as well as how long time they have been communicating in Japanese and writing in Japanese. When looking at the relationship between how long time the participants have done certain extramural activities and how much time per week they do certain activities, there are, unsurprisingly, similar patterns for these three variables, and they will be presented below. We find weaker correlations between these three variables and how long the participants have been watching video with Japanese speech, but no correlations between any of these variables and how long time the participants have been playing games in Japanese.

Table 5: Pearson product-moment correlations between different extramural activities (how long time the participants have been doing them)

<table>
<thead>
<tr>
<th>Extramural activity:</th>
<th>Watching video</th>
<th>Reading</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>r = 0.45**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>r = 0.41**</td>
<td>r = 0.9**</td>
<td></td>
</tr>
<tr>
<td>Communicating</td>
<td>r = 0.4**</td>
<td>r = 0.76**</td>
<td>r = 0.86**</td>
</tr>
</tbody>
</table>

How long the participants have been reading, writing, and communicating in Japanese correlate with hours per week spent watching video without subtitles, watching video with Japanese subtitles, reading Japanese without accompanying pictures, communicating with others in Japanese in text, communicating with other in Japanese in speech, as well as total amount of hours per week spent on extramural activities. All of these correlations, as can be seen in Table 6, are either significant or highly significant, and the r value ranges from .3 to .74. In addition, there is a correlation between how long the participants had been reading in Japanese and how much time per week they listen to recorded Japanese speech. There was also a correlation between how long the participants have been playing games in Japanese, and how many hours per week they play games.

Table 6: Pearson product-moment correlations between how long time the participants have done various extramural activities and how many hours per week they do various extramural activities

<table>
<thead>
<tr>
<th>Extramural activity: (h per week)</th>
<th>Reading</th>
<th>Writing</th>
<th>Playing games</th>
<th>Communicating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watching video without subtitles</td>
<td>r = 0.39**</td>
<td>r = 0.4**</td>
<td></td>
<td>r = 0.44**</td>
</tr>
<tr>
<td>Watching videos with Japanese subtitles</td>
<td>r = 0.34*</td>
<td>r = 0.44**</td>
<td></td>
<td>r = 0.59**</td>
</tr>
<tr>
<td>Reading without accompanying pictures</td>
<td>r = 0.35*</td>
<td>r = 0.32*</td>
<td></td>
<td>r = 0.3*</td>
</tr>
<tr>
<td>Listen to recorded speech</td>
<td>r = 0.34*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing games</td>
<td></td>
<td>r = 0.34*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicate in text</td>
<td>r = 0.48**</td>
<td>r = 0.57**</td>
<td></td>
<td>r = 0.74**</td>
</tr>
<tr>
<td>Communicate in speech</td>
<td>r = 0.37*</td>
<td>r = 0.48**</td>
<td></td>
<td>r = 0.61**</td>
</tr>
<tr>
<td>All extramural activities</td>
<td>r = 0.36*</td>
<td>r = 0.41**</td>
<td></td>
<td>r = 0.39**</td>
</tr>
</tbody>
</table>

1 Non-significant correlations have been excluded from this and following tables.
It is worth noting that there were no significant correlations between how long time the participants have been writing in Japanese and how many hours per week they write in Japanese. Similarly, there are no significant correlations between how long time the participants have been reading in Japanese and their overall time spent reading each week, or how many hours per week they read Japanese with accompanying pictures.

If we then look at the relationships between different extramural activities, in regards to how many hours per week the participants do these activities, we find some correlations between different types of activities. Watching video correlates with reading, listening to Japanese music, communicating in speech, and communicating in writing. These correlations have an r value ranging from 0.36 to 0.59. Reading also correlates with communicating in speech, and communicating in writing. In addition, it correlates very strongly with writing, which is interesting because it indicates that there is a strong relationship between how much the participants read and how much they write, and it is possible that these activities are done simultaneously, for example when chatting on the internet in Japanese. Other than that, writing only correlates with studying, and not very strongly so. Listening to music correlates with listening to recorded speech, communicating in writing, and communicating in speech. The only other correlation for listening to recorded speech is with communicating in speech. The only correlation for communicating in writing not reported above is a very strong one with communicating in speech. In other words, there were no correlations between playing games and any other extramural activities. If we compare this with the low number of participants playing games in Japanese and the relatively low amount of mean hours per week that the participants play games, it seems like it is an activity which is not favored by the participants. In Table 7, we can see the exact r value and significance level for each correlation.

Table 7: Pearson product-moment correlations between different extramural activities (how many hours per week the participants are doing them).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Watching video</th>
<th>Reading</th>
<th>Writing</th>
<th>Listening to music</th>
<th>Listening to recorded speech</th>
<th>Communicating in writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td></td>
<td>r= 0.36*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>r= 0.51***</td>
<td></td>
<td>r= 0.92***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening to music</td>
<td></td>
<td></td>
<td></td>
<td>r= 0.41**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening to recorded speech</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r= 0.39**</td>
<td></td>
</tr>
<tr>
<td>Communicating in speech</td>
<td>r= 0.56***</td>
<td>r= 0.39**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicating in writing</td>
<td></td>
<td></td>
<td></td>
<td>r= 0.39**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicating in speech</td>
<td>r= 0.59***</td>
<td>r= 0.44**</td>
<td></td>
<td>r= 0.55**</td>
<td>r= 0.32*</td>
<td>r= 0.88**</td>
</tr>
<tr>
<td>Studying</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2.2 Relationships between extramural activities and background variables
If we look at the relationship between background variables and the participants' extramural activities, see Table 8, we find some significant correlations as well. Rather unsurprisingly,
there were correlations between how long the participants have studied Japanese and how long they have been watching video, reading, writing, and communicating in Japanese (but not for how long they have been playing games in Japanese). Furthermore, if we look at correlations between how long time the participants have been studying Japanese somewhere other than at Stockholm University, the correlation with how long the participants have been watching video disappears. And if we compare those who have studied Japanese before starting to study at Stockholm University with those who only have studied there using independent samples t-test, we find differences in regards to how long they have been reading, writing, and communicating in Japanese, but not for how long they have been watching video in Japanese. Those who have studied Japanese somewhere else have on average been reading Japanese for 30 months more, \( t(42)=3.244, p<0.01 \); writing Japanese for 25 months more, \( t(42)=3.551, p<0.001 \); and communicating in Japanese for 15 months more, \( t(42)=4.075, p<0.001 \). Age of onset, on the other hand, correlated negatively with how long time the participants have been watching video in Japanese, meaning that those who started studying Japanese at an earlier age have been watching video in Japanese for a shorter amount of time than those with an older age of onset.

Table 8: Pearson product-moment correlations between background variables and extramural activities.

