

## Using Q Methodology to Investigate L2 Possible Selves

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Recent developments in motivation studies have led to an increased focus on the self. As Ushioda (2009) stated, large-scale quantitative studies cannot investigate the holistic being; however, by using Q Methodology, in which participants rank statements to illustrate their beliefs about a given topic, Irie and Ryan (2014) tried to balance this holistic picture with the need for meaningful conclusions. For many learners of English in Japan, the main focus of their classes is often to pass the course, and there may be no perceived meaningful reason for learning English (Ryan, 2009). Dörnyei (2009) stated that learners lack motivation to learn the language when one element of their L2 Motivational Self System is missing. This study used Q Methodology to investigate the L2 Possible Selves of non-English major students at a Japanese university to establish the extent to which Ryan's (2009) and Dörnyei's (2009) characterizations are applicable in this context.

動機付け研究の昨今の発展においては学習者自己 (self) への注目が高まっている。Ushioda (2009) は大規模での量的研究は包括的な本質を調査することはできないと述べているが、Q方法論 (Q Methodology) の使用で、参加者は与えられたトピックについての考えを述べたものを分類し、説明づけることができ、Irie and Ryan (2014) は意義ある成果へ向けての必要性を受け、これらの調和を試みた。日本の多くの英語学習者は、クラスでは、そのコースに及第することに集中し、英語を学ぶことへの有意義な理由に対する認識がないかもしれない (Ryan, 2009)。Dörnyei (2009) は学習者の第二言語に対する動機付け自己システムの一要因が欠けると、学習者の学ぶことへの動機付けは不足すると述べている。この研究では、日本の大学で英語専攻でない学生に対し、第二言語での可能な自己 (L2 Possible Selves) について調査し、Ryan (2009) と Dörnyei (2009) の見解が、このコンテキストで適正であることを確立するためにQ方法論を活用した。

By studying the L2 selves of non-English major students at a science and engineering university in West Japan, the researcher's aim was to learn more about the holistic beings of these students, as recommended by Ushioda (2009). Being aware of students' L2 selves enables the teacher to direct the class in a manner that is relevant to the learners' perceived needs. These needs may not always be clear to the teacher, as they are not necessarily demonstrated by classroom behavior. Without a determined effort to learn about the learners' goals, the teacher can only make assumptions. The teacher's awareness of learners' current selves also leads to more accurate feedback, as the teacher can help students build a more accurate picture of their current proficiency. However, research findings such as Dörnyei's (2009) L2 Motivational Self System can be difficult to apply to classroom practice (Irie & Ryan, 2014). This study used Q Methodology in an attempt to bridge this gap between research and practice.

### Literature Review

In this review of the literature, learner in context research will be explored, with particular reference to motivation studies. Next, theories of motivation such as possible selves and the L2 motivational system will be examined. Finally, Q Methodology, the methodology used in this study, will be described.

### Studying Motivation

As Ushioda and Dörnyei (2009) showed, recent shifts in theories of self and identity have brought changes in the study of motivation, as researchers examine motivation from the perspective of the individual. An example of this is Dörnyei's (2009) theory of the L2 Motivational Self System, which described the key factors that may affect motivation in the individual. These factors will vary from person to person, emphasizing the need to adopt methods of research that enable researchers to examine the individual more closely.

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### **Learner in Context Research**

In his 2012 overview of recent developments in L2 motivation study, Pigott argued against reductionist methods of research, an argument particularly relevant to motivation research. By reducing data to make generalized statements, researchers miss the beliefs that underlie activity. He argued that motivation in particular is influenced by so many factors that it is unwise to discount any of them. Therefore, researchers have to strike a balance between oversimplifying complex systems and reaching meaningful conclusions. Ushioda (2009) called for a person-in-context view of L2 motivation, in which personal relations, social identities, and cultural context are examined. We need to consider the learner as a “self-reflective intentional agent” (Ushioda, 2009, p. 218) working within a complex web of social relations, experiences, and macro- and micro-contexts. One aspect of this L2 motivation research is the possible self.

