

Using Q methodology to examine the effect of imagery training on possible second language selves among basic English users

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Abstract

A number of studies have shown the role of imagery training in the enhancement of advanced or dedicated English learners' ideal L2 selves. This article details an intervention study which sought to examine the effect of imagery training on Japanese university students with elementary levels of English. Data from a control and an experimental group, both consisting of 23 students, was collected by means of Q methodology and substantiated with supporting comments. Pre-intervention analysis revealed that both groups of students held positive but vague notions of their future L2 selves. Post-intervention analysis revealed that while control group students who did not take part in imagery activities did not develop or maintain these concepts, participants in the experimental group displayed both maintenance and promotion of their future L2 self concept. The study thus shows how imagery training, student English level notwithstanding, can be effective in promoting the future L2 self.

Keywords: Q methodology; imagery; possible L2 selves; intervention study

1. Introduction

This study aims to investigate the effect of imagery training on students' ideal L2 selves (Dörnyei, 2009), using a mixed-methods intervention study, combining

both quantitative and qualitative data. The students were freshmen non-majors at a Japanese technical institution, whose self-perceived and externally verified English level placed them as basic English users. While other studies have demonstrated the positive association between possible L2 selves and imagery training (Chan, 2014; Dörnyei & Chan, 2013; Kim & Kim, 2014; Magid, 2014; You, Dörnyei, & Csizér, 2016), these studies have tended to focus on higher ability students. Furthermore, they have tended to use more traditional forms of data collection, analysis and presentation. Following Irie and Ryan (2015), this study employs Q methodology in a pre/post-analysis format to offer unique insights into student development relating to their ideal L2 selves.

2. Literature review

2.1. L2 motivational self system

Over the last 50 years, as the complexity of the second language (L2) learning process has begun to become better understood, research into L2 motivation has gradually evolved and adapted to account for the integration of motivational psychology into its philosophy (Boo, Dörnyei, & Ryan, 2015; Ushioda & Dörnyei, 2012). In short, greater recognition and emphasis has been given to the complexity of the L2 learning process as it merges and weaves organically through the complexities of the social and contextual influences surrounding the learner and their motivations for learning a language. One of the key developments in L2 motivation studies and validated in a number of countries and contexts is the L2 Motivational Self System (Dörnyei, 2005). In revisiting the traditional definition of integrativeness, once recognised as key to L2 motivation (Gardner, 2001), and drawing on Markus and Nurius' (1986) psychological theory of "Possible selves," Dörnyei's system examined how "self images develop and evolve in interaction with the complex constellations of internal and contextual processes shaping engagement in learning" (Ushioda & Dörnyei, 2012, p. 401). A fundamental part of that system (and still valid in the more recent studies on motivation) (Dörnyei, Henry, & Muir, 2016; Nitta & Baba, 2014), seeks to look beyond an actual or metaphorical connection to the L2 community and instead to focus on a different concept of identification taking place within the L2 learner's psyche: the influence of possible selves. According to this theory, an individual's motivation toward a goal lies in their imagining their future through the filters of what they *might* become, what they *would like to* become, and what they are *afraid of becoming*. This promotional/preventive distinction, first suggested by Markus and Nurius (1986), was later conveyed by Higgins in the form of the ideal self and the ought-to self (Higgins 1987, 1998).

Dörnyei's evolution of the theory to apply it to L2 motivation saw the ideal L2 self become the L2-related facet of one's ideal self, and the ought-to self become related to L2-specific traits that the learner believes they ought to possess. To this was added the L2 learning experience, defined by Dörnyei as "situated, 'executive' motives related to the immediate learning environment and experience (e.g. the impact of the teacher, the curriculum, the peer group, the experience of success)" (2009, p. 29). As with other components of Dörnyei's system, the future self-images, as constructed by the individual, rather than being static constructs, are instead under constant revision by the learner, adjusted as time goes on and existing in greater focus and intensity in some learners and learning contexts than others. These sub contexts and the important effect of temporal, idiosyncratic and environmental variables on learning outcomes, have led to a number of articles seeking to examine the significance of one or more of these variables in different learning contexts.