<table>
<thead>
<tr>
<th>Extramural activity:</th>
<th>Time studying Japanese</th>
<th>Time studying Japanese somewhere else</th>
<th>Age of Onset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watching video</td>
<td>( r=0.3^* )</td>
<td>( r=-0.36^* )</td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>( r=0.68^{***} )</td>
<td>( r=0.6^{***} )</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>( r=0.49^{**} )</td>
<td>( r=0.52^{***} )</td>
<td></td>
</tr>
<tr>
<td>Communicating</td>
<td>( r=0.43^{**} )</td>
<td>( r=0.54^{***} )</td>
<td></td>
</tr>
</tbody>
</table>

There were no differences between genders or between those with different mother tongues in regards to extramural activities. If we compare those who had lived in Japan (\( N=7 \)) with those who had not using an independent samples t-test we find that those who had lived in Japan have been communicating in Japanese for approximately 16 months longer on average, \( t(42)=2.909, p<0.01 \). Comparing the same groups, we find that those who have lived in Japan on average spend 6.5 hours per week less on studying, \( t(42)=-2.081, p<0.05 \).

So for the most cases, there were no correlations between background variables and extramural activities. The only correlations were for how long the participants have been doing certain activities, meaning that the background variables measured in this study have no relation with what activities the participants are doing regularly (on a weekly basis as defined here) or to what extent they do these activities.

4.2.3 Correlations with grades
Four different grades were used as measures of Japanese language proficiency in this study. The grades from Basic grammar 1, Basic writing 1, Practical language usage 1, and the overall grade from Japanese 1 which is based on the three courses above, plus one more course dealing with Japanese culture, politics, and history.
If we start by looking at Basic grammar 1, the only significant correlations were negative ones with the participants' study time. There were negative correlations between the grade for Basic grammar 1 and how many hours per week the participants study outside of class time, how many hours they study grammar, how many hours they study reading and writing, and how many hours they practice words. There is a high correlation between the grade for Basic grammar 1 and the grade for Japanese 1 ($r_s = 0.91^{***}$), and the same correlations were therefore found when looking at the grade for Japanese 1. No other significant correlations were found for any of the background variables, or other extramural activities, and there were also no correlations for how many hours per week the participants practiced speaking Japanese. In addition, no significant correlations were found between background variables or extramural activities and the grade for Basic writing 1.

The same negative correlations were found between the grades for Practical language usage 1 and how much time per week the participants study outside of class. In addition, there were positive correlations for how long time they have been reading in Japanese, and for how long time they have been communicating in Japanese. Correlations were also found for a few of the background variables, such as time spent in Japan and how long time the participants have been studying Japanese. However, when controlling for these variables and those with positive correlations by calculating partial correlations, the correlations with the background variables were no longer significant. In other words, the important factor was how long time the participants had been communicating in Japanese and how long time they had been reading in Japanese, not how long time they had been studying or how long time they had lived in Japan. It simply seems, rather unsurprisingly, that those who have studied for a longer time or lived in Japan have been doing these extramural activities for a longer time. Finally, there were no correlations between the grade for Practical language usage 1 and how many hours per week the participants did any of the extramural activities. See Table 9 for all correlations between extramural activities and grades.

Table 9: Spearman rank order correlations between Practical language usage 1, Basic grammar 1, and Japanese 1 with extramural activities.

<table>
<thead>
<tr>
<th>Extramural activities</th>
<th>Practical language usage 1</th>
<th>Basic grammar 1</th>
<th>Japanese 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months reading in Japanese</td>
<td>$r_s = 0.33^*$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Months communicating in Japanese</td>
<td>$r_s = 0.39^*$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total time studying out of class</td>
<td>$r_s = -0.54^{***}$</td>
<td>$r_s = -0.52^{**}$</td>
<td>$r_s = -0.43^*$</td>
</tr>
<tr>
<td>Studying grammar</td>
<td>$r_s = -0.53^{**}$</td>
<td>$r_s = -0.47^{**}$</td>
<td>$r_s = -0.35^*$</td>
</tr>
<tr>
<td>Studying reading and writing</td>
<td>$r_s = -0.55^{***}$</td>
<td>$r_s = -0.44^{**}$</td>
<td>$r_s = -0.42^*$</td>
</tr>
<tr>
<td>Practicing words</td>
<td>$r_s = -0.37^*$</td>
<td>$r_s = -0.49^{**}$</td>
<td>$r_s = -0.43^*$</td>
</tr>
</tbody>
</table>

4.2.4 Correlations with the results of the cloze test
The results of the cloze test correlated positively with age, the number of months the participants have been studying Japanese, the number of months they have lived in Japan, the number of months they have been communicating in Japanese, and how many hours per week they watch video with Japanese speech and subtitles in Japanese. The results also correlated
negatively with how many hours per week the participants study Japanese outside of class time, how many hours they study grammar per week, how many hours they study reading and writing per week, and how many hours they practice words per week. See Table 10 for r values for correlations between the results of the cloze test and background variables or extramural activities.

Table 10: Pearson product-moment correlations between the results of the cloze test and background variables/extramural activities.

<table>
<thead>
<tr>
<th>Background variables:</th>
<th>Cloze test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>r = 0.55**</td>
</tr>
<tr>
<td>Length of exposure</td>
<td>r = 0.35*</td>
</tr>
<tr>
<td>Time in Japan</td>
<td>r = 0.72***</td>
</tr>
<tr>
<td>Extramural activities</td>
<td></td>
</tr>
<tr>
<td>Months communicating in Japanese</td>
<td>r = 0.41*</td>
</tr>
<tr>
<td>Hours per week watching video with subtitles in Japanese</td>
<td>r = 0.35*</td>
</tr>
<tr>
<td>Hours per week studying</td>
<td>r = -0.52**</td>
</tr>
<tr>
<td>Hours per week studying grammar</td>
<td>r = -0.45**</td>
</tr>
<tr>
<td>Hours per week studying reading and writing</td>
<td>r = -0.46**</td>
</tr>
<tr>
<td>Hours per week studying words</td>
<td>r = -0.35*</td>
</tr>
</tbody>
</table>

Some of these variables have a large degree of interdependence, and partial correlations were calculated to check these variables in order to ensure that they did not correlate with the results of the cloze test because they also correlated with another variable. When controlling for time spent in Japan, the correlation with age disappeared, meaning there was no significant correlation between age and the results of the cloze test. It simply seems that those who are older have had more time to live in Japan, which seems plausible.

If we control for how long time the participants have been studying Japanese, there is no longer any correlation between how long time they have been communicating in Japanese and the results of the cloze test, but there is still a correlation between the results and how many hours per week they watch videos with Japanese speech and subtitles. If we control for how long time they have lived in Japan, on the other hand, the results are the opposite. There are no longer any correlations with how many hours per week they watch video with subtitles in Japanese, but there is a correlation with how long time they have been communicating in Japanese. This would indicate that there is a correlation between how long time they have been studying Japanese and how long time they have been communicating in Japanese, much as was found when looking for correlations between the background variables and extramural activities. There also seems to be a relationship between how long time the participants have lived in Japan and how many hours per week they watch video with subtitles in Japanese. In this case, how long time they have lived in Japan seems to be the stronger variable, as the correlation with the cloze test is still significant even when controlling for how many hours per week they watch videos with subtitles in Japanese. However, only three of the 12 participants who watch videos with subtitles in Japanese have lived in Japan, and there are no significant correlations between that variable and the results of the cloze test if we only test those who have lived in Japan. Neither are there any significant correlations if we only test
those who have not lived in Japan. Which would indicate that the reason why there no longer are any significant correlations when controlling for how long time they have lived in Japan is not because of a correlation between the two variables (there is indeed no correlation between the two when looking at all the data), but rather because a quarter of the participants who watch videos with subtitles in Japanese are taken out of the equation and more than the remaining nine participants are needed in order to reach significance. Therefore, it seems like the correlations between the results of the cloze test and how many hours per week the participants watch videos with subtitles in Japanese is valid.