### **Possible Self**

Markus and Nurius (1986) described possible selves as “individuals’ ideas of what they might become, what they would like to become and what they are afraid of becoming” (p. 954). Firstly, the ideal self is the self the learner dreams of becoming, the “successful self.” It is the representation of the characteristics the learner would, ideally, like to develop. Next, there is the self the learner believes he or she is able to become. Dörnyei (2009) suggested thinking of this as the “expected” or “likely” self. Thirdly, the self the learner fears becoming is the “feared self.” In summary, these are the best case, worst case, and default scenarios (Dörnyei, 2009). Dörnyei (2009) also describes the “ought self,” which is based on obligation, or the learners’ perception of what others want them to become. This may be quite different from the ideal self, which is related to one’s own desires.

According to Dörnyei (2009), possible selves cannot be effective if the learner does not perceive them as realistic in their present circumstances. The ideal self acts as a guide towards the learner’s positive view of the future and the feared self influences behavior by moving the learner away from the negative view of the future. The ideal self forms part of the L2 Motivational Self System.

### **The L2 Motivational Self System**

The L2 Motivational Self System was developed by Dörnyei (2009). It is made up of three main components: the ideal L2 self; the ought L2 self, and the L2 learning experience. This L2 learning experience is related to the immediate learning environment and experience that can include the curriculum, the teacher, or the learner’s peer group.

Dörnyei (2009) theorized that ideal and ought selves are the main foundations of this system, and the classroom experience adds a motivational impact. Ideal and ought selves are included in possible selves.

When a learner lacks L2 motivation, it is likely to be caused by an absence of a developed ideal self, in general, or an ideal L2 self in particular (Dörnyei, 2009). In fact, if the ideal L2 self is an unrealistic expectation, and the difference between the current L2 self and the ideal L2 self is too great, bridging the gap between them will appear as an insurmountable task and the learner will lose motivation. On the other hand, the feared self can be a powerful motivator, as the learner works to widen the gap between the current L2 self and the feared self while reducing the distance between the ideal and current L2 self.

### **Q Methodology**

#### *Background*

Developed by William Stephenson in 1935, Q methodology was designed to study attitudes and demonstrate subjectivity. Watts and Stenner (2012) believed Q Methodology can be used with any material at all. Inverted factor analysis is used to identify the views of individuals as well as an interpretative process in which the researcher codes data. As such, Q Methodology combines both qualitative and quantitative approaches, making it useful in the study of second language acquisition (Irie, 2014). It also has qualities that make it ideal for studying possible selves as it “provides an alternative for capturing unique information about possible selves that is not available using traditional methodologies” (Kerpelman, 2006, p. 181).

The different selves cited in the literature above may aid us in understanding the varying motivation of L2 learners; however, a methodology giving us detailed insight was also required. Using Q Methodology has the potential for deeper analysis of learners’ possible selves (Irie, 2014) as it encourages more thoughtful responses about a topic the participants may not have considered deeply. Participants may not respond to questionnaires with the same thought, as they may answer the questions quickly and proceed. During the Q sort, limitations are placed on the number of cards that can be placed in any one ranking. As a result, if there are too many statements in any one ranking, participants must reflect on their choice and rearrange the statements accordingly. Before beginning this study, it was unclear whether the participants would have thought about the reasons and possible benefits of studying English, particularly as they had not chosen to study English. Rather it is a compulsory subject both at secondary level and at the university they attend. The Q sort and interview format is also more in keeping with the

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learner-in-context theory (Ushioda, 2009), so a more detailed profile of each participant could be created, enhancing the view of the holistic being. With all of this in mind, it was decided to use Q Methodology for this study and to assess the benefits of doing so as a secondary aim of the project.

### Research Questions

In this study, there were two main research questions:

- RQ1. To what extent do non-English major students have clear possible and ideal L2 selves?
- RQ2. How useful is Q methodology in determining the L2 possible selves of non-English major university students in Japan?

### Methodology

#### The Q Sort

The Q set is a set of statements that refer to the learners' beliefs about English, such as *I don't think I will ever use English in my future* or *Whenever I think of my future career, I imagine myself being able to use English*. Irie and Ryan's (2014) example of 50 statements was followed. This was primarily because it enabled the use of the Q sort layout used in their study (see Figure 1), avoiding the need to create, and pilot, a new layout. As I had not conducted this type of research before, I believed it was beneficial to follow previous studies when possible to minimize the possibility of errors.