Within L2 literature, a number of studies have confirmed the positive association between possible L2 selves and imagery training (Chan, 2014; Dörnyei & Chan, 2013; Kim & Kim, 2014; Magid, 2014; You, Dörnyei, & Csizér, 2016). Imagery training, and specifically the concept of vision, has its origins in sports psychology. Based on the original models by Paivio (1985) and Hall, Mack, Paivio and Hausenblas (1998), it has been validated in a number of studies in that sphere (Bernier & Fournier, 2010; Williams & Cumming, 2012). Distinct from imagination, vision pertains to a more specific and enduring, tangible concept. To create a vision in our mind of something is to foresee an event and to experience an inherent attraction or pull towards the imagined future state, resulting in the potential for behavioral change to achieve that state or outcome (Dörnyei & Kubanyiova, 2014). In his aforementioned (2014) study, Magid argued that his image training program helped his participants to develop their English goals and their confidence, stating: "I strongly believe that there is a great potential to develop many more of these types of programs (...) that will be suitable for language learners of all ages, levels of proficiency and target languages" (2014, p.351). Similarly, Chan's (2014) study, reported positive results regarding development or maintenance of various aspects of participants' L2 selves. The student participants in both of these studies were classed as having intermediate or advanced levels of English. This present study sought to examine the effectiveness of carrying out such a program with students who were without either immediate environmental stimuli or extant English ability, namely with freshman students in a Japanese technical university with an elementary level of English. Specifically, it sought to discover whether there was a causal relationship between imagery training and the promotion or maintenance of the possible L2 self with these students, leading to the creation of the first research question: RQ1: To what extent does imagery training have an effect on the promotion or maintenance of the possible L2 selves of basic English users?

2.2. On Q methodology

The aforementioned studies regarding vision and its role in L2 motivation follow a traditional method of data analysis, based on abstractions and generalizability from which to draw their conclusions and examine relationships. This study uses an alternative method of data collection and analysis in the form of Q methodology. The origin of the Q sort and Q methodology came through the desire of its creator, William Stephenson, to be able to define an *individual's* traits or attributes, allowing comparisons to be made with other individuals, within a statistical study (Stephenson, 1936). In the statistical analysis carried out in Q methodology, the variables being measured are not grouped according to the similarity of the items, but the view of the participants of the study according to the rated order given to the items. Using what is called a forced-choice or pre-arranged frequency distribution known as a Q sort, allows the researcher to gather data in this way. In a typical Q sort, and as used in this study, each participant is asked to place an item on the scale relative to their psychological viewpoint. Different from other data collection methods, such as a Likert scale, participants are encouraged to consider and reconsider relative item placement before making a final decision and submitting their selection. In addition to the ability to capture data that reflects subjective evaluations of each participant, this facet of the data collection process is another advantage of Q methodology (Irie, 2014).

A handful of previous studies using Q methodology have examined the concept of the possible L2 self. Indeed, the qualities inherent in its unique data collection format, and subsequent methods of interpretation and analysis have been lauded as they provide "(...) an alternative for capturing unique information about possible selves that is not available using traditional methodologies" (Kerpelman, 2006, p. 181). Following the publication of papers promoting the use of Q methodology in the study of possible selves (Irie, 2014; Irie & Ryan, 2014), Irie and Ryan (2015) used Q methodology to examine changes in Japanese university students' L2 self concept following participation in a study abroad program. More recently, Faherty (2016) used Q methodology to examine the L2 selves of non-English major students in order to be able to better determine the needs of her students. As discussed above, the L2 self concept is the one that can be described as very personal and complex, with responses befitting an analysis which can highlight different views and feelings regarding questions on its prevailing condition. With this in mind, it was decided to use Q methodology for this study in a unique pre- and post-analysis of student concept of possible L2 selves and formulate the second of the two research questions around this form of analysis: How useful is Q methodology in examining the changes in L2 self concept among basic English users?