4.2.5 Correlations with the self-evaluations
In this section, relationships between the participants' self-evaluations and their extramural activities, as well as with background variables, will be presented (see Table 11 for r values and alpha levels). If we start by looking at the participants' self-evaluations of their overall Japanese language proficiency, there are positive correlations for how long they have been studying Japanese and for the participants' intrinsic motivation. Negative correlations are found for how many hours per week they study in total, how many hours per week they study grammar, how many hours per week they study reading and writing, and for how many hours per week they practice words. The same negative correlations are the only correlations found for the participants' self-evaluations of their writing proficiency.

For the participants' self-evaluation of their reading proficiency, negative correlations are found for how many hours per week they study in total, how many hours per week they study reading and writing, and how many hours per week they practice words. But not for how many hours per week they study grammar. In addition, there is a negative correlation between their self-evaluation of their reading proficiency and how hard they think it is to learn Japanese. However, this correlation becomes non-significant if we control for time spent studying in total.

Lastly, there are positive correlations between the participants' self-evaluations of their speaking proficiency and for how long they have been studying Japanese, much as with their overall proficiency, and for how many hours per week they write to others in Japanese. It is interesting to note that there is a significant correlation for how many hours they communicate in writing, but not for how many hours they communicate in speech. Especially since the participants on average communicate more in speech than they do in writing, as can be seen in the beginning of this chapter. The only significant negative correlation was for how many hours per week the participants practice words. In other words, there were no significant correlations for how much time they study in total, how many hours they study writing or reading, or, interestingly, for how many hours per week they practice speaking Japanese.
Table 11: Spearman's rank order correlations between the participants' self evaluations and extramural activities/background variables.

<table>
<thead>
<tr>
<th>Overall proficiency</th>
<th>Writing proficiency</th>
<th>Reading proficiency</th>
<th>Speaking proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time studying Japanese</td>
<td>$r_s = 0.32^*$</td>
<td></td>
<td>$r_s = 0.36^*$</td>
</tr>
<tr>
<td>Hours study Japanese per week</td>
<td>$r_s = -0.4^{**}$</td>
<td>$r_s = -0.31^*$</td>
<td>$r_s = -0.3^*$</td>
</tr>
<tr>
<td>Hours study grammar per week</td>
<td>$r_s = -0.36^{**}$</td>
<td>$r_s = -0.37^*$</td>
<td></td>
</tr>
<tr>
<td>Hours study reading and writing per week</td>
<td>$r_s = -0.42^{**}$</td>
<td>$r_s = -0.38^*$</td>
<td>$r_s = -0.35^*$</td>
</tr>
<tr>
<td>Hours practice words per week</td>
<td>$r_s = -0.55^{***}$</td>
<td>$r_s = -0.33^*$</td>
<td>$r_s = -0.38^{**}$</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>$r_s = 0.32^*$</td>
<td></td>
<td>$r_s = -0.3^*$</td>
</tr>
<tr>
<td>Difficulty of learning Japanese</td>
<td></td>
<td></td>
<td>$r_s = 0.31^*$</td>
</tr>
<tr>
<td>Hours communicate in text</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2.6 Correlations between measures of Japanese language proficiency

As has been mentioned in part 4.2.3, there were relations not only between some extramural activities, but also between some of the measures of Japanese language proficiency used in this study. Significant correlations were found within all groups of similar types of measures of language proficiency, that is to say, between the different grades, and between the different self-evaluations. In addition, some correlations were also found between different types of measures of language proficiency.

If we start by looking at the various grades used in this study we find highly significant correlations between the different grades, with an $r_s$ value ranging from 0.55 to 0.91. As can be seen in Table 12, the strongest correlations are between Japanese 1 and Basic grammar 1, meaning that they will relate to other variables in similar ways. It is interesting to note that the lowest correlations are between Practical language usage 1 and the other grades. This would seem to indicate that it measures slightly different aspects of Japanese language proficiency. In the descriptions for the different courses, both Basic grammar 1 and Basic writing 1 contains parts with theoretical knowledge about the Japanese language, while Practical language usage 1, as the name suggests, purely deals with practical aspects of the Japanese language.

Table 12: Spearman rank order correlations between the different grades.

<table>
<thead>
<tr>
<th></th>
<th>Japanese 1</th>
<th>Basic grammar 1</th>
<th>Basic writing 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic grammar 1</td>
<td>$r_s = 0.91^{***}$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic writing 1</td>
<td>$r_s = 0.78^{***}$</td>
<td>$r_s = 0.68^{***}$</td>
<td></td>
</tr>
<tr>
<td>Practical language usage 1</td>
<td>$r_s = 0.55^{**}$</td>
<td>$r_s = 0.58^{**}$</td>
<td>$r_s = 0.57^{***}$</td>
</tr>
</tbody>
</table>

The relationships between the different self-evaluations are more balanced. The weakest correlation is $r_s = 0.4^{**}$ and the strongest correlation is $r_s = 0.68^{**}$. As can be seen in Table 13, the weakest correlations are between the participants' self-evaluations of their speaking proficiency and their writing and reading proficiency. The overall self-evaluations of their proficiency, however, correlate similarly with the three different measures.
Table 13: Spearman rank order correlations between the different self-evaluations.

<table>
<thead>
<tr>
<th></th>
<th>Overall proficiency</th>
<th>Writing proficiency</th>
<th>Reading proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing proficiency</td>
<td>( r_s = 0.68^{**} )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading proficiency</td>
<td>( r_s = 0.6^{***} )</td>
<td>( r_s = 0.59^{***} )</td>
<td></td>
</tr>
<tr>
<td>Speaking proficiency</td>
<td>( r_s = 0.66^{***} )</td>
<td>( r_s = 0.4^{**} )</td>
<td>( r_s = 0.52^{***} )</td>
</tr>
</tbody>
</table>

If we look at correlations between the results of the cloze test and the other measure of language proficiency, we find significant correlations for the participants' self-evaluations of their overall proficiency and their speaking proficiency, but not their reading or writing proficiency; and the grades for Japanese 1, Basic grammar 1, and Practical language usage 1. If we look at the \( r_s \) scores in Table 14, we can see that the scores are similar for the two self-evaluations. If we turn our eyes to the grades, the \( r_s \) scores are also similar for Japanese 1 and Basic grammar 1, which is to be expected due to the high correlation between these two variables described above, but the score for Practical language usage 1 is much higher than any of the other scores. It is likely that this is because a cloze test is a measure of general language proficiency, and Practical language usage 1 is a course dealing with language usage and therefore general language proficiency. We can see this as a case of triangulation, where the validity of both measures as a measure of general language proficiency is strengthened.