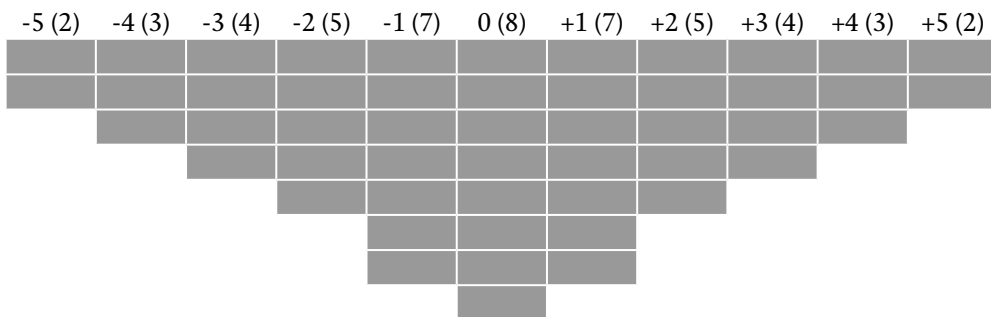


Figure 1. Q sort layout (Irie, 2014).

The Q sort statements were created using the work of several researchers as a starting point. In their study, Irie and Ryan (2014) used Q methodology to define certain types of learner among English majors participating in a study abroad program. Some of their statements, such as *These days I feel like English is at the center of my everyday life*, were deemed irrelevant in the context of the current study, as the participants were not majoring in English, nor were they studying overseas at the time of the study. Kerpelman's (2006) work on high school students' possible selves provided some useful statements, but statements such as *I will be a parent*, which would not provide data relevant to this project about L2 possible selves, were omitted. Finally, the data collection method used by Yashima (2009) in her study on international posture was used for the statements relating to using English with international acquaintances. By adapting the statements from these previous studies, 50 Q sort statements were created and piloted before and after translation into Japanese (see Appendix A).

The statements were then organized into a pyramid shape, as shown in Figure 1. Statements the participants believe are the most accurate descriptions of their beliefs or experience are represented as +5; -5 represents the least accurate. If a statement is ranked 0, it means that the participant is ambivalent about this statement. The numbers in brackets (see Figure 1) represent the number of statements permitted for each ranking. As has already been described, if too many statements are selected for any one ranking, participants are encouraged to reexamine the statements in that particular ranking and decide which should be moved to a neighboring ranking. This process increases the chances of participants reflecting on their responses in order to provide a more accurate description of their current selves.

The Q sort was followed by a structured interview that was intended to gather further information about the participants and their views. This interview also added depth to the narrative being constructed (Irie, 2014). In this study, a strongly structured interview was conducted with the participants. Participants were first asked to describe their English learning history. They were then asked further questions such as, "What do you think a 'proficient English speaker' can do?" "Is becoming a proficient English speaker important for you? Why or why not?" and "Will you use English in the future? How?" A Japanese interpreter was present during the interview to translate the participants' responses into English, as well as to translate any further questions into Japanese.

### Participants

Six participants took part in this study. They were all students at a science and engineering university in West Japan and all were enrolled in a compulsory English communica-

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tion course. Students of differing proficiencies were selected to participate, based on the results of the Oxford Online Placement test (2015) they had taken at the beginning of their 1st year. Students from different faculties were also selected in order to attempt as broad a perspective as possible within the parameters of the study.

All participants have been given pseudonyms to preserve anonymity. These pseudonyms are listed below, along with the participants' year group, department, and proficiency level. Proficiency level is indicated by describing their level relative to others in their department.

**Table 1. Participant Profiles**

Name	Year group	Department	Proficiency level
Satoshi	1st	Biotechnology	Low
Akira	1st	Aerospace systems engineering	High
Yutaka	2nd	Architecture	Middle
Kazuhiro	2nd	Architecture	Low
Ayaka	2nd	Pharmacy	High
Minami	2nd	Computer information systems	High

## Results and Discussion

The quantitative data will be presented first, followed by the qualitative data.

### Factor Analysis

Factor Analysis was conducted using PQ Method; however, clear conclusions were difficult to draw as the data set was too small. First, PQ Method was used to extract the Eigenvalues (EV; see Appendix B, Table B1). Two factors were extracted, as recommended by Watts and Stenner (2012). The final set of factors should account for as much variability of the original correlation matrix as possible. In this study, the first two factors accounted for 66% of the variance. In addition, these two factors were the only two with an EV of more than 1.00. Factors with an EV of less than 1.00 were not used because they showed less study variance than a single Q sort.