3. Methodology

3.1. Student participants and English levels

The study was carried out during a 15-week elective English conversation course. The main course aims were to develop basic English communicative competence. In the initial stage of the study, a total of 46 students, comprising 2 classes of 23 non-English major Japanese freshman students, studying at a technical university in northeast Japan, participated in the study. The students were between 19 and 20 years old. The control group consisted of 13 female and 10 male participants, whereas the experimental group comprised 1 female and 22 male students. The students were all participants in elective English conversation classes taught by the same teacher.

To gauge students' current English skill levels, they were first administered a self-perceived proficiency test taken from the CEFR-J (Tono & Negishi, 2012). The CEFR-J is based on the Common European Framework of Reference for Languages (CEFR) and has been adapted for the English language context in Japan. It consists of a series of "can do" descriptors, which indicate what the test-taker feels they can do with language. It is based upon the "action-oriented approach" proposed in the original CEFR and has 12 levels based on the original six A1 to C2 levels found on the CEFR (see Markel, 2018, for delineation). According to Markel's profile, the analysis showed the participating students (Table 1) all come under the classification of "basic user".

Table 1 Average CEFR-J scores from student English skills self-assessment

Group	Speaking (interaction)	Speaking (production)	Understanding (listening)	Understanding (reading)	Writing
Control	A1.3	A1.2	A1.3	A2.1	A2.1
Experimental	A1.2	A1.3	A1.3	A1.3	A1.3

To substantiate the self-evaluations, a second test was administered. Primarily used as a placement test, The Versant English Placement Test (VEPT) assesses students' four skills by evaluating their typed and vocalized input via an online test. The maximum score for each skill is eighty. Table 2 shows the Average Versant score and the equivalent CEFR score for both groups. The VEPT scores for both groups substantiate the self-reported evaluations of the CEFR-J, classifying the participating students as "basic users."

Table 2 Average VEPT scores and equivalent CEFR scores

Group	Speaking	Listening	Reading	Writing
Control	27 / A1	32 / A1	30 / A1	25 / Pre-A1
Experimental	32 / A1	31 / A1	28 / A1	27 / A1

This is a mixed-methods intervention study, combining both quantitative and qualitative data. The quantitative data consists of factor analysis of responses to a series of questions administered via a Q sort. The qualitative data is presented in the form of student comments which serve as confirmatory data of the statistical analyses collected at various points of the study. The questions used can be seen in the appendix.

3.2. Procedures

3.2.1. The first Q sort

Figure 1 shows the Q sort used in this study, with a ranking scale from -5 (of least personal significance) to +5 (of most personal significance). It also shows the number of items that can be placed in each section (totaling 50 items used in this study). The 50 questions selected for the Q sort distribution used in this study, were taken and developed from a variety of sources, notably Irie and Ryan (2015). The questions were translated into Japanese by the author and checked for accuracy by two Japanese colleagues at the author’s institution.