Table 14: Spearman rank order correlations between the cloze test and the other measures of language proficiency.

<table>
<thead>
<tr>
<th></th>
<th>Cloze test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-evaluations:</td>
<td></td>
</tr>
<tr>
<td>Overall proficiency</td>
<td>( r_s = 0.36^{*} )</td>
</tr>
<tr>
<td>Speaking proficiency</td>
<td>( r_s = 0.35^{*} )</td>
</tr>
<tr>
<td>Grades:</td>
<td></td>
</tr>
<tr>
<td>Japanese 1</td>
<td>( r_s = 0.42^{*} )</td>
</tr>
<tr>
<td>Basic grammar 1</td>
<td>( r_s = 0.41^{*} )</td>
</tr>
<tr>
<td>Practical language usage 1</td>
<td>( r_s = 0.66^{***} )</td>
</tr>
</tbody>
</table>

Lastly, if we look at correlations between the participants' self-evaluations and their grades we find significant correlations between the overall grade for Japanese 1 and the participants' self-evaluations of their overall, reading, and speaking proficiency. The same is true if we look at the grades for Basic writing 1. For Practical language usage 1, however, we only find correlations for the participants' self-evaluations of their overall and speaking proficiency, and for Basic grammar 1 we only find a correlation with the participants' self-evaluation of their overall proficiency (see Table 15 for all the \( r \) values of significant correlations between the participants' self-evaluations and their grades). There were no correlations between the participants' grades and their self-evaluations of their writing proficiency.
### Table 15: Spearman rank order correlations between the participants' self-evaluations and their grades

<table>
<thead>
<tr>
<th></th>
<th>Japanese 1</th>
<th>Basic grammar 1</th>
<th>Basic writing 1</th>
<th>Practical language usage 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall proficiency</td>
<td>( r_s = 0.43^* )</td>
<td>( r_s = 0.42^* )</td>
<td>( r_s = 0.5^{**} )</td>
<td>( r_s = 0.34^* )</td>
</tr>
<tr>
<td>Reading proficiency</td>
<td>( r_s = 0.37^* )</td>
<td>( r_s = 0.4^* )</td>
<td>( r_s = 0.5^{**} )</td>
<td>( r_s = 0.34^* )</td>
</tr>
<tr>
<td>Speaking proficiency</td>
<td>( r_s = 0.36^* )</td>
<td>( r_s = 0.44^{**} )</td>
<td>( r_s = 0.45^{**} )</td>
<td>( r_s = 0.34^* )</td>
</tr>
</tbody>
</table>

#### 4.2.7 Relationships between significant extramural activities

If we summarize the analysis of the relationships between extramural activities and the different measures of Japanese language proficiency, we find four extramural activities which seem to correlate positively with Japanese language proficiency (see Table 16 for correlation coefficients). These are how long time the participants have been reading in Japanese, how long time they have been communicating in Japanese, how many hours per week they watch video with Japanese subtitles, and how many hours per week they communicate with others in writing in Japanese. If we look at the relationships of these four variables, we find that all of them correlate with each other to a stronger or lesser degree (r values and significance level can be found in Table 17). This seems to indicate that they have something in common which correlates with Japanese language proficiency. This will be discussed more in-depth in the next chapter.

### Table 16: Positive Pearson product-moment correlations between extramural activities and measures of Japanese language proficiency

<table>
<thead>
<tr>
<th></th>
<th>Months reading in Japanese</th>
<th>Months communicating in Japanese</th>
<th>Hours per week watching video with Japanese subtitles</th>
<th>Hours per week communicating in text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical language usage 1</td>
<td>( r = 0.33^* )</td>
<td>( r = 0.39^* )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cloze test</td>
<td></td>
<td>( r = 0.41^* )</td>
<td>( r = 0.35^* )</td>
<td>( r = 0.31^* )</td>
</tr>
<tr>
<td>Speaking proficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 17: Pearson product-moment correlations between extramural activities which correlate positively with measure of Japanese language proficiency.

<table>
<thead>
<tr>
<th></th>
<th>Months reading in Japanese</th>
<th>Months communicating in Japanese</th>
<th>Hours per week watching video with Japanese subtitles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months communicating in Japanese</td>
<td>( r = 0.76^{***} )</td>
<td>( r = 0.34^* )</td>
<td>( r = 0.59^{***} )</td>
</tr>
<tr>
<td>Hours per week watching video with Japanese subtitles</td>
<td>( r = 0.48^{**} )</td>
<td>( r = 0.74^{***} )</td>
<td>( r = 0.89^{***} )</td>
</tr>
</tbody>
</table>
4.3 Summary
In this chapter, the results of the study have been presented. First, the descriptive data of the participants' background information, extramural activities, and the different measures of Japanese language proficiency was presented. After that, the analysis and correlations between different variables and within groups of variables were presented.

5 Discussion
In this section, the results of this study will be discussed and compared to the hypotheses stated in the background as well as to earlier research. First, the participants’ extramural activities and the extent they are done will be discussed. Then, relationships between the different variables and Japanese language proficiency will be discussed. Lastly, some of the limitations of this study will be discussed.

5.1 A description of the participants' extramural activities
The hypotheses to the first research questions, what kinds of extramural activities in Japanese the participants do and to what extent they are done in regards to average time spent on these activities and how long time they have been done, stated that the participants would take part in a wide range of extramural activities, as well as spend a large amount of hours per week doing extramural activities. In addition, it was hypothesized that the participants would have been doing some of these activities, for instance watching video, since before they started to study Japanese. These hypotheses were confirmed by the data.

On average, the participants spent 38.1 hours per week doing extramural activities in Japanese. Although it should be noted that there are no indications in the data to whether some of these activities are performed at the same time, for instance some participants might listen to music while reading, this is a large amount of time spent on extramural activities. In addition, it was hypothesized that the participants would have been doing some of these activities, for instance watching video, since before they started to study Japanese. These hypotheses were confirmed by the data.

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In Sundqvist's (2009: 116) study of the extramural activities in English of Swedish ninth graders, the average time spent on extramural activities was 18.4 hours per week, that is to say, less than half of what was found in this study. Even if we take out the time spent on studying outside of class time, a variable which was not investigated in Sundqvist's study, there is still a large difference in how much time is spent on extramural activities in the two studies since the mean changes to 28.6 hours per week. It is possible that some other activities were not measured in earlier studies, which could explain this difference, but it is impossible to say for certain.