Next, Centroid Factor Analysis was carried out (see Appendix B, Table B2). The degree of agreement between two factors is measured on a scale ranging from +1.00 to -1.00. A

large positive correlation shows that people who rated variable one highly also rated variable two highly (Watts & Stenner, 2012). In this study, there was little correlation shown. These results give weight to the theory that there is no “one size fits all” student type (see Appendix B).

The crib sheet method recommended by Irie (2014) and Watts and Stenner (2012) was then used, with the intention of finding more detailed data. The crib sheet was created by comparing the rankings of each participant for each of the 50 statements. The statements ranked as +/-5 or +/- 4 by each participant were noted and a brief profile of each participant was created.

### Purposes for Studying English

#### *Students Who Study as a Hobby*

Ayaka represents this potential student type. She intends to continue learning English as a hobby, which proved to be unusual among this group of learners. In her Q Sort, she ranked Statement 19, *I will study English as a hobby* as +5. She ranked the statement *In the future, I think being able to speak English will be useful in professional situations* as +1, displaying some ambivalence. In addition, she ranked the statement *I don't know what I will do professionally after I graduate* as -4. This demonstrated that Ayaka had a clear idea of her professional future, but does not envision English skills as being beneficial professionally. She also said in her interview that she would like to be able to spend more time improving her English. She stated, “I love learning English and I want to put more energy into learning English than pharmacy.” Based on this, it appears that Ayaka, who will continue to study English purely for her own enjoyment, does not equate English proficiency with professional success, which could be the reason she chose to major in pharmacy rather than in English.

#### *Students Who Study for Professional Reasons*

In this group of learners, only Akira had a clear professional ideal self related to English study. A TOEIC score of 700 is recommended for applications to work as a pilot for both domestic and international airlines. He ranked the statement *Mastering English will be impossible for me, no matter how hard I try* as -4. This suggests that he is confident in his abilities. It is important that the ideal self is realistic, otherwise the learner will feel the gap between their current self and ideal self is insurmountable (Dörnyei, 2009). In Akira's case, it is important that he believes it is possible for him to get a 700 TOEIC score and become an airline pilot, in order for him to be motivated enough to work towards this.

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For many Japanese learners of English, the experience of English has little relation to communicating with people from other cultures. Instead they are focused on examination performance (Ryan, 2009). This offers one possible reason for an absence of L2 possible selves related to professional endeavors, as a lack of experience using English to communicate makes it difficult for learners to imagine a professional future using English.

#### *Students Who Have a Possible Self That Does Not Involve English*

In his Q sort, Satoshi showed that he did not believe that English proficiency would be useful in his future. He was quite clear in his Q sort. He ranked the statement *In the future, I think being able to speak English will be useful in social situations* as -4 and the statement *In the future, I think being able to speak English will be useful in professional situations* as -3. Additionally, he ranked *Learning English is necessary because it is an international language* as -5, the only participant to rank this statement negatively. In his interview, he explained his plans to become a sake producer; he was currently following a course in sake production at university, within the biotechnology department. Although he enjoys his English classes, he does not envision a future requiring it.

#### *Students Who Are Unsure of the Future*

Three out of the six learners who participated in this study appeared to lack a clear L2 possible self. Both Yutaka and Kazuhiro ranked the statement *I think I'm naturally good at learning languages* negatively, and Minami ranked it as +2. If the gap between the possible self and the ideal self is too great, the learner will become demotivated as the gap will appear insurmountable (Dörnyei, 2009). In this case, the participants do not believe they have natural English proficiency. If the ideal self is to use English as a tool of communication, either professionally or socially in the future, the gap between the possible self, who is not naturally good at learning languages, and this ideal self may appear insurmountable to these learners.

Additionally, both Yutaka and Kazuhiro spoke in their interviews about their fear of travelling abroad. They also rated the statement *Interacting with foreign people in English is fun for me* as -2 (Yutaka) and 0 (Kazuhiro). Compared to Ayaka, who ranked it as +4, this ambivalence gives us a possible reason for their hesitation to travel beyond Japan. If learners fail to gain any enjoyment from communicating with people from other cultures, immersing themselves in a foreign culture is also likely to appear unattractive to them.