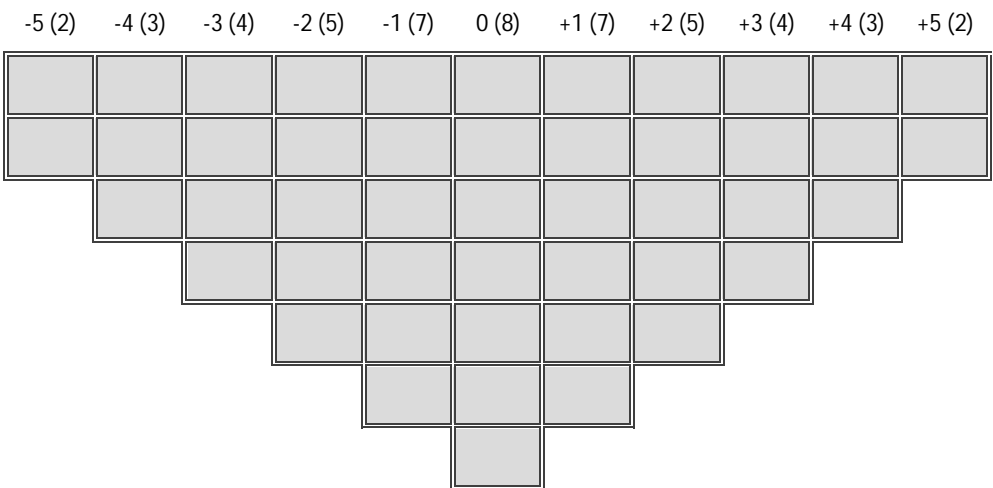


Figure 1 Pre-arranged frequency distribution used in this study

Previous studies employing Q methodology have asked students to place physical media, in the form of cards, onto a scale. As the organization and collection of data from Q sort in terms of space and time was perceived to be a potential problem (as highlighted in Faherty, 2016), the Q sort for both pre- and post-intervention was administered using an online software tool, Q-Sortouch (Pruneddu, 2017). The

drag and drop interface used in the software allows students to replicate the manual activity of the sorting activity described above. Following the Q sort, students were asked to justify the reasoning behind 2 of the allocations for each score, which was also done in the software application. This number of allocations was chosen to ensure that students had ample time to complete this part of the task (comprising 22 individually typed responses) and to discourage task fatigue.

For both pre- and post-tests and for both groups, sets of 23 Q sorts were intercorrelated and factor analyzed using PQMethod version 2.35 (Schmolk, 2014) and the resulting data entered into Ken-Q Analysis version 0.11.1 (Banasick, 2016) for further manipulation and final analysis.

3.2.2. Vision building activities

Over the following 9 weeks, students from the experimental group participated in a number of vision-building activities. The following section describes the activities administered during this time.

Possible selves tree

The possible selves tree activity was adapted from Hock, Deshler and Schumaker (2006). In the third week of the semester, students were given a pre-rendered graphical representation of a tree with 3 boughs. The 3 boughs were labeled from left to right *English learner*, *Hobby*, and *(institution name) student*. The decision to guide the students in this way, rather than allowing them to decide upon their own parameters, as in Hock's original study or iterations on it (Chan, 2014) was to place the focus on the immediate learning environment. In weeks 6 and 9 of the semester, students were asked to revisit their drawing to remind themselves of what they had drawn, reflect on their selection of words or images and alter the tree as necessary.

Peer-peer future selves discussion

In weeks 4, 7 and 10, students were asked to discuss their English-using future selves with their peers, using their possible selves tree for conversation prompts. The students were allowed to carry out this activity in Japanese, thereby precluding language barriers to ideas generated and shared. Value in peer-peer discussion and its role in supporting students' concept of their future L2 selves has been demonstrated in a previous study (Cooke, 2020) which sought to examine ideas regarding peer-peer L2 metalanguage (linguaging) practices.

Visualization script

In weeks 5, 8 and 11, the teacher read from a Japanese script regarding students' possible L2 selves. Students were asked to close their eyes and the lights in the

classroom were dimmed while the teacher read the script. The text (see the appendix) was adapted from Chan's (2014) study and translated into Japanese by the author. The decision to use the Japanese script was to ensure understanding among the students.

3.2.3. The second Q sort

In week 12 of the course, the students from both groups were asked to repeat the Q sort, using the same methods as described above. Again, both groups were asked to clarify their reasons for their Q sort distribution in order to help interpret the results of the statistical analysis and to substantiate changes in the quantitative data from the first to the second sort.

4. Results

In this section, results from the factor analysis of the Q sorts from both groups will be presented. Following each quantitative description, supporting student comments taken from defining sorts are shown to substantiate accompanying comments both in this section and in the discussion. Supporting comments are presented in the students' original Japanese and in translated form. The translations in both cases were made by the author and checked by proficient Japanese speakers in the author's institution. In some cases, the students have written their comments in English. In those cases, no Japanese translation is given. In a number of cases, student explanations for the selected representative item were either not given or were too austere (such as "I think so"). In these cases too, no supporting comments are added. The following abbreviation format is used for comments: CPre1 refers to student number 1 of the control group in the pre-intervention. EPos10 refers to student number 10 of the experimental group in the post-intervention. Readers are advised to refer to Table 3, showing factor arrays to find items referenced in the interpretations given in the results section.