The participants had also been doing different types of extramural activities for a long time. Especially watching video with Japanese speech was noteworthy, since the participants had on average been doing this for 70.7 months. This is much longer than they have been studying Japanese at Stockholm University, and only 19 of the 44 participants had studied Japanese earlier. The longest time any of the participants have been studying Japanese is 72 months, and this was the only person who had been studying Japanese for a longer time than the mean for how long the participants have been watching video with Japanese speech. In other words, it is highly likely that all or almost all the participants have been watching video with
Japanese speech since before they started studying Japanese. Therefore, they would have received input in Japanese from media even before starting to study. It is very interesting that the participants had accessible target language input despite Japanese being a foreign language in Sweden. They have on average been doing the other activities between 8.9 (communicating in Japanese) months and 21.9 (reading in Japanese) months, which is not as surprising since it is closer to the mean time they have been studying Japanese (16.93 months).

All of the extramural activities asked about in this study were done to a larger or smaller degree by the participants. There was also no activity that all the participants did. In other words, there was very large individual differences in regards to what extramural activities were done. The most popular activities were watching video with Japanese speech, especially in combination with translated subtitles; reading Japanese text, listening to Japanese music; and studying Japanese. The least popular activities were listening to recorded Japanese speech (for example podcasts in Japanese) and playing video games in Japanese. This is surprising if we compare the results to Sundqvist's (ibid.), since playing video games was one of the most popular activities while reading was one of the least popular activities in her study. The difference in how much time the different groups of participants spend playing video games might be due to differences in the languages and their usage for games. English is often used as a lingua franca for games and many games are not only in English, but English is also used as the default language of communication between players (see for example Stenberg, 2011). As Japanese is a smaller language which is geographically distant from Sweden, it is possible that it is difficult to get access to Japanese language games. It is harder to explain the differences in how much the two participant groups read in the target language, but it is possible that this is due to a difference in for much they study the target language. The participants in this study spend almost as much time studying reading and writing on average (3.86 hours per week) as they do reading Japanese text (3.93 hours per week). When testing the questions for the questionnaire, one person noted that they view activities not directly related to studying, for example talking to people in Japanese, as a study activity as well. If this holds true for other language learners, it is possible that they actively try to read in Japanese, as a way of studying.

5.2 Correlations

In regards to the hypotheses to the second research question, what the relationship between extramural activities in Japanese and Japanese language proficiency is, they were for the large part not confirmed. The hypotheses stated that there would be correlations between total time spent on extramural activities and Japanese language proficiency, as well as a difference depending on extramural activity with the strongest correlations for activities which require the learner to be active, such as reading and playing video games. While there were some correlations between reading and Japanese language proficiency, no correlations were found for playing video games or total time spent on extramural activities. In addition, there were correlations between watching video with Japanese subtitles, an activity which does not fit the criteria for causing the learner to be active. These results and what they might mean will be discussed more in-depth below.
5.2.1 Japanese language proficiency

Three different types of measures of Japanese language proficiency were used in this study. A cloze test which looked at the participants' general Japanese language proficiency; the participants' self-evaluation of their relative proficiency in reading, writing, speaking, as well as their overall proficiency; and the participants' grades from earlier courses in Japanese grammar, writing, language usage, and their overall grade from Japanese 1.

Highly significant or very highly significant correlations were found between the participants' different grades, with r values ranging from 0.55 to 0.91. The same is true when we look at correlations between the participants' different self-evaluations, with r values ranging from 0.40 to 0.68. This indicates that there are large similarities between these measures of Japanese language proficiency if we only look at correlations within each type of measure.

If we instead look at correlations between different types of measures we find that some, but not all measures correlate with each other. The participants' self-evaluations of their writing proficiency do not correlate with any other measure of Japanese language proficiency. Their self-evaluations of their reading proficiency only correlate with their grades for Basic writing 1 and the overall grade for Japanese 1. The grade for Basic writing 1 also correlates with the participants' self-evaluations of their overall proficiency and their speaking proficiency, but not with the cloze test. The grade for Basic grammar 1 only correlates with the participants' self-evaluation of their overall proficiency and with the cloze test. The three measures that correlate with most other measures are the overall grade for Japanese 1, the participants' self-evaluations of their overall proficiency, and the cloze test. These measures of general Japanese language proficiency seem to give a more balanced picture of the participants' Japanese language proficiency, as opposed to measures of a more specific Japanese language proficiency. Which is reasonable, since we can expect different individuals to be good at different things, but that these differences will be less noticeable when looking at the overall picture (see for example Butler, 1985). It should also be noted that the r values for these correlations range from 0.34 to 0.66 and therefore no single measure explains all the variation in any other measure. In other words, they measure slightly different aspects of Japanese language proficiency. Language proficiency is not something which is easily measured, as there are different aspects of proficiency. While the participants' complete Japanese language proficiency is not captured, the validity of this study is increased by the usage of multiple measures, since more aspects are captured.

5.2.2 Extramural activities and Japanese language proficiency

A part of the results that needs to be highlighted is that for the vast majority of extramural activities investigated in this study, there were no significant correlations with Japanese language proficiency. Even extramural activities which have had positive correlations with language proficiency in earlier studies such as playing video games in the target language (Sundqvist, 2009; Sundqvist and Sylvén, 2012) did not correlate with Japanese language proficiency. There were also no correlations for total time spent on extramural activities, which also goes against earlier research (Olsson, 2012; Sundqvist, 2009). In other words, since there were no positive correlations it seems like doing more or less extramural activities in general neither means that one becomes more proficient in the target language, or that the
more proficient in the target language one is, the more time is spent on extramural activities. Since a correlation in itself says nothing about the causal direction, these are the two possible interpretations of a positive correlation. In addition, since there were no negative correlations either (apart from studying, which will be discussed more in-depth in 5.2.4), it seems like doing more or less extramural activities has no negative effect on target language proficiency. Meaning that while there seems to be no incentive to do these extramural activities as a means of studying, there is no data in this study that says that doing more extramural activities for other reasons is harmful. In other words, as a rule of thumb doing extramural activities in the target language for pleasure is neither beneficial nor harmful for target language proficiency.

There are, however, a few extramural activities which did correlate positively with the measures of Japanese language proficiency. These were how long time the participants have been reading in Japanese, how long time they have been communicating in Japanese, how many hours per week they watch videos with Japanese speech and Japanese subtitles, and how many hours per week they communicate in writing. There were also positive correlations between these different extramural activities and it seems likely that they are related. Note for example that the variable how long they have been communicating in Japanese contains both communication in writing and communication in speech, since it was judged to be too hard to separate these two forms of communication in retrospect. If we look at these four variables and what characterizes them, there are two predominant themes. The first is that there will likely be plenty of time for the participant to process input as well as produce output. When reading language learners can take their own time in deciphering words. They can take the time necessary to process the input. The same is true when communicating in writing, for example when sending e-mails or chatting, since responses do not necessarily need to be instantaneous. When listening to speech, on the other hand, the pace is not set by the listener but rather by the speaker. Therefore it is possible that the listener, that is to say the language learner, does not have the time necessary to process all the input properly and is forced to focus on the content of the input in order to understand the message due to a limited time frame. The second theme is support for the language learner through multimodal target language input. In the case of watching video with Japanese subtitles, a language learner both hears what is said and can read what is said. So it seems like an overabundance of input through different modalities is beneficial for foreign language acquisition at this level, and that a variety of modality cues acts as support for each other to further understanding and acquisition (Al-Seghayer, 2001).