#### Future Directions *Implications for Teaching*

One stated aim of this paper was to examine the L2 possible selves of non-English major students at a Japanese university. Three out of the six participants in this study had no clear possible self. Further research is needed to find out if this is a common trend. Working with students to develop short-term, realistic goals and how these can be built upon to work towards longer term goals, which should be reviewed periodically, could also help learners develop greater confidence in their English skills. Events such as the upcoming 2019 Rugby World Cup, in which matches will be played in cities in West Japan, may help with the shift from seeing English as an examination subject to a language of communication, as the number of overseas visitors are likely to increase.

Yutaka and Kazuhiro spoke about their fears concerning travelling overseas. This suggests that these learners would benefit from greater contact with English speakers beyond their current native-English-speaker teachers. Promoting greater use of the university facilities would be one way to offer students chances to communicate with other teachers from English-speaking countries. Further opportunities to travel while at university might also help with this, as well as workshops and other events with students returning from overseas programs to demonstrate the reality of studying overseas.

#### Limitations and Implications for Future Research *Using Q Methodology*

The second research question in this study was to assess the use of Q methodology in this type of study. The primary drawback of Q methodology is that it is time-consuming. For each participant, about 40 to 60 minutes of contact was needed. This makes it more difficult to gather data from a large sample size. Indeed, one of the limitations of this study was the difficulty in making broad conclusions that resulted from the small sample size. The time needed for each participant was the primary reason for this, which limited the use of factor analysis. Although a questionnaire would have been a more efficient method of gathering data from a larger number of learners, the information about the learners would have been less detailed. The benefits of detailed data offered by this methodology need to be weighed against these time constraints. If this study is attempted again in the future, a more efficient way of gathering the information should be found. One possible way to do this is to conduct the Q sort with a number of participants at one time, perhaps in a classroom setting. By collecting a large data set at one time, the factor analysis could be conducted efficiently. Following this with an open-

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ended questionnaire in place of the interview to collect additional data would also limit the contact time with participants, although this data would need to be processed, which would also require a large time commitment—but only the time of the researcher and her team, rather than including the time of the participants. Alternatively, the follow-up interview could be eliminated altogether and only the factor analysis used to provide purely quantitative data.

### Conclusion

This aim of this study was to explore the L2 possible and ideal selves of non-English majors at a small university in West Japan. A secondary aim was to examine the benefits of using Q Methodology to study possible selves. This type of research into possible selves is important to give teachers a realistic understanding of how students view themselves, their learning, and their future. It is hoped that this data will help teachers to create classes that help learners to develop possible selves and to clarify existing ones.

It was found that half of the participants did not have clear L2 possible selves. Although there was a general understanding that English skills will be beneficial in the future among the participants, there was little concrete knowledge of how this could be the case. This suggests that learners are not being adequately informed of the reasons for learning English and how it is relevant to them. It is hoped that teachers will use this information to look more closely at the learners in their classes and what extent this information is true about them.

It was also found that the use of Q Methodology provided detailed data about the participants, but that it was a very time-consuming method of doing so. Collecting the responses from six participants did not allow broad conclusions to be made as the sample size was too small. However, learning more about the individual language learners and their possible selves permitted potential student types to be established, which can be built upon in future research. Firstly, the student types discussed here should be researched further so that more meaningful conclusions can be drawn. As this study was a small-scale study, broad conclusions cannot be made. Additionally, the reasons for these students developing these possible selves need to be examined more closely.

In the wider context of English education in Japan, it is hoped that this study demonstrates the value of investigating learners' L2 possible selves and the way in which such investigation can both challenge and support our assumptions about our students. This, in turn, can provide valuable information on which effective and appropriate teaching can be based. Additionally, it is believed that the use of Q Methodology, although beneficial to the study, should be further assessed with a larger scale study.