Table 3 Factor arrays for control and experimental groups pre-and post-intervention

Item	Statement	Control (pre)		Experiment. (pre)		Control (post)		Experiment. (post)	
		F. 1	F. 2	F. 1	F. 2	F. 1	F. 2	F. 1	F. 2
1	I would like to try living in a foreign country in the future	-2	5	-1	2	-5	4	0	1
2	Whenever I think of my future career, I imagine myself being able to use English.	0	1	0	0	-1	1	0	0
3	I will be able to use English effectively in the future.	0	3	0	1	-1	0	3	0
4	I can imagine speaking English comfortable with foreign friends in the future.	-1	1	2	0	-2	1	-3	1
5	I would like to be able to express my opinions in English.	3	3	4	2	3	0	5	1
6	I want to be respected because I speak English fluently.	1	3	4	3	2	0	1	2
7	I've wanted to speak English fluently since I was very young.	-1	1	3	0	0	4	-3	5
8	English will expand my possibilities in the future.	5	5	4	3	3	5	5	3
9	If I could speak English I would be a much cooler person.	5	4	3	5	4	4	1	3

that share this view. They appear to regard English and their English study as being relevant to them and useful for their future (8: +5; 12: +4; 20: -5; 21: -5) “今の時代では英語がとても必要なため単語だけの理由で勉強するわけではない” “In today’s age, when English is so important, it is not enough to just learn vocabulary” (CPre17) and there is a sense that this importance is shared with other class members (45: -4). These positive emotions regarding English and English study are personal, rather than being coerced via outside pressure (27: -4). However, as seen in the students’ comments made at the start of the research period (see above) regarding motivation for learning English, the positivity is both undirected and unassured (25: +1; 32: -1; 33: -2). In addition, despite these earlier comments citing future employment as reasons for learning English, the results of the Q sort see these comments somewhat tempered by the efforts (or rather lack thereof) outside of class that students are willing to expend in order to reach these goals (44: -3; 23: 0) and the realities and difficulties of using English outside of the classroom are apparent (13: -4; 14: +1; 50: +4) “私は外国人と会話をするとき緊張してしまう” “When I talk to a foreigner, I get nervous” (CPre17).

Factor 2 explains 17% of the variance. Six participants are significantly associated with this factor. As seen in table 4, Factor 2 shows a number of similarities with Factor 1. There are still elements of positivity from these students regarding English and English study for their futures (1: +5; 8: +5; 9: +4; 21: -5) “I think we need to be able to use English now. If I can use it, I can do many jobs”; “I think people who can speak English are cool. I think if I can speak English, I’ll be cool too” (CPre12), with many comments regarding using English abroad for employment or for leisure (16: 4). There is also positivity and enjoyment regarding the English class (36: +4; 40: +2), although, as seen in factor 1, there appears little desire to make efforts outside of class to translate this enjoyment into efforts regarding their English study (43: -2; 44: -3; 47: -5), though this may be explained by the immediate environment “日本人の友達しかいないのであまり話せるがいらない” “I only have Japanese friends so there isn’t really anyone to talk (English) to” (CPre14).

4.2. Post-intervention control group

Four factors were extracted and rotated through varimax rotation, which together explained 58% of the variance. Eigenvalues for all 4 of these factors rose above 1.00. Sixteen of the 23 Q sorts loaded significantly onto one of these four factors. Factor loadings of ± 0.36 or above were significant at the $p < 0.01$ level. Due to space limitations, descriptions of the initial two factors for each group both pre- and post-intervention are given.

