Revisiting Mindset Theory: Insights from EFL Students in Japanese Higher Education

Doctor of Education Thesis

Michael Berg

Student ID: 201151537

University of Liverpool

Abstract

Despite the marked impact they have been shown to have in the classroom, growth/fixed mindsets are an under-researched area of English as a Foreign Language (EFL) studies (Lou & Noels, 2016; Mercer & Ryan, 2009). How these mindsets interface with students' EFL proficiency, as well as linguistic and social environments (demographic information such as where students grew up; to what extent English was used and study was encouraged; how much exposure students had to native English-speaking foreigners etc.) were examined in order to illuminate some trends regarding how Japanese university students perceive and approach their language learning journey. In this study approximately 850 Japanese students from two municipal universities were surveyed to identify their language learning mindsets, EFL proficiency and social/educational histories. Subsequent statistical correlations were sought, and follow-up interviews were undertaken for a more in-depth understanding of the relationships that exist. It was discovered that despite the impact mindset theory has had on a host of learning domains, its-relevance in helping to make sense of EFL learning within a Japanese university context was minimal with respect to growth mindsets, and negligible with respect to fixed. As well it was discovered the tool used to measure mindsets (Lou & Noels' Language Mindset Index) had a limited fit within a Japanese context prompting a four- (rather than six- and three-) factor model. Rather than mindsets, it appeared students struggled far more markedly with a host of affective hinderances; such as a lack of confidence and fear of making mistakes which stemmed from an overfamiliarity with the still prominent grammar-translation (yakudoku) teaching methods prevalent within secondary, as well as "cram" schools (jukus). The overcoming of these affective hindrances appeared to be requisite to becoming a "more proficient" student (as defined in this

study). Finally, from a practitioner's perspective the author makes the case for positive psychology within the Japanese EFL classroom.

Keywords: Language Learning, EFL, Growth & Fixed Mindsets, Linguistic and Social Environment, Positive Psychology, Japan.

Table of Contents

Abstract	3
1. Introduction	7
1.1 Background of the Researcher	7
1.2 Background of the Research	9
2. Literature Review	14
2.1 Mindset Interventions	20
2.2 Mindset and Culture	22
2.3 Mindset, Proficiency and The Language Learning Domain	23
2.4 Positive Psychology	26
2.5 The Intersection of Positive Psychology and Mindset Theory	28
2.6 Summary	32
3. Research Methodology	32
3.1 Research Design/Methods	32
3.2 Phase 1: Survey/methods	36
3.3 Phase 2: Interviews/methods	41
3.4 Ethical Considerations	52
4. Findings from the Surveys: Mindsets Minimal	54
4.1 Factor Analysis	55
4.2 Correlational Analysis.	68
4.3 Proficiency Scores and Educational Background	79
5. Findings from the Interviews: Stories, Commonalities and Differences	85
5.1 Introduction	85
5.2 Students' Stories	88
5.2.1 "More proficient" Students	88
5.2.2 "Less proficient" students	94

5.3 Commonalities	99
5.4 Themes from Higher and Lower Proficiency Students	104
6. Discussion	121
6.1 Introduction	121
6.2 The Language Mindset Index in a Japanese context	122
6.3 The Effects of Mindsets Appear Minimal	124
6.4 Making the Case for Socialized Scripts	126
6.5 What Can be Learned from Students' L2 Learning Journeys?	128
6.6 CLT and the Yakudoku Classroom	130
6.7 The Yakudoku Classroom and Negative emotions	132
6.8 Mindsets Revisited	141
6.9 Implementing Positive Psychology (PP) into the Japanese Classroom	143
7. Conclusion	148
7.1 Limitations	154
7.2 Future Research	159
References	161
Appendix A: Survey Items	173
Appendix B: Interview Questions*	179
Appendix C: PIS	181
Appendix D: LMI and J-LMI scales items	187
Appendix E: Analysis of Variables Compared to Growth/Fixed Mindset Scores	191
Appendix F: Summary and Graphical Representation of Fig. 4.13-4.18	192

1. Introduction

1.1 Background of the Researcher

It was not until a couple years ago that I became familiar with the works of Dweck and associates, and frankly speaking it was something of a eureka moment. I had moved to Japan more than ten years earlier at the age of twenty-six, intending to learn Japanese, but at the time was unable to hold even a basic conversation in the language. I spent a considerable amount of time studying on my own and familiarizing myself with Japanese fundamentals, however it was not until many years later coming across Dweck's work that I immediately recognized myself as primarily a fixed mindset subscriber in a number of ways; not the least of which was within the domain of language learning. In point of fact, I realized it was more important to me that people thought of me as proficient in Japanese, than it was to actually be proficient, and instead of searching for opportunities to speak and learn from natives, I found myself often simply trying to keep conversations and interactions in this regard as brief as possible in order to avoid being "found out" as lacking in my Japanese ability, or to potentially have to go through an awkward communication breakdown. I had witnessed peers communicate (seemingly) effortlessly which only added to my chagrin, and after having spent considerable time studying to - what felt like little effect, I felt my inability to be something of a 'dirty little secret' of sorts. Eventually I found myself shying away from opportunities to speak, and not progressing became a cyclical dynamic of helplessness and anxiety (see: Horwitz, 2001; Macintye, 1995). The question (asked by virtually every new Japanese person I met) "So, how long have you been in Japan?" was particularly embarrassing, as to my mind, it highlighted the mismatch between my ever-increasing

years on Japanese soil, and my stagnant language abilities. More and more this gave way to my outright asserting to interlocutors – in both English and Japanese - that "I'm just not a good language learner". It is as if I embraced this as part of my identity, and any time I found myself in a situation struggling to understand or communicate something in Japanese, instead of making the requisite effort to understand, I simply reminded myself that the problem was due simply to "who I was". (This was perhaps in part due to my own personal history. In point of fact those growing up in socio-economically challenging circumstances are more prone to subscribe to fixed mindsets/learned helplessness (Yeager et al., 2016; Aronson et al., 2002; Lam, 2014), and this is something which would later also factor into my own reticence to address socio-economic issues and power differentials with the interview phase of this study.) At any rate, as a language learner living in Japan, I had accepted that I simply was not a Japanese speaker, and until coming across Dweck's work, I was entirely ignorant of how harmful this way of thinking can be.

After having realized it however, I consciously made the effort to change my mindset. I started taking Japanese lessons again, and perhaps more importantly, viewed communication breakdowns, misunderstandings in an entirely different light; as not evidence of my failure, but rather inevitable *and* as learning situations. Perhaps unsurprisingly in retrospect, as a result, my Japanese proficiency level started progressing at a far faster rate than it had before. I came to wonder to what extent my former psychological condition aligned with that of my students', and was both surprised and intrigued to find there was very little research that had been done on mindsets within the language learning domain or within a Japanese context. As will be explained, mindsets are remediable through fairly simply interventions, so if in fact my EFL students were subscribing to a fixed mindset with respect to how they approached learning as in fact

I had been, and if it was impacting their ability to learn English, certainly this was something worth exploring.

1.2 Background of the Research

Implicit psychological mindsets or self-theories held by students regarding their own competencies in the classroom can affect learning in either positive or negative ways. These have been the focus of Carol Dweck and associates for the past few decades, and her research, originally stemming from attribution theory, has been very prolific (see: Diener & Dweck, 1978; Dweck, 1986; Dweck & Leggett, 1988; Elliot & Dweck, 1988; Dweck, 1991; Dweck, Chiu & Hong, 1995; Chiu, Hong & Dweck, 1997; Dweck, 2006; Blackwell, Trzesniewski & Dweck, 2007; Dweck, 2008; Murphy & Dweck, 2010; Elliot & Dweck, 2013 etc.) as well as very influential, spurring Boaler (2013) to describe it as the cause of nothing short of a "mindset revolution". The canon of work shows with consistency that those subscribing to an entity (fixed) mindset believe that intelligence is fixed and immutable, and are concerned primarily with measuring and validating their competence resulting in poor academic outcomes and a tendency towards helpless responses in the face of failure. In contrast, those with an incremental (growth) mindset view intelligence as malleable and developed through effort. These theorists generally do better in school, are more satisfied, motivated, engaged and less likely to see failure as a threat to their self-worth.

Students subscribing to the fixed theory focus more on measuring and validating themselves as they view challenges not as opportunities to learn and grow, but as threats to their selfworth. This is understandable, for if it is true that one's intelligence is static or immutable, then it stands to reason that measurement of said intelligence can cut fairly close to one's sense of self-worth. Consequently, rather than facing challenges head-on in the interest of development, fixed mindset subscribers will often avoid them; preferring instead to either do nothing, or engage in work they feel comfortable will not threaten how they view themselves, as well as how others view them (Dweck & Molden, 2005; Dweck, 2000). The research shows that students subscribing to fixed mindset are concerned primarily with validating their competence to themselves and others to the eventual detriment of their grades (Dweck, 2000; Hong, Chiu, Dweck, Lin, & Wan, 1999; Blackwell, Trzesniewski, & Dweck, 2007). Their reaction to failure in - for example - a math test might result in their deciding "I guess I'm not a math person", which often results in their neglecting to study math altogether (Yeager et al., 2016).

Those holding incremental or growth mindsets on the other hand are able to view challenges as natural and necessary to self-development. They exhibit *mastery* rather than *performance* goals (Dweck & Leggett, 1988), are more concerned with improving and learning, and have a less static view of people generally. They are less anxious, as they do not generally feel that negative results from tests or challenges reflect on them *as people*, but rather simply on a lack of progress or effort thus far (Dweck, 2000; Dweck, 2006; Dweck, 2008). Whereas in the face of failure, the fixed mindset subscriber will say "I guess I'm not a math person", the growth mindset subscriber will say "I guess I'm not a math person", the growth

Curious as to the extent the tenets of Mindset Theory impacted EFL students at the universities where I have worked, I formulated the following research questions:

1. How do language learning mindsets impact Japanese university students' learning of English?

1.1 What is the relationship between students' mindsets and English language proficiency?

1.2 What is the relationship between students' mindsets and their linguistic and social histories (demographic information such as where students grew up; to what extent English was used and study was encouraged; how much exposure students had to native English-speaking foreigners etc.)?

1.3 How do students' mindsets change over their four years in university?

On the basis that mindsets are fairly easily diagnosable via survey (Dweck, 2000; 2006))

I reasoned that adding some context to – what otherwise might be a fairly one-dimensional study

- might be fruitful. The survey, which was administered at two municipal universities at which
the author teaches, could provide information regarding students' EFL proficiency, mindsets and
demographic information, and using this information, a broad range of students could be selected, and invited for follow-up interviews; loosely comprising a mixed methods approach
(Gray, 2014).

From a practitioner's standpoint, to assume mindsets were the whole story seemed a bit presumptuous, and although mindsets can be remedied (Good et al., 2003; Yeager et al., 2016; Aronson et al., 2002), it stood to reason that first uncovering whether or not they matter within Japanese university EFL context constituted a logical first step. Regardless of the extent to which mindsets impacted students' journey, looking at experiences/viewpoints/issues/opinions via semi-structured interview format could add not just context and breadth, but scope to the overall picture (Sakui & Gaies, 1999; Lund, 2012). Thematic analysis of the interview transcripts would provide a) overall themes, viewpoints and commonalities shared by EFL students regardless of proficiency etc., and (owing to the fact that the author would be in possession of

students' mindset/EFL proficiency and demographic information), b) themes which corresponded with students' level of proficiency; that is, commonalities shared by those who have become more (as well as less) successful during their EFL learning journey.

To this end I added to my research questions the following:

- 2. What can be learned from Japanese university students' EFL learning journeys?
- 2.1 What can be learned from commonalities within the journey of ESL university students in order to foster more fruitful learning paths?
- 2.2 What can be learned from the journeys of more proficient ESL university students in Japan in order to foster similar experiences/approaches?

In the end, what was in fact uncovered was that mindsets' impact upon Japanese university students' EFL journey is minimal and arguably non-existent. Themes that surfaced instead through analysis of the interviews suggest that students struggle far more with affective factors such as nervousness and fear of making mistakes, a lack of confidence and a misunderstanding as to how languages are best learned which are at least in part due to institutional factors such as the reliance on the *yakudoku* (grammar translation) teaching method and the inability to implement communicative language teaching (CLT) methods. In point of fact, within the interviewee cohort, it was primarily only students who were able to overcome these affective factors who went on to become 'successful' EFL learners.

Though addressing these institutional factors may be beyond the scope of this paper, the debilitating effects of language anxiety is a well-established (Horwitz, 2001; MacIntyre, 2017) in Second Language Acquisition research. Owing to this, as well as alarming statistics regarding the overall psychological well-being of Japanese adolescents (Lamis et al., 2014; Twenge et al.,

2019), the author suggests the tenets of positive psychology be considered within the EFL class-room, as they have been shown to effective in combating anxiety and fostering psychological well-being (Oxford, 2017).

Positive psychology (PP) is a relatively young field of research, having proliferated around the turn of the millennium (Lomas et al., 2020) making it not much older than contemporary university students themselves. It focuses not on repairing damage within a disease model (as does traditional psychology), but rather on what people do right, how they flourish, achieve happiness and what makes life worth living. Its emphasis is on "subjective well-being, contentment and satisfaction (in the past), hope and optimism (for the future), and flow and happiness (in the present)" (Seligman & Csikszentmihalyi, 2000, p. 5). Since its inception into the field of Second Language Acquisition (SLA), PP has flourished (Dewaele, Chen, Padilla and Lake, 2019), and it is this flourishing and potential with respect to EFL learning, juxtaposed with the affective challenges uncovered within the interview portion of this study specific to Japanese EFL university students, which underpins the author's advocacy that the tenets of PP be grafted into the Japanese EFL classroom.

2. Literature Review

We all have beliefs which give meaning and structure to our lives and day to day experiences. One of the primary reasons human beings subscribe to belief systems according to George Kelly is so that we can garner a sense of security in our being able to predict future events (1955, as cited in Dweck, 2000). Some beliefs depict a dynamic world in which things, other people and even one's self are capable of change and growth. These beliefs help us move forward, see problems as having solutions, and view others - as well as ourselves - as not finished projects but rather in the midst of their(our) own learning journey. Generally, the world according to those subscribing to this view is filled with potential. Another way of looking at the world around us is to see things and people as generally static and unchanging. Qualities and abilities possessed by people as well as ourselves 'are how they are', and there is not much that can change that. Importantly, it is not which of these two general viewpoints are more "logical", "rational" or "developmentally mature", as they both can be "internally consistent, and they are both widely held by people of all levels of education and from all walks of life." (Dweck, 2000, p. 132). In fact, there are advantages to both. The advantage of the more 'dynamic' view, is that subscribers to it view change and growth as natural and hence are themselves more capable of change and growth, whereas the advantage of the latter mentioned view is that it portrays a simpler, more knowable world; and there can be a great sense of security gleaned from this belief (Dweck, 2000).

The concept of self-theory and its role in behaviour has been discussed and researched within psychological communities for over forty years now. In its nascency, Dweck and Reppucci (1973) found that students with *learned helplessness* (see: Seligman, 1972) both a) took less responsibility for their failures as well as successes, as well as b) to the extent they did accept responsibility, accredited said success/failure to ability rather than effort. In her later seminal study Dweck (1975) found subjects who also underwent failure attribution retraining (in which they were taught to take responsibility for failure, and attribute it to effort) fared much better academically than helpless students who underwent training which simply attempted to manufacture perseverance by highlighting students' correct answers and glossing over their mistakes. (This later attempt to remedy struggling students - dubbed a "success only procedure" - was a technique recommended by a host of behaviour modifiers at the time (p. 675).)

Following this, Diener and Dweck (1978) began documenting the two different response patterns (helpless and non-) within grade school children in dealing with challenging classroom material. They found the helpless group would respond by either avoiding the material entirely, or in a way which displayed a marked deterioration of performance. Most interesting was the fact that those displaying the helpless response patterns were often equally or even brighter than those who embraced the challenges. Equally as puzzling was the fact that those most concerned with their ability, as the more helpless children seemed to be, behaved in ways which clearly hampered their own development and growth.

Dweck and Elliot (1983) later began looking to students' goals as an explanation for said behaviour. They submitted that the goals that individuals harboured created the framework within which they acted, interpreted and reacted to events. Specifically, within the realm of intellectual achievement, students appeared to harbour either *performance goals* (in which they

sought primarily favourable judgements from peers and teachers) or *learning goals* (in which learning and mastering the material were the major goals).

Still unanswered however was the question as to why students in the same situation; both wanting to do well, would possess such different goals. This led to the proliferation of Dweck's *Implicit theory* which has been her focus for the last few decades. Stemming from attribution theory, different hypotheses students hold about themselves were tested and it was found that students who viewed their own intelligence as a fixed entity consistently pursued *performance* goals while those who viewed intelligence as more malleable pursued *learning*, or *mastery* goals (Bandura & Dweck, 1985). More pointedly, *implicit* or *mindset theory* posited that in different domains students attribute successes and failures either to primarily natural and unchangeable innate talent (comprising a *fixed* or *entity* mindset), or to their essentially having (or not) exerted enough effort or learned enough (exhibiting a *growth* or *incremental* mindset).

Dweck and Leggett (1988) later presented the *social-cognitive approach to motivation* and personality model which purports that students' goals set up patterns of response, and that these goals are further fostered and reinforced by individuals' self-conceptions. The model is built around goal-oriented behaviour but identifies individual differences in beliefs and values which generate differences in behaviour. The social-cognitive approach to motivation and personality model further seeks to illuminate specific psychological mediators of behaviour while "assigning a central role to interpretive processes in the generation of affect and the mediation of behaviour" (p. 257).

It is important to note that up until this point, essentially the only domain that had been studied was that of intellectual achievement/theories of intelligence, etc. However, Dweck and

associates would soon expand this to that of the realm of social interactions and then to a host of other domains as well. In her book *Self-Theories* (2000) Dweck outlines how the research had expanded up until the book's publishing date. Asserting a surprising amount of internal consistency within the belief systems of both growth (incremental) and fixed (entity) mindset subscribers, she cites research findings that show that entity theorists are more likely to hold and act on stereotypes (Levy & Dweck, 1998) and to believe in "destiny" (Carver, Scheier & Weintraub, 1989). Entity theorists were further shown to put more weight on grades than learning, were more likely to refuse help in school when offered it in comparison to incremental theorists (Dweck, Chui & & Hong, 1995) and were shown to be more likely to view someone as intelligent based on the *ease with which they achieved* in an academic context as opposed to the *effort or struggle they exerted* (Mueller & Dweck, 1997). They were also shown to be more likely to feel success by outshining others (versus incremental theorists who were more likely to feel successful via personal progress) (Dweck & Sorich, 1999) and they were more likely to give up when challenged (Dweck, 2008),

Furthermore, fixed mindset subscribers were more likely to have lower self-esteem (Robins & Pals, 1998), were more likely to seek friendships and romantic relationships which gave them status and validated them in the eyes of others as opposed to relationships which challenged them to grow (Kamins, Morris & Dweck, 1996), and they were more likely to view a potential partner as either 'destined to get along with them, or not' (Knee, 1998). As well, they were more likely to disengage from relationships in the face of a negative event (Carver, Scheier & Weintraub, 1989), they were more prone to have self-worth contingent on the opinions of others and seek validation (Kamins & Dweck, 1999), and finally, they were also shown to be generally more anxious, and prone to depression (Zhoa, Dweck & Mueller, 1998).

One could not be faulted for thinking that the issue here might be a lack of confidence; indeed, the theory's proximity to notions of success and failure would seem to suggest this, and there is research linking confidence with higher grades in school (Dweck, 2000). However, interestingly confidence levels between entity and incremental mindset subscribers is fairly even (Hong et al., 1998). The fissure within these students appears to be their ability (or in ability) to maintain a confident and non-defensive demeanour when faced with challenges and/or failure. Indeed, it is precisely here - during these more tumultuous times - where Dweck and associates have in fact found that high confidence/fixed theorists lose ground (grades-wise) while low confidence/growth theorists thrive (Henderson & Dweck, 1990). Dweck (2000) suspects that it is in fact this lack of confidence which spares the latter group from interpreting challenges as commentary on their (lack of) intelligence, or as viewing the entire interaction as a proving ground of sorts. In other words, those lacking confidence, but equipped with a growth mindset are advantaged in that they are looking to increase their ability, not to show others they have it.

This - Dweck postulates - is why students with generally higher academic success rates early on, are often more likely to be fixed or entity theorists: they have recognized that - compared with other students - school is easy for them and have come to define themselves as the high-achievers or as the "smart students" in the class. These early performers are often girls, as girls mature quicker than boys, and they are further able to regulate their behaviour more successfully which lends them to more praise regarding their behaviour/intelligence from teachers, which serves to only further cement their entity mindset (for more on the detriment of praise which promotes an entity mindset see: Dweck, 2000; Gunderson et al., 2013; Dweck, 2015).

Indeed, as studies have shown (Licht & Shapiro, 1982; Licht, 1984; Dweck and Leggett, 1988; Licht, Linden, Brown & Sexton, 1984) bright elementary school-aged girls are one of the

most vulnerable groups. So much so that in one study (Licht, 1984) students were grouped according to their levels of achievement and it was found that the *higher* the achievement of the girls, the *more* they displayed helpless responses when presented with challenging material. These primary school "bright girls" (who, by a fair margin, outperformed the boys) were also the most likely to choose material which was "easy enough so I don't make mistakes", while almost none of the boys opted for the easier material. As well, when the boys were presented with the challenging material, those with higher IQs mastered the material the quickest. The takeaway from all of this is that confidence and past scholastic success is by no means evidence of a growth mindset, and often an indicator of quite the opposite.

Importantly, the impact of a student's mindset does not typically surface until he/she is faced with a failure situation (Lou & Noels, 2016; Dweck, 2006; Hong, Chui, Dweck & Lin, 1998; Dweck, 2000). Even fixed mindset subscribers who are generally well prepared can do just fine as long as they are not faced with difficulty. In a longitudinal study by Blackwell, Trzesniewski, and Dweck (2007) students of equal math ability transitioning from elementary to junior high school were categorized (via survey) as either growth or fixed mindset subscribers. By the next year, the growth mindset students had median scores approximately six percentage points beyond their counterparts, and these scores continued to diverge as time went on. As well, in a study of tenth grade students, growth/fixed mindsets were found to be predictive of students' nationalized test score scores at all socio-economic levels (Claro et al., 2016). Indeed, the predictive power of how mindsets impact student grades has been well documented (Dweck, 2006; Dweck, 2008).

However more recent research has also challenged some of the theory's assertions. Sisk et al. (2018) conducted a meta-analysis which examined the strength of the relationships between

mindset and academic achievement for a host of studies, finding a relationship they describe as weak. They do however – along with other researchers (Burnette et al., 2013) - cede that overall mindset efficacy and interventions may perhaps be more promising for lower SES, underachievers and other at-risk students.

It is worth mentioning before moving on that although the growth/fixed dichotomy discussed here may seem to suggest it, the theory does not entirely pit students as strictly either one or the other. Rather, it is more fruitful to view the construct as a continuum, with students *generally* falling somewhere in between. The extent to which this is the case is probably best illustrated by Dweck herself in the following paragraph:

"Students who consistently agree with the fixed mindset items and disagree with the growth mindset ones are classified as holding a fixed mindset (about 40% of students). Those who consistently agree with the growth mindset items and disagree with the fixed mindset ones are classified as holding a growth mindset (about 40%). About 20% of students do not choose consistently and are not classified. (In some analyses, the mindset scores are used as a continuous measure and the results are similar.)" (2008, p.2).

With that said, other more recent studies claim that it is more productive to treat growth and fixed mindsets as negatively associated, yet relatively independent constructs within certain domains (Karwowski, 2014). Clearly it is not a straightforward theoretical phenomenon and therefore best – from a researcher's perspective - to proceed with caution.

2.1 Mindset Interventions

Other studies have looked to remedy fixed mindsets and associated psychological maladies. Good et al. (2003) conducted a mere two 90-minute growth mindset mentoring sessions in a test group of 7th grade math students which lead to a 4.5-point increase in math scores; the effect of which was most pronounced in girls. Looking to the tertiary level, Yeager et al. (2016) intervened in the mindsets of disadvantaged students enrolled in and transitioning to university and reduced the achievement gap by 31-40%. Additionally, Aronson et al. (2002), conducted similar interventions in the US leading to clear gains in all students, but gains which were most pronounced in African American university students leading them to conclude that mindset interventions could combat stereotype threat after just three sessions. What is shown consistently, is that in many scholastic domains in which students face challenges, there are students struggling due to what may be in part be remediable psychological barriers, and this is borne out in the literature (see: Diener & Dweck, 1978; Dweck, 1986; Dweck & Leggett, 1988; Elliot & Dweck, 1988; Dweck, 1991; Dweck, Chui & Hong, 1995; Chui, Hong & Dweck, 1997; Dweck, 2000; Dweck, 2006; Blackwell, Trzesniewski & Dweck, 2007; Dweck, 2008; Murphy & Dweck, 2010; Elliot & Dweck, 2013; Spenner, 2017).

It should be noted that the longevity of these interventions is still up for debate. Dweck (2006) found intervention results to be resilient for two years, and Aronson et al. (2002) found them resilient after one year, while other studies have shown the impact of interventions to be rather short-lived (Meyers et al., 2015; Rattan, Good & Dweck, 2012).

Notably other studies have found the effects of interventions to be virtually naught. In a study mentioned earlier, Sisk et al. (2018) conducted a second meta-analysis looking at the effectiveness of mindset interventions on academic achievement, and they demonstrated that mindset interventions had only a very small effect on academic achievement. They do however cede that

academic interventions *generally* average fairly modest effect sizes though not as low as what they found mindsets interventions to have broadly. As well, although it was found that in the US, 98% of teachers believe that changing students' mindsets would be beneficial in terms of academic achievement (Yettick et al. 2016), a more recent large-scale study (involving 100 schools) found that mindset interventions were unable to improve student test scores (Foliano et al., 2019). Furthermore, Yeager et al. (2018) found a 50-minute intervention among over 12,000 students to increase grades by a fairly weak 3%. With that said, a relatively low time investment of 50 minutes resulting in any increase *at all* is at least worthy of consideration.