### Bio Data

**Sarah Faherty** is a senior assistant professor at Sojo University in Kumamoto. She holds a MA in TEFL/SL from the University of Birmingham, as well as a PGCE/Maîtrise in teaching French as a foreign language, jointly awarded by the University of Nottingham and Université Marc Bloch, Strasbourg. She has worked in Japan for the last 10 years, during which she has taught in a number of different settings. Her current research interests include motivation and learner self. <sfaherty@m.sojo-u.ac.jp>

### References

- Dörnyei, Z. (2009). The L2 motivational self system. In E. Ushioda & Z. Dörnyei (Eds.), *Motivation, language identity and the L2 self* (pp. 9-42). Bristol, UK: Multilingual Matters.
- Irie, K. (2014). Q methodology for post-social-turn research in SLA. *Studies in Second Language Learning and Teaching*, 4, 13-32. <http://dx.doi.org/10.14746/ss/lt.2014.4.1.2>
- Irie, K., & Ryan, S. (2014). Study abroad and the dynamics of change in learner L2 self concept. In Z. Dörnyei, P. D. MacIntyre, & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 343-366). Bristol, UK: Multilingual Matters.
- Kerpelman, J. L. (2006). Using Q methodology to study possible selves. In C. Dunkel & J. Kerpelman (Eds.), *Possible selves: theory, research and application* (163-186). New York, NY: Nova Science.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954-969. <http://dx.doi.org/10.1037/0003-066X.41.9.954>
- Oxford Online Placement Test. (2015). Retrieved from <<https://www.oxfordenglishtesting.com>>
- Pigott, J. (2012). Motivation and complex systems theory: An exploratory view of the motivation of four Japanese university students. *OnCUE Journal*, 6(2), 27-47.
- Ryan, S. (2009). Ambivalence and commitment, liberation and challenge: Investigating the attitudes of young Japanese people towards the learning of English. *Journal of Multilingual and Multicultural Development*, 30, 405-420. <http://dx.doi.org/10.1080/01434630902928447>.
- Ushioda, E. (2009). A person-in-context relational view of emergent motivation, self and identity. In E. Ushioda & Z. Dörnyei (Eds.), *Motivation, language identity and the L2 self* (pp. 215-228). Bristol, UK: Multilingual Matters.
- Ushioda, E., & Dörnyei, Z. (2009). Motivation, language identities and the L2 self: A theoretical overview. In E. Ushioda & Z. Dörnyei (Eds.), *Motivation, language identity and the L2 self* (pp. 1-8). Bristol, UK: Multilingual Matters.
- Watts, S., & Stenner, P. (2012). *Doing Q methodology*. London, UK: Sage.
- Yashima, T. (2009). International posture and the ideal L2 self in the Japanese EFL context. In E. Ushioda & Z. Dörnyei (Eds.), *Motivation, language identity and the L2 self* (pp. 144-163). Bristol, UK: Multilingual Matters.