Factor 1 explains 23% of the variance. Eight participants are significantly associated with this factor. Those that share the view of the L2 self characterized

in factor 1 have value in their own English studies (21: -5), enjoy them (36: +3) and find the atmosphere of the classroom (40: +4) and the teacher motivating (39: +5), though not so much their classmates (29: 0). Alternative inspiration comes in the form of Japanese TV personalities using English (49: +4). They do not have the chance to use English as an everyday activity (46: -4) nor do they study English outside of class time, being unconfident about how to best proceed in this regard (44: -3; 43: 0) “してみたいと思ったがあまりできないと思ったから” “I intended to do it but I thought I wasn't really able to” (CPos8). Despite acknowledging the value in learning English for both immediate social gratification (9: +4) and English worth on a larger social scale (12: +5; 8: +3) “どの国でも英語は必要だから勉強は大切だと思う” “In any country English is necessary, so I think it's important to study it” (CPos17), they do not have strong opinions regarding their ability to master English (25: 0; 35: +1), though they do have ambition to improve (5: +3). Despite being confident in their current English use (33: -4), there is a lack of confidence when considering future English application (31: +1; 34: 0) “私は内気であるため英語をうまく話すのは苦手と感じることが多い” “I am shy and often think my English speaking is poor” (CPos17), and use in future employment (2: +1; 3: +1; 13: -1).

Factor 2 explains 11% of the variance. Two participants are significantly associated with this factor. Those that share the view of the L2 self characterized in factor 2 enjoy speaking English (25: +2) and have confidence using it in the English classroom (37: -4), which they enjoy (36: +2). They do not spend any time out of class studying English (43: -5; 44: -4) or speaking it (43: -3; 26: -2), although they do come into contact with it passively in their own time (22: +3). They have wanted to study English since they were young (7: +4) and have a desire to travel (16: +5) or live (1: +4) abroad, recognizing English as an international language (12: +3). Conversely, they do not ally their English study with future employment (2: +1; 13: -3, 15: -1) or their role in a globalized future (10: -1), although they value English as being a tool which can expand their future possibilities (8: +5) “英語を使えることでできることは沢山ある” “There are many things you can do using English” (CPos1). Fluency in English is not a priority for these students, and there is no expectancy for them to be skilled in English after graduation (13: -3) but they enjoy the thought of the social value associated with English (9: +4) rather than the respect that fluency may bring (6: 0). None of their close friends or relatives are models for English speaking (30: -5) and their friends' English learning attitude does not influence their own. Instead, influences for speaking English come from Japanese media (49: +3).

4.3. Pre-intervention experimental group

Five factors were extracted and rotated through varimax rotation, which together explained 59% of the variance. Eigenvalues for all 5 of these factors was above 1.00. Seventeen of the 23 Q sorts loaded significantly onto one of these five factors. Factor loadings of ± 0.36 or above were significant at the $p < 0.01$ level. Due to space limitations, descriptions of the initial two factors for each group both pre- and post-intervention are given.

Factor 1 explains 9% of the variance. Two participants are significantly associated with this factor. There is a positivity regarding attitudes towards English (9: +3), English learning at the institution (21: +5) and towards the English classes there (36: +5). Those who share this view have lofty ambitions and desires regarding their English study (17: +5; 6: +4; 21: +5; 5: +4) and they have had a wish to speak English since childhood (7: +3). However, despite this high regard for English and comments made in pre-intervention remarks regarding their future selves, they do not identify an English-speaking future self with clear practicable goals using English (2: 0; 5: +1) or with further English study after graduating from the institution (18: -4). Lack of confidence with English clearly plays a part for these students (34: +3; 32: 0). There is an air of confusion about the role that English will play in their lives, with acknowledgement of the value in learning English pertinent to their futures (8: +4) confounded with a lack of belief in their own ability to reach that goal (34: +3; 35: +1) and a reticence to commit to the rigors of language learning (44: -3).

Factor 2 explains 18% of the variance. Seven participants are significantly associated with this factor. The L2 self identified in factor 2 is characterized by an overall positivity towards English and the learning of English. They value the concept of being able to speak from both a social standpoint (9: +5) “かつこよくなりしたい” “I want to be cool” (EPre1) and an educational point of view (11: +4). They correlate English skill with broader personal social goals (10: +4; 16: +3) and recognize the value of English in expanding possibilities in the future (8: +3), but they are very much more tentative regarding the use of English skills for their future employment (2: 0; 15: 0; 13: 0) “想像できない” “I can't imagine it” (EPre1). In order to reach their goals, they have confidence in their efforts (33: -5; 35: +5; 32: -3; 34: -2) “もっと勉強すれば英語をすらすらと話せるようになると思う” “If I study more, I think I'll be able to speak English fluently” (EPre22). Their efforts are not simply future plans (18: +3) but are manifest in the present (41: +4), though they do not go out of their way to study outside of class or beyond classroom instruction (44: -2; 42: -1; 43: -1).