2.2 Mindset and Culture

According to Stigler and Hiebert (1997) many Asian countries have in place educational systems based more concretely on the idea that learning is a process which is spurred on through effort rather than ability. Lockhart, Nakashima, Inagaki & Keil (2008) found that the Japanese participants they tested more closely subscribed to a growth mindset than their American counterparts, while Stevenson, Lee, Chen, Stigler, Hsu and Kitamura (1990) assert that "Asian cultures see effort as being a major and integral part of intelligence, much more than Americans" (as cited in Dweck, 2000, p. 60). As well, Chen et al. (2005) found evidence, which suggests Asian or Confucian cultures subscribe to a 'required motivation' construct, which strives to meet societal, parental and educational expectations. It has also been suggested that growth mindsets may be more prominent in Confucian cultures owing to Confucianism's emphasis on self-improvement and self-criticism as opposed to Protestantism's emphasis on positive self-presentation in the West (Heine et al., 2001; Rattan et al., 2012a). It is possible that Eastern/Confucian culture broadly lends itself to more awareness and acceptance of change generally, as Ji, Nisbitt

and Su (2001) found that Chinese nationals were - among other things - more readily expectant of change generally, more tolerant of contradiction and more persistent on tasks. In sum, the underlying assumptions of the growth mindset subscriber's worldview seem more prevalent within Confucian or Asian cultures.

However, before writing the situation off as a largely cultural - and hence primarily a Western - problem, it is important to remember that the myth of the gifted language learner is one that persists all over the world (Mercer & Ryan, 2009; Mercer, Ryan & Williams, 2012; Mori, 1999; Burns & Garcia, 2017). Indeed, Mercer (2012) as well as Burns and Garcia (2017) propose that this universally accepted trope is perhaps in part due to the internationally used Modern Language Aptitude Test (MLAT) which was popularized in the 1960s and is still widely used today. Its widespread use is predicated on the notion that people are born with a static proclivity for language learning; that is, the MLAT makes the same assumptions about language learning that a fixed mindset subscriber does and hence its widespread use - it would stand to reason - would only further cement entity theories into the collective consciousness. In fact, even fairly recently language teachers and researchers cling to this assumption despite a lack of evidence either for or against it (Burns & Garcia, 2017).

2.3 Mindset, Proficiency and The Language Learning Domain

As mentioned earlier, mindset research is *domain specific*. What this means is students can simultaneously be a fixed mindset subscriber in – for example - Math, but a growth mindset subscriber in Science (Dweck, 2008). Furthermore, with respect to L2 learning, a student could in fact be a fixed mindset subscriber with regards to listening, but not with regards to reading

(Mercer & Ryan, 2012). As an academic domain, second language learning as it relates to mind-sets is unique in at least two ways: first, language learning can occur outside of the classroom and hence involves learning of not just the subject matter, but cultural practices as well (Mercer & Ryan, 2010; Gardener, 2010). Secondly, it is unique in the marked paucity of attention it has received by scholars to date (Mercer 2012; Lou & Noels, 2016; Mercer, personal communication).

Although research has been sparse, there have been roughly two approaches to date. Firstly, Lou and Noels (2016) developed the Language Mindset Inventory (LMI) which is a survey-style measurement tool which examines students' mindsets (whether growth or fixed) in relation to a) general language intelligence (GLB), b) second language aptitude beliefs (L2B) and finally c) age sensitivity beliefs (ASB). Beyond verifying the instrument for use with university students, they found through path analysis that growth mindset subscribers were likely to be more goal-oriented and mastery-oriented in the face of failure, while their counterparts showed greater concern with simply demonstrating competence (2015; 2017). In a second study within the same article mentioned earlier, Lou and Noels (2016), primed students with either a growth or fixed mindset belief (via two "scientific" articles professing the efficacy a) hard work and b) natural talent) which was shown to impact how students reacted within future language failure situations. Importantly, they acknowledge that the longevity of the impact of the interventions is entirely unknown.

Secondly, Mercer and Ryan's (2010) approach comprises a more qualitative one in that they conducted case studies with a total of nine ESL learners from Austria and Japan. Learners tended to express an amalgam of views which characterized them as neither growth nor fixed

mindset oriented, but rather as having *tendencies* towards one or another end of a mindset *spectrum*. Notably, the Japanese interviewees tended to express more homogenously, growth mindset-oriented views. Mercer and Ryan suggest this may be due to their largely quoting from a culturally authored "socialized script" in that despite the prominence of a more effort-oriented mindset, there were also many statements which seemed to be in direct contradiction to said script. One can imagine how Chen's (2005) assertion that Asian's generally subscribe to a 'required motivation' construct – one which strives to meet societal, parental and educational expectations – would support the notion of a socialize script. In a sense this idea circles back into the earlier section on culture. At any rate, clearly what is happening here is worthy of further investigation.

To what extent a second language learner's proficiency impacts their mindset (and vice versa) has been a question raised by Horwitz (1999) and echoed by Mercer and Ryan (2009). Lou and Noels (2014) proposed a model which further refines second-language-learning-fixed-mindset subscribers as either viewing themselves as more or less proficient as language learners. Those viewing themselves as *more* competent will typically subscribe to *performance-approach* goals in which they are motivated to win positive judgements (for example, getting good grades, winning positive praise) and look "smart", while those with *less* confidence in their proficiency will typically subscribe to *performance-avoidance* goals in which they seek avoiding negative feedback, or having their incompetence exposed. Importantly however, in accordance with mindset theory more generally, regardless of whether they seek performance-approach or -avoidance goals, as alluded to earlier, they are generally more anxious and fearful of failure, reacting more helplessly because they view any failure as comment on something immutable about themselves. According to the model, growth mindset subscribers are immune to the effects of being

either perceived high or low ability, as both ability groups view development as possible through the application of more effort, and are not as apt to take criticism personally. They harbour *learning* or *mastery* goals and are not self-conscious or concerned with so much with performance (Lou & Noels, 2017).

2.4 Positive Psychology

From its inception around the turn of the millennium, positive psychology (PP) has addressed a) the workings of positive internal experiences/emotions b) positive individual characteristics and c) institutions that enable people to flourish (Seligman & Csikszentmihalyi, 2000). Rather than taking a more traditional psychological - that is, a palliative - approach, PP seeks to build positive emotions, greater engagement and an appreciation of meaning in life. It focuses not on what Maslow (1954) called psychology's "darker, meaner half", but rather is - according to MacIntyre (2016) - most succinctly summed up by Christopher Peterson (2006) as "The scientific study of what goes right in life".

MacIntyre posits that the most significant contribution to PP to date has been Fredrickson's (2001; 2013) differentiation between positive and negative emotions. Negative emotions generally can result in (with fear or anxiety) the narrowing of attention – somewhat akin to the "fight or flight" response – which results in a sort of closing or narrowing of the mind/attention, along with an avoidance behavior. The role of positive emotion on the other hand is to "broaden and build". "Broaden" means that the actor's field of vision becomes larger, and they are able to take in more information; noticing things not noticed before. All the while they "build" various

resources for the future both mentally - involving the retention of information - as well as socially, as bonds with others are created through positive emotions.

In their Oxford Handbook of Positive Psychology (2009), Lopez and Snyder posit that since its inception PP has expanded into new areas such as optimism, hope, happiness, well-being, resilience, grit and meaning. MacIntyre and Mercer later asserted that Second Language Aguistion had rarely dealt with PP, but that its value becomes apparent when considering the social, human and practical dimensions of L2 learning (2014), and indeed since that time the two have become inextricably linked, evidenced in the exponential increase in publications as of late (Dewaele, Chen, Padilla & Lake, 2019). MacIntyre, Gregersen and Mercer (2019) posit that the topics addressed by PP (such as the ones mentioned in the Oxford handbook of PP) "play a central role in learning and teaching, especially with respect to language learning, which is a longterm, gradual acquisition process necessitating perseverance, optimism and resilience among other qualities." (2019, p. 262). There has been a recent burst of research in into positive emotions, specifically with regards to foreign language enjoyment (Dewaele & MacIntyre (2014), which is a direct result of applying PP to the field. This emergence signals a shift in interest in learner and teacher psychology offering "rich potential for expanded theory, novel areas for research, and innovative evidence-based approaches to language teaching practice" (MacIntyre, Gregersen & Mercer, 2019).

2.5 The Intersection of Positive Psychology and Mindset Theory

Broadly speaking, PP is a more generic theory which links how people learn, with their emotional states, while mindset theory in essence proposes that the fact that students hold different views as to the malleability of basic psychological attributes has implications for their success as students. There are however overlaps between the two theories.

Both stem from the work of Martin Seligman (mindsets from "learned helplessness" (1979), and PP (2000) in a special issue of the *American Psychologist*). Both are intricately tied to self-esteem (Mindsets: Dweck, 2008; PP: Mruk, 2006), with Diseth, Meland and Breidablick (2014) finding growth mindsets to be positively correlated with self-esteem. Robins and Pals (2002) found that fixed mindset subscribers suffered a loss of self-esteem when transitioning to university from high school, while growth mindset subscribers had increased self-esteem. Finally, both PP and mindsets have been shown to be disproportionately challenging obstacles for minorities (mindsets: Yeager et al., 2016; Aronson et al. 2002; PP: Walton & Cohen, 2011), and both have been shown to be remediable via interventions (mindsets: Yeager et al., 2016; Aronson et al., 2002, as well, see Section 2.4; PP: Kaferbock, 2019; Dewaele, Chen, Padilla & Lake, 2019).

King asserts that while there is a paucity of research regarding mindset and subjective well-being, (indeed, in his study he found what he deemed perhaps the *first* direct evidence of a causal role of positive affect negatively predicting fixed mindsets) there are several reasons to think the two may be linked (2017). Subscribers to both growth mindsets and PP view failure as natural and inevitable, while refusing to stigmatize it and seeing it as part of the learning process. On the other hand, fixed mindset subscribers may well be at risk of lower levels of well-being because they are more likely to experience negative emotions such as anger, anxiety, shame,

hopelessness and boredom in the process of learning (King, McInerney & Watkins, 2012). This is possibly due to the experience of having less control over academic outcomes (Ommundesen, Haugen & Lund, 2005). Such feelings of lack of control in turn are associated with higher levels of negative affect (Pekrun, 2006). As well, as mindsets are related to goal achievement within the academic domain, it is either failure or success which students are assessing when *compiling* their mindset, and it could be argued when students are able to make progress and achieve goals, they are theoretically more likely to experience higher levels of well-being, as well as recognize their own growth, contributing even more to a growth *as well* as a positive mindset.

In a meta-analysis looking at the effects of positive education (PP in a more applied format) interventions on both wellbeing and academic performance, Kaferbock (2019) *included* mindset interventions as both part of her study and her conceptualization of PP; in essence subsuming mindset theory under the broader concept of PP. Other recent literature has done the same (Bartz, 2018; Frydenberg, 2017; Cherkowski, 2018), further illustrating the proximity of the two theories. As well, recent empirical research in PP and second language acquisition (SLA) has been legion, and Dewaele, Chen, Padilla & Lake's (2019) meta-analysis of PP and second language learning studies cites dozens of recent empirical studies examining the contrast between foreign language enjoyment and foreign language classroom anxiety. This recent dichotomous theoretical standpoint, complete with two opposing psychological modes further underpins their resemblance.

There are also parallels between proponents of positive emotions and growth mindsets.

Both view failure as natural and inevitable, while refusing to stigmatize it and seeing it as part of the learning process while the results of harboring negative emotions and fixed mindsets have

several parallels as well. Fixed mindsets have also been discussed as leading to avoidance behaviors, (Lou & Noels, 2016; Dweck, 2008; Dweck, 2000), while negative emotions – via narrowing peoples' attention – also cause avoidance behaviors as students disengage from their environment (Fredrickson, 2013). What is more, both fixed mindsets and negative emotions act as psychological self-protective mechanisms; fixed mindsets in that the student will try avoid embarrassment or scrutiny in claiming to simply not be – for example – a 'language learning kind of person', while negative emotions more broadly – according to Fredrickson's theory - draw on evolutionary theory, positing feelings such as fear and anxiety as pre-cursors prodding us – and our ancestors - to retreat to safety.

PP and mindset theory have vastly different pasts. Mindset theory stems mostly from Attribution Theory (that is, in the face of failure or success, students *attribute* their failure of success to either natural talent or effort) making it a more *cognitive* lens through which to look, while PP from its inception (as mentioned earlier), has been a response to the overwhelming focus that the field of psychology has had to date on disorders, abnormalities and mental illnesses. PP aims to contribute by examining what can be done to "increase strengths and attributes such as resilience, happiness, optimism and the like in the general population." (MacIntyre, 2016, p. 155) placing it in the more *affective* category.

Where they further diverge, is in the fact that mindset research - as mentioned in Section 2.3 – with regards to second language acquisition research is markedly scarce (Mercer 2012; Lou & Noels, 2016; Mercer, personal communication, 2018), while as Dewaele, Chen, Padilla and Lake (2019) assert between 2012 and 2015, "PP fell on fertile ground in applied linguistics" (p. 2), and after 2016, that interest increased so exponentially as to warrant them comparing its current state to that of an "English garden in full bloom" (p.1).

As well, mindsets can be seen in a certain light to be supporting the tenets of traditional psychology in that much of the research in essence "diagnoses" learners as either growth or fixed; with fixed being arguably an example of a psychological 'malady'. They also split notably in the fact that mindsets have been shown to be *domain specific* (see: Section 2.3), while PP focuses on the individual and their emotions from a more *holistic* standpoint; indeed, its professed goal is to "help people live a better life (MacIntyre & Mercer, 2014, p. 154).

Perhaps, however where they diverge most saliently is within a Japanese (or cultural) context. As was illustrated in Section 2.2, many Asian countries have been shown generally to have educational systems and indeed cultures which foster growth mindsets and the importance of effort within student populations (Stigler and Hiebert, 1999; Stevenson, Chen, Stigler, Hsu and Kitamura, 1990; Mercer & Ryan, 2010), particularly in contrast with the U.S (Lockhart, Nakashima, Inagaki & Keil, 2008). At the same time, a large-scale study done by Dewaele and MacIntyre (2014) looking at foreign language enjoyment and foreign language classroom anxiety found that North American participants (as well as older participants) reported more FLE and less FLCA, while Asian (as well as younger participants) reported more FLCA and less FLE. The same year Lamis et al. (2014) found that compared with their US counterparts, "Japanese students reported more suicide proneness, greater hopelessness, and higher levels of depressive symptoms ... [and that] depressive symptoms were significantly associated with suicide proneness", and as recent as 2020, CNN reported that "Japan is the only G-7 country where suicide is the leading manner of death for young people aged 15 to 39" (Wang, Wright & Wakatsuki, 2020).

2.6 Summary

To summarize, at the nexus of culture and the language learning domain, mindset research has to date been vastly under-researched, particularly in light of how ubiquitous the theory is within the field of education (Boaler, 2013). This is particularly noteworthy when one considers the relative simplicity and efficacy which interventions have exhibited. This study has attempted to address this aperture by measuring the extent to which growth and fixed mindsets impact Japanese university EFL students, as well as more broadly, what other factors interface within their language learning journey and the impact these factors may have. As will be shown in the factor analysis findings within this study, the tool used to measure mindsets within a language learning context (Lou & Noels' Language Mindset Index) had a limited fit within a Japanese context. Also, it was discovered that students appear to be minimally affected by both growth and fixed mindsets and far more so by affective factors such as fear of making mistakes, trepidation and an unwillingness to "come out of their shell" so to speak. It was these affective factors which – in the end - prompted the author to recommend mindset research be abandoned in a Japanese EFL context in favor of the tenets of positive psychology which far more directly address said affective factors.

3. Research Methodology

3.1 Research Design/Methods

The aforementioned paucity of research with respect to mindsets both culturally within Japan and within the language learning domain - as well as my own personal interest as the reader will recall - prompted the following primarily exploratory research questions:

- 1. How do language learning mindsets impact Japanese university students' learning of English?
- 1.1 What is the relationship between students' mindsets and English language proficiency?
- 1.2 What is the relationship between students' mindsets and their linguistic and social histories (demographic information such as where students grew up; to what extent English was used and study was encouraged; how much exposure students had to native English-speaking foreigners etc.)?
- 1.3 How do students' mindsets change over their four years in university?
- 2. What can be learned from Japanese university students' EFL learning journeys?
- 2.1 What can be learned from commonalities within the journey of ESL university students in order to foster more fruitful learning paths?
- 2.2 What can be learned from the journeys of more proficient ESL university students in Japan in order to foster similar experiences/approaches?

In light of the largely qualitative language learning/mindset approaches of Mercer (2011) and the more quantitative approaches of Lou and Noels (2016), (indeed as was shown earlier, few other studies exist with regards to L2 learning and mindsets) initially a mixed-methods approach was thought pragmatic. Another such project which merged surveys with follow-up interview data within a Japanese context was a study conducted by Sakui and Gaies (1999) who concluded that the interview data served to underpin the value of the questionnaire resulting in valuable data triangulation. They assert "Well-conducted interviews allow learners to reveal beliefs which are not addressed in the questionnaire and to describe the reasons, sources, behavioural outcomes and other dimensions of their beliefs." (1999, p. 486). This view is well-echoed

in literature in reference to more general research platforms (see: Gray, 2014; Teddlie & Tashakkori, 2011; Bryman, 2009; Creswell, 2009; Mercer, Ryan & Williams, 2012). Indeed, mixed-methods approaches offer a variety of advantages beyond triangulation. According to Lund (2012), mixed-methods are also *complementary*, in that they are able to enhance what is otherwise often single dimensional research, and they are also *developmental* in that they are also able to capitalize on the strengths of each approach; adding validity while offsetting their weaknesses. They are also valuable in uncovering paradoxes that might be otherwise hidden, and they are often capable of adding breadth and depth to a study (Gray, 2014). It was hoped that the fact that the survey section fed into and informed the interview questions, that the interviews in turn would shed more light onto quantitative survey phase, adding *thick description*.

Mixed methodology is not without its critics. Scholars view many of its supposed advantages as excuses to explain away what can often be a lack of due diligence in studies; such as adequate sample sizes for example (Leppink, 2017). Instead, a focus on justifying why each decision was made along the research journey is viewed as more apt (Picho, Maggio & Artino Jr., 2016; Leppink, 2017). Symonds and Gorard (2010) echo the case for abandoning the more rigid paradigmatic approaches in favour of an ethological typology which approaches research as a craft and a process; functioning fine without being hamstrung by binary classification such as quantitative and qualitative. Insights from both methodological vantage points were kept in mind while moving forward.

Other opponents point to the incompatibility of quantitative and qualitative methods based on epistemological and often ontological grounds; research with a qualitative leaning is unable to escape being interpretative while research of a quantitative slant is *ipso facto* positivist

(Bryman, 2009). Indeed, as recently as 2006, mixed-methods research has been deemed "positivism in drag" (Giddings, 2006 as cited in Bryman, 2009). However, the paradigm wars which dominated the 1970s and 80s have recently given way to mixed methods based on more pragmatic grounds, specifically in the applied fields where real-life problems require more practical/less theoretical research questions (Bryman, 2009). Indeed, Hammersley (2008) asserts that despite having plenty of time to do so, neither single paradigmatic position has been able to demonstrate its superiority. Furthermore, as mentioned earlier, Lund (2012) asserts that the two can actually eschew the weaknesses of one another and beyond this can in fact lay the ground for interesting analysis *regardless* of whether the results align. Indeed, the tables have seemingly turned so much so, that in Denzin's (2008) estimation, it is now the adherence to a single methodological paradigm which is under fire (as cited in Teddlie & Tashakkori, 2011). Teddlie and Tashakkori (2011) further argue that in ten years the mixed methods paradigm in the social sciences will be so commonplace that research projects will dispense with referring to themselves using terms such as *qualitative* and *quantitative*, and simply assume a more eelectic orientation.

Broadly speaking this project originally comprised two phases: an initial survey looking to garner broad insight into the mindsets of a more extensive number of students, and a second interview phase in which selected students were invited to share opinions and thoughts in order to avoid overly simplistically characterizing them *en masse* as theoretical abstractions. This is in line with Ushioda's (2009) person-in-context model which is critical of studies which hypothesize linear, cause-and-effect relationships, and ignores the fact that humans are dynamic and idiosyncratic, constantly making meaning and negotiating between the micro- and macro-cultures

in which they are situated. Finally, a second interview phase was later opted for in order to ensure that that data saturation was achieved, as well as to clarify some questions which arose during earlier analysis.

Summing up, the mixed-methods approach in this study more broadly could be characterized as a *Quan -> Qual sequential nested* approach. *Quan -> Qual sequential* denotes the chronological order of the study, and *nested* implies that key informants were selected for the *Qual* phase from the *Quan* phase (Gray, 2014).

3.2 Phase 1: Survey/methods

Surveys have been the standard method in which mindsets have been measured to date (Ryan & Mercer, 2012) and they can be measured relatively easily. Lou and Noels (2016; 2017) developed and validated an 18-item, six-factor questionnaire dubbed the *Language Mindset Inventory* (LMI) using a sample of 1,633 language learners attending Canadian universities. It is, to the author's knowledge, the only survey instrument which measures growth/fixed mindset within the L2 language learning domain. The six factors were postulated to represent fixed and growth mindsets along three dimensions including 1) age-sensitivity beliefs (ASB); 2) general language intelligence beliefs (GLB); and 3) second language aptitudes beliefs (L2B). Through confirmatory factor analysis Lou and Noels found three models that best fit the data including:

- a 2-factor model with growth and fixed beliefs loading on two separate factors
- a 3-factor model representing GLB, L2B, and ASB
- a 6-factor model representing fixed & growth beliefs for each of the three aspects.

After having received permission to use the LMI, the 18 items, which comprised their survey were added to a host of other items which served to further investigate students' educational and social-linguistic histories, as well as their proficiency (see: Appendix A), in order to flesh out their profiles as EFL learners.

The survey consisted generally of three sections; a) demographic questions such age, gender, year in university, amount of time spent interacting with foreigners, area raised (city/sub-urbs/rural) etc., b) Lou and Noels' (2016) aforementioned 18 item mindset battery and c) a final section which looked to assess students' EFL proficiency via survey inquisition into their TOIEC (Test Of English for International Communication)/EIKEN (英検 Test in Practical English Proficiency)/IELTS (International English Language Testing System) and TOEFL (Test of English as a Foreign Language) scores; all of which are nationally used and recognized proficiency tests. A seven-item self-rated proficiency (SRP) metric was also included, which asked students how they feel their English skills (reading, writing, speaking, listening, vocabulary, grammar and overall) compare to Japanese university students generally. Finally, the group/class which each student had been slotted into based on an EFL entrance test was also sought (these are known as kumis; at SCU there are 23 kumis with kumi 1 comprising the top scoring students; more on this later).

The survey was translated into Japanese, back translated, piloted, and then further corrected for accuracy. It was administered at both universities at which the author is employed as a lecturer. The survey was administered via smart phone (Google Surveys) in October of 2018 to students by as many fellow teachers/colleagues as could be persuaded to help at both universities

(a QR code link was provided for easy distribution). Every ESL teacher at both schools (approx. 30 teachers; with class sizes ranging from approx. 8 to 40) were asked to present students with the QR code link informing them that it would take no more than 10 minutes complete. How many teachers *actually* helped, and how many students opted to complete or disregard the survey is unknown, and - in the interest of anonymity - could never be known; comprising what Gray might refer to as a "convenience sample" (2014).

The final question on the survey gave students the option to leave their contact information, allowing them - if they so chose - the chance to participate in the second phase as interviewees. Importantly, they were never asked their names at any point, and simply opting to *not* provide their contact information allowed them 100% anonymity (more on this later).

Finally, something worth noting about the diagnostic instrument used in the survey in this – as well as Lou and Noels' (2016) - study (the Language Mindset Index (LMI)) which was not clear until later on in the study, is that *all* of the statements which students were asked to express their level of agreement with; the strength of which indicated their level of 'growth mindset', are decidedly positive, while with the fixed mindset statements, are almost invariably negative; 'positive' and 'negative' not just on grammatical level - although this is also true - but as well on a level denoting a *general* view of the L2 learning process itself. To illustrate this, we can do a simple exercise: the reader might look to Table A below (LMI growth mindset survey items) and mentally insert the word "Unfortunately" at the beginning of every growth mindset statement, and see how awkward doing so makes each statement. For example, "Unfortunately, in learning a foreign language, if you work hard at it, you will always get better".

Table A. LMI growth mindset survey items

Everyone could do well in foreign languages if they tried hard, whether young or old

Regardless of the age at which they start, people can learn another language well.

How well a person learns a foreign language does not depend on age; anyone who works hard can be a fluent speaker in that language.

How good you are at using a foreign language will always improve if you work at it

In learning a foreign language, if you work hard at it, you will always get better.

You can always change your foreign language ability.

You can always substantially change your language intelligence

No matter how much language intelligence you have, you can always change it quite a bit.

No matter who you are you can significantly change your language intelligence level

Growth mindset survey items. All statements are decidedly optimistic.

In the same way, if one affixed the word "Fortunately" to the beginning of every fixed mindset statement below (Table B) and one could see how awkward doing *this* might make each statement from the perspective of a university L2 student. For example: "Fortunately, many people can never do well in foreign language even if they try hard because they lack natural language intelligence."

Table B. LMI fixed mindset survey items

People can't really learn a new language after they reach adulthood

Even if you try, the skill level you achieve in a foreign language will advance very little if you learn it when you're an adult.

How well a person speaks a foreign language depends on how early in life they learned it.

It is difficult to change how good you are at foreign languages.

To a large extent, a person's biological factors (ie: brain structures) determine his/her abilities to learn new languages

Many people can never do well in foreign language even if they try hard because they lack natural language intelligence.

You have a certain amount of language intelligence and you can't really do much to change it.

Your language intelligence is something about you that you can't really change much

To be honest, you can't really change your language intelligence

Fixed mindset survey items. All statements are decidedly pessimistic.

Indeed, the reader will agree that in general, all growth items suggest a positive and optimistic possibility of change, while the fixed items allude almost exclusively to hindrances, are pessimistic and injected with a sense of hopelessness. Despite the fact that the LMI was designed to measure only mindsets, it would seem plausible that to some degree they are measuring students' overall optimism with regards to the language learning process as so perhaps this should be kept in mind when interpreting the results.

At any rate, once the data was collected and cleaned, descriptive statistics were generated the Cronbach Alpha for the LMI section of the survey was calculated in order to check for reliability and to see if it aligned with Lou and Noels' (2016) studies and to get an overview of the pattern of responses. Also, correlations for scale items were examined to make sure the items that were purportedly being measuring had suitable levels of correlation. From there, various other measures/tests (such as the Kaiser-Meyer-Olkin (KMO)) were used to measure of sampling adequacy - which checked if the sample size provided a stable factor solution - as well as Bartlett's test, which checked whether data correlations were strong enough to be deemed valid. All of this comprised the pre-statistical analysis phase ensuring that the data did not break certain assumptions which allowed the quantitative portion (factor analysis and correlation) of the study to proceed.

In the interest of verifying the LMI in a Japanese context, following collation of the data, exploratory factor analysis was used to-identify response patterns. Exploratory factor analysis (EFA) was used in favor of Lou and Noels' confirmatory factor analysis (CFA) for a variety of reasons. While both are used to generate models/theories based on empirical data, CFA is used

in a deductive manner, usually affixing data to models based on existing theory complete with strong theoretical background and empirical evidence (Brown, 2016; Finch, 2019). EFA on the other hand is more of an inductive tool, used mostly in order to generate factors in order to account for patterns in data; usually at the initial stage of model/theory generation. As Lou and Noels themselves (as well as this study) point out, there is little research with regards to L2 learning, and so whether or not some certain theoretical perspective could be fitted to the model is unclear. Further, having created a translated version it could be argued, is similar to having created a new version, and hence it is possibly unsafe to assume certain assumptions exactly match the Japanese students' understandings of the questions; something echoed by Flora and Flake, who advise that following survey translation into a different language, a re-evaluation of the factor structure is prudent (2017).

Following factor analysis, various correlation analyses (regression analysis, ANOVA and t-tests) were employed to investigate the relationships between a series of items. However, as this phase of the study was iterative, and many steps and decisions were based on results gleaned *a priori*, results as well as the reasoning behind the reasoning and paths of analyses are clarified in Section 4.1.

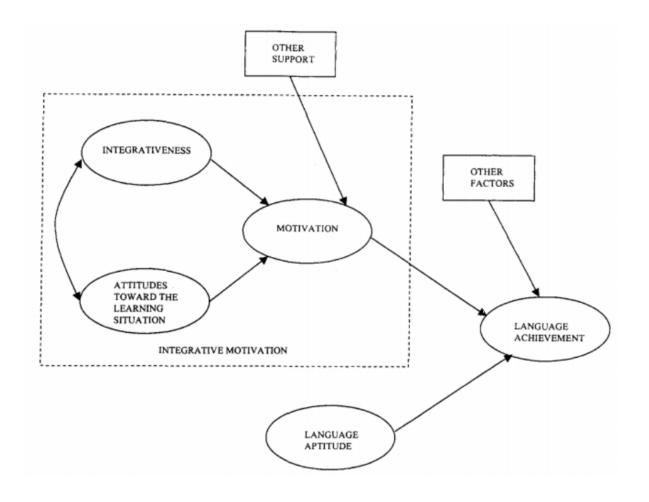
3.3 Phase 2: Interviews/methods

Interview questions looked to follow up on data gleaned from the survey and were constructed by the author based on over ten years' experience as an EFL teacher living in Japan, as well as insights garnered during the completion of a Master's degree in Applied Linguistics. As well, the interview questions were – to an extent - based on Gardener's (2010) Socio-educational model (see Figure 3.1 below). Work on this model began in the 1950s continues to be one of the most dominant models in Linguistics today (Taie & Afshari, 2015). The model in general tries

to interrelate four aspects of L2 learning including 1) the social and cultural milieu, 2) individual learner differences, 3) the setting, and 4) learning outcomes. Although the model is not without its critics, it is very comprehensive, sharing components with seven different foreign language learning models (Gardener, 1985). The underlying rationale behind it is that L2 learning involves essentially cognitive and emotional tasks. Cognitively it is a skill, requiring the learning of pronunciation, grammatical principles etc. Emotionally, it goes beyond the cognitive, viewing L2 learning as a set of behaviors characteristic of a different ethnolinguistic community (Gardener, 1985).

To this end, beyond addressing and looking to add context to issues uncovered in the survey phase, questions looked to uncover experiences students had interacting with people of different cultures in English. It also looked to uncover how students feel about English and Western culture generally, their school environment, opinions not just they hold, but also opinions their friends or parents have expressed regarding English, experiences they have had with foreigners and other things/people they felt influenced their language learning journey.

Figure 3.1. Gardener's (2010) Socio-educational model



Ushioda (2009) argues that too often in L2 research context and/or culture are located outside of the individual as an external variable; pre-existing and stable. Rather, she argues, we should opt for a *person-in-context relational view* which sees students as acting as self-reflecting intentional agents which both act on and are acted on by the contexts in which they are a part. This relationship – she continues – is "dynamic, complex and non-linear" (p. 218).

In this sense, it is important to recognize that the students in this study are all Japanese, but not to reduce comments made by them entirely to their "Japanese-ness". Labels like this ("Japanese", "woman", or even "fixed mindsets subscriber" etc.) are only starting points, and we should seek to understand not just them but also what Holliday (1999) terms the "small cultures"

that operate within, and how these all interact with the student as an individual. Broadly speaking, this is what the interviews looked to excavate. With this said, it was deemed important to remain cognizant of the fact that themes do not "emerge' on their own, but are rather uncovered by the researcher and are therefore inherently subject to the researcher's bias (Braun & Clarke, 2006). In order to minimize this, the author attempted to be vigilantly objective, made concerted efforts not to lead students, and keep in mind his own positionality as Western researcher in Japan. (See Appendix B for a more detailed list of the interview questions).

For students more reticent to open up, the author had planned to offer some insights, feelings and transitions he had had over his own language learning journey, in order to further aid in rapport-building and humanization (Gray, 2014). Time was earmarked at the outset for creating rapport with students (meetings took place 10 minutes before the scheduled interview where interviewer and interviewee walked together to a nearby vending machine and a drink of their choice was purchased. The interviewer and interviewee chatted as the reserved space was set up) in order to get more earnest answers and to mitigate both the evident power dynamics, as well as the Hawthorne effect (Cohen, Manion and Morrison, 2011; Gray, 2014). Naturally quantifying the extent to which the power dynamics affected students' responses is impossible, however the author can confidently assert that this was mitigated to the best of his abilities. Luckily, being comparably young in a Confucian culture does mitigate power distance from the students to some degree (King, 2013), however beyond this, the author maintained an informal, friendly and open demeanor, and kept the general tone of the interviews as light as possible. All of which it can be purported was generally successful based on the fact that students seemed eager to answer, and seemed willing to give as much detail as possible. This is further evidenced by the fact that 10 of the 11 interviews went the full hour with very few pauses throughout. Three or four

students even expressed gratitude for the experience after it was over, owing to the fact that they so very much enjoyed the interview and the chance to reflect.

Semi-structured interviews comprised the most pragmatic approach, as according to Gray this approach constitutes a middle ground of sorts; allowing the student to "take the lead" (2014, p. 387) if necessary, yet at the same time, maintaining interview structure. Importantly therefore, questions were broad but focused primarily on getting students to look backwards and inwardly to reflect on past/present experiences and thoughts, providing enough data to later be – what Creswell (2007) refers to as – "restoried" into narratives.

In selecting interviewees, an as-broad-as-possible range of students with regard to - primarily - their mindsets and overall EFL proficiencies was sought. To this end, students' mindset scores on the nine growth mindset questions were tallied, as were their scores on the nine fixed mindset questions, and the fixed were subtracted from the growth, giving students an overall mindset index (OMI) which ranged from +40 (meaning very growth mindset oriented) to -28 (meaning very fixed). In a sense this was simply ad hoc way to achieve maximum selection variability in minimal time, as unforeseen time restraints were a factor. As Lou and Noels (2017) did affirm that there was a very strong negative correlation between the growth and fixed mindsets using their instrument (r = -.78, p < .001), it was felt that it would be reasonable to combine the growth and fixed mindset scores particularly when time was of the essence. This OMI score, along with students' SRP (simply an average of all seven self-rated proficiency metrics) and TOEIC scores were also taken into consideration, as were - but to a lesser extent - students' age, year in university, gender, school attended etc. Looking over the responses of the 113 students willing to participate in interviews (WTPI), rearranging the data set by OMI and TOEIC scores etc. (again, in search of an as-broad-as-possible range of students), and then looking it over

again was the iterative method used to select students to invite for interviews. In the interest of variability, heuristically those on the far ends of proficiency and mindset (approx. 1/3 of each), as well as those close to the center (making up the final 1/3) of these metrics were given priority. This comprises what Gray (2014) would call maximum variation sampling, which is ideal for teasing out "any common patterns that emerge [which are of] particular interest in capturing core values and experiences". Admittedly this selection method does not bode entirely ideally for replicability, however, a case could be made that replicability might be inherently compromised owing to the number of "moving parts" involved in the study. That is, which teachers administered the survey to which classes is unclear, the students who took the survey were anonymous, only a fraction of them left their contact details, and less than half of those contacted replied. Furthermore, perhaps not surprisingly, those who did reply generally fared higher on proficiency metrics, hence "replicating "the study might not be entirely realistic. At any rate, more specifically, 26 students were invited, 12 responded, and 9 were able to meet for the interviews. Later as a second round of interviews was deemed ideal - two more students agreed to meet for interviews.

Upon agreeing to be interviewed, selected interviewees were then emailed the participation information sheet (see: Appendix C) which informed them the interview would last no longer than an hour, and arrangements to meet were made. Interviews were carried out on campus in - regarding Shimonoseki U. - classrooms which required reservation, and with regards to Kitakyushu U., in a small conference room located in the main campus library, which also had to be reserved. Despite the potential pitfalls of offering students inducements - such as undermining student commitment to the research or distorting the data (Oliver, 2010) – it had been ad-

vised by a colleague with hands-on interviewing experience specific to Shimonoseki U. that offering compensation was indeed necessary (and in-line with normal practice in Japan) in order to garner cooperation. Indeed, beyond the fact that travel costs may have been incurred, the thinking was that to not acknowledge the value of the students' time might undermine the extent to which students were willing to cooperate; particularly among less enthusiastic students - whom were also to be interviewed. One thousand yen (approx. \$9 U.S.) was thought fair, and provided out of pocket by the researcher, as were refreshments. Following transcription of all nine interviews, follow-up questions, where deemed necessary, were emailed to interviewees (most of whom replied) and member checking was also implemented.

Thematic analysis is a form of pattern recognition (Fereday & Muir-Cochrane, 2006), which captures something important in the data in relation to the research question (Braun & Clarke, 2006). There are no set rules as to what makes a theme, however in principle there should be a number of instances of each theme. Importantly, mere numbers do not comprise a theme, but rather significance does, and important themes *may* appear relatively little in the data, and so researcher judgment is crucial (Maguire & Delahunt, 2017). Furthermore, a link between two seemingly minor themes can comprise a key theme as well. Part of the flexibility of thematic analysis is that themes can be determined in a number of ways, and there is no right or wrong way of determining prevalence of themes, though it is important that a researcher is consistent how themes are gleaned and open regarding how said themes emerged (Braun & Clarke, 2006).

With respect to this study, following transcription, initial themes were highlighted and coded, and a rough concept map was drawn. This was done iteratively, and after two iterations,

a spreadsheet was drawn up which illustrated which theme and subtheme applied to which interviewee. Soon it became apparent that thematic analysis alone might not be sufficient owing to the fact that student proficiency appeared to correlate more strongly with some themes than with others (more on this later).

Braun and Clark assert that thematic analysis is rapidly becoming widely recognized as one of the most valuable methods of qualitative analysis (2006; 2014). They acknowledge that there is no clear agreement about what thematic analysis actually is or how one is best to go about it, and consequently they assert that clarity on process and practice of method is vital. Braun and Clarke further assert that a researcher's theoretical position or approach all too often is not made clear, positing a continuum which places a realist/essentialist approach at one end, and a *constructionist* approach at the other. The *realist/essentialist* approach reports experiences and meanings while the *constructionist* approach examines ways in which meaning and realities of the participants are a reflection of a range of discourses operating in society. Falling between these two poles however is what they dub a contextualist method which is characterized by theories, such as critical realism (eg. Willig, 1999) which recognize how individuals make meaning from experience and the way in which a broader social context impacts those meanings (Braun & Clarke, 2006). Owing to the author's own etic position as an outsider of sorts, the approach necessarily swayed towards the realist/essentialist pole. That is, to make assumptions regarding the inner workings of a "range of discourses" operating in Japanese society might seem slightly presumptuous and/or even in a certain sense to be "orientalising" the participants. However, with that said, the author has lived in Japan for almost 15 years as an English teacher and has taught at virtually all scholastic levels and so this experience as a practitioner/insider does carry some

weight. For example, the author is familiar with classroom etiquette, aware of the range of motivation levels students possess, average student proficiency, overall strong and weak points of student EFL ability and am in relatively continuous contact with colleagues regarding said factors. He is also aware of social and cultural protocols in the more public sphere, however as he is unmarried, lives alone and has always lived in cities, and is hence less proficient in what might comprise a typical home life growing up, and even less so in more rural areas. Finally, his approach is at least in some sense theoretically informed (growth/fixed mindsets etc.) and so it is here (between the *realist/essentialist* pole and *contextualist* middle) where my theoretical position is estimated.

Braun and Clarke further demarcate between two forms of thematic analysis including an inductive and a deductive approach. The approach in this study is an inductive one characterized by its "bottom up" structure in which the themes are strongly linked to the data. In this way, inductive thematic analysis reassembles grounded theory which would seem intuitively conducive to the primarily exploratory research aims. Further, themes were not coded according to a preexisting framework which was deemed sound in that shoehorning students' responses into – for example - a growth or fixed mindset framework, was thought presumptuous. Rather it was thought apt to allow related themes to emerge as organically as possible - if they so existed.

Where this study's approach veers from sole thematic analysis is in the fact that interview participants were deliberately selected and invited for the purposes of getting to speak with students with a variety of - primarily - EFL proficiency levels and mindsets. Hence, as it was later realized, searching solely for themes which could be *generalized* was folly at least in some cases; particularly with one of the research questions (2.2) being "What can be learned from the jour-

ney of successful ESL university students in Japan in order to foster similar experiences/approaches?" That is, clearly granting some utterances from more "successful" students the same thematic weight as those less proficient would be inappropriate.

At the same time, some themes common within the students' experiences in high school for example, or impressions of their ALTs (foreign-born assistant language teachers) *could* be subject to a more traditional thematic analysis. Differentiating between the two was something that was approached pragmatically, and based on the comprised database which arranged students from most to least proficient (more on this later).

At any rate, the overlap of the two approaches I suspected was owing to an admitted general lack of definition and consensus on what comprises a thematic analysis (Braun & Clarke, 2006; 2014; Gray, 2014), a case study (Yazan, 2015; Yin, 2009; Gray, 2014) and a narrative analysis (Creswel, 2007; Merrill & West, 2009). The coding and concept map analysis methods used were arguably aligned with thematic analysis. However, the database and spreadsheets which were created as well as the writing up of the findings arguable veer more towards a case study methodology, while the interview structure and recognition of the transcribed text as a gestalt is more reminiscent of a narrative analysis (Gray, 2014). Furthermore, thematic analysis (in the interest of teasing out commonalities) draws on data exclusively from the interview transcripts, while case studies often draw on multiple data sources (Lewis, 2003 as cited in Gray, 2014). For example, in this case, students' TOEIC and OMI scores as well as other survey data allowed for the interpretation of interview statements through the lens of students' EFL proficiency, mindset etc. In the end, as I will demonstrate, these two approaches bifurcate into two

separate qualitative results sections with thematic analysis comprising Section 5.3 *Commonalities*, and the thematic analysis/case study/narrative analysis methodology results being summarized in Section 5.4 *Themes from Higher and Lower Proficiency Students*.

In a sense, this approach could be viewed as an exploratory/inductive case study (see: Gray, 2014) in that it starts with a tentative theoretical position (growth/fixed mindsets) with the recognition that this position may change by the end of the study (Hartley, 1994 as cited in Gray, 2014). Stake (2013) would deem the approach a multiple or collective case study in that several bounded cases are studied jointly to investigate a phenomenon or general condition. Eisenhardt (1989) suggests that often with case studies it makes sense to choose cases that are polar or extreme types, and to keep the number of cases studied between four and ten, which would fit with my design in that the survey and OMI index allowed me to select for students a wide range of mindsets and proficiencies. Hence, as a case study, this study could be viewed as multi-modal in that it utilizes both interview and survey data with the unit of analysis being the EFL student (the participants).

More concretely, following transcription of the initial nine interviews considerable time was spent reading, re-reading and becoming familiar with the data. Potential themes were highlighted and coded. I then summarized each of the nine interviews, while highlighting some potential themes of each and making note of each respondents' OMI, TOEIC score, SRP, age and year. From there a spreadsheet cross-sectioning each respondent with each tentative theme was constructed noting how/if that theme applied to them. Then, time was spent listening to and rereading the data, summaries and spreadsheets, and a series of thematic maps were composed (Maguire & Delahunt, 2017) in order to try and further refine and identify connections between the themes. Following this, as aforementioned, it was deemed pragmatic to implement a second

round of interviews to ensure saturation was reached. This second round comprised 12 invitations 2 responses and 2 interviews. Responses were added to the pre-existing data framework. From here, a considerable amount of time was spent naming, renaming themes while remaining cognizant of the difference between students. Eventually as mentioned earlier, it became clear that there were not only common themes which ran throughout all interviews regardless of proficiency levels and other factors, but also other themes which were common specifically to those more proficient in English and to those less proficient. Otherwise said, it gradually became clear that thematic analysis along a single overarching dimension would be fruitful in a universal sense, but at the same time would be less capable of uncovering themes which could shed light on views and practices specific to those who have gained proficiency and those who struggle with EFL respectively.

3.4 Ethical Considerations

Ethically, many of the stumbling blocks that exist in a lot of social science research are absent in this research, as asking students their opinions, or how they feel regarding their language learning journey would seem fairly innocuous. With that said, unexpected ethical issues can arise (Cohen, Manion and Morrison, 2011) and it is important to remain vigilant in ensuring student comfort at all times. To this end, school councillors' contact information was provided to students, and students were informed that they were welcome to stop the recording, or even the interview at any time. Data will be stored for five years under password protection, and alias' will be used throughout the thesis.

Having spoken to the relevant department heads at both universities, I outlined the benefits of the research to the students, including the opportunity to use English and reflect on their own language learning journeys. I also allowed the department heads access to the proposal for this study as well as the proposed survey, and permission to conduct research at both universities was granted. The University of Liverpool granted ethical approval as well after all the relevant forms were filled out satisfactorily.

The survey was written entirely in Japanese, and the preamble made it clear in the that it was 100% voluntary, and - as mentioned earlier - anonymous (see: appendix A). Prior to the interview, students were emailed the Participation Information Sheet (see: Appendix C) which explained the purpose of the research as well as their rights as interviewees, remuneration, and how the data was to be used. Students also signed an informed consent form acknowledging their consent to be recorded and to have their opinions and thoughts used for research purposes prior to the interview (see: Appendix D). They were also aware that I was in possession of their survey responses, told that they could use either English or Japanese, that they could feel free to switch at any time, and that if at any time they felt uncomfortable and/or wanted to take a break or to stop the interview entirely, that that was perfectly fine. Following the interview phase, all un-contacted students' names and contact information were destroyed, while those contacted for interviews will not be destroyed until the completion of the thesis, allowing for any possible follow-up concerns to be addressed.

4. Findings from the Surveys: Mindsets Minimal

The reader will recall that the study was designed as primarily an exploratory one and that the degree to which mindsets interacted with EFL proficiency and other metrics was by no means a foregone conclusion. The approach taken with respect to the survey data – in very broad terms – was to first clean it (filtering out responses from students who clearly did not take the survey seriously, deduping and cleansing), then confirm the validity/reliability of the data (see below), and then check if Lou and Noels' (2016) 6-item, 18-question Language Mindset Index (LMI) instrument (translated into Japanese and incorporated as part of the survey) was valid in a Japanese context (see Section 4.1 Factor Analysis). Next the plan involved probing for correlation, noting both where it did and did not exist (see Section 4.2 Correlation). Finally, exploratorily, the intent was to then take stock of the results gleaned, reflect and move forward with the secondary/interview phase. Later however, in search of survey data which might help illuminate themes uncovered in the secondary qualitative phase, I later returned to the survey data for the purposes of uncovering correlations between students' educational background (whether and for how long they had attended cram school (juku), as well as their year in university) and their EFL proficiencies (see Section 4.3 Proficiency Scores and Educational Background), and hence it is these three Sections (4.1, 4.2 & 4.3) which comprise the quantitative results section which follows.

4.1 Factor Analysis

Using the 18-itme LMI data from the survey, a factor analysis was to be done in order to see if Lou and Noels' LMI 2-, 3- and 6-factor models held in for the Japanese LMI (J-LMI) in an ESL context. The analysis consisted of a polychoric correlation matrix with oblique factor rotation (oblimin) as well as maximum likelihood estimation. This is because polychoric correlation is advised for use in cases where the data is ordinal in nature, which is the case with the scale used in this study. Also, an oblique factor rotation approach was deemed most appropriate as it assumes correlation between the factors (Finch, 2019).

The correlation matrix was checked to ensure it met necessary assumptions prior to carrying out the EFA. Bartlett's test of sphericity indicated that the level of correlations between scale items were appropriate for factor analysis. The overall KMO measure for the data was .9, which is considered "great" under Kaiser's (1974) original conceptualization. All individual KMO measures were above .78, and the determinant of the correlation matrix (0.00013) indicated no problems with multicollinearity.

To decide on the number of factors, parallel analysis and Very Simple Structure (VSS; Revelle, 2019) were used. The best fit here was for a 2-factor solution however, interestingly the parallel analysis also suggested a four-factor solution. Lou and Noels suggested a 2-factor solution was appropriate with their version of the LMI, so this was first tested. The factor loadings after rotation are presented in Table C with a corresponding factor path diagram in Figure 4.11. The test of the hypothesis that 2 factors are sufficient had $\chi^2(118) = 1158.43$, n = 825, with goodness of fit indices Tucker Lewis Index of factoring reliability (TLI) = 0.81, RMSEA = .104, 90% CIs [.098, .109], SRMR = .056, and BIC = 366.02. It is clear that the survey items load on two separate factors, this matches the two-factor model of the English-language LMI, with one factor

(ML1) representing an incremental or fixed mindset measure, and the other (ML2) an entity or growth mindset dimension (see Fig. 4.11).

So, in essence, Lou and Noels' 2-factor solution also worked with the data. Now what was needed was to see if Lou and Noels' 3- and 6-factor solutions dovetailed as well. In accordance with recommendations given by Preacher and MacCallum (2003) as well as Brown (2016) a host of preliminary oblique factor rotation approaches were applied to the data in search for the best solution. However, unlike Lou and Noels, the 3- or 6- factor model did *not fit* to this study's data. Nonetheless, the most suitable solution produced was a 4-factor model using oblimin rotation. This provided the most appropriate fit based on the criteria put forth by Kline and Thurstone for very simple structure (Brown, 2016). The test of the hypothesis that four factors are sufficient gave $\chi^2(87) = 422.75$, N = 825, with goodness of fit indices TLI = .917, RMSEA = .069, 90% CIs [.062, .075], SRMR = .027, and BIC = -161.49.

In the end, the final model consisted of two factors comprised of growth mindset items, and two factors comprised of fixed mindset items. The factor loadings and other statistics are presented in Table D (with corresponding path diagram in Fig. 4.12). This 4-factor model had similar reliability ratings to the original LMI scale, though considerably weaker correlations between factors. The reasoning behind names affixed to these four new factors are explained below. Finally, note that within the two tables and figures, item column GLB, L2B and ASB refer to general language beliefs, second language learning beliefs and age sensitive beliefs respectively. Lowercase "e" refers to entity (fixed) mindsets, while "i" refers to incremental (growth) mindsets, and the final number within the factor names is simply the question number (recall that there are three of each). So for example, "ASBi3", would read as "ASB" (age sensitive belief); "i" (incremental or growth mindset statement); and "3" (the third statement of the set of

three), while *GLBe1* would read as "*GLB*" (general language belief); "e" (entity or fixed mindset statement); and "1" (the first statement of the set of three). For a more concrete reading of the actual statements themselves, see *Table C Mindset Statements in their Four Factor Groupings* below.

Table C. Factor Loadings for 2-Factor Solution

Note: Factor loadings > .30 are in bold text

Item	Oblimin rotated fac	Oblimin rotated factor loadings				
	Growth Mindsets	Fixed Mindsets				
GLBe1	.00.	.43				
L2Bi1	.72	.15				
ASBe1	.03	.63				
L2Be1	.03	.51				
GLBi3	.71	07				
ASBi1	.78	03				
L2Be2	.36	.56				
GLBe2	08	.65				
ASBe2	20	.65				
GLBi1	.66	11				

Item	Oblimin rotated factor loadings			
	Growth Mindsets	Fixed Mindsets		
L2Bi2	.88	.07		
ASBi2	.82	01		
GLBe3	20	.58		
L2Be3	16	.44		
ASBe3	.17	.48		
L2Bi3	.73	08		
GLBi2	.66	06		
ASBi3	.72	10		
Eigenvalues	5.34	2.90		
% of variance	29.68	16.09		
α	.77	.90		

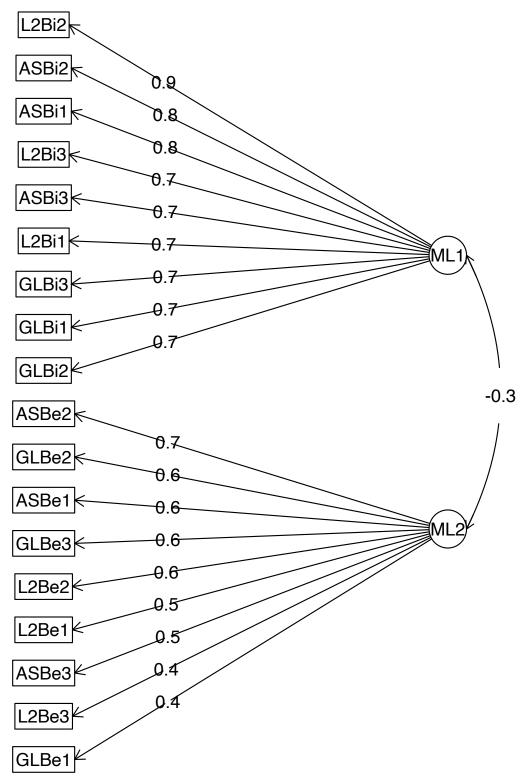


FIG. 4.11. FACTOR LOADINGS FOR 2-FACTOR SOLUTION. ML1 REPRESENTS GROWTH MINDSET SCALE ITEMS, ML2 CONSISTS OF FIXED MINDSET SCALE ITEMS. THIS MODEL *DID* MATCH LOU AND NOELS'.

Table D. Factor Loadings for 4-Factor Solution *Note:* Factor loadings > .30 are in bold text

Item	Oblimin rotated factor loadings						
	Potential via Hard	Innate Hinder-	Universal Poten-	Age-related Hinder-			
GLBe1	.07	.56	.02	02			
L2Bi1	.59	14	.08	.20			
ASBe1	07	.02	.01	.78			
L2Be1	.14	.38	10	.21			
GLBi3	.27	29	.44	.18			
ASBi1	.70	10	.08	03			
L2Be2	.43	.11	14	.48			
GLBe2	.14	.60	18	.16			
ASBe2	26	.28	.03	.55			
GLBi1	.22	10	.51	01			
L2Bi2	.77	06	.11	.04			
ASBi2	.78	.03	.09	14			
GLBe3	04	.72	06	.05			
L2Be3	18	.64	.15	02			
ASBe3	.10	.20	.05	.36			
L2Bi3	.13	.03	.77	05			
GLBi2	02	.00	.84	.03			
ASBi3	.55	.08	.27	24			
Eigenvalues	3.31	2.29	2.44	1.67			
% of variance	18.37	12.73	13.58	92.79			
α	.86	.72	.83	.66			

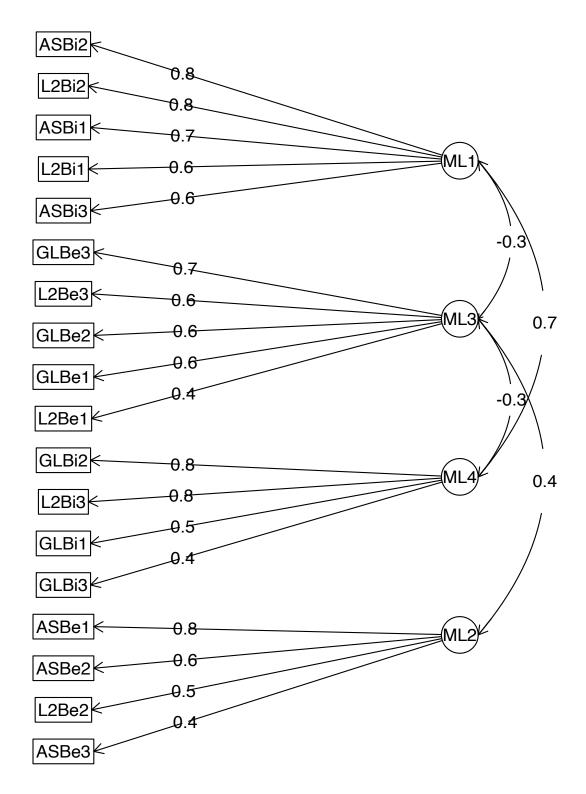


FIG. 4.12. FACTOR LOADINGS FOR 4-FACTOR SOLUTION. ML1 AND ML4 REPRESENT GROWTH MINDSET SCALE ITEMS, ML2 AND ML3 CONSIST OF FIXED MINDSET SCALE ITEMS. THIS MODEL *DID NOT* MATCH LOU AND NOELS'.

Although the data supported a 2-factor model matching that of Lou and Noels' original LMI, the goodness of fit indices are somewhat weak, based on the guidelines provided by Hu and Bentler (1999). (It should also be noted that the L2Be2 variable had relatively high loadings on both factors. This variable had complex loadings in the 4-factor model, with relatively high loadings across other factors also apparent. In the end, removing L2Be2 from the analysis did not result in a better fit, and as it was part of the original study, it was left in for this analysis.)

The primary difference with the original LMI scale is its incapability to fit a 3- or 6-factor model to this study's data. Hence, the factors in the J-LMI (my Japanese version of the LMI) were reconceptualized to fit a 4-factor model (see: Table D & Fig. 4.12 above). The two growth-scale item factors appear to represent (and were hence named) *achievement potential via hard work* (ML1) and *general change potential* (ML4). In the case of the two factors on which the fixed scale items have the highest loadings, the factors were named *innate hinderances* (ML3) and *age-related hinderances* (ML2). (See Tables D & E)

Table E Mindset Statements in their Four Factor Groupings

Factor Analysis (4 path)	<u>MINDSET</u>	Original LMI	ENGLISH-VERSION QUESTION		
ML1: potential via hard work	GROWTH	ASBi1	Everyone could do well in foreign languages if they tried hard, whether young or old		
ML1: potential via hard work	GROWTH	ASBi2	Regardless of the age at which they start, people can learn another language well		
ML1: potential via hard work	GROWTH	ASBi3	How well a person learns a foreign language does not depend on age; anyone who works hard can be a fluent speaker in that language.		
ML1: potential via hard work	GROWTH	L2Bi1	How good you are at using a foreign language will always improve if you work at it		
ML1: potential via hard work	GROWTH	L2Bi2	In learning a foreign language, if you work hard at it, you will always get better.		

ML2: age-related hinderances	FIXED	ASbe1	People can't really learn a new language after they reach adulthood	
ML2: age-related hinderances	FIXED	ASbe2	Even if you try, the skill level you achieve in a foreign language will advance very little if you learn it when you're an adult.	
ML2: age-related hinderances	FIXED	ASBe3	How well a person speaks a foreign language depends on how early in life they learned it.	
ML2: age-related hinderances	FIXED	L2Be2	It is difficult to change how good you are at foreign languages.	
ML3: innate hinder- ances	FIXED	L2Be1	To a large extent, a person's biological factors (ie: brain structures) determine his/her abilities to learn new languages	
ML3: innate hinder- ances	FIXED	L2Be3	Many people can never do well in foreign language even if they try hard because they lack natural language intelligence.	
ML3: innate hinder- ances	FIXED	GLBe1	You have a certain amount of language intelligence and you can't really do much to change it.	
ML3: innate hinder- ances	FIXED	GLBe2	Your language intelligence is something about you that you can't really change much	
ML3: innate hinder- ances	FIXED	GLBe3	To be honest, you can't really change your language intelligence	
ML4: general change potential	GROWTH	L2Bi3	You can always change your foreign language ability.	
ML4: general change potential	GROWTH	GLBi1	You can always substantially change your language intelligence	
ML4: general change potential	GROWTH	GLBi2	No matter how much language intelligence you have, you can always change it quite a bit.	
ML4: general change potential	GROWTH	GLBi3	No matter who you are you can significantly change your language intelligence level	

Mindset Statements and their four-factor groupings. The four factors found in this study can be denoted by the shades of grey as well as the "ML" number. Lou and Noels' original three- and six-factor paths are be denoted under the 'Original LMI' column.

Looking at Table E above, the four grey variants (*ML1: Potential via hard work; ML2: Age related hindrances; ML3: Innate hindrances;* and *ML4: General change potential*) represent the four paths uncovered in this study, however Lou and Noels' (2016) factor paths are also discernible by looking under the Original LMI column. For example, ASBi1, ASBi2, and ASBi3 would represent *Age-sensitive beliefs* (ASB) *incremental*/growth (i), while the final number (1,2,3) is simply the statement number. Therefore, all the ASBi's, L2Be's (*Second language beliefs, entity*/fixed), GLBi's (*General language beliefs, incremental*/growth) etc. *each* represent a

single factor uncovered by Lou and Noels, and so the "movement" of these factors from their study to the present one is discernible.

In labelling the two growth-scale factors (ML1 and ML4) we see phrases which differ primarily in terms of the verbs used within the statements. For example, the ML1 scale items use the phrases "everyone can learn/can be fluent (dare demo ~ ga shūtoku dekiru)" in tandem with conditional semantic chunks such as "if you work/if you work hard/if they tried hard (is-shōkenmei ni benkyō sureba)". Furthermore, phrases denoting achievement (learn/be a fluent speaker/improve/get better) or Japanese equivalents are present, suggesting a sort of "state of improvement" or betterment. Achievement potential via hard work seems an apt title here as most of the scale items generally assert "If effort is applied, a better future state is possible".

Looking to the second growth-scale factor (ML4), notably every scale item contains some version of the phrase "can [...] change (*kaeru koto wa dekiru*)"; which is a phrase absent in all (growth) ML1 items. There is a common thread of general or universal potential for things to change, however, absent is the notion of *work* or *effort*, as is the notion of a unidirectional *change for the better*. In sum, contrasting these two growth-scale factors (ML1 and ML4) we see surfacing a thematic difference characterized in the case of factor ML1 as an ability for an actor to impose their will via effort on current conditions, and make them better, whereas thematically ML4 emphasizes the possibility of change but does not prioritize the role of the effort, or efficacy of the learner's agency, and hence ML4 was labelled *General change potential*.

Stepping back, the reader will note that along the incremental/growth plane, all of Lou and Noels' *General language belief* factored into this study's *General change potential*, and all of the *Age sensitive beliefs* became *Potential via hard work*. *Second language beliefs* however

split with two statements factoring into *Potential via hard work*, and one going to *General change potential*, and it is here where we can see the degree to which the phrasing of the statement dictates which factor it groups with in this study. Take the three *Second language beliefs* statements:

ML1: potential via hard work	GROWTH	L2Bi1	How good you are at using a foreign language will always improve if you work at it
ML1: potential via hard work	GROWTH	L2Bi2	In learning a foreign language, if you work hard at it, you will always get better.
ML4: general change potential	GROWTH	L2Bi3	You can always change your foreign language ability.

The only difference discernible in among them is the way they are phrased. In fact, one might go as far as to say, had the bottom "L2Bi3" statement been written "You can always improve your foreign language ability if you really try hard" for example, it probably would have factored into *Potential via hard work* where, again, all of the statements denote an improvement conditional to effort, rather than a general change.

What this means for growth mindsets in general is that perhaps owing to cultural differences, general beliefs about language learning ability such as the ones suggested by Lou and Noels' (General language beliefs, Second language learning beliefs and Age sensitive belief) are not so much a part of the psychological fabric of the students surveyed in this study, but rather more prominent are the notions that effort and hard work lead to improvement (ML1: Potential via hard work) and that change in language ability generally is possible (ML4: General change potential). Perhaps what accounts for these groupings are students' belief that language can be learned via hard work or effort (via rigorous study), or via life circumstances conducive to what they see as an effortless language acquisition. This is speculation to some extent, however, not

uncommon in Japanese tertiary school is the knowledge of the one or two students who speak English more proficiently than the Japanese English teacher themselves owing to the fact that they were raised in a home where at least one parent is an English-speaking ex-patriot. Beyond this, many students are at least aware of other students who had done overseas homestays for a few months or even a year and had come back able to speak English fluently. Importantly, neither of these situations paint a picture in which the student becoming fluent is doing so by rigorously studying for hours every day (perhaps the sole alternative in the mind of any other young Japanese student; for more on this see Section 6.6), but rather by "picking up" English as it is simply the medium of communication in daily life.

The two fixed-scale items (ML2 and ML3) on the other hand appear to be more straightforward. The scale items contributing to ML3 all denote a certain relinquishment of learner agency; resigned to biological realities. That is, all statements imply that biological factors determine outcomes, along the lines of "you cannot really change", or "you're stuck with what you got". This is more general, and as the reader will note, in essence groups Lou and Noels' *General language beliefs* and *Second language learning beliefs*, into a single factor. With all of this in mind, this factor was labelled *Innate hinderances*. ML2 on the other hand focuses almost entirely on the detrimental impact of *age* on the language learning process, essentially suggesting both that adulthood is too late to begin studying language, and that the earlier one begins, the better. (One exception is the item L2Be2 (it is difficult to change how good you are at foreign languages) which - as can be seen in Tables A and B - has somewhat problematic loadings across a variety of factors.) It is interesting to note that age sensitive and innate hindrance beliefs align more congruently with Lou and Noels' findings with respect to the entity/fixed dimension than the incremental/growth. However, it could be argued that this becomes perhaps less interesting

if the incremental/growth and entity/fixed dimensions are viewed – as will be discussed in Section 6.3 - as rather optimistic and pessimistic dimensions respectively. "Beliefs" about language learning in this light to some students might be simply an abstraction, or even an excuse. Statements such as "Some people have more language intelligence than others", or "It doesn't matter how old you are, you can always learn a language if you try hard" represent perhaps to some students, fodder in an entirely uninteresting debate, and perhaps to them, even entertaining these ideas detracts from effort that could be spent learning the language (or doing something else).

Recall that these EFL students are interested in learning a language and not ruminating over – for example – linguistic concepts such as how brain structures interface with language intelligence.

With this in mind, perhaps the fixed/pessimistic dimension more resembling Lou and Noels' factor groupings in comparison to the growth/optimistic dimension is owing to the fact that the fixed/pessimistic statements (focus on innate or age-related hindrances) offer the pessimistic EFL learner an excuse to not exert herself, or a 'way out', while for the growth/optimistic learner these notions are, again, an abstraction.

One criticism that may be levelled here is that this discussion is focusing mostly on the English version of the LMI survey. Readers perhaps understandably may wonder if this is prudent considering the potential of semantic loss from the Japanese version. My position here is that I have done all I can to maintain accuracy with translations and piloting.

In sum, the factor loadings for both the LMI and this study's J-LMI dovetailed along their two-factor loadings, but interestingly, while Lou and Noels also uncovered a 3- and 6- factor loading, here, a 4-factor loading was found, suggesting a limited fit within a Japanese context (For more on this, refer to: Collett & Berg, 2020). Either way, as both the LMI and the J-LMI

split along the two-factor divide (growth vs. fixed), it was with this in mind that I proceeded to correlation analysis.

4.2 Correlational Analysis.

At this point the goal was to see how the other items within the survey correlated with the degree to which students agreed with the incremental (growth) and entity (fixed) mindset statements in order to address most specifically Research Questions 1 through 1.3. The reader will recall the research questions to be:

- 1. How do language learning mindsets impact Japanese university students' learning of English?
- 1.1 What is the relationship between students' mindsets and English language proficiency?
- 1.2 What is the relationship between students' mindsets and their linguistic and social histories (demographic information such as where students grew up; to what extent English was used and study was encouraged; how much exposure students had to native English-speaking foreigners etc.)?
- 1.3 How do students' mindsets change over their four years in university?
- 2. What can be learned from Japanese university students' EFL learning journeys?
- 2.1 What can be learned from commonalities within the journey of ESL university students in order to foster more fruitful learning paths?
- 2.2 What can be learned from the journeys of more proficient ESL university students in Japan in order to foster similar experiences/approaches?

Many of the survey items were omitted based on a host of factors; not the least of which was that the *number* of said items was so large that – it was realized in hindsight – it would be impossible to give each fair analysis and consideration in contrast with both the growth and fixed mindset metrics. As can be seen below, many of these omitted metrics would have served to elucidate research question 1.2, but as this question was seemingly the most "qualitative" of questions 1 through 1.3, it was thought best to perhaps focus more sharply on items which addressed the other three more quantitative questions (1, 1.1 & 1.3), and look to further address question 1.2 during the interview stage; particularly in light of the amount of statistical work that would necessary to address all of these items (for a full list of the survey items, see *Appendix A*).

However, beyond that, items were ignored for other reasons. For example, what English-level groups students had been stratified into (*kumis*) garnered so few responses as to be useless. Also, what type of school students attended was deemed fairly idle in that 792 of the 864 responses went to a regular (non-specializing) high school, and the differences between this group and those attending other types of schools were negligible.

With regards to whether or not students spoke English with their families, a very high 765 students claimed to "never" speak English with their families, while 38 said "seldom" and 23 said "sometimes". Students claiming "sometimes" had the lowest fixed and highest growth mindsets, but those claiming "seldom" had lower growth mindsets than those who said "never". This perhaps suggests that students' understanding of what it means to "sometimes", "seldomly" or "never" speak English with their families could easily mean different things to different students. Indeed, it is a difficult thing to quantify. The Japanese language makes use of English

loanwords quite regularly, and whether or not students regard these words as "Japanese" or "English" is unclear (indeed, they are quite literally both). All of this in tandem with the hugely disproportionate number of "never" responders, as well as the reasons mentioned earlier, led me to deem it pragmatic to ignore this metric.

As well, TOFL, IELTS and EIKEN (all nationally recognized English tests) scores were also excluded. TOFL and IELTS owing based on the marked-paucity of responses (only 13 and 18 of 853 responses respectively). EIKEN garnered 381 responses, however a disproportionate number of students had second grade level (291) while - for example - grade four only garnered eight responses and grade five only two. Indeed, all things considered - including EIKEN's only offering a low-resolution score along a five-point grade scale (vs. TOEIC's 0- to 1000-point scale) - and the fact that TOEIC responses (601) far outstripped EIKEN's, disregarding all test scores except TOIEC seemed prudent.

Other metrics left out include: What kind of high school students went to (almost all respondents (792) went to a 'regular' high school and many of the remaining students didn't answer); how students entered university (only 196 responded, and unbeknownst to me before making the survey, the number of ways students are able to enter university are legion, differ by school and are strangely unclear not only to the author but most full-time faculty spoken with); and students' majors (r² of 0.015 with respect to growth mindsets, meaning very low inter-major variability, hence students' majors appeared to have little influence).

Which of the two universities students attend (SCU [a lower ranked municipal university] or KKU [a higher ranked municipal university]) was ignored because, as the prime determinant

regarding entrance to all universities in Japan are entrance exams on which the English component is virtually identical to TOIEC (etc.) tests, it was thought safe to ignore which university students attend, and subsume it under the TOEIC metric. (For more on omitted metrics, see: Limitations).

In the end, the five metrics remaining which were deemed inclusion-worthy (and hence tested for correlation against the two mindset metrics) were: a) TOEIC scores, b) self-rated proficiency (SRP), c) how many hours students attended *juku* (cram school), d) students' year in university, and e) whether or not they left an email address at the end of the survey; signalling a willingness to be contacted and speak with a foreign teacher face to face for a follow-up interview. This was dubbed a willingness to participate in an interview (WTPI).

Of these five, three (TOIEC, SRP and WTPI) can be considered in a sense to represent a single *EFL proficiency* metric which, aggregated and pitted against the two mindset metrics, serve in large part to answer Research Questions 1 and 1.1 (1. *How do language learning mindsets impact Japanese university students' learning of English?* 1.1 *What is the relationship between students' mindsets and English language proficiency?*). At the same time, the thinking was that the metric *Students' year in university* stacked up against the mindset metrics should fairly fully answer research question 1.3 *How do students' mindsets change over their four years in university?*, while the *juku* metric would serve to shed preliminary light onto research question 1.2 *What is the relationship between students' mindsets and their linguistic and social histories?*. Again, many of the omitted metrics would have shed further light onto this question, but limited time and word count, as well as the potentiality of it being addressed - possibly more fruitfully - within the interview stage, cumulated in their omission, while the metrics which appeared to most directly address the research questions were kept for analysis.

The following table (Table F) summarizes the regression results for three of the five metrics (and their relationship with growth and fixed mindsets) mentioned above. Below Table F, each metrics corresponding graph is presented. The remaining two – which were calculated using ANOVA and t-tests respectively – follow.

Table F. Regression Analysis Summary for EFL Proficiency (SRP & TOEIC) and *juku* hours Predicting Mindsets.

Variable	b	95% CI	t	p	β
4.3 Growth Mindset/TOEIC	3.044	[1.5083, 4.5797]	3.893	< 0.001*	404.247
4.4 Fixed Mindset/TOEIC	-1.378	[-3.213, 0.456],	-1.476	0.14	565.131
4.5 Growth Mindset/SRP	0.034	[0.021, 0.046]	5.273	< .001*	3.335
4.6 Fixed Mindset/SRP	-0.005	[0, 0.9]	-0.608	0.54	4.788
4.7 Growth Mindset/juku hours	-0.1413	[-1.611, 1.328]	-0.189	0.85	228.006
4.8 Fixed Mindset/juku hours	-0.2973	[-2.038, 1.443]	-0.336	0.73	231.429

^{*}Statistically significant < 0.001

TOEIC is a nationally recognized English test which most students do annually which grades students' English proficiency from 10-990. The survey asked students to recall their latest score, and it was discovered that the extent to which they agreed with the growth mindset metrics to a somewhat predicted TOEIC scores (Fig. 4.3), while the extent to which students agreed with fixed mindsets however was not significant with respect to students' TOEIC scores, which means there was very little/no relationship (Fig. 4.4).

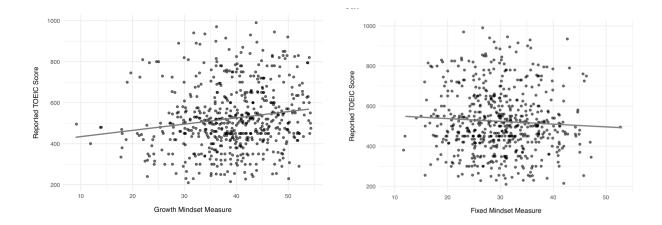


Fig. 4.3 TOIEC and Growth Mindset Regression. It was uncovered that a minimal – yet statistically significant - relationship exists p<0.001, r=0.0232, [0.0053, 0.0526].

Fig. 4.4 TOEIC and Fixed Mindset Regression. Here, a statistically insignificant relationship was uncovered suggesting a negligible relationship. p=0.14. r=.002 [0.0, 0.0154]

The SRP section of the survey asked students to rank their own proficiency in comparison with their schoolmates with respect to grammar, vocabulary, reading, writing, speaking, listening, grammar and over all from one to ten. Students' average scores in this respect were pitted against mindset scores, and it was found that growth mindset scores predicted SRP; students with higher self-ratings, had higher growth mindsets (Fig. 4.5). The regression results for fixed mindsets and SRP however were not significant, implying little or no relationship (Fig. 4.6).

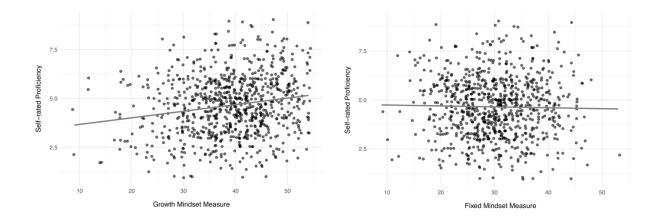
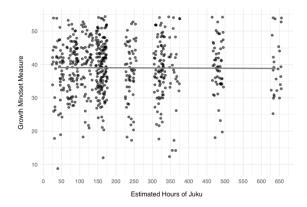


Fig. 4.5 SRP and Growth Mindset Regression. Similar to TOIEC scores above, a minimal, yet statistically significant relationship was found. p<0.001. r= 0.032 [0.0125, 0.0595]

Fig. 4.6. SRP and Fixed Mindsets Regression. The regression results for fixed mindsets and SRP however were not significant, implying little or no relationship. p=0.54; r=-0.001 [0, 0.9]

For students who attended cram school, an approximate measure of the hours they likely attended was calculated. In the survey students were asked both how many times a week, as well as how many years they attended *juku*. I multiplied the number of times per week students attended cram school, by 40 (a rough estimate of the number of weeks per year *jukus* are open taking into consideration holidays, and possible sick days etc.); by the number of years they attended cram school. All of this gave a rough estimate as to the total number of times (each of which would include an hour of English instruction) the average student might have attended. Clearly the numbers gleaned are by no means exact, but obtaining more exact numbers would not have been reasonable considering the scope of the study.

The regression results for estimated hours of cram school attendance and growth mindset were not significant, and it would appear entirely unrelated (Fig. 4.7), while, the regression results for estimated hours of cram school attendance and fixed mindset also showed an insignificant relationship (Fig. 4.8).



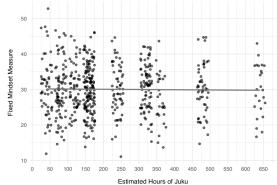


Fig. 4.7 Growth Mindset Scale by Hours of Juku. The regression results for estimated hours of cram school attendance and growth mindset were not significant, and it would appear entirely unrelated. p = .85, F(1, 599) = 0.0356 p = .85; r = -0.0016.

Fig. 4.8 Fixed Mindset Scale by Hours of Juku. The regression results for estimated hours of cram school attendance and fixed mindset also showed an insignificant relationship. p = .73; r=-0.0015.

In contrasting what year of university students are in, and their growth mindsets, a 1-way ANOVA was used, and it was found that F(2, 822)=0.6458; p=0.52; (year 1&3): d=0.09; r=0.04; (year 2&3): d=0.01; r=0.01. So, although growth mindsets looked to increase ever-so-slightly year by year it was not at all significant (Fig.4.9).

Fixed-Effects ANOVA results using TOEIC as the criterion

Predictor	Sum of Squares	df	Mean Square	F	p	$_{partial}\eta^2$	partial η^2 90% CI [LL, UL]
(Intercept)	140611966	1	140611966 .08	7722.51	.000		
Year	3493614.6 0	2	1746807.3 0	95.94	.000	.24	[.19, .29]
Error	10833805. 16	595	18208.08				

Note. LL and UL represent the lower-limit and upper-limit of the partial η^2 confidence interval,

respectively.

Descriptive statistics for Fig. 4.9

Year	n	mean	sd	median	se
1	313	38.56	8.2	39	0.46
2	400	39.21	8.25	40	0.41
3/4*	112	39.31	8.64	41	0.82

^{*}Years 3 and 4 were combined owing to the limited number of responses from 4th years students.

However, interestingly the rate at which fixed mindsets decreased did appear significant.

F(2, 822)=4.213; p=0.015; (year 1&3): d=-0.3; r=-0.13; (year 2&3): d=-0.29; r=-0.12.

Fixed-Effects ANOVA results using ProfScore as the criterion

Predictor	Sum of Squares	df	Mean Square	F	p	partial η^2	partial η^2 90% CI [LL, UL]
(Intercept)	6115.88	1	6115.88	2633.32	.000		
Year	52.93	2	26.46	11.39	.000	.03	[.01, .05]
Error	1909.09	822	2.32				

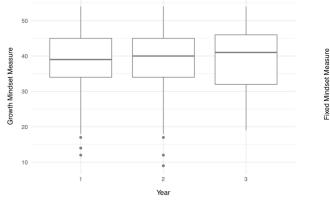
Note. LL and UL represent the lower-limit and upper-limit of the partial η^2 confidence interval, respectively.

Descriptive statistics for Fig. 4.10

Year	n	mean	sd	median	se
1	313	30.27	7.03	31	0.4

2	400	30.24	6.98	30	0.35
3/4	112	28.2	6.88	27	0.65

^{*}Years 3 and 4 were combined owing to the limited number of responses from 4th years students.



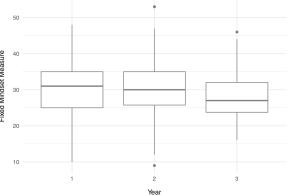


Fig. 4.9 Student Year by Growth Mindset ANOVA. Although growth mindsets appeared to increase ever-so-slightly year by year it was not at all significant. p=0.52; (year 1&3): d=0.09; r=0.04; (year 2&3): d=0.01; r=0.01.

Fig. 4.10 Student Year by Fixed Mindset ANOVA. Interestingly the rate at which fixed mindsets decreased *did* appear significant. p=0.015; (year 1&3): d=-0.3; r=-0.13; (year 2&3): d=-0.29; r=-0.12.

It was predicted that students with a higher growth mindset would be more willing to leave their contact details, signifying a willingness to be interviewed; participating in a one-hour conversation with (me) a foreigner. Using a 2-sample t-test, statistical significance was in fact found: difference in means: -2.017 CI[-3.7135, -0.32], t(143.09) = -2.35, p = 0.02, r = 0.193

T-test summary for Fig. 4.11

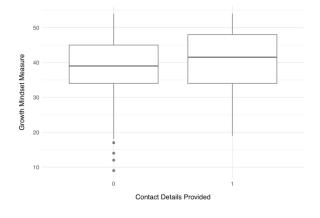
Contact Details	n	mean	sd	median	se
Left no details (0)	715	38.71	8.23	39	0.31

^{*}Years 3 and 4 were denoted simply by '3' owing to the limited number of responses from 4^{th} years students

However there seemed to be a very small relationship between fixed mindsets and those who left contact addresses. Mean difference = 1.358 [-0.098, 2.814], t(141.96)= 1.844; p = 0.067; r=0.153

T-test summary for Fig. 4.12

Contact Details	n	mean	sd	median	se
Left no details (0)	715	30.16	6.97	30	0.26
Left details (1)	110	28.8	7.22	29	0.69



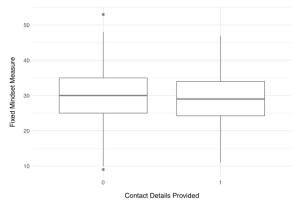


Fig. 4.11 Growth Mindset and WTPI t-test. Students who left their contact details tended to have higher growth mindsets. p = 0.02, r=0.193

Fig.4.12 Fixed Mindset and WTPI t-test. However, there was no statistically significant difference in the fixed mindsets of the students who left their contact details and those who did not. p=0.067; r=0.153

An interesting thing to note about the above graphs is that whenever statistically significant results were found for each one of the five metrics with respect to growth mindsets, the result was insignificant for the same metric with respect to its fixed counterpart and vice versa 78

(with the exception of the *jukus* metric). Indeed, this study (using Spearman rank correlation) found quite a small correlation between growth and fixed mindsets generally (r = -0.33, p < .001). Considering that the language mindset index (LMI) was designed (in order to categorize students as growth or fixed mindset oriented) using – in essence - mirror image statements (see: Appendix D) in a certain light this is quite striking, and would at the very least lend credibility to the earlier assertion that growth and mindset constructs should best be treated as negatively associated, but independent constructs. (Karwowski, 2014). The reader will recall that Lou and Noels' study garnered larger correlation (r = -.78, p < .001), which still leaves enough space to argue that the two constructs be treated as independent, but clearly this study supports the point.

4.3 Proficiency Scores and Educational Background

Beyond how growth and fixed mindsets correlated with various factors, it was also later deemed prudent - in the interest of expounding on research question 1.2, as well as further shedding light onto themes later uncovered within the qualitative portion of this study - to look at how students' general proficiency (including the TOIEC, SRP and WTPI metrics) stacked up against their educational background (if they attended *juku*, (cram school), how long they attended *juku* and what year of university they were currently in). As a variety of statistical tests were used, Table F below indicates which test was used, as well as summarizes the findings, while the following figures give graphic detail with respect to each cell.

Table F Summary of Proficiency Scores and Education.

	JUKU HOURS	JUKU YES/NO	YEAR IN UNIVERSITY
TOIEC SCORE	Fig. 4.13 (Regression analysis)b= 0.05, CI[-0.04, 0.14], t = -1.05 p = .294, F(1, 437)=1.103; p=0.29; r=-0.0002.	Fig. 4.16 (t-test) Mean difference = 27.5984 [-3.3384, 58.5351], t(236.41)= 1.7575; p = 0.08; r=0.114.	Fig. 4.19 (One-way ANOVA) F(2, 595)=95.94, p<0.001. (Year 1&3): Cohen's d of 1.8; r=0.65. (Year 2&3): Cohen's d = 0.93, r=0.37.*
SRP SCORE	Fig. 4.14 (Regression analysis)b = 0.0004, CI[-0.0004 0.0012], t = 0.901 p = .368, F(1, 599) = .81; p = .3678; r= -0.0003.	Fig. 4.17 (t-test) Mean difference = 0.005 [-0.2423, 0.253], t(365.62) = 0.0425; p = .9661; r=0.002.	Fig. 4.20 (One-way ANOVA) F(2, 822)=11.39, p<0.001. (Year 1&3): Cohen's d of 0.52; r=0.22. (Year 2&3): Cohen's d=0.35; r=0.15.*
WTPI SCORE	Fig. 4.15 (t-test) Mean difference = -0.5 [-33.595, 32.532], t(144.41) = -0.0318; p = .9747; r=0.003.		Fig. 4.21 (Chi square) $X^{2}(2, N = 825) = 8.3668, p = 0.015.*$

Summary of students' proficiency scores and their educational backgrounds. The impact of *juku* on proficiency seems minimal, while differences in students' year in university show fairly large effect sizes.

*Denotes statistically significant results at p<0.05

Referring to Table F above, the reader will note that Fig. 4.13 through 4.18 (all denoting proficiency scores in relation to whether and how long students attended juku) convey minimal effect sizes as well as statistically insignificant results. Summaries of these figures as well as graphical representation can be found in *Appendix F: Summary and Graphical Representation of Fig. 4.13-4.18*. In contrast, Fig. 4.19 through 4.21 all show notable effect sizes and are statistically significant and are therefore detailed below.

Fig 4.19 Reported TOEIC Scores and Year in University

The more mature students are, the better their TOEIC scores would seem, as students' years in university (ie: first year, second year and third year) significantly predicted their TOEIC scores. Using 1-way ANOVA, it was found that: F(2, 595)=95.94, p<0.001. Between years one

and three, I found a Cohen's d of 1.8 (large size) and a Pearson's r of 0.65 (medium size). Between years two and three, Cohen's d = 0.93 with an r of 0.37.

Fixed-Effects ANOVA results using Total.growth as the criterion

Predictor	Sum of Squares	df	Mean Square	F	p	partial η^2	partial η ² 90% CI [LL, UL]
(Intercept)	465446.96	1	465446.96	6784.60	.000		
Year	88.61	2	44.30	0.65	.524	.00	[.00, .01]
Error	56392.04	822	68.60				

Note. LL and UL represent the lower-limit and upper-limit of the partial η^2 confidence interval, respectively.

Descriptive statistics for Fig. 4.19

Year	n	mean	sd	median	se
1	183	434.86	98.5	450	7.28
2	319	531.17	139.22	515	7.8
3	96	669.17	174.84	700	17.84

Fig. 4.20. Self-rated proficiency (SRP) Scores and Year in University

It would seem that the more mature a student is, the higher they rate their own proficiency as well. Students' years in university (ie: first year, second year and third year) significantly predicted SRP scores score. Using 1-way ANOVA, it was uncovered that: F(2, 822)=11.39, p<0.001. Between years one and three, a Cohen's d of 0.52 (medium size) and a Pearson's r of 0.22 (small size) was found. Between years two and three: Cohen's d = 0.35 (small) with an r of 0.15 (very small).

Fixed-Effects ANOVA results using Total fixed as the criterion

Predictor	Sum of Squares	df	Mean Square	F	p	partial η^2	partial η ² 90% CI [LL, UL]
(Intercept)	286883.63	1	286883.63	5881.41	.000		
Year	411.04	2	205.52	4.21	.015	.01	[.00, .02]
Error	40095.53	822	48.78				

Note. LL and UL represent the lower-limit and upper-limit of the partial η^2 confidence interval, respectively.

Descriptive statistics for Fig. 4.20

Year	n	mean	sd	median	se
3	112	5.22	1.69	5.43	0.16
1	313	4.42	1.47	4.43	0.08
2	400	4.67	1.51	4.71	0.08

Fig. 4.21 Willingness to Participate in Interviews (WTPI) scores (Contact Details Provided) and Year in University

Finally, the more mature a student is, seemingly the more willing they are to participate in interviews. Results (for Fig. 4.21) are presented as a crosstab table (below). Pearson's Chisquared test was used to analyze the results $X^2(2, N = 825) = 8.3668, p = .015$. The cell contents (for *Descriptive statistics for Fig. 4.21* below) from top to bottom are as follows: Count, Row Percent, Column Percent, and Total Percent.

Descriptive statistics for Fig. 4.21

University Year	No Contact Details	Contact Details	Row Total	
3	89	23	112	
	79.464%	20.536%	13.576%	
	12.448%	20.909%		
	10.788%	2.788%		
1	282	31	313	
	90.096%	9.904%	37.939%	
	39.441%	28.182%		
	34.182%	3.758%		
2	344	56	400	
	86.000%	14.000%	48.485%	
	48.112%	50.909%		
	41.697%	6.788%		
Column Total	715	110	825	
	86.667%	13.333%		

Fig. 4.19, 4.20 & 4.21; Year in University and TOIEC/SRP/WTPI

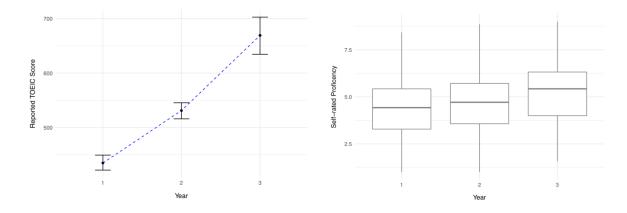


Fig 4.19 TOEIC Scores and Year in University. The higher the year a student was in university significantly predicted a higher TOEIC score. Here a medium effect size (0.65) between years two and three, and a large effect size (1.8) between years one & three was found.

Fig. 4.20. SRP Scores and Year in University. It would appear the higher year in university a student is, the more confident they are in their EFL skills. Here a small effect size (0.35) between years two and three, and a medium effect size (0.52) between years one & three was found.

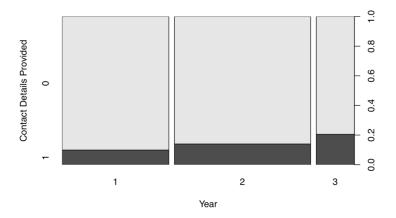


Fig. 4.21 WTPI scores (Contact Details Provided: 1) and Year in University. The higher a student's year in university was, the more willing they seemed to participate in follow-up interviews. Results were statistically significant. X = (2, N = 825) = 8.3668, p = .015.

^{*}Years 3&4 have been denoted simply by 3 owing to a limited number of $4^{\rm th}$ year respondents.

^{**}Note within the mosaic plot the width of the category represents the number of cases

5. Findings from the Interviews: Stories, Commonalities and Differences.

5.1 Introduction

In this chapter, students' individual stories and backgrounds are first presented in Section 5.2. To this end, in line with case study methodology, multiple data sources are exploited, including – but not limited to - the interview transcripts, data produced in the survey, demographic data as well as TOEIC, mindset, and SRP scores, however notably the significance of students' stories and experiences are left for the following sections (5.3 & 5.4). As an added metric within Section 5.2, the number of English students used (vs. Japanese) during the interviews was estimated, and tallied in a chart which demarcates the 11 interviewees as "more" or "less" proficient (more on this later). It is worth noting that these terms (more/less proficient) are used loosely, and are relative only to the other interviewees within the study for the purposes of examing what habits, thoughts, backgrounds or other factors might be conducive to achieving higher levels of EFL proficiency as it has been defined in this study.

As mentioned earlier, in the interest of answering Research Questions 2.1 What can be learned from commonalities within the journey of ESL university students in order to foster more fruitful learning paths? and 2.2 What can be learned from the journeys of more proficient ESL university students in Japan in order to foster similar experiences/approaches? two qualitative approaches were deemed pragmatic in order to address each respective question. First, in order to tease out commonalities within the body of interviewees and address research question 2.1, thematic analysis was performed on the interview transcripts. Section 5.3 Commonalities is a taxonomy of 10 themes which were uncovered in this way while Section 5.4 Themes from higher

and lower proficiency students comprises an arrangement of five themes which address research question 2.2 using a case study/thematic analysis hybrid. (For more on the qualitative methods employed, see Section 3.3 Interviews/methods). Notably, as the author was in possession of students' growth and fixed mindset scores coming into the interviews, related questions were foregone with the expectation that were mindsets in fact a prominent facet of students' learning psychology, they would emerge from within the data organically. In the end as the reader will come to see, very little did emerge, however that which did so, is examined in Section 6.4.

A total of 11 students participated in one-hour semi-structured interviews. The chart below (Table G: Interviewees) shows all students' self-rated proficiency (SRP), TOEIC test scores, as well as overall mindset indices (OMI). As well, their SRP and TOEIC scores have been multiplied, giving an overall proficiency score (OPS), and it is via this metric that students have been ranked accordingly (rank numbers are provided next to students' monikers in the chart and throughout the chapter henceforth where related context was deemed prudent. So for example, Student B(5) would be the second student interviewed, and the 5th most proficient). (The reason this was not done earlier during the selection process is that originally, the author had only planned on implementing thematic analysis, and it was not clear at that time that bifurcating students via their proficiency would be apt.) Also included in the chart is students' overall mindset index (OMI) as well as my estimation regarding how much English (vs. Japanese as a percentage) each student used during the interviews, which - it was felt - would add some insight into students' overall characterization as "more" or "less" proficient. The black line below Student A(6)/above I(7) represents this demarcation, and – taking stock – appears to fairly accurately demarcates this fissure. Notably whether students are "higher" or "lower" proficiency is only in

relation to one another, is in no way meant to be derogatory, and is only done in order to high-light tendencies.

Table G: Interviewees

Student Alias	SRP	TOEIC	OPS	OMI	% of Eng. used
Student F(1)	8	940	7,360	24	100%
Student J(2)	7.7	830	6,391	29	98%
Student E(3)	6	780	4,680	18	90%
Student K(4)	5.4	775	4,185	28	98%
Student B(5)	6.1	640	3,904	31	100%
Student A(6)	4.9	780	3,822	38	100%
Student I(7)	4.7	495	2,327	-10	40%
Student C(8)	4.1	530	2,173	-10	40%
Student H(9)	2	685	1,370	24	60%
Student D(10)	2.9	420	1,218	-32	70%
Student G(11)	3	340	1,020	0	60%

List of interviewees ranked from most to least proficient based on proficiency scores and the percentage of English used in the interview.

5.2 Students' Stories

What follows is a short portrait-style vignette for each interviewee summarizing their language learning history, thoughts, habits and general background. As only one hour was available with each interviewee, and the interviews were conducted - for the most part – in students' second language, vignettes are perhaps not as detailed as could have been. However, for virtually all students, the entire hour was used. Preceding each of these is the students' age, year, sex, overall mindset index, TOEIC score, self-rated proficiency and other demographic information. The vignettes are ordered to mirror the proficiency ranking system established in Table G above.

5.2.1 "More proficient" Students

Student F(1)

22 years old; 3rd year; male

+24 OMI

940 TOEIC

8.0 self-rated proficiency

Major: English and Foreign Literature at KQU

Grew up in: Countryside

Overseas Experience: Poland for a year, also has traveled on his own throughout E. Europe

Cram school (Juku): N/A

Spoke English for 100% of the interview

Student F(1) Grew up in rural Hokkaido with the first foreigner he had ever seen in real life being his junior high school ALT. He claims that his junior high school teacher gave him and his classmates plenty of time to practice speaking in class which he acknowledges many of his current peers were not able to do. He was the top student of many of his classes, seeing ambition as engrained and part of who he is. However, when he got to high school, he became very sick and missed a couple years of school because of it. To make up for this, he attended a make-up high school which was fairly lax regarding workload compared with his previous school (his homework was reduced from 3 hours to 10 minutes/day).

After graduating high school, he did a year of study in KQU's English department. Seeing many of his European classmates' proficiency level, he claims, was disheartening for him as he felt he could never be as good as them. A year or so later he went to Poland on his own to study Polish, which he now claims is his strongest language (something very surprising considering his English ability). This was spurred by an interest in a Polish rock band he discovered on YouTube, and was later cemented by a Polish girlfriend he is currently seeing.

While he was in Poland, he travelled around Eastern Europe. He became interested in Slavic languages, and now speaks Russian and Lithuanian, as well as a bit of French. Indeed, Student F has always excelled in school, and is particularly interested in Slavic languages and historical linguistics. He insists learning Polish gave him a new perspective on language learning itself, and in the future he plans on further traveling throughout Eastern Europe.

Student J(2)

21 years old; 2nd year; male

+29 OMI

830 TOIEC

7.7 self-rated proficiency

Major: Comparative Cultures at KQU

Overseas Experience: None. Grew up in: Countryside Cram school (Juku): N/A

Spoke English for approx. 100% of the interview

Student J(2) has never traveled overseas, nor has he ever gone to a *juku*, making his 830 TOEIC score and the fluency with which he spoke English during the interview quite impressive. He credits his ability to "take his English further" to his extensive watching of only English channels on YouTube every day. He is interested in foreign pop culture, and is critical of the Japanese English education system which he says doesn't allow expression in any way, calling it

"worthless". (However, he later hedged this by adding that Japan's *repeat-after-me* classroom practices can be "effective, but that they are not enough").

He says he feels excited in his university English classes as they allow him a chance to actually speak English - unlike secondary school. However, he has a friend who – counter to him - gets incredibly nervous in when called upon. He resents his final year of high school in which he had to study for the university entrance exams which were annoying and sucked the excitement out of learning for him.

Student J considers himself culturally literate, credits his fluency in English to his passion for cultures and his extensive consumption of English YouTube. He currently has no passport, however he plans to travel to the US after graduation. He's "learned the joy of learning English" but recognizes that there is a large disconnect between what he was taught in his secondary school classrooms and the "natural English" (defined as slang, jokes and memes) which he has learned from YouTube and his current teacher in university.

Student E(3)

22 years old; 3rd year; female

+18 OMI

780 TOEIC score

6.0 self-rated proficiency

Major: Econonics at KQU Grew up in: Countryside

Overseas Experience: A year overseas in Canada. Also week-long stays in Guam and Thailand.

Cram school (Juku): twice a week for about six years Spoke English for approx. 85% of the interview.

Student E(3) went to Guam briefly in high school and that's when she decided to start studying English seriously. She said that class was more fun with an Assistant Language Teacher (ALT) but that generally high school English was not at all interesting. However, she

did receive higher marks than other students, and she attended juku (cram school) starting in jun-

ior high school, and then for over six years where she learned "correct grammar". She describes

her juku teacher as "very serious and he never said "good job" or anything like that [...] however

he had a good reputation". She claims it was clear to her that the tests were only to help students

pass the university entrance exams, and that learning "everyday English" would be much better.

Her parents were very encouraging regarding her English study. She currently works at

an *izakaya* (Japanese pub) and enjoys when foreigners come in so she can speak to them and

give them advice about sightseeing in Japan. She did a one-year homestay last year in Vancou-

ver, and currently has a number of friends who live overseas.

She had a Korean boyfriend in Vancouver for about 6 months who worked at Starbucks

where many of their international friends would congregate. Here, she would watch everyone

chat together and she would try to mimic them. She later traveled to New York by herself, and

she commented on not just how lively it was, but how everyone there seemed so uninhibited and

simply did what they felt; such as dancing in subway stations etc. She also seemingly hit a turn-

ing point after going to the gay pride parade in Vancouver. She expressed surprise at how ac-

cepting everyone was of the LGBT community, which stood in stark contrast to Japan. She feels

having attended the parade made her more understanding and tolerant in this regard.

Student K(4)

20 years old; 2nd year; female

+28 OMI

775 TOEIC

5.4 self-rated proficiency

Major: International Relations at KQU

Overseas Experience: Approx. 3 weeks in Australia and Germany

Grew up in: Countryside Cram school (Juku): No

Spoke English for approx. 95% of the interview

91

Student K studied at a KUMON school, which is a private cram school specializing in

English, which she loved because (unlike *jukus*) students are able to work at their own pace. She

joined on her own volition because her friends also attended. She also likes watching English

YouTube channels recently including Ellen and James Corden saying "so.. listening to real con-

versation on the internet or TV is the best way [to learn English] I think." She had an ALT in el-

ementary school who made quite a good impression on her. She claims he was popular, and

sparked an interest in English in her. The ALT stayed for a period with a friend of hers' whose

grandmother could speak English. In fact, impressively, Student K still keeps in touch with the

ALT.

Student K spent some time overseas; two weeks in Australia on a homestay (which she

sees as a very positive experience), and a week in Germany. She plans on doing a 6-month

homestay in Washington in the Summer, which she funding herself from money saved from her

part-time jobs.

She has always been a keen student. Specifically, in high school she was in AP English,

so she feels perhaps there was a pride that students felt collectively about being in the advanced

class. Although she disliked English class in high school because of all the reading, writing and

university entrance exam preparation, she insists that her teachers were good. With that said, she

much prefers university now "because I can learn English by using many things like YouTube

and teachers so a chance to English is increased".

Student B(5)

22 years old; 3rd year; female

+31 OMI

640 TOEIC score

6.1 self-rated proficiency

Major: Economics at KQU

92

Grew up in: Suburbs

Overseas Experience: Over a year in Canada/Cebu

Cram school (Juku): once a week for more than three years.

Spoke English for 100% of the interview

Student B(5) was very friendly and bubbly, speaking entirely in English in long monologues. She spent 6 months studying English in Cebu and then 6 months in Canada on a homestay during her third year of university where she had a Columbian roommate who she spent a lot of time with. They especially liked watching Netflix. She was a mediocre student in high school and did not enjoy English classes. She was a good softball player all through secondary school, and it wasn't until a short trip to Singapore during her first year of university that she became interested in learning English; lamenting her inability to talk with the very friendly local people, who are very unlike "shy Japanese people". She views this trip as a major turning point for her.

Student A(6)

22 years old; 3rd year; female

+38 OMI

780 TOEIC score

4.9 self-rated proficiency

Grew up in: Suburbs

Major: English Literature at KQU

Overseas Experience: less than a month in Utah Cram school (Juku): twice a week for less than a year.

Other: Spoke English for 100% of the interview, answering in long detailed explanations.

Student A has always been a high-achieving student, however English has always been her best subject. In her high school English classes, grades and student rankings were posted on the wall of the classroom, and she was always in the top position. Being the top in the class afforded her the confidence and opportunities to compete in English speech competitions, which granted her private time with the (female) native English-speaking ALT to practice. She and the

ALT became close friends to the point that she would often spend time hanging out at the ALT's home, cooking dinner together or going out to movies, and her family would even sometimes go driving with the ALT.

Her family was fairly open to Western culture generally, as the entire family were church-attending Christian – a rarity in Japan – and would frequently listen to Western music (The Carpenters, Queen etc.) on road trips. She would try and speak English to some of the passing-through missionaries when she was younger.

She currently has a foreigner boyfriend, who she met in by initiating a conversation with him while standing in line at Tokyo Tower. He has since visited her in her hometown, and although he now lives in Korea, they Skype every day and he plans to move to Japan to be near her.

5.2.2 "Less proficient" students

Student I(7)

18 years old; 1st year; female

-10 OMI

495 TOEIC

4.7 Self-rated Proficiency

Major: Comparative Cultures at KQU

Overseas Experience: many countries; almost exclusively with her mother.

Grew up in: Countryside

Cram school (Juku): once a week for about 4 years Spoke English for approx. 40% of the interview

Student I's mother has been a huge influence on daughter. She is very familiar with Western culture, is herself an English teacher, and hence was very involved in her daughter's English education. She helped her with homework when she was young, and now – in university - still does. Student I, as well as her friends, recognize this as the reason her English grades are so good; in high school consistently scoring in the top three of her class. Student I's mother also

enrolled Student I in a *juku* from grade 7, and also brought her into her own adult English conversation classes; translating for her what the fast-speaking British teacher was saying. She describes this as reassuring and alleviating what would otherwise be a scary/nervous situation.

Student I now tutors Home Economics and English herself. She's been overseas quite extensively (LA, Belgium, Holland, Malaysia) but almost entirely with her mother; who – not unlike in the adult conversation classes - would translate almost everything for her which was both relied on and appreciated. An exception to this was in high school in which she had an ALT whom she became close with. Student I had a chance to speak/practice with the ALT in preparation for speech contests etc., and the two spent plenty of out-of-school-hours together hanging out. With this said, she also had an ALT in elementary school who she describes as scary, and easily angered.

Student I says she would like to do a homestay and in fact her mother has a number of friends/contacts overseas who would be willing to host Student I, however she says she is too nervous to do so.

Student C(8)

21 years old; 3rd year; male

-10 OMI

530 TOIEC score

4.1 self-rated proficiency

Major: International Commerce at SCU

Grew up in: Urban area

Overseas Experience: A year in Taiwan, a month in Australia and under a month on his own traveling through SE

Asia

Cram school (Juku): once a week for less than a year.

Spoke English for approx. 60% of the interview.

Student C(8) answered many of the questions with terse often one-word answers. He went to a high school which specialized in Chinese and later did a homestay in Taiwan for one

year. He also got a Korean girlfriend while there, and enjoys learning Korean the most of the

three languages he is learning even though he and his girlfriend are not together anymore. He

also has relatives in Australia, who he spent a month with when he was younger. His grandfa-

ther, who he looked up to, was also a polyglot, speaking Japanese, Chinese and French, and he

admits to looking up to him when he was young.

He has gone traveling throughout Asia (Malaysia, Singapore, Combodia, Vietnam, Thai-

land, Korea) on his own, and plans to live in Asia in the future hopefully working for an aviation

company in some capacity.

Interestingly, of all the interviewees he was the only one who felt that it was during the

obligatory preparation for university entrance exams when English "became interesting". In-

deed, most students think of their final year in high school as "exam hell" because of these all-

important exams, however he seemed to enjoy the challenge and pressure involved. His grades

reflected this as well as he was an average student until closer to the final years of high school

when his English scores pulled ahead.

Perhaps this has something to do with his having attended a high school specializing in

Chinese, as this made him a bit of an outlier as well. However, in all honesty, his answers were

hardly more than one or two words long and he has not returned any of my emails. He recounted

no particular positive or negative experiences with English, and seemed not to be able to remem-

ber quite a lot, shrugging off many of my questions and exhibiting a general.

Student H(9)

19 years old; 2nd year; female

+24 OMI

685 TOEIC

2.1 Self-rated proficiency

Major: Economics at KQU

96

Overseas Experience: approx. a month

Grew up in: Suburbs

Cram school (Juku): twice a week for about 5 years

Spoke English for approx. 60% of the interview

Student H(9) also replied with mostly very short answers. She started studying English

in a juku in grade 5 at her mother's behest, and owing to her father's desire to travel overseas and

have a translator. She's spent a total of about a month overseas in Thailand and Australia. Her

grades were according to her "not that good", however when pressed she admitted she got mostly

As and Bs. Her brother looks up to her and she feels this is why he started studying English seri-

ously, however his English is now better than hers because, she says, he has a naturally better

memory. The problem, she says, is that "Japanese don't want to make mistakes in front of other

people; specifically in front of other Japanese people. They're too shy". A class environment

where its ok to stick out is the best way for Japanese people to get better she later said. To this

end, in the future she wants to go traveling alone in the future.

Student D(10)

20 years old; 2nd year; female

-32 OMI

420 TOIEC

2.9 self-rated proficiency

Major: Human relations/Literature at KQU

Grew up in: Urban area

Overseas Experience: None

Cram school (Juku): once a week for less than a year.

Spoke English for approx. 70% of the interview.

Student D started learning English at the very young age of three at a conversation school

until she was twelve, in particular her father took her English education seriously. When she was

young, she studied English because she (and her father) felt it was necessary, but now that "exam

97

hell" is over she enjoys it more. She claims to want to do a homestay, but doesn't have any concrete plans to do so.

Despite her educational advantage (nine years of English study before Jr. high school when most of her classmates began studying), by high school her English grades were below most of her peers, and it was then when she really began to dislike English. Her English classes now are the only classes which she gets homework, but she feels these are the most fun English classes she has have ever had; teachers are less strict and more focused on communication rather than grammar etc., which she far prefers to studying. She loves Johnny Depp and aspires to watch his movies listening to "his real voice"; presumably she watches his movies dubbed in Japanese.

Student G(11)

19 years old; 1st year; female

0 OMI

340 TOIEC

3.0 Self-rated proficiency

Major: Law at KQU

Overseas Experience: None; no passport

Grew up in: Suburbs

Cram school (Juku): twice a week for about 5 years Spoke English for approx. 60% of the interview

Student G(11) (who also replied with very short answers) attended a *juku* for about 5 years, 2 or 3 times a week. It was her mother's idea, but she claims she was keen to go as well. She did about five hours of homework a day. She very much dislikes English tests asserting that primarily before and during tests she becomes very stressed out when she comes across words she does not recognize. As well, she specifically dislikes the time limits imposed. Her only positive English-related experiences were when tests were finished.

After a friend of hers went to the Philippines, she herself felt she wanted to go too, but she does not have a passport. She claims she doesn't really talk to other people, prefering to play video games and be alone. She thought a homestay would be good to do, but she says she doesn't have the courage to do so. Compared to her classmates, she was good at English in high school, but in university she is comparably lower and listening is.

Naturally elaborating fully on what comprises each interviewee, their views, and their unique language learning journey is beyond the scope of this study, however it is hoped that the preceding vignettes set the stage for analysis within the following two sections. In contrast to these, the following section will look illuminate commonalities as well as ascribe significance to the interviewee's otherwise distinctive views and journeys.

5.3 Commonalities

The commonalities uncovered via thematic analysis (Braun & Clarke, 2006; 2014; Gray, 2014) within the interviews were:

- 1. A virtually universal distain for entrance exams
- 2. Positive, negative and nil influence of the ALT
- 3. The double-edge sword of intra-class competition
- 4. Self-depreciating view of English skills.
- 5. Notion of Japanese people as universally nervous and timid.
- 6. Recognition that English isn't necessary.
- 7. Students' conception of there being "real" and "fake" English
- 8: The English classroom is too serious
- 9. Frustration and disappointment reaction pathways while using English in real life
- 10. Real life experiences as perceived as either positive or negative depending on the interaction's ability to provide hospitality to foreigners in Japan.

Parsing the difference between the cultural and scholastic influences on students is not an easy task, and in explaining these first two over-arching commonalities some overlap is inevitable. Commonality 1 (A virtually universal distain for entrance exams) will probably come as no surprise to anyone familiar with the school system in Japan. However also apparent was the fact that every student interviewed seemed to dislike English more and more as they approached grade 12 and the exams, as students were expected to memorize increasingly more and more material covered in class. An exception to this was Student C who saw this workload increase as a challenge to rise to. Perhaps relatedly, Student C was a champion high-jumper in secondary school, and so "rising to challenges" could possibly be something he both figuratively and literally had a predilection for. However, as mentioned, Student C is an outlier of sorts in a few ways.

Commonality 2 (Positive, negative and nil influence of the ALT) was interesting in that the ALT (Western-born Assistant Language Teacher) seemed to be memorable or noteworthy only if a) he/she developed a personal relationship with the students (as was the case with Students A, K and I) or if b) he/she became angry at a class (as was the case with students I and H). Beyond this, most students remember their ALTs as friendly enough, but most do not remember their names or any tangible details about them suggesting a minimal influence. In the case of ALTs becoming friends with students, the friendship bloomed in the context of more personal one-on-one speech contest preparation, and this relationship has lasted for all three students until this day. Regarding ALTs who became angry with classes, this happened in both cases when ALTs asked questions of the class, ostensibly expecting students to raise their hands to answer, and having no students do so.

With regards to commonality 3 (The double-edge sword of intra-class competition), many secondary EFL classrooms had lists posted on the wall which ranked students in the classroom according

to test scores. Some students who excelled in class seemed to benefit from this intra-class competition (Students A, F, K and I) as it provided motivation to remain in the upper echelons. As well, importantly, it is from these pole positions which students are selected to participate in the English speech contests, affording them personal time with the ALT for preparation, as well as more time/exposure to English generally. However, Student K - who was in AP English, and in the top of her class, who also derived pride and motivation from being in that position - also said she much preferred the KUMON school system, which is a preparatory school which boasts its efficacy is owing to the fact that it allows students to work at their own pace. It would hence seem then that intra-class competition can cut both ways.

With regards to commonality 4 (Self-depreciating view of English skills) all students seem to harbor an aversion to admitting to success with regards to their English or grades generally. The conversation in this regard essentially did not diverge much from something akin to "So, how were your English (grades or otherwise) in high school?" "Not very good", regardless of how good (or bad) their grades turned out to be. This is probably unsurprising to anyone who has taught English in Japan, as much literature has characterized Japanese people generally are humble and reticent to accept praise (see: Doyon, 2000; Hinenoya & Gatbonton, 2000). The one exception was Student F(1) who was markedly confident regarding his ability and grades, however he had spent a large amount of time overseas and did in fact have an impressive command of English as well as a 940 TOEIC score. Perhaps his time overseas had fostered an ability to navigate social norms – regarding for example accepting praise - between different cultures, or maybe it is the case that he had reached a point in which he felt denying his ability would be more dishonest than humble. Either way, he was the exception and his ability and experience most likely accounted for this.

Expanding on commonality 5 (Notion of Japanese people as universally nervous and timid), almost all students saw-seemed to view Japanese people generally as shy, scared of looking foolish and associated the making of mistakes with a feeling of shame. Many students recall thinking of their ALT as fun, but also being scared to approach them. Interestingly, Student H and Student J asserted that Japanese people are reticent about making mistakes in English in front foreigners, but even more nervous about making mistakes in English in front of their fellow Japanese nationals/classmates.

Most students, regarding commonality 6 (Recognition that English isn't necessary) held faith in the notion that learning English is a worthy pursuit, but something that is generally not entirely necessary. Japanese culture and industry - they and their friends agreed - is vast enough that students uninterested in the world beyond the Japanese borders can function without ever needing English to thrive. This was supported by a faith in burgeoning translation software technology, which some felt promised a future in which language learning will be reduced essentially to a hobby.

Shifting to students' views on the Japanese EFL classroom, students largely felt that English taught there is not "real English" (Commonality 7: Students' conception of there being "real" and "fake" English). Importantly all students who spoke on the topic (Students A, F, H, J, K) characterized "real" English as - instead - English which foreigners "actually use" which can be found on the internet (YouTube, Netflix etc.) and in real life. This, again, is juxtaposed by the English found in classrooms and textbooks which students largely thought of as artificial, stiff, unnatural and not very useful. Interestingly virtually all students still felt that grammar and vocabulary study (from a textbook) were crucial to EFL learning however.

Three students (Student J, E and B) also asserted on their own that classrooms were "too serious" (Commonality 8: The English classroom is too serious). This, Students E and B claimed, is tied in with their nervousness and aversion to trying to communicate in English. For these students, a

lighter mood would have been helpful, however Student J(2) points out that in Japan, there is a universal understanding and acceptance that the classroom is not supposed to be fun.

With regards to commonality 9 (Frustration and disappointment reaction pathways while using English in real life), perhaps not all that surprisingly students asserted that frustration, embarrassment and shame stemmed from experiences when they were trying to communicate, and "words didn't come to them" or when they could not understand someone in real time. Interestingly, however, the failure pathway universally occurs with students immediately lamenting how difficult English is, and then later subsiding to something they simply need to work harder at (perhaps in a certain light, a kneejerk fixed mindset reaction, followed by a more sober, recalibration to a more growth mindset orientation). The exception – not for the first time - is Student C(8) who asserted that in failure situations he immediately feels the allure of a challenge, but in the longer term finds himself lamenting the difficulty of EFL learning, which could be interpreted as almost a reverse path in comparison to the other interviewees. Notably Student F(1) was the only interviewee who asserted a "self-regulated meta-learning strategy" (See: Ryan & Deci, 2006) so to speak. That is, in failure situations, following the initial disappointment, he will intentionally do something like "go for a walk to clear his mind".

Finally, Commonality 10 (Real life experiences as perceived as either positive or negative depending on the interaction's ability to provide hospitality to foreigners in Japan) as with commonality 9, is characterized by positive and negative experiences using English in real life. However, with all of these experiences, whether or not they were recounted as positive or negative hinged on the interviewee's ability to help a foreigner navigate or understand Japan in some way, or by simply being hospitable. For example, Student B and Student E both work at *izakayas* (Japanese pubs) and recall their *most* positive experiences as being able to help/guide foreigner clientele with the menu or with more general questions in English. Student H recalled helping a foreigner find a shoe store in a mall once,

later mentioning that she studies English with the aim of travelling with - and providing Japanese translation for - her father who cannot speak English. For Student A it was in fact returning a dropped umbrella to a foreigner in Tokyo which sparked in her the courage to also ask him where he was from, later leading to their becoming - and currently remaining - romantic partners. Student I gets pleasure from playing online video games and coming across other players with kanji character monikers to whom she is able to explain the meaning of in English. Finally, for Student K, the *inability* to be hospitable comprised what she views as her most negative experience using English. Here, a foreigner with a thick accent asked her where he might buy a specific type of souvenir. She physically guided him to the shop she believed he was looking for, only to be disappointed that it was not the one he had meant. He thanked her for help anyway, but clearly – again, the anecdote was heralded as her *most* negative experience with English - she had felt a great deal of shamed for not being able to be of assistance.

5.4 Themes from Higher and Lower Proficiency Students

The previous two sections comprised first, vignettes pertaining to students lives as individuals and second, commonalities among students' thoughts and experiences regarding EFL learning which looked to address research question 2.1. What can be learned from commonalities within the journey of ESL university students in order to foster more fruitful learning paths?. In the interest of examining What can be learned from the journey of more proficient ESL students in order to foster similar experiences/approaches? (research question 2.2), as aforementioned, students have necessarily been categorized into either "more" or "less" proficient, with their ranked number following their alias in order to add insight for the reader (Recall Student B(5) would be the second student interviewed(B), and the 5th (of 11) most proficient. Also note for

the reader's reference that when students are quoted speaking in English, it is written verbatim, while when Japanese was used, the English translation proceeds the Japanese which is written in *italics*.).

The following themes (gleaned via a combination of thematic analysis (Braun & Clarke, 2006; 2014; Gray 2014) and case study methods (Yazan, 2015; Yin, 2009; Gray, 2014); for further explanation refer to Section 3.3) have also been ordered from one to five based on the amount of evidence and/or salience of each – deemed so via overall student insistence, word count and time spend discussing each - with number one emerging as the most salient theme and number five as the least. These themes are:

Theme 1: Facing and overcoming fear of judgement and nervousness

Theme 2. Failure of the yakudoku classroom.

Theme 3. Media consumption preferences.

Theme 4: Mindset contradiction statements in growth mindset students

Theme 5: The effects of parental support seem varied.

Theme 1: Facing and overcoming fear of judgement and nervousness

Language learning can be a daunting task. Communication breakdown is an inevitable reality, and anyone who has ever tried to learn a second language knows that these situations can be awkward and often uncomfortable whether speaking in a real-life situation or in a classroom. Unquestionably one of the most salient themes to emerge from this study was the difference between higher and lower proficiency students in this regard. In virtually all cases higher proficiency students had overcome in essence a fear of making mistakes and/or looking foolish when 105

it came to speaking English while lower proficiency students almost universally still felt trepidation in this respect.

Student E(3) recounts a major turning point in this regard for her. After her first few months during a homestay in Canada she says: "I couldn't go outside and when I do a shopping I just listen to music (with my earphones in) and [body language implying] 'please don't talk speak to me'". When asked why and how this changed, she replied:

"I had many [international] friends who can speak English and they didn't care about their ability of English-speaking so I thought I envy them [also] our teacher said... hahaha our teacher said 'please make a mistake and please learn' so I realized I have to speak, I have to speak."

Notably it was after this turning point that Student E(3) feels her English made true and lasting gains, however beyond change purely on a linguistic level, she noted how impressed and surprised she was with Vancouver's Gay Pride Parade and the city's willingness to accept people of all walks of life (*kanada hito ga subete ukeru kanji... sore ga suteki da na*). She asserted that this contrasts rather sharply with Japan's more negative view (*mainasuna kanji*) of the LGBT community. Relatedly, in Japan, she asserted, people all try to be the same and not stick out, (*minna isshou*) while in America (during a trip to New York) she noticed everyone is far more individualistic, lively (*minna ga jibun kose wo daiji ni shitteru.. minna uki uki.. minna hitori hitori*) and will simply start singing or dancing in public as they feel. They are indifferent to what people around them think, and this way of living she asserts outright is better than in Japan. Clearly Student E(3) has not only conquered trepidation on a linguistic level, but has had a major shift in her worldview with regards to her formerly self-consciousness and judgement-fearing self.

Shifting to the lower proficiency group, Student I(7) presents an interesting case in relation to the theme; particularly when juxtaposed to her mother. Her mother is an English teacher 106

and has many foreign friends whom Student I was around quite extensively when she was young. Her mother would, for example, approach and engage Westerners randomly on the train, and hence has accumulated friends and contacts from all over the world. Indeed, Student I's mother's level of interest in Western people and culture is exceedingly rare and if she herself has ever harbored a fear of speaking English or making mistakes, she has long ago overcome it. Her mother's enthusiasm for Western culture is so much so, that Student I's name is that of a popular British rock song from the 1970's; a name which the author has otherwise never before heard in his nearly 15 years living in Japan. Her mother – whom she still lives with - chose the name specifically so that "foreigners would be able to easily remember her daughter's name".

Beyond this, Student I developed a close and personal relationship with her ALT in secondary school, hanging out with her after school hours socially and in preparation for English speech contest. She now tutors English at a cram school herself. When she was young, upon her mother's insistence, she would sit in on her mother's adult English conversation classes (something the author has also never seen or heard of being done in his year spent teaching at a conversation school or since) and her mother would translate what the fast-speaking teacher was saying for her daughter; something she describes as "comfortable" (anshin) in what would otherwise be a nervous situation for her. It would seem that from all possible angles, the stage would be set (so to speak) for Student I to both be excelling in English and progressing on to what she recognizes as the natural next step of her English education: an overseas homestay. Indeed, her mother has a number of friends/contacts overseas – many whom she has met - who would be happy to host her. However, she asserts she is simply too nervous to do so. Inquiring as to why she has refused to do a homestay in Canada despite conditions to do so being so ideal she replied:

"Now? Hmm... It's a bit unsettling/scary...I don't really remember those people.. I met them in elementary school or kindergarten so.. and we haven't met again since then (*Ima wa.. Sou ne.. Chotto fuan ne.. Amari.. shogako toka yochien atta dakedo.. Sorekara zenzen attenai.. Hisabisa.. Amari Oboetenai*)

MB: I see.. so... maybe your mother's friends... you don't remember them so... is Canadian culture a bit scary? [...] What if you were to do a homestay with someone else?? Maybe just... maybe the reason is you're just too busy?? (Gomen... Ikanai no riyuu.... Mama to hisashiburi no tomodachi ga iru demo.. betsu no hito to homestay yattara?. Isogashi toka...)

Student I: Doing a homestay with another family would be even scarier!! hahaha (*Betsu no hito ga.. motto kowai!*)

Even after being offered the opportunity to ascribe her reluctance to the vagueness of simply being too busy, she insisted that the whole situation did not just make her nervous, but was outright scary. To sum up, Student I's life seems to have quite literally been engineered for her to become a cosmopolitan and fluent speaker of English. Her English grades have always been at the top of her class, she is both interested in furthering her English education, cognizant that a homestay would be the way to do it, familiar with foreigners and foreign culture, a practiced student *and* teacher of English, and receiving all manner of support and encouragement imaginable from her mother. However, as she insists, she is too nervous and scared to travel overseas alone. It is perhaps noteworthy that an overseas homestay would be the first time she would be away from her mother for any real length of time, and a case could be made that it has been her mother being by her side for all these years - initiating conversations, pulling strings, allowing her to sit in on adult English conversation classes and translating for her etc. – which has precluded Student I(7) from ever having the chance to "come out from under her mother's wing" so

to speak. In other words, she's never been in a situation in which she was forced to rely on herself and it is for this reason that she is perhaps yet too nervous to "strike out on her own" and commit to a homestay.

Student H(9)'s fear seems in a certain light to be an inverse of Student I's, and she offers an interesting insight in this regard. Having already have travelled overseas alone, she views communicating with foreigners and speaking English as *less* scary or threatening than speaking English here at home with/in front of her fellow native Japanese nationals. She says:

"In Japan, when you speak with foreigners, Japanese people sort of gawk at you [...] When I'm alone overseas I can go anywhere by myself and I can speak to foreigners. I can do anything on my own [...] Even in class, other students are listening, and we are all worried about how we are being perceived. [This makes me very] nervous." (Nihon de wa... Kaigiana hito to shirabetara.. mirareru.. kyomi ni nareru.. [...] Hitori de.. Kaigai de... Nan demo dekiru hitori de [...] Class demo... Hoka no student ga.. Kiiteru kara [...] sacchi sareteru.

Unlike Student I who is fearful of overseas travel, Student H(9)'s trepidation is rooted in the perceived judgement of her fellow Japanese natives, despite having travelled overseas and having a respectable 685 TOEIC score. Notably, her self-rated proficiency (the survey item which asked her to rate her various EFL abilities compared to her schoolmates) score was a meagre 2.0 (only 20 of the over 850 students surveyed scored lower than a 2.0, and of those 20, the average TOEIC score was 387) which – considering her comments – underpins the notion that she feels somewhat intimidated, or maybe even outshined in a classroom environment, or by her classmates. In light of her respectable TOEIC score, and overseas experience, but juxtaposed against her use of only about 60% English in the interview and her low self-rating and mostly

one-word answers within the interview, it is suggestive that fear and trepidation can present challenges from a variety of sources beyond just speaking with native English speakers.

Indeed, with regards to fear and trepidation, the classroom can stand out as a place of considerable tension. Student J(2) tells of a friend of his who feels so nervous in English class that she will sometimes get *physically* sick. He explains "Every time [she is in English class she gets] stomach aches... like she feels pressure... like she feels like she has to or she must answer the question or she must answer what her friends were talking about or what the teacher was talking about... that means pressure for her."

Student J(2) explained that his friend is not naturally a shy person, but rather she simply does not want to learn English. He explained that he and his friend took the same French class a year earlier, and in that class his friend was eager to participate by eagerly offering to write answers on the blackboard, feeling "positive and excited", however "English", he insists "makes her shy". He mentioned that after class the two of them were chatting and she mentioned that she is therefore far more interested in learning French than English. He said it had to do with a combination of her dislike for the teacher and the language generally, and the fact that she generally feels French is her favorite language. Pressing Student J(2) as to the underlying reason for his friends aversion to English, he explained that she does not plan on traveling to countries such as "America or Canada or Australia" but would rather travel to Europe, more specifically Italy.

This was understandably a somewhat perplexing explanation. Surely his friend didn't think that learning French would be more advantageous than English if she were planning on traveling through Europe or more specifically Italy; particularly when she - like virtually all Japanese university students - had already studied English for over six years, while her French was

still at a first-year level. Surely she was aware that – outside of France - English is a more effective lingua franca. He explained:

"I guess she simply didn't want to feel the pressure, then she felt comfortable with the French class (because the teacher was so kind and wasn't so aggressive) and that leads her to learn French. The key point is how she felt as a student. Probably, she'll find how helpful English is, but at that time, she just didn't want to feel the pressure, she wanted to learn and find something fun."

One might naturally conclude then that Student J(2)'s friend simply had an aversion to "aggressive teachers", and it is entirely possible that she was simply unfortunate to have been enrolled in a class with just such a teacher. But here it is important to remember the pedagogical differences between a first-year French and English class in Japanese university. First year English is - at least in theory - a continuation of the six years students have been studying in secondary school. The most pertinent change is that in university, English is taught by a native English speaker - presumably - for the most part in English. Her French class on the other hand is taught by a native Japanese speaker, and would comprise very little - if any at all - speaking or language production in French beyond rote repetition exercises. In essence, she would be learning about French in Japanese. Underpinning this disconnect is Student J(2)'s later assertion that he himself (being in the same class as his friend) "just studied French; [he] can't speak it". At any rate, not having spoken to Student J's friend directly, it is difficult to assert anything for certain (indeed, in light of her professed dislike of English etc. speaking with her would not appear to be realistic) however as a veteran EFL teacher in Japan I can assert both I and every colleague who I have discussed it with is *entirely* familiar with the type of student who has clearly never had to use English in any productive sense, and is either resentful or at least confounded upon realizing they are expected to do so (more on this in Theme 2: Failure of the *yakudoku* classroom).

In a similar vein, Student G(11) presents and interesting case as well. Not only does she claim to never have spoken with a foreigner, she does not belong to any clubs, and indeed – somewhat concerningly – says she "doesn't really have the experience of talking to other people at school" (amari hoka no hito to hanashita koto wa nai). Speaking as an interviewer, it was clear that Student G was clearly more nervous during the interview than with any other student despite attempts to assuage this. She spoke Japanese for approximately half of the interview answering almost all of the questions with one- or two-word answers. This could be attributed to low English ability (indeed, she has the lowest proficiency of all the interviewees), however beyond having sensed an uneasiness/nervousness in her, she also fluctuated in her use of Japanese registers throughout the interview; that is, sometimes she would use casual Japanese (as did every other student), however she would sometimes switch to polite Japanese, back to casual and then to very polite. Though this is not "proof of nervousness" as such, it does convey an inability to get comfortable in the interview, and - importantly - it is something only she did. On a more heartening note, I suspect that the interview itself with respect to EFL may have comprised one of the more braver things Student G has done, and in this sense, hopefully she will continue to conquer her trepidation.

Shifting back to the more "proficient conquerors of trepidation", despite having an affinity for English, Student K(4) initially was too nervous to do a homestay, however it was not until her mother strongly insisted she go that she made the leap and ventured forth on her own. Notably, she now plans to do a six-month homestay in the U.S., which she is impressively funding on her own by saving money from her part-time job. However, Student F(1) highlights - perhaps

most saliently - the detrimental effects of fear and trepidation in language learning, and the potential rewards in overcoming it. During the interview when asked if he could think of any experiences which he'd like to share with me he replied:

"I'd like to talk about the process I had learning Polish [...] so I studied Polish just two and a half years and I.. I learned so fast and now I speak better than English. The factors which caused it are like I... I started from communicating with native speakers and I started speaking Polish almost at the beginning... so I have never felt nervous when I spoke Polish.... I don't hesitate to speak Polish, so I think when Japanese people learn English, my experience with Polish language might help..."

Indeed, Student F(1) makes the explicit point that he feels *the* primary cause of difficulty in language learning for Japanese people is nervousness. He asserts that after having realized this, he then took his new found "confidence" back with him to Japan and proceeded to become markedly fluent in English (he now has an almost unheard of 940 TOEIC score, and is an incredibly articulate student. In truth Student F now speaks a number of other languages as well including Russian, Lithuanian and French, which might characterize him a bit of a language savant. However, if that is the case, it would perhaps lend even more credibility to his entirely unprompted assertion that from a Japanese perspective, overcoming nervousness is the biggest challenge to language learning.

Theme 2. Failure of the *yakudoku* classroom.

Despite the widespread acceptance of communicative language teaching (CLT) methods over the last few decades, Japanese teachers of English (JTEs) generally continue to employ the *yakudoku*, method, which is "a teaching approach in which classes are teacher-led, highly structured, focussed on recurring language structures and fundamentally conducted in Japanese"

(Humphries, Burns & Tanaka, 2015, p. 165). This is for a number of reasons (which will be explored later), not the least of which is in preparation for the (previously mentioned universally distained) university entrance exams. Speaking of her high school (*yakudoku*) English study regiment in contrast to her more CLT university classroom, Student K(4) posited:

"So I dislike it but but after I enter into this University we have more conversation in English so I don't have to care about grammar so much so I like English now. especially in Mr. X's class it's tough but... we have to conversation with him at once in the classroom and that is very use.. useful for me."

Indeed, it is perhaps unsurprising that the *yakudoku* method is unpopular with many students. Student B(5) asserts that prior to her overseas travel, she had no interest in English what so ever. In secondary school, she claims, "they just teach just grammar [...] not so interesting and very boring." Indeed, almost all interviewees levied criticisms of their high school classrooms as being "too serious" (Student F(1) I(7), D(10), B(5), G(11) H(9) and J(2)) or "not interesting" (Students F(1), B(5), E(3), K(4) and J(2)), or too grammar-laden (Students F(1), B(5), D(10), E(3), J(5) and K(4); indeed, the only students to not mention something in this respect were Students A(6) and C(8)).

But beyond it being simply bland, the overly-serious classroom in tandem with the zeal-ous grammar-focus brings with it a stigmatism affixed to mistakes according to Student B(5), which is the prime contributor to her own nervousness. Preferring a situation in which the "atmosphere is more 'hahaha', I'm laughing is easy to make a mistake it's okay" she says of her high school class "Oh I'm so nervous [and] shy and [we] can't speak anymore." In this vein, this theme is not entirely unrelated to the previous one (which will be explored later).

For Student E(3), the realization that mistakes are a natural part of the language learning process came during her first year in university while she was doing a homestay in Canada. She notes that she was genuinely surprised while there to find that Canadians didn't care whether or not her English form was correct. "Canadians", she says:

"don't care about that I cannot speak English I realized so I try to speak English more and more [....] I tried to speak correct English, but this is not important [so] I just tried to [simply communicate]".

Importantly, it was at this point when she felt her English started to truly blossom. In fact, she viewed this lesson as so crucial to her language learning journey, that when asked at the end of the interview what advice she might have for younger Japanese students, she said emphatically "make mistakes... I made a lot of mistakes so I could improve my English so... Making mistakes is best." The notion that she would point this out as a lesson learned overseas that she insisted was worthy of passing on to Japanese students younger than herself implies it is something that she feels is not otherwise conveyed within the Japanese educational system.

Student F(1) presents possibly the most damning case regarding the detrimental effects of the yakudoku classroom. Unlike all the other interviewees, his junior high school teacher was:

"A good teacher because he didn't do just memorization of words or reading texts but he..

He.. He made us speak with each other so we had a lot of speaking time."

Student F grew up in a very rural area, and he posits that because of this, his junior high school teacher was perhaps not subjected to the same looming exam pressures which teachers

from more urban areas might be. Expressing my surprise at the novelty of his junior high school situation, he elaborated on his high school experience.

"To be honest I didn't really go to high school because I had a problem with my health and I had to quit my first high school and after that I studied by myself to get into University."

What occurred was, owing to health problems Student F(1) dropped out of a far more challenging and respected high school, later entering a far less challenging make up school in which - according to him, humorously - his homework load dropped from three hours a day to a mere ten minutes.

In sum, what is particularly interesting here are three things: 1) Student F went to a unique junior high school which could roughly be categorized as employing CLT methods in that it offered opportunities for students to speak within the classroom as opposed to the *yakudoku* model that is otherwise universal in Japan; 2) He had minimal exposure to the *yakudoku* education model after entering high school owing to the illness he mentions *and* in fact did far less English homework than his would-be peers were subjected to; and 3) He has an almost unheard of 940 TOEIC score and – as I have mentioned - is one of the most articulate Japanese people I've ever spoken with.

On the other end of the proficiency spectrum, juxtaposing Student F(1)'s success as a language learner as well as his minimal exposure to the *yakudoku* system is (least proficient) Student G(11) who beyond being exposed to the full battery of *yakudoku* teaching methods, also studied English in a Japanese cram school (juku) for "four or five years [...] two or three days a week" with an English homework load approximating five hours a week. (Regarding the juku

classroom - which Student F(1) never attended - it should be noted that it is taught by native Japanese nationals and is entirely focused on university exam preparation. Hence, it is safe to assume that the methods employed in these classrooms are at the very least yakudoku-heavy; more on this in later.) Now, clearly there are other factors at play here, and to be clear external validity is not being claimed, but the difference in the proficiency as well as educational background of Students F(1) and G(11) is quite striking. Finally, with all of this in mind, perhaps it is also worth mentioning that of all the 11 interviewees, the top four most proficient students comprised only *one* student who attended juku, while all of the bottom seven attended juku.

Theme 3. Media consumption preferences.

It is probably equally as difficult to quantify the amount of media someone consumes as it is to quantify the impact of said media. However, an interesting theme that seemed to trickle run down through from the "more" to the "less proficient" students was the *type* of media they claimed to consume. Of the 11 interviewees, three (Student F(1), Student J(2), and Student K(4)) claimed to regularly watch YouTube (in English), and notably those three were among the top four most proficient students. As mentioned earlier, Student K(4) claims to enjoy watching Ellen and James Cordon on YouTube as well as the television series "White Collar". Continuing along the proficiency descent - Student B(5) claimed to enjoy watching television series' and movies on Netflix regularly. Finally, all students below fifth position alleged to be familiar with, and have watched *only* English blockbuster movies and/or be fans of actors who only appear in these movies (Johnny Depp or Tom Cruise).

Stepping back, it appears that media consumption preferences pit the most proficient students watching English YouTube, followed by television series/Netflix viewers and finishing

with the least proficient students preferring only blockbuster movies such as Harry Potter and Titanic.

One could speculate that this is perhaps owing to the fact that YouTube channels and television series through their multiple episodes, offer more in-depth character development and regularity, allowing for more of a consumption habit to form (an English learning *habitus* (Bourdieu, 1990) perhaps?). Maybe it is little more than the fact that by watching these, students are by extension spending more time exposed to English, however it is notable that – very proficient - Student J(2) credits his proficiency in English in its *entirety* to his favorite hobby: watching YouTube. He watches a variety of channels (ie: music, animations etc.), and upon my asking if he was familiar with Pewdiepie (one of the most subscribed-to YouTube stars of all time) he replied: "I love Pewdiepie!", demonstrating a clear familiarity with Western YouTube culture. Indeed, he has never set foot in *juku* (Japanese cram school), has never travelled abroad (he does not even have a passport) and he does not have any foreign friends. However, despite all of this he *has* managed (owing solely to YouTube) to etch out an impressive proficiency as well as an impressive 830 TOEIC score.

Theme 4: Mindset contradiction statements in growth mindset students

Despite never attempting to assess students' mindsets or elicit statements of this nature within the interviews (recall that coming in to the interviews, the author was in possession of both students' growth and fixed mindset scores), within the interviews there were examples of what could be characterized as growth and fixed mindset statements. Student H(9) – for example - lamented that her brother's English level was better than hers owing to his "always having had a better memory". Student F(1) further asserted that his success as a student is owing to the fact that ambition is engrained in him; perhaps representing a fixed mindset.

However perhaps the most interesting statement came from Student A(6) who asserted "My brain is good for learning English, because I think my best ability is to remember and memorize things [...] it is maybe a gift?" (fixed mindset). However, less than a minute later she also claimed that she would become frustrated when friends claimed to be jealous of – what they perceived to be – her "natural ability" (fixed mindset). It was frustrating – she claimed - because they did not recognize the amount of hard work (growth mindset) she was putting into her studies. This statement is all the more interesting in light of the fact that Student A has the highest overall mindset index (scoring 38) of all interviewees; in fact, of all the over 850 students surveyed, only five scored higher than 38. The degree to which all of this stands in stark contrast is certainly noteworthy (more on this later).

Theme 5: The effects of parental support seem varied.

All interviewees claimed that their parents for the most part supported the study of English, but none pushed it on them in a way they would characterize as strict. Student J(2) and Student I(7) both had parents who were English teachers, however Student J(2) insists that his interest in English had nothing to do with his father's profession. This is at least somewhat born out

via the fact that Student J(2)'s father never taught his son English (at home or at the high school at which he worked), nor did he ever speak English with his son, enroll him in any sort of supplemental educational programs or even advise his son to study English. In Student J(2)'s words "All he said to me was.. 'Do whatever you want but don't quit... If you start anything don't stop, don't quit and probably you will be succeeded'". The influence leveraged on Students K(4) could be characterized as similar to Student J(2) in that Student K was also encouraged to find her own path. However, as mentioned earlier, once her mother became aware of her interest in English, it was via her mother's strong insistence that she found herself signing up to do a homestay despite her initial reservations to do so.

Shifting to "lower proficiency" cases, Student H(9) asserts that her going to cram school was entirely her mother and father's decision despite her never professing interest in it. It could be said as well that Student I(7)'s mother was fairly aggressive with regards to her daughter's English education; exposing her to English at every possible opportunity (see Section 5.4).

Clearly Student I(7)'s enthusiasm never mirrored her mother's, however the more interesting point perhaps is to be found in the aforementioned relationship between Student I's mother and grandmother. Here, the former's enthusiasm for Western culture was done – according to Student I - almost to spite the later. In point of fact, I(7)'s mother was specifically told to avoid foreigners by her mother because they were "dangerous". Here, we see – almost counterintuitively - grandmother's virtual xenophobic forbiddance of Western culture and English study acting as a spite-driven catalyst to Student I's mother's becoming incredibly fluent and cosmopolitan. Clearly parental influence upon their sons and daughters in this respect is not a straightforward phenomenon.

6. Discussion

6.1 Introduction

As the quantitative results suggest, the effect mindsets play in students' learning of EFL in Japan in university are minimal if not non-existent, which, broadly speaking, addresses Research Questions 1 through 1.3 (1. How do language learning mindsets impact Japanese university students' learning of English?; 1.1 What is the relationship between students' mindsets and English language proficiency?; 1.2 What is the relationship between students' mindsets and their linguistic and social histories?; 1.3 How do students' mindsets change over their four years in university?). With that said, there are some interpretations of the results worth noting. In this chapter, first the case is made for Mercer and Ryan's "socialized script" hypothesis. Following that – and in reference to Research Questions 2 through 2.2 (2. What can be learned from Japanese university students' EFL learning journeys?; 2.1 What can be learned from commonalities within the journey of ESL university students in order to foster more fruitful learning paths?; 2.2 What can be learned from the journeys of more proficient ESL university students in Japan in order to foster similar experiences/approaches?) communicative language teaching (CLT) and its inability to take root within the Japanese secondary classroom is explored, tying it in with the two major themes of 'facing fear of judgement' and 'failure of the yakudoku (grammar translation) classroom'. The author then makes the case that there is almost a cycle of negative emotions that persist. Following this I suggest that fostering positive emotions can contribute far more fruitfully than more time spent within the yakudoku classroom (or juku [cram school]), and finally, the case is made that language mindset research – at least within a Japanese context –

could more comfortably be brought under the umbrella of Positive Psychology within a Japanese EFL context.

6.2 The Language Mindset Index in a Japanese context

In verifying Lou & Noels' Language Mindset Index (LMI) this study found that in a Japanese EFL university context, their two-factor model (*growth and fixed mindsets*) held strongly, while the three- and six-factors proposed by the LMI's creators (*age sensitive beliefs*, *L2 language learning beliefs* and *general language learning beliefs*, as well as these three metrics along both the *growth* and *fixed* dimensions) appear not to hold. Rather – in this study - a four-factor model seemed apt. These four factors (*achievement potential via hard work* (growth), *general change potential* (growth), *innate hinderances* (fixed), and *age-related hinderances* (fixed)) evince – within the growth dimension – a fissure with respect to how students' view paths to L2 learning generally. That is, perhaps what the data is expressing is that students conceptualize L2 learning as something achievable via study, determination and hard work, *and/or* something achievable by simply living in favorable circumstances. Otherwise said, perhaps students conceptualize - for example – learning a language while living in a foreign country or by growing up in a bilingual family is something that students conceptualize as happening effortlessly.

This would be supported by Mercer and Ryan (2010) who note in their study of Austrian and Japanese EFL students, that some Japanese students "seem to believe that you can merely acquire the language without conscious effort", which "raise[s] questions about whether some learners may equate a stay abroad with effortless acquisition, in contrast to more conscious, stra-

tegic hard work and effort which some learners appear to more typically associate with formalized classroom instruction." (p. 6). In short, a case could be made that Mercer and Ryan's (2010) assertion that students see two paths towards fluency (consisting of strategic hard work or/and effortless acquisition within favorable circumstances) align with the two growth factors (achievement potential via hard work, and general change potential) found in this study.

Meanwhile, the split along the fixed dimension (resulting in *innate hinderances*, and *age-related hinderances*) suggests students see impediments to L2 learning as owing both to biological realities (a lack of innate talent generally) as well as a phenomenon which increases with age. With that said, as *age sensitive beliefs* was also a factor in Lou and Noels' study, essentially, the author has conceptualized *L2 language learning beliefs* and *general language beliefs* as a single factor in this study (*innate hinderances*).

At any rate, factor analysis provided support - albeit limited - for the LMI's validity within a Japanese context, but clearly more research is needed in other EFL learning contexts in order to further address the cultural variation which the instrument does not seem to do. With that said, the factor loadings along two-dimensions (growth and fixed) held fairly strong for both the LMI and the J-LMI, and hence it seemed prudent - as was done - to proceed along these two dimensions. As was found, the regression results in fact provided further support for the two-factor model and validity of the scale; provided that one assumes that higher ratings on the growth mindset scales aligning with TOIEC test scores, self-rated proficiency (SRP) and willingness to participate in interviews (WTPI) demonstrate this.

6.3 The Effects of Mindsets Appear Minimal

According to a host of scholars, Asian cultures have in place educational practices and systems which place a higher degree of emphasis on effort than is present in the West (Stigler & Hiebert, 1999; Lockhart, Nakashima, Inagaki & Keil, 2008; Boaler, 2013). They tend to view effort as being a "major and integral part of intelligence, much more than their American counterparts" (Lee, Chen, Stigler, Hsu & Kitamura, 1990, as cited in Dweck, 2000, p.60). Intuitively this would suggest that Japanese students are less likely fall prey to the same mindset-related psychological pitfalls more prevalent in the West, and the small effect sizes (see Table H below) uncovered in this study would seem to support this (For graphic representation, see: Fig. 4.3, 4.4, 4.5, 4.6, 4.11, 4.12)

Table H Summary of growth/fixed mindsets correlations with TOIEC and SRP (Self-Rated Proficiency) scores and Willingness to Participate in Interviews (WTPI).

	P value	Effect size	Confidence intervals
Growth mindset and TOEIC	p<0.001	$r^2 = 0.023$	[0.0053, 0.0526]
Growth mindset and SRP	p<0.001	$r^2 = 0.032$	[0.0125, 0.0595]
Growth mindset and WTPI	p=0.02	r=0.193	[-3.7135, -0.32]
Fixed mindset and TOEIC	p=0.14	$r^2 = 0.002$	[0.0, 0.0155]
Fixed mindset and SRP	p=0.54	$r^2 = -0.001$	[0, 0.9]
Fixed mindset and WTPI	p=0.067	r=0.153	[-0.098, 2.814]

Summary of mindset correlations with proficiency scores. Note the white cells denote statistical significance, but with very small proportion of variation explained (r^2 , 2 – 4%) and – as is the case with WTPI – correlation.

As can be deduced by Table H above (again, for graphic representation refer to Chapter 4), the tenets of Dweck and associates' theory that mindsets play a role are discernable (within

the growth metric), but arguably negligible. More proficient students (students with higher TOEIC scores, higher SRP scores and students' WTPI) generally agreed more with the growth mindset statements than did lower proficiency students. With regards to the fixed mindset statements, what can be concluded, is that their relationship to proficiency was negligible, in that in no case (TOEIC, SRP or WTIP) was even statistical significance reached.

With that said, despite the effect size being small in the growth charts and statistically insignificant in the fixed, a case could perhaps be made that the validity of the statistically significant (or growth mindset metrics represented in white) charts could be found - in a sense - in their supporting of one-another, and perhaps even in their relatively comparable small effect sizes. However, this point should be taken very tentatively, and – as could be argued - not at all.

To recap, were one to be aggressively searching for correlation, they might be able to assert that within a Japanese university context, the degree to which students subscribe to a growth mindset does impact the (or is impacted by) their EFL proficiency (in terms of test scores, self-rating *and* a willingness to engage in an interview), but that the impact is minimal while the degree to which they subscribe to fixed mindsets is negligible. Indeed, to conclude anything definitive may be beyond the scope of this paper. However, as also pointed out in Section 3.2, at a more fundamental level, it is possible that the Language Mindset Inventory itself may be measuring not exclusively students' mindsets, but also a general sense of optimism with respect to the language learning process as well; something which only further trivializes the already small effect sizes found in this study. Finally, in a meta-analysis of growth mindset literature to date,

Sisk et al. (2018) looking at 273 studies found an average of very weak effect sizes (r= 0.10, 95% (CI) = [.08, .13]) and various further evidence of researcher bias, p-hacking and publication

bias. Hence, perhaps it is sufficient to simply say that within a Japanese university EFL context, the extent to which mindsets impact the L2 learning process is negligible.

6.4 Making the Case for Socialized Scripts

Shifting gears, Sarah Mercer and Stephen Ryan in a separate study found Japanese EFL learners' interview responses consisted of primarily homogenous responses; that is "all the learners appeared to tend towards a growth mindset with a strong expression of a belief in the potency of effort" (2010, p. 4). However, they also found within their interviews - as this study did – counter examples of fixed mindset statements which were unique to the Japanese learners, suggesting that Japanese EFL learners harbor what they called a "socialized script". That is, in their study they found the Japanese participants – unlike the Austrian participants - to fairly homogenously assert effort and hard work to outweigh talent with respect to success in L2 learning. However, despite these assertions, when discussed within their interviews, there were plenty of examples, not unlike this study, which suggest that students clearly do feel natural talent is also crucial. Hence Mercer and Ryan hypothesized that Japanese students' assertion of hard work underpinning L2 success (despite it possibly not actually aligning with what they believe) was in a sense conditioned or *socialized* somehow; positing that growth mindsets are consistent with many of the fundamental tenets Confucian culture. (For more on this, refer to Section 2.2: Mindset and Culture).

Although direct comparison to their qualitative data set is unworkable, a few things are worth noting. If this script does in fact exist, there would seem to be evidence in the fact that this

study found virtually zero change in student growth mindset throughout university when surveyed (year 1&3: d=0.09; year 2&3 d=0.01; refer to Fig. 4.9)

Indeed, within this more longitudinal measure of mindsets, growth mindsets essentially stay static throughout students' tenure in university, suggesting they are in fact 'socialized' (they increase, but barely, and not to statistical significance). Again, although growth mindsets do increase to statistical significance in relation to students' TOIEC scores, SRP and WTPI (see: Table H) *and* although students TOIEC scores increase dramatically year by year (see: Fig 4.19), as do – to a lesser, but still statistically significant extent - students' SRP and WTPI scores (see: Fig. 4.20 & 4.21) these same growth mindsets remain almost entirely stable as they progress throughout university. In other words, the degree to which students profess to agree with the growth mindsets statements are independent of age and homogenous over time despite the fluctuation of a host of other changing EFL scores and factors throughout their four years in university.

Again, this would then align with Mercer and Ryan's assertion that they are "socialized". Compounding this is the fact that, within interviews, there are a number of instances of growth statements, which are later directly contradicted by fixed mindset statements (ie: "Learning an L2 is all about hard work." [and later] "Some people are just better at learning L2" or "My brother has always had a better memory than me") which further suggests that what students are asserting is a "script" to some degree. Instances of this surfaced in Mercer and Ryan's study, as well as this one, despite no effort having been made to elicit them. In fact, as mentioned in Section 5.4, of all the students interviewed, the one with the highest growth mindset (indeed, of the over 800 students surveyed, only five students scored higher) was the one student to exhibit opinions which most egregiously contradicted each other when looked at through growth/fixed

lens. (Recall she asserted both that her ability to learn English is a gift, *and* not one minute later that she resents classmates who claim to be jealous of her ability not recognizing how much work she puts into learning English.). Admittedly this is not empirical proof of the Mercer and Ryan's "socialized script" hypothesis, but it is suggestive.

Stepping back, there is perhaps another way of looking at this however. The reader will recall that earlier the case was made that growth and fixed mindsets are independent constructs. This, in light of the qualitative findings above, as well as the large quantitative differences uncovered in this study (r = -0.33, p < .001) with respect to growth and fixed mindsets in contrast to Lou and Noels' (r = -0.78, p < .001), is suggestive rather that whatever the degree of independence growth and fixed mindsets exhibit, they are even more independent with a Japanese university ESL context.

Regarding the implications for this decrease in fixed mindsets, perhaps it could be speculated that students' gradual recognition of their own EFL skills improving over time is occurring, prompting within more mature students a proclivity to more confidently reject the fixed statements. Or perhaps more mature students are simply more willing to object *generally* to statements they disagree with; evincing the emergence of an independence of sorts. At any rate, the effect size of their year-by-year decline is small (year 1&3: d=0.3; year 2&3: d=0.29; refer to Fig. 4.10), and hence any conclusions drawn must be tentative.

6.5 What Can be Learned from Students' L2 Learning Journeys?

Learning a language is not easy. Communication breakdown is an inevitable reality, and anyone who has ever tried to learn a second language knows that these situations can be awk-

ward and often uncomfortable whether in a real-life situation or in a classroom. Often these encounters are made all the more uncomfortable by virtue of the fact that mistakes can cause further attention to be focused on the mistake-maker, and so in order to avoid discomfort, the language learner may make efforts – unconscious or not – to simply avoid these situations.

Looking more broadly and holistically to the themes and then back at research question 2 (denoted as the title of this section), what stood out within the interviews most clearly was the emotional component to learning English. Student's struggles with anxiety and nervousness with regards to L2 learning was very clear. Students had a marked – sometimes crippling - fear of making mistakes and being judged, and a virtually universal distain and fear of the university entrance exams, they viewed the classroom as a "serious place". Also, many feared going overseas, shied away from praise, and many professed a view of Japanese people generally as nervous and timid; perhaps something acting as a self-fulfilling prophecy of sorts.

This probably will not come as a surprise to anyone familiar with EFL teaching in Japan. Japanese learners are generally known to be modest, introverted and hesitant to speak in front of others (Doyon, 2000; Hinenoya & Gatbonton, 2000). As well, they are often known to harbor a fear of being laughed at, embarrassed, or making mistakes in front of peers, specifically with regards to their pronunciation or grammar use (Ocampo, 2016). What is more novel within the results of this study is that, generally speaking it was *only* students who recognized this anxiety and nervousness for what it was, and made conscious efforts to face and break though it who ended up flourishing in EFL. Although quantifying the amount of anxiety students feel, as well as all their sources is perhaps beyond the scope of this study, several factors evidently contributed and - as will be argued - compounded into a sort of feedback loop of fear and trepidation.

Like a feedback loop, the single point of initiation is not as important as the detriments of its continuous amplification, and also like a feedback loop, disruption of feedback is crucial.

6.6 CLT and the Yakudoku Classroom

Much curriculum innovation over the last few decades has focused on the implementation of communicative approaches to language teaching (Humphries & Burns, 2015). Communicative Language Teaching (CLT) originated in Europe in the 1970's. Its purpose was making the language classroom responsive to the communicative, practical needs of students. In essence its proliferation and widespread adoption was in response to both the failures of earlier methods (Grammar Translation; Audio-Lingual Method; Direct Method; and later the Natural Approach and Total Physical Response methods) and Chomsky's refutation of much of Skinner's behaviorist and structuralist views, as he demonstrated that language structures were unable to account for the uniqueness and creativity of uttered speech (Horwitz, 2008). As CLT immigrated to North America in the mid-1970s it entered a period in which it morphed into a host of derivations and versions, however its main precept is its focus on function, meaning and fluency rather than grammar (Suemith, 2011).

With CLT, students are encouraged to participate as much as possible within the class-room. Consequently, interactive small-group work is crucial to developing fluency. Peers - as opposed to simply being passive receptacles to the explanations pronounced by the "sage on the stage" teacher - are expected to use the language with each other and take a measure of responsibility for their own learning (Parrish et al., 2006). The teacher is viewed more as a facilitator of

students' linguistic scaffolding (see: Vygotsky and ZPD) which requires social and culturally embedded experiences.

The benefits of the implementation of CLT (rather than rote learning) are not unknown by educators in Japan and since the late 1980s the Japanese ministry of Education (MEXT) has introduced a host of policies in order to develop students' communicative competence. JET (Japan Exchange and Teaching) programs have been implemented, and thousands of native-speaking ALTs (Assistant Language Teachers) have come from overseas to aid Japanese English teachers in schools (Kikuchi, 2009), and more recently administrative reforms have been implemented to attempt to have high school English classes taught with "English-as-the-Medium-of-Instruction" (EMI). In 2003 MEXT implemented the Action Plan to Cultivate 'Japanese with English Abilities' whose stated target was to produce high school graduates who can communicate in English. Finally, also implemented has been the "Global 30" initiative, which in essence is an attempt to transform Japan's top 30 universities into more global institutions by transforming - at the very least - two departments at each school into fully EMI departments.

Despite these attempts at more communicative language teaching (CLT), Japanese teachers of English (JTEs) generally continue to use the *yakudoku* (literally meaning "translation reading") method which is "a teaching approach in which classes are teacher-led, highly structured, focused on recurring language structures and fundamentally conducted in Japanese" (Humphries, Burns & Tanaka, 2015, p. 165). Outlining the reasons why *yakudoku* continues to be used, Humphries Burns and Tanaka assert:

"Scholars have indicated various causes for this phenomenon (which can also apply to other contexts in Asia) including: (a) high stakes university entrance examinations that focus on reading comprehension, lexicogrammatical knowledge and translation skills (Kikuchi, 2006); (b) strong institutional cultural norms

that discourage divergence from existing practices (Sato & Kleinsasser, 2004); (c) teachers' lack of confidence in their own communicative proficiency (Nishino & Watanabe, 2008) and the proficiency of their students (Humphries, 2014); (d) fear of losing control of the class (Humphries, 2014; Sakui, 2007); (e) teacher training that is too theoretical (Kizuka, 2006) and fails to address local problems (Humphries & Burns, 2015); and (f) government-mandated materials that rely heavily on low output, highly structured exercises (Humphries, 2013)." (2015, p. 165).

6.7 The Yakudoku Classroom and Negative emotions

As many EFL teachers (as well as the CLT literature) will profess, time within the English classroom not spent teaching students how to communicate in English is counterproductive. However, preparation for the university entrance exams in Japan is anything but communicative, in fact it is the widely viewed as the literal counter to CLT. As one high school teacher put it, the biggest challenge to implementing CLT teaching is the fact that they feel they must "wear two pairs of shoes": one pair to prepare students for the university entrance exams and one to teach students to communicate in English (Sakui, 2004, p. 158).

The university entrance exams are standardized nation-wide exams which take place over two days every January. English is a core component of the exam - usually given the most weight (Fujikawa, 2014) - and the English section of the test comprises primarily memorized factual information via multiple choice, translation exercises and reading passages. Notably many of the questions are known to be so difficult as to give even Anglophones difficulty (Kikuchi, 2006). At the same time, a large-scale study done some time ago revealed that some 93% of high school students believed the education they were receiving would not enable them to actually speak English (Kobayashi, 2001). Hence many students recognize that the purpose of their

secondary EFL education is solely in preparation for exams; exams which test anything but actual communicative competence (Allen, 2016; Brown & Yamashita, 1995; Kikuchi, 2006). This might explain this study's interviewees aforementioned view of there being both a "real" and "fake" English (with an example of "real" being YouTube, movies and conversations with foreigners, and "fake" being virtually everything taught within the classroom/textbooks) and it certainly goes at least partial way in explaining anxiety, demotivation and a generally negative attitude towards the subject. Consequently, beyond simply taking away much needed class time to focus on communication, there are indeed further detrimental effects of university exams and preparation, and further evidence for this was found within this study. Indeed, virtually every interview participant not only expressed disdain for the university entrance exams, they also asserted that owing to these exams, the amount that they enjoyed English plummeted ever-further as they progressed through high school towards what is widely referred to as "exam hell" (shiken jigoku).

The extent to which some are willing to go to do well on these exams has led to the proliferation of the cram school or *juku*, which target - even more zealously - examination competence. Indeed, exam preparation is the *juku's* prime focus (Allen, 2016; Lowe, 2015), and *jukus* are big business. Approximately 70% of all Japanese students will attend *juku* at some point in their life (Bray, 2007), and in 2010, there were over 50,000 *jukus* in Japan (Dierkes, 2010). The paucity of research on *jukus* - evidenced by Japan's leading language teaching journal *JALT* having only produced one study in the last 40 years (Lowe, 2015) - forces a measure of speculation on exactly how English is taught there, and – as they are private companies - obviously not all *jukus* are the same. However, in light of the professed aims, as well as the educational background of those teaching there (teachers are almost universally unqualified, and are generally

university students themselves; as they are familiar with - having recently undergone - the entrance exams (Lowe, 2015)) it is not unsafe to speculate that *yakudoku* teaching methods are prevalent. Indeed, how would a recent high school graduate unfamiliar with any method *but* the *yakudoku* method charged with teaching younger students - not English, but rather - how to pass a test they *themselves* prepared for via *yakudoku*, teach?

At any rate, with regards to mindsets, this study found that the amount of time a student spent in juku had no impact whatsoever; whether a student attended once a week for one year (approx. 50 hours) or two or three times a week for six years (approx. 650 hours) growth mindsets remained almost entirely unaffected ($r^2=-0.0016$; see Fig. 4.7) as did fixed mindsets ($r^2=-0.0015$; see Fig. 4.8)

However, when hours of juku are stacked up next to students' TOEIC scores (again, the same scores which are juku's professed $raison\ d$ 'être), perhaps a more telling story emerges. Though an almost imperceptibly slight increase can be discerned when looking at TOEIC scores compared to hours students spent in juku ($r^2=-0.0002$; see Fig. 4.13) we see students who never attended juku at all fare approximately the same as than those who did attend.

Now, importantly, the entrance exams for both universities require certain scores to get in, so the fact that – with Fig. 4.13 - TOEIC scores seem to be fairly unrelated to the number of hours could be argued away. That is, perhaps student X needed 600 hours of *juku* to get her grade high enough to get into their desired university, while student Y only needed 50 hours. However, Fig. 4.16 is a bit more damning. English proficiency is one thing, but here we see students who attended a cram school with the professed aim of helping them *pass tests* fare worse on the TOIEC *test* by an average of 28 points - than those who did not attend at all (p= 0.08; r^2 =0.013; see Fig. 4.16). Admittedly the effect size here is small, and the p value not confidence

inspiring, however again, students attend *jukus* expressly to do better on the university entrance *exams*, and so later on in university when they take the comparable (often replica) TOIEC *exam*, one would expect them to be at an advantage over those who never attended the *juku*. Consequently, even a small effect size in the *opposite* direction is noteworthy.

TOEIC scores do go up, and considerably so during students' tenure at university (years 1&3: d=1.8 (very large effect size) and r=0.65: medium size; years 2&3: d=0.93 and r=0.37: small/medium size; see Fig. 4.19), and students while in university take a yearly TOIEC test, the score of which was inquired about in the survey. So perhaps then what is being exhibited via the (loosely estimated) 28 point difference in mean TOEIC scores, is students who did not attend juku more capably shifting to the CLT methods used in university - pulling up and away from their classmates - while those who have had the yakudoku methods more codified into their learning style - and into what they expect a class to be/think learning a language looks like hamstring them. Again, it would be not just the yakudoku classroom methods then that hamper students, but their over-familiarity with it which hampers their ability to adjust to the more communicative methods used within the tertiary classroom. Certainly the experience of Student J's friend – who did attended juku and would get physically ill during her first year English classes in university - would support this assertion. Finally, the reader might again also recall that of the 11 interviewees, the top four most proficient students comprised only one student who attended *juku*, while *all* of the bottom seven attended *juku*. All told, a fairly questionable picture emerges of an industry on which Japanese households – in 2010 – spent approx. 924 billion yen (US \$12 billion) (Dawson, 2010).

Perhaps one of the most prominent features of the *yakudoku* classroom – particularly with regards to L2 learning in light of the efficacy of CLT – is its insistence on student silence. In

'Silence in the Second Language Classroom' (2013), James King posits that from a psychoanalytic perspective, silence may be a place of relative safety into which disempowered people retreat. Compounding this he says in Japan silence is a way of maintaining face and as well a way of being polite to interlocutors. Furthermore, in Japan ideal language exchanges involve a larger amount of inference than in most other cultures in which directness is valued. Finally, Confucian cultures highlight in-group membership, prize hierarchies - particularly those at the top - while compelling those on the lower end to assume a more passive and dependent role.

Indeed, it could be argued that much of the inability to overcome the trepidation and nervousness can be placed at both the feet of the yakudoku classroom methods students are subjected to, as well as the culture and general behavioral norms students – as well as teachers and society generally – are accustomed to. However, Student J(2)'s friend's proclivity to get physically ill due to anxiety in her university EFL classroom (despite her not being a particularly nervous person), reflects a glaring problem (feedback loop) with the language learning process in Japan. Indeed, it could be postulated that after having spent six years in the yakudoku EFL classroom, being thrust into a university CLT classroom was too rapid a shift for her and so, she reverted back to the psychologically safe silence and anonymity that a yakudoku classroom provides; opting instead to study beginner's French in Japanese. Admittedly, speculation is being relied on here; speculation on what is in fact a second-hand report, however within the author's own experiences after approximately ten years teaching EFL at Japanese universities, similar examples of students completely "freezing up" after being asked quite innocuous and simple questions in English are ubiquitous. At any rate, herein we see the failure of not just students to learn English, but as well the failure of students to learn how to learn a language. Underpinning this point, recall Student F(1)'s assertion that learning Polish organically is what in fact taught him

how to learn English, and that actually using Polish and speaking it from the outset is what allowed him to sidestep any sort of nervousness or anxiety, which he insists is the biggest challenge for Japanese EFL learners (for the full quote see: Section 5.4). In point of fact, students in the author's (as well as the author's colleagues') experience often seem genuinely shocked that they are expected to *speak* in a language class, and one might suspect in many cases, this overfamiliarity or even preference for the *yakudoku* method - and the unfamiliarity with, and fear of actual communication which it breeds - will forever hamstring many of these students.

Indeed, Sakui (2007) contends that the fact that teacher-led classrooms comprise the majority of other subjects in the secondary school setting, makes the transition to 'active classroom participant' particularly challenging. Unfortunately - as Sakui also points out - many students do in fact develop a preference for this method, viewing it "real" study, while considering more communicative methods as 'fun-time side-shows' and not taking them seriously (2004). Ocampo summarizes the reasons students prefer the yakudoku method: a) they feel talking and sharing with the members of a group is stressful, b) they feel concentration is easier when done alone c) they prefer just listening d) they prefer to rely on their teachers' instructions and e) they prefer strict teachers (2016). Some of these sentiments would undoubtedly be echoed by some of my students, as well as Student J's friend, and in point of fact the reader will recall that Student J himself asserted that "classrooms are too serious" and that "[they] are not supposed to be fun". Despite research showing that most adult ESL students prefer teachers to be warm, patient and empathetic as opposed to strict (Wlosowicz, 2016) "L2 learning" – in however they define it - in the eyes of many interviewees is a unilateral, somber and purely academic pursuit. Notably, in this study it was mainly those who uncovered extra-curricular methods of engaging with English (whether it be overseas travel of some kind, consumption of continuity-based media [such as

YouTube, or television series; to the exclusion of simply movies]) who we see in the 'more proficient' category.

In contrast to these extra-curricular activities, the yakudoku classroom has been shown to be overly focused on complicated technical jargon, frustrating, confusing and isolating (Reed, 2018), boring and demotivating (Falout et al., 2009). It removes the relevance of English as a tool, transforming it into something abstract, being presented as something more akin to mathematical formulae than a system of human communication (Ryan, 2009). Add that students become bored, frustrated, isolated and confused, to the fact that as a teaching method, yakudoku is terribly ineffective (as evidenced by Japan's TOEIC and TOFL scores compared with other Asian countries, as well as their ever-plummeting proficiency index ("Japan's English Proficiency Drops Among Non-English-Speaking Countries", 2019) and the result is fairly dire. But then consider the reality that how well students perform on the all-important university entrance exams can literally dictate the future course of their lives (Allen, 2016; Ishida, 2007; Fewell, 2010; Butler & Iino, 2005), and it is not difficult to imagine a host of negative emotions - even beyond anxiety and nervousness - regarding EFL surfacing. Beyond this, Ocampo (2016) points out the anxiety felt by teachers in (among other things) having to wear "two pairs of shoes" (Sakui, 2004) often compounds the situation as well. This then translates into students further succumbing to a fear of negative evaluation, which only further acerbates their own anxiety. These negative emotions further shut down students' ability to process and retain information (Frederickson, 2013; MacIntyre & Gregersen; 2012; Krashen, 1982) and serve ultimately as prime demotivators (Murphey et al., 2009; Kikuchi, 2009; Falout & Falout, 2005).

Furthermore, anecdotally, having taught compulsory EFL to first- and second-year students in lower ranked universities, the author and colleagues have come across students – who 138

again *have* studied English in secondary school for at least six years - unable to understand spoken phrases such as "How old are you?" And "What time is it?". Despite attempts to mask it, evidence of a teacher's disappointment and frustration in both reaction and tone in these situations, is most likely not helpful (see: Guz & Tetiurka, 2016), and probably just further serves to push students further away from English.

All told, it is not an overstatement to posit that some of these students in a sense have fallen through the cracks and - barring some kind of major ideological or existential shift in their lives - will never speak English. Beyond the fact that skill-wise they have long ago been left behind, it is highly unlikely that they will muster the motivation to catch up, and in some cases the attention it would require from their teachers to help them to do so, would drastically take away from those who have kept up skill-wise. In fact, from experience the author can attest to the fact that attempts at conducting a CLT class result in rather these students simply doing their best to evade the teacher's attention and/or the attention of peers by avoiding eye-contact, pretending to be working or just by keeping their heads down. Reflecting on what these students are taking away from these classes paints a pretty bleak picture. Despite attempts at providing a communicative format, in the interest of avoiding embarrassment or negative assessment they anxiously avoid situations in which they must speak English, and notably, teachers – as well as their classmates – often oblige.

What results here is, owing at least in part to students' *yakudoku* EFL upbringing, a confluence of negative emotion which undoubtedly becomes associated with English learning and perhaps even non-Japanese culture generally. Within EFL learning, the contribution which emotion plays "might well be the factor that most influences language learning, and yet is the least understood by researchers in second language acquisition" (Scovel, 2001, p. 140). With that

said, according to Falout, work by a number of scholars (Compas et al., 2001; Skinner & Wellborn, 1997; Skinner and Zimmer-Gembeck, 2007; Skinner, Edge, Atman & Sherwood, 2003) has concluded that in L2 learning, "positive outlooks, rather than negative frames of mind, help people face struggles in ways which optimize outcomes." (2012, p. 4).

Again, Student F(1) in a sense represents the quintessential conqueror of trepidation and nervousness. Through a series of circumstances beyond his control (a junior high school teacher who taught using CLT methods and a sickness which rendered him absent for much of high school) he in essence side-stepped the yakudoku teaching methodology entirely. With that said, he is also in a unique position in that he is also cognizant of the detrimental effects of nervousness and negative emotion within the Japanese EFL student mindset, offering - unprompted - an insider's narrative juxtaposing his organic learning of Polish with the Japanese EFL student experience. In traveling to Poland as a student entirely unfamiliar with the language, he clearly was stepping out of his comfort zone and "venturing forth" so to speak. But in doing so, he learned not just the Polish language itself, but how to learn a language, returning to Japan afterwards and then increasing his English TOEIC score to an almost unheard of 940, and his proficiency to a level I have yet to encounter. He recounts his journey, comparing it to the journey of his Japanese friends and is critical of the Japanese system. One line is particularly telling: "I started speaking Polish almost at the beginning... so I have never felt nervous when I spoke Polish...." One cannot help but think that if Student J(2)'s friend started speaking English from the beginning a lot of unwanted anxiety - as well as illness - could have been avoided.

6.8 Mindsets Revisited.

It would seem based on the quantitative data (and in reference to Research Questions 1: How do language learning mindsets impact Japanese university students' learning of English?, and 1.1: What is the relationship between students' mindsets and English language proficiency?) that whether or not students subscribe to a growth mindset, plays a minimal role in relation to their ability to learn EFL, and whether or not they subscribe to fixed mindset views, has virtually no impact whatsoever. Compounding this minimal relationship is evidence within the qualitative data which pits the most fervid growth mindset subscriber (evidenced by the survey) as also espousing contradictory fixed mindset views which further confounds and illustrating the minimal effect on students' EFL learning process. Indeed, as illustrated above, the qualitative data, suggests Japanese university EFL students are grappling with something entirely different; that is, a willingness (or indeed, an understanding of the necessity) to "come out of their shell" and venture forth; an imperative to do away with the pessimistic culturally and pedagogically induced stigma of grammar and pronunciation mistakes, and engage with the English language on a more communicative and organic plane.

Positive psychology (PP) is a subfield of psychology which is rapidly increasing in scope, and doing so even more notably within the field of second language acquisition (SLA) (Mac-Intyre & Mercer (2014). PP differs from traditional psychology in that its focus is on a more holistic understanding of what goes right in life; what contributes to happiness, meaning, optimism and flourishing, and can be seen as a response to traditional psychology, which has always focused more on negative aspects such as disorders and illnesses. Although only a couple decades old, two suggestions MacIntyre (2016) makes for future research with L2 learning and PP is to pay attention to the role of cultural dimensions, and to allow for a diversity of rigorous empirical

methods. With this in mind, what the author then suggests, is that the overlap with mindset research be considered at least within a Japanese EFL context. Perhaps even - as has been done with so many other areas of EFL research to date - bringing Japanese ESL mindset research under the umbrella of the more generic PP.

The subsuming of another area under that of PP would not be anything novel. In fact, according to MacIntyre (2016) this is exactly what has been done in numerous subfields and cases within the over 700 page/65 chapter Oxford Handbook of PP (2009). The reasons to do so are apparent when one considers in totality a) the aforementioned inefficacy of mindsets in relation to student EFL proficiency in Japan; b) the psychological challenges Japanese university students grapple with in EFL learning uncovered within the interviews in this study; c) the host of similarities/overlap between the two theories; and perhaps most saliently, d) how the two theories diverge within a cultural context (for further illustration of the similarities and differences refer to Section 2.4).

Indeed, despite an otherwise fairly close relationship between EFL mindset and PP theories, clearly they diverge in a Japanese context with mindsets offering very little fertile ground, and positive education practices offering not just opportunities for EFL improvement, but for mental fitness and enjoyment as well (White & Murray, 2015). In light of small effect sizes found within this study looking at the relationships between TOEIC scores, SRP, WTPI in comparison with mindsets; the ill-fit with regards to Lou and Noels' LMI, (which as has been argued earlier, could in fact be acting as – in part – a measure of positive/negative attitudes towards EFL); the difficulty researchers have faced circumventing Japanese students' parroting a hardwork ethic (Mercer and Ryan's 'socialized script' (2010)); the affective component discovered in the interviews (including a fear of judgement, making mistakes and nervousness) which clearly

impacts students' language learning journey; the *yakudoku* classroom which is anxiety-provoking, boring and ineffectual; a culture in which shame, hopelessness and bullying are pronounced problems, and suicide is the leading cause of death among university students (Lamis et al., 2014) and the alarmingly low levels of wellbeing among children and young adults generally (Twenge et al., 2019), it is time to at least consider grafting some of the tenets of positive education and positive psychology into the Japanese EFL classroom.

Doing so would naturally support the already burgeoning amount of literature which attests to the efficacy of PP. However, further implications would include – naturally - bringing to a close mindset/EFL research within a Japanese university context, but also perhaps further bringing into question the role cultures play in mindsets and language learning. That is, within a Canadian context, as Lou and Noels (2016) showed, mindsets *do* affect language learning, so it would be interesting to know how the two interfaced within – for example – an African or South American context. Finally, it is tempting to view the subsumption of mindsets under PP as a strike against mindset theory in general, however keeping in mind the fact that mindsets are domain specific, perhaps it is more apt to conclude there are simply some domains (in tandem with certain cultural specifics) in which mindsets students subscribe to, are unrelated to aptitude.

6.9 Implementing Positive Psychology (PP) into the Japanese Classroom

From a practitioner's perspective, how can PP be implemented into the EFL classroom? The book *Positive Psychology Perspectives on Foreign Language Learning and Teaching* (2016) represents the one of the first major works to address this question, as well as the nascent field of PP generally (Babic, 2019). PP entails learning *how* to learn, and in the book, Kossakowska-

Pisarek (2016) suggests strategy training, which beyond fostering meta-cognitive learning, also raises student and teacher morale and helps develop life skills in students such as time management, goal setting and life-long learning. Concretely this involves setting a learning task for students, putting them into groups and having students discuss which way is best to complete the task/learn the materials. They then report back to the class their findings and the teacher sums up the class's findings and comments generally on the pluses and minuses. The teacher assigns homework based on overall findings, and outcomes are discussed the following class. This is but one of a host of PP practitioner-ready hands-on classroom modalities to be found in the fully bloomed "English garden" (Dewaele, Chen, Padilla and Lake, 2019, p. 2) of positive educational practices today.

The Greater Good in Action website (http://ggia.berkeley.edu/) presents a host of other empirically tested classroom activities, including – for example – the handwriting of a gratitude letter and the delivering of it to the person to whom the student is thankful. Another example activity has students taking pictures out of class, and explaining what the picture is and why it is meaningful. Helpfully, each activity on the website is rated and so teachers can select from the top rated, or most talked about activities if they like. With respect to EFL specifically, the website (https://www.eltandhappiness.com/) has a host of ideas as well. Beyond links to YouTube videos addressing topics (in English) which actually contribute to happiness (such as flow, positivity, laughter etc.), Helgesen has developed a number of activities inspired by PP including balloon toss icebreakers, mindfulness, gratitude and savouring activities, talks, song lyric studies, and a series of ten-minute activities designed as warm up activities which can set a happy tone within the classroom. How some of these activities could address Commonality 8.

The English classroom is too serious from Section 5.3, is evident. Also, students' engagement with

online song lyrics (from YouTube for example) happily could address Commonality 7. Students' conception of there being "real" and "fake" English, as indeed, what English is more "real" than the words to a popular music video or talk which has been embraced by millions of English speakers. Finally, recall that Theme 3 Media consumption preferences posited media preferences to correlate with EFL proficiency, with 'interviewees who regularly watched YouTube in English' topping the list. It is easy to see how an English teacher could tailor YouTube as a PP platform, while familiarising many with less experienced with the site in its English form; indeed, the author has found that many of students are not even aware that often YouTube videos have a closed caption function which can aid in comprehension.

The negative effects of foreign language learning anxiety are well documented (Horwitz, 2001; MacIntyre & Gardner, 1991; MacIntyre, 2017) and in light of the two main themes uncovered in this study (Facing and overcoming fear of judgement and nervousness, and Failure of the *yakudoku* classroom) and their arguably close relationship to anxiety, Oxford (2017) offers a variety of PP interventions to address this including positive self-talk, situational analysis, paradoxical intention, hope-oriented interviews, and the ABCDE maco-strategy to name a few.

Beyond activities which engage and foster happiness in students specifically, Guz and Tetiurka (2016) looked at factors which contributed to positive student affect and engagement, and found that student emotions, and the intensity of engagement was closely related to that of the *teachers*. Gallo (2016) found that teacher professional development and positive emotions are also closely related. Mercer, Oberdorfer and Saleem (2016) note the importance of teacher psychology and wellbeing and argue that these - despite the paucity of research to date - play a crucial role in the EFL classroom, while Wlosowicz (2016) – as mentioned earlier – found most EFL students to prefer a more empathetic and patient teacher with whom they can share a good relationship with, as opposed to a stricter teacher. Dewaele and MacIntyre (2014) surveyed over

1,700 foreign language students, and in their subsequent qualitative research found that teachers who were supportive, positive, well-organized, happy, respectful and could be funny all contributed to students' FLE. The reader will recall that students' ALT (Assistant Language Teachers) seemed to be memorable or noteworthy only if a) he/she developed a personal relationship with the students (as was the case with Students K(4), A(6) and I(7)) or if b) he/she became angry at a class (as was the case with students I(7) and H(9)) (Commonality 2; Section 5.3). Admittedly whether or not students "recalled" their ALTs on the surface of it seems inconsequential, however the emotional consequences of either developing personal relationships with students, or scolding them, speak to two entirely different emotional atmospheres through a PP lens; especially in light of the fact that "fear and nervousness" surfaced as the most prevalent theme in this study. The four said students' proficiency levels (with K(4) and A(6) having developed personal relationships, H(9) having been scolded, and I(7) having had both) are perhaps salient here as well. At any rate, clearly, the ALTs in this study willing to take the time to develop personal relationships with their students, were clearly adhering to the aforementioned tenets of PP, and the endearing (or in the case of those who scolded them; fearful) way in which the students spoke of said ALTs in the interviews further cements this assertion.

Indeed, the importance of a teacher's contribution to FLE has been uncovered in a host of studies (see: Dewaele et al., 2018; Dewaele & Dewaele (2020); Li et al