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**Appendix A**

**Q Sort Statements**

1. A high level of English proficiency is considered to be a valuable attribute in my social group.

高水準の英語力は私のいる環境では価値のある特性と見なされている。

3. I only study English because it is compulsory.

私は、英語が必須科目なので勉強している。

5. I think I will be able to watch English TV shows and movies without subtitles in the future.

私は、将来字幕なしで英語のテレビ番組や映画を見れるようになると思う。

7. In the future, I will be able to speak English comfortably with international acquaintances.

私は、将来海外の知人達と英語で気楽に話せるようになると思う。

9. In the future, I think being able to speak English will be useful in professional situations.

私は、将来英語を話せることは職場で役立つと思う。

2. I strongly believe that it is important to have English communication skills.

私は、英語のコミュニケーション能力を持つことは重要だと強く信じている。

4. With hard work, I think I can become a proficient English speaker.

一生懸命勉強すれば、英語を流暢に話せるようになると思う。

6. I think I will be able to read English newspapers without a dictionary in the future.

私は、将来辞書を使わずに英語で新聞を読めるようになると思う。

8. In the future, I think being able to speak English will be useful in social situations.

私は、将来英語を話せることは社交の場で役立つと思う。

10. I have no clear vision of how I will use English in the future.

私は、将来どのように英語を使用するかについて明確な見通しはない。

11. I often study English independently.

私はよく独りで英語を勉強する。

13. When I witness others speaking English, I feel I will never be able to join them.

他の人達が英語を話しているのを見ると、会話に入れない気がする。

15. I will do work that involves only speaking with Japanese people.

私は、日本人との会話のみを必要とする仕事をするだろう。

17. I will have a job that will permit me to spend time with non-Japanese people.

私は、外国人と時間を過ごす機会のある仕事に就くだろう。

19. I will study English as a hobby.

私は英語を趣味として勉強するだろう。

21. I have little interest in learning about other cultures.

私は、他国の文化を学ぶことにあまり興味はない。

23. I will never use English in the future.

将来、私は英語を決して使用することはないだろう。

12. I have a clear understanding of the reasons for studying English.

私は英語を学習する理由を明確に理解している。

14. I will do work that involves speaking with non-Japanese people regularly.

私は、普段から外国人と話すことが求められる仕事をするだろう。

16. I will travel overseas for my job.

私は仕事のために海外に行くだろう。

18. I will travel overseas for leisure.

私は余暇に海外旅行をするだろう。

20. I don't think I will ever use English in my future.

私は、将来英語をそもそも使用するとは思わない。

22. I can't imagine that I will have international acquaintances in the future.

私は、将来自分が海外に知人を持つとは考えられない。

24. I have not had many chances to use English outside of my English class.

私は、英語の授業以外で英語を使用する機会を持ったことはあまりない。

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25. I don't know what I will do professionally after I graduate.

私は、卒業後は何を専門的に仕事にするか分からない。

27. Whenever I think of my future career, I imagine myself being able to use English.

私は、将来の仕事について考える時はいつも、英語を使用している自分の姿を想像する。

29. I would like to be able express my opinions in English.

私は、自分の意見を英語で表現できるようになりたい。

31. I will socialize with people from other countries in the future.

私は、将来他の国々の人々と交流するだろう。

33. If I could speak English I would be a much cooler person.

英語が話せたら、私はもっと格好いい人になると思う。

35. In order to get a good job I will need to be able to use English well.

良い仕事に就くには、英語を上手に使用できるようにする必要がある。

37. My goal is to be able to speak English like a native speaker.

私の目標はネイティブスピーカーのように英語を話せるようになることだ。

26. I would like to try living in a foreign country in the future.

私は、将来海外に住んでみたい。

28. I will be able to use English effectively in the future.

私は、将来英語を有効活用することができるだろう。

30. People who speak English fluently are respected in my social group.

私のいる環境(社会)では英語に堪能な人々は尊敬される。

32. English will expand my possibilities in the future.

将来、英語は私の可能性を伸ばすだろう。

34. Learning English is necessary because it is an international language.

英語は国際語なので、学習することは必要である。

36. I need to be fluent in English to do the job I want to do.

私がしたい仕事をするには英語が流暢である必要がある。

38. To be honest, I have no idea why I'm learning English.

正直、なぜ英語を学習しているのか分からない。

39. I regularly study English in my own time.

私は、時間のある時に定期的に英語を勉強している。

41. People around me are not interested in the progress of my English learning.

私の周りの人々は私の英語学習の進行には興味を持っていない。

43. I have close friends that speak English as an L2.

私には英語を第二外国語として話す親しい友達がいる。

45. I'm too shy to speak English well.

私は、英語を上手に話すには内気すぎる。

47. Mastering English will be impossible for me, no matter how hard I try.

英語を習得することは、どんなに頑張っても不可能だろう。

49. I have friends I communicate with in English.

私には英語でコミュニケーションをとる友達がいる。

40. Interacting with foreign people in English is fun for me.

英語で外国人と交流するのは、私にとって楽しいことだ。

42. I want to be part of an English-speaking social circle.

私は、英語を話す人々の社会の一員になりたい。

44. I think I'm naturally quite good at learning languages.

私は生まれつき言語の習得がかなり得意だと思う。

46. I don't have the right kind of personality for learning English

私は英語を学ぶのに適した性格ではない。

48. If I make more effort, I am sure I will be able to master English.

もっと努力すれば、英語は習得できるだろうと確信している。

50. I will be able to speak English at a natural pace in the future.

私は、将来英語を自然な速度で話せるようになるだろう。



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**Appendix B**  
**Factor Analysis Results**

Table B1. Eigenvalues and Percentages

	Eigenvalues	As percentages	Cumulative percentages
1.	<b>2.51</b>	<b>41.84</b>	<b>41.84</b>
2.	<b>1.44</b>	<b>24.05</b>	<b>65.89</b>
3.	0.78	12.97	78.86
4.	0.54	8.96	87.82
5.	0.45	7.55	95.37
6.	0.278	4.63	100.00

Table B2. Centroid Factor Analysis

	Factor 1	Factor 2
	0.57766	0.23948
	0.58589	0.48221
	<b>0.68314</b>	0.37724
	<b>0.65611</b>	-0.25094
	0.52967	-0.26421
	0.01331	-0.62248