4.4. Post-intervention experimental group

Five factors were extracted and rotated through varimax rotation, which together explained 57% of the variance. Eigenvalues for all 5 of these factors was above 1.00. Nineteen of the 23 Q sorts loaded significantly onto one of these five factors. Factor loadings of ± 0.36 or above were significant at the $p < 0.01$ level. Due to space limitations, descriptions of the initial two factors for each group both pre- and post-intervention are given.

Factor 1 explains 18% of the variance. Six participants are significantly associated with this factor. Those that share the view of the L2 self characterized in Factor 1 are embarrassed to speak English in class, (37: +3; 31: +1) “全員の前では緊張すると思うから” “I’m embarrassed speaking in front of other people” (Epos5) and hold relatively unremarkable attitudes towards study both inside and outside of class (3: -2; 44: -1). However, the perceived value in taking the English class (20: -5; 21: -4) is supported in a vision of their L2 selves active in a society in which English skills will be practical (12: +4; 8: +5; 14: +3) “これから国際化が進んで英語を話すのは大事だと思う” “Internationalization will continue to progress so I think it is important to speak English” (Epos22). They have a belief in their efforts to be able to function in this way both now (32: -4) and in the future (35: +4; 33: -5) “いつかできると信じている” “I believe I’ll be able to do it one day” (EPos12) despite a lack of pressure in this regard from outside sources (13: -2; 27: -4). They place function over fluency (5: +5; 4: -3; 17: -3; 6: +1) “ネイティブスピーカーと同じレベルになる必要はない” “It’s not necessary to be at the same level as a native speaker” (Epos14). Despite recognition of classroom and teacher influences on their English study (39: +2; 40: +2) “英語の先生の授業が楽しいとモチベーションに影響を与えるから” “When the teacher’s class is fun, it affects my motivation” (Epos10), their own drive appears to be the source of their inspiration for the current image of their future selves, rather than classroom or other interaction (36: +1).

Factor 2 explains 12% of the variance. Five participants are significantly associated with this factor. Those that share the view of the L2 self characterized in factor 2 want to play a role in a globalized world (10: +4), using English to a high standard (17: +5), extending to the type of job that they want to do (15: +3). These aspects inform both their current reasons for learning English (21: -4) and their future efforts they envision expending to reach those goals (33: -3), in tandem with their positive English learning mindset (31: -5; 32: -1; 33: -3; 34: -4; 38: -3; 50: -5) “間違いから学べる” “I learn through making mistakes” (Epos4). They are not influenced in their English learning by their friends (29: -4) “自分のペースで勉強している” “I learn at my own pace” (Epos4) or by their teacher

(39: -1), although the teacher does play a role of providing clarification in the English class for them (42: +4) “分からないところがあった場合、必ずと言っていいほど先生に聞きに行く” “When I don’t understand something, I almost always go and ask the teacher” (Epos4). Instead, inspiration comes in the form of media personalities, highlighted as potential avenues for motivation in my previous study (Cooke, 2020), and in the form of the expectation of family and friends for them to succeed in learning English (27: +4).