In her study on extramural activities in English, Sundqvist (2009) found correlations for activities which required language learners to be active, such as reading or playing video games, to correlate the highest with oral proficiency and vocabulary knowledge. This is not supported in this study, as there were no correlations for several of the activities Sundqvist pointed to, more specifically how many hours the participants read every week or play video games. In addition, watching video with Japanese subtitles correlated positively with Japanese language proficiency, despite watching video with translated subtitles or watching video without subtitles not correlating at all. It is unlikely that the addition of Japanese language subtitles should make the activity of watching video more active than when translated or no subtitles are used, since in all of these three scenarios there are no productive activities.
Frequency of occurrence or depth of processing is often pointed to as the determining factors in experimental research on incidental foreign language acquisition (see for example Ellis and He, 1999; Hulstijn, 1992; Lee, 2002). However, these factors do not seem to be as influential when looking at extramural activities from a holistic perspective. For example, if we look at how many hours per week the participants communicate in writing (\(\bar{x}=1.3\) h/week) and communicate in speech (\(\bar{x}=2\) h/week) we see that the participants communicate more in speech than in writing. In other words, there should be more effects of communication in speech than in writing. However, there were no significant correlations for communicating in speech, whereas there were significant correlations for communicating in writing. Similarly, the participants read Japanese text (both with and without pictures accompanying the text) more than they watch video with Japanese subtitles every week, but no significant correlations were found for how much they read Japanese text each week. In this example, it does not seem likely that watching video requires a deeper level of processing than reading text either. It is of course impossible to discuss specific activities in this study, since it only looked at the quantity of different types of activities. Despite this lack of information, the explanations frequency of occurrence and depth of processing do not seem sufficient to explain the results in this study. In other words, it does not seem like the activity level, the depth of processing, or the frequency of occurrence determine successful incidental foreign language acquisition on this level. Rather, it seems like the time a language learner has to process and understand input as well as support for the learner in the form of multimodality has a larger impact on whether incidental foreign language acquisition is successful or not.

One of the inherent problems with calculating correlations is that there is no indication of causal direction, that is to say which variable is affecting the other. It is only possible to say that the variables are interrelated (Dörnyei, 2007:225). In order to make claims about causal direction evidence, either empirical or logical, other than the mere correlation coefficient is needed.

Earlier studies on extramural activities (see for example Olsson, 2012; Sundqvist, 2009), have discussed the causal direction in careful terms, but they suggest that extramural activities do have an effect on foreign language proficiency. Similarly, in experimental research, media used as a stimulus have been shown to have effects on different kinds of foreign language proficiencies (see for example De Jong, 2005; Eckerth and Tavakoli, 2012; Lee, 2002; Sydorenko, 2010). In other words, earlier research supports a general view of gains in foreign language proficiency as a result of extramural activities or exposure to target language media.

The same view was adopted in this study, due to the results of earlier research as well as the results of this study. If we look at the extramural activities which are done on a regular basis and correlated positively for Japanese language proficiency in this study, it seems illogical that there would be a correlation with these activities, but not with related activities if Japanese language proficiency was the independent variable. If Japanese language proficiency was the independent variable, it seems likely that the more proficient people are, the more time they would spend watching video without any subtitles as opposed to watching video with subtitles. In other words, they would choose the option with less support the less need they have of this support. Furthermore, it seems highly unlikely that current Japanese language proficiency has an effect on how long time the participants have been doing certain
extramural activities. There is a time difference in the measurement of these variables which indicates that the extramural activities are the independent variable in these cases. It is of course possible that there is some other variable which was not measured in this study that affects both the participants' Japanese language proficiency and the time for the four extramural activities which correlated positively, and it is impossible to rule out this possibility based on the results of this study. However, based on the nature of the extramural activities which correlated positively and the results of earlier research, there is a strong indication of the causal direction. That is to say, certain extramural activities have an effect on Japanese language proficiency. Foreign language proficiency is neither simple nor easily measured, and many factors can affect it. Therefore, extramural activities as a factor might explain part of a person's foreign language proficiency, but not all of it.

5.2.3 Motivation and Japanese language proficiency

One surprising result in this study is how little impact motivation seems to have on Japanese language proficiency. It has been shown that degree of motivation influences language acquisition (cf. Lightbown and Spada, 2006; Oroujlou and Vahedi, 2011). Furthermore, some research has found that media consumption in the target language can improve motivation (see for example Arnold, 2009; Pérez Niño, 2010). It should therefore be possible to find relations between these three variables, where media consumption in the target language increases motivation, which in turn has an effect on target language proficiency. However, the only correlations found in this study was between intrinsic motivation and the participants' self-evaluation of their overall Japanese language proficiency. No other correlations were significant, which indicates that in this sample, motivation does not seem to be a determining factor. It is uncertain why this is, but one possible explanation is that all of the participants had a very high degree of motivation in general, and especially when it comes to intrinsic motivation. Since all of the participants study Japanese in university courses, which they have applied to voluntarily, it is possible that all of the participants were highly motivated and therefore there was not enough individual variation for finding correlations. Another possible explanation is that motivation was only measured by four questions in this study, two for intrinsic motivation and two for extrinsic motivation and it is therefore possible that the participants' motivation was not properly measured and that better measurement tools are needed.

5.2.4 Study time and Japanese language proficiency

There were negative correlations between how much time the participants' studied Japanese per week and almost all the measures of Japanese language proficiency. The only study variable which did not correlate, neither positively or negatively, with Japanese language proficiency was how many hours per week the participants practiced speaking Japanese. This could be because the participants spend the least amount of time practicing speaking each week, as can be seen in Table 2. These results were highly unexpected and a discussion about the interpretation of them is necessary.

As was discussed in 5.2.2, it is not easy to determine the causal direction of correlations. One interpretation of these results would be that as more time is spent studying Japanese, language learners Japanese language proficiency becomes worse, which seems unlikely.
Another interpretation is that those who are better at Japanese need to spend less time studying Japanese in order to complete the goals of a course. This seems much more likely. It is also possible that there is another variable which is related to both of these variables. For instance, it is possible that those who use more effective study methods both achieve a higher level of Japanese language proficiency, and need to spend less time studying. In other words, it is important to consider likely causal directions for interpreting these particular results. It is highly unlikely that language proficiency gets worse if a language learner spend more time studying. It is much more likely that those who are better from the start, or those who can study in a more effective way, need to spend less time studying on average. Therefore, the negative correlations between time spent studying per week and Japanese language proficiency found in this study should not be interpreted wrongly, or given more weight than they warrant.

5.3 Limitations of the study

Although this study gives indications about extramural activities which can influence foreign language acquisition positively, some limitations of the study should be noticed. These limitations can influence both the interpretation of the results, and the generalizability of these results.

Firstly, it is important to note the low amount of participants. Only 44 participants participated in this study, and information about all of these participants could not be gathered for some of the measures of Japanese language proficiency. While the number of participants is large enough to constitute a large sample (Butler 1985: 55), and fulfill criteria for statistical validity, adding more participants would be beneficial for generalizing the results.

Furthermore, all of the participants of this study were studying Japanese at a beginner level, with some of them having studying Japanese for as short a time as 4 months. Yoshino et al (2000) found that the proficiency of language learners had an impact on gains made from watching target language video with and without subtitles, which indicates that the effectiveness of extramural activities, as well as the type of activity, can in part be dependent on the target language proficiency of language learners. Since all of the participants in this study were beginner level learners of Japanese, it is possible that results could be different for intermediate or advanced learners of Japanese. Therefore, the results of this study should only be generalized to beginner level learners.

In addition, there might be differences depending on which language is learned, due to differences in access in target language media. For example, playing video games in English seems to be beneficial for English language proficiency (see for example Kuppens, 2010; Sylvén and Sundqvist, 2012), whereas no correlations between playing video games in Japanese and Japanese language proficiency was found in this study. It is possible that similar differences in access to media exist for different languages.

One point that needs to be stressed, is that motivation was only measured with four questions. This decreases the validity of motivation as a measure in this study, since it might not be measured accurately. Therefore, due consideration should be taken when interpreting any of the results regarding motivation.
Finally, it should be pointed out that since this study only contains cross-sectional data, and does not have a longitudinal approach, it is impossible to be certain about causal directions. While the results of this study give indications about the causal direction, these indications are not by any means certain.

6 Conclusions

In this study, the extramural activities in Japanese of adult foreign language learners of Japanese as well as their Japanese language proficiency has been investigated. The participants' extramural activities were described and relationships between extramural activities and Japanese language proficiency were identified and analyzed. From the results of the study, three main conclusions were drawn.

It was shown that there is a very large degree of individual variation for how many hours per week is spent on extramural activities in Japanese, as well as for which activities individuals do. Overall, the participants spend a large amount of time on a wide range of different types of extramural activities, including both productive and receptive activities. In other words, the participants of this study had plenty of opportunities for receiving input and producing output in Japanese, despite studying Japanese as a foreign language and therefore having little contact with a target language environment.

For the vast majority of extramural activities, there were no correlations for Japanese language proficiency. This indicates that even though a beginner level foreign language learner has plenty of opportunities for input, output, as well as interaction in the target language through extramural activities, incidental acquisition of the target language might not occur. However, some specific types of activities did correlate with Japanese language proficiency.

These activities provide a language learner with plenty of time for processing language input and output, they provide the language learner with oversaturation of input through coordinated usage of modalities, or they provide both. Therefore, it seems like extramural activities which do this are beneficial for foreign language acquisition for beginner level language learners.

In regards to implications of these results, it is possible that successful foreign language learning can be helped by informing foreign language learners about appropriate extramural activities, and encouraging them to do these activities for pleasure. It should also be noted that other research have found beneficial effects on more specific aspects of foreign language proficiency, as well as beneficial effects not related to language proficiency such as motivation, from doing different types of extramural activities, including activities which had no correlation with general Japanese language proficiency in this study. Therefore, it is important to remember that doing other extramural activities is not harmful and can be beneficial as well.

As noted previously, there were several limitations in this study. In order to overcome these, further research is needed. This research would need to look at a larger number of participants, different levels of foreign language proficiency, different target languages, as well as look at longitudinal data in order to give more evidence for causal directions.
7 References


8 Appendices

8.1 Appendix 1: Questionnaire

EXAMENSARBETE – FRITIDS AktIVITETER PÅ JAPANsKA OCH KUNSKAPER I JAPANsKA

Beskrivning av studien: Den här studien är ett examensarbete på masternivå genomfört av Andreas Bengtsson, masterstudent vid Centrum för Tvåspråkighetsforskning vid Institutionen för Svenska och Flerspråkighet. Syftet med studien är att undersöka hur mycket tid universitetsstudenter i japanska sysslar med fritidsaktiviteter på japanska och se om det finns någon koppling till kunskaper i språket. Resultat från studien kan potentiellt användas till att förbättra undervisning av språk, samt till att göra det lättare för studenter att studera främmande språk.


Sekretess: All information som ges kommer att anonymiseras och personuppgifter kommer enbart hanteras av författaren av studien. Insamlade data kommer enbart användas till, och vara tillgänglig för, forskning.

Frivillighet: Deltagande i studien är helt frivilligt och du kan när som helst dra dig ur studien (fram till och med examensarbetet blir färdigt).

Medgivande: Genom att skriva under nedan ger du ditt medgivande till att vara med i studien enligt villkoren ovan och att författaren får hämta ut dina studieresultat från HT 2013.

Namnförtydligande: ____________________________________________

Underskrift: ___________________________________________________

Personnummer: ___________________________________________________

E-mailadress: ___________________________________________________

(fyll i e-mailadress om du kan tänka dig vara med i fler undersökningar vid behov, eller är intresserad av att få resultaten av den här studien skickade till dig).

☐ Jag kan tänka mig vara med i fler undersökningar.

☐ Jag vill få resultaten av studien skickade till mig.

Har du frågor om studien kan du kontakta Andreas Bengtsson på mailadress anbe5801@xxxx.se eller på telefonnummer 070-xxx-xxx.

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ENKÄT

Bakgrund:


4. Hur lång tid har du studerat japanska? ……………….år …………………….. månader
5a. Har du bott i Japan?: …… 5b. Om ja, hur lång tid? …………. år ……………… månader
6. Har du studerat japanska någon annanstans än på Stockholms Universitet?: ………………..
(var vänlig fyll i när och var du studerade då)

Skola: Land: Från (år och månad) - Till (år och månad)
…………………………. ……………… ………….. ………… - ………….. ………
…………………………. ……………… ………….. ………… - ………….. ………
…………………………. ……………… ………….. ………… - ………….. ………

Hur länge har du totalt sett sysslat med aktiviteterna nedan?
(Om du inte sysslar med aktiviteten, var vänlig fyll i 0 år och 0 månader)
7. Titta på video med japanskt tal ……… år ………… mån
8. Läsa på japanska. ……… år ………… mån
9. Skriva på japanska. ……… år ………… mån
(ex. dagbok, blogg, osv.)
10. Spela dator- eller tv-spel på japanska. ……… år ………… mån
11. Kommunicera med folk på japanska ……… år ………… mån
((i tal eller skrift , ex. chatt, sms, skriva på Facebook, träffa kompisar, Skype osv.)

Hur mycket tid per vecka sysslar du i genomsnitt med aktiviteterna nedan på din fritid?
(Om du inte sysslar med aktiviteten, var vänlig fyll i 0 tim och 0 min)
12a. Under en vecka, hur mycket tid tittar du totalt sett på video med japanskt tal? (ex. filmer, tv-program, anime, Youtube osv.) ………. tim ….……. min
12b. Hur stor del av den tiden tittar du utan någon undertext? ………. tim ….……. min
12c. Hur stor del av den tiden tittar du med översatta undertexter? ………. tim ….……. min
12d. Hur stor del av den tiden tittar du med undertexter på japanska? ………. tim ….……. min

13a. Under en vecka, hur mycket tid läser du totalt sett japansk text? ………. tim ….……. min
13b. Hur stor del av den tiden hör texten ihop med bilder? ………. tim ….……. min
(ex. manga, bildböcker, osv.)
13c. Hur stor del av den tiden hör texten inte ihop med bilder? ………. tim ….……. min
(ex. böcker, tidningsartiklar, Facebook, osv.)

14. Under en vecka, hur mycket tid skriver du på japanska? ………. tim ….……. min
(ex. dagbok, blogg, osv.)

15. Under en vecka, hur mycket tid lyssnar du på musik på japanska? ………. tim ….……. min

16. Under en vecka, hur mycket tid lyssnar du på inspelat japanskt tal? ………. tim ….……. min
(ex. podcasts, radio, osv.)

17a. Under en vecka, hur mycket tid spelar du totalt sett spel på japanska? ...... tim ...... min
17b. Hur stor del av den tiden spelar du själv (dvs. singleplayer)? ...... tim ...... min
17c. Hur stor del av den tiden spelar du med folk (dvs. multiplayer)? ...... tim ...... min

18. Under en vecka, hur mycket tid skriver du till andra på japanska? (ex. chatt, sms, skriva på Facebook, osv.) ...... tim ...... min

19. Under en vecka, hur mycket tid pratar du med andra på japanska? (ex. när du träffar kompisar, pratar på Skype, osv.) ...... tim ...... min

20a. Under en vecka, hur mycket tid studerar du totalt sett japanska på din fritid? (dvs. då du inte har seminarier osv. i universitetet) ...... tim ...... min
20b. Hur stor del av den tiden studerar du grammatik? ...... tim ...... min
20c. Hur stor del av den tiden över du på att läsa och skriva (ex. kanji)? ...... tim ...... min
20d. Hur stor del av den tiden övar du på att tala japanska? ...... tim ...... min
20e. Hur stor del av den tiden övar du japanska ord? ...... tim ...... min

Andra fritidsaktiviteter på japanska (var god skriv vad nedanför):

21a. .......................................................... ...... tim ...... min
21b. .......................................................... ...... tim ...... min
21c. .......................................................... ...... tim ...... min

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I vilken grad håller du med meningarna i fet stil nedan? Kryssa i det alternativ som passar bäst.

22. Det är roligt att studera japanska.
   Instämmer □    Instämmer delvis □    Tar delvis avstånd □    Tar avstånd □

   Instämmer □    Instämmer delvis □    Tar delvis avstånd □    Tar avstånd □

24. Det är bra för karriären om man kan japanska.
   Instämmer □    Instämmer delvis □    Tar delvis avstånd □    Tar avstånd □

   Instämmer □    Instämmer delvis □    Tar delvis avstånd □    Tar avstånd □

   Instämmer □    Instämmer delvis □    Tar delvis avstånd □    Tar avstånd □

27. Jämfört med mina kurskamrater är jag duktig på japanska som helhet.
   Instämmer □    Instämmer delvis □    Tar delvis avstånd □    Tar avstånd □

   Instämmer □    Instämmer delvis □    Tar delvis avstånd □    Tar avstånd □

29. Jämfört med mina kurskamrater är jag duktig på att läsa på japanska.
   Instämmer □    Instämmer delvis □    Tar delvis avstånd □    Tar avstånd □

   Instämmer □    Instämmer delvis □    Tar delvis avstånd □    Tar avstånd □
8.2 Appendix 2: Language diary

Namn: ..............................................................         Personnummer: .......................................  

Fyll i hur många timmar och minuter du har sysslat med de olika aktiviteterna på din fritid för varje dag i en vecka. Var vänlig och fyll i dagboken på kvällen varje dag, eller direkt på morgonen dagen efter. Om du inte har sysslat med en aktivitet, fyll i med 0 eller -. 

<table>
<thead>
<tr>
<th>Aktivitet</th>
<th>Dag 1</th>
<th>Dag 2</th>
<th>Dag 3</th>
<th>Dag 4</th>
<th>Dag 5</th>
<th>Dag 6</th>
<th>Dag 7</th>
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</thead>
<tbody>
<tr>
<td>Video utan undertext</td>
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<td>Video med översatta undertexter</td>
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<td>Video med undertexter på japanska</td>
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<tr>
<td>Läsa på japanska med bilder (ex. Manga, bildböcker, osv.)</td>
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<tr>
<td>Läsa på japanska utan bilder (ex. Böcker, tidningsartiklar, osv)</td>
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<td>Skriva på japanska (ex. Dagbok, blogg, osv)</td>
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<td>Lyssna på musik på japanska</td>
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<td>Lyssna på inspelat japanskt tal (ex. Podcasts, radio, osv.)</td>
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<td>Spela singleplayer spel på japanska</td>
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<td>Spela multiplayer spel på japanska</td>
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<td>Skriva till andra på japanska (ex. Chatt, sms, osv.)</td>
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<td>Prata med andra på japanska (ex. Träffa kompisar, Skype, osv.)</td>
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<td>Studera grammatik</td>
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<tr>
<td>Läsa och skriva (ex. kanji)</td>
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<tr>
<td>Öva på att tala japanska</td>
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<tr>
<td>Öva japanska ord</td>
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8.3 Appendix 3: Cloze test

SPRÅKTEST

Fyll i luckorna i texten nedan med ett ord, ett verb, en partikel, etc.

初めまして

初めまして。私はジャックです。出身は______________のニューヨークです。

昨年の四月に日本に______________。みなさん、よろしくお願いいたします。

私は富士大学______________二年生です。日本語学科で今______________や日本語文化を勉強して______________。私はアメリカで大学を卒業して、半生______________日本の会社に勤めていました。______________、私は日本語があまり上手ではありませんでした。______________、将来のことを考え、もっと日本語を勉強して、通訳に______________としました。それ故、両親と相談して、日本に留学______________。

私は今大学の留学生寮に______________います。寮にはいろいろな国______________来た留学生がいて、______________にぎやかです。私は日本に来て______________になりますが、今ではすっかり日本の______________にも慣れて、友達も______________できました。

では、これから日本語を勉強して______________みなさん、私が日本で暮らして、見たり______________体験したりしたことをお話______________と思います。

KOMMENTARER OCH SYNPUNKTER

...................................................................................................................................................
...................................................................................................................................................
...................................................................................................................................................
...................................................................................................................................................

Tack för din medverkan!!