5. Discussion

5.1. Control group

The findings for these students’ both pre-and post-intervention echo Ryan’s (2009) evaluation of Japanese students’ English study as being routine; a means to an end, rather than seeking proficiency with a goal to adopting English skills for use with or for an external community, either now or in their future. As in Irie and Brewster’s (2013) study, proficient English skills, for these students, continue to represent a vague and inauspicious goal and the same can thus be said regarding their concept of their future English selves. For them, English is an intangible construct. They are able to perceive the existence of an objective, but are unwilling to commit to the efforts required to reach it. The Q sort and comments thereof endorse Aubrey and Nowlan (2013) and Csizér and Kormos’ (2009) evaluation of the positive influence of classroom experience on student L2 motivation. However, the findings indicate that students’ recognition of the value of English and the desire to communicate in English are hampered by a lack of confidence, consistent with the findings of Apple, Falout and Hill (2013). The inclusion of Japanese personalities as influences on motivation highlights the paucity of near-peer role models in both the local and wider context (Cooke, 2020; Ushioda, 2013) and can also help to explain the appeal of English use in a foreign country, seen in factor 2 of the control group.

5.2. Experimental group

While the pre-intervention shows a number of close similarities with that of the control group, there are a number of significant changes in the post-intervention. Of note for both factors, post-intervention is the emergence of the development and elaboration of an ideal L2 self through self-regulatory processes. This, in addition to (albeit limited) peer-peer and teacher-student interaction and support, correlates to findings by Nitta and Baba (2015), who regard self-regulatory capacity as having a distinct impact on future selves, and Apple et al.

(2013), in their study of Japanese science and engineering students. In the same vein, the Q sort array and accompanying comments challenge previous research which has suggested that without clear paths to career or future study prospects or plans, students might not be motivated to learn English (Taguchi, 2013; Yashima & Arano, 2014). For freshman students, classed as basic English users, in their first semester of an elective English course, this is quite a triumph! These results at this stage do indeed answer RQ1 in a positive way. A second proficiency test carried out post-intervention could be employed to verify links between stronger imagery and perceived or actual improvements in language proficiency, as revealed in Dörnyei and Chan (2014). Subsequent studies in the second semester (with those that choose to continue their sties) could measure maintenance or development of these results.

Regarding RQ2, as with other cited studies which have examined changes in L2 self concept using Q methodology, this study demonstrates the value for data collection, analysis and interpretation using this technique. By incorporating both the qualitative and quantitative methodologies inherent in this approach, this study demonstrates the value in the merging of data sources to uncover group patterns but also individual sentiment, through considered analysis and interpretation.

6. Limitations and conclusions

An increase in the number of participants would help to clarify both figures and comments which have emerged during this study. This would naturally entail the collection of a larger amount of qualitative data, the analysis of which can be very time-consuming. My attempt to circumvent some of the problems cited in previous research when collecting collaborative and supporting data regarding decisions made during the Q sort, allowed the students in this study to make a number of interesting comments and provide explanations to this end. Indeed, I believe that immediate feedback regarding decisions is important. However, the brevity and undetailed nature of the comments in this study is disappointing. Furthermore, this method of comment collection does not allow for examination of the reasons why the L2 selves of some participants in the experimental group were not positively influenced by the activities, which interview or other elicitation methods might uncover. This is clearly something that will need to be addressed in future studies of this nature.

Despite these limitations, this study highlighted the potential for imagery training to enhance students' ideal L2 selves. The intervention enabled a number of students in the experimental group to develop and express a concept of their L2 selves. For students whose Q sort or comments thereof did not reveal cogent changes, there is prevailing support for the English classroom and its

atmosphere and the teacher's role in creating and supporting these constituents. This suggests a potential for developing student L2 selves, or simply to further interest in the learning of a second language, even in learning environments where the capacity for evolution in this regard may seem formidable.

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Appendix

Feedback questions regarding choices for Q sort distribution

Please explain your reason for putting two of these statements here. Please explain why they are so relevant to you personally. Please be detailed.

Visualization speech excerpt

Please relax.

In the next few minutes, I'm going to ask you to close your eyes and picture something positive regarding using English. Please don't talk. Please close your eyes. I want you to visualize being in a place where you are using English. It could be anywhere – in a classroom, in an airport, or in a shop. You could be doing anything – giving a presentation, talking with a friend or a famous actor. You don't need to be speaking, you could be reading or writing English. Whatever you are doing in English, you are doing it well. You are succeeding in putting your message across or understanding everything that you hear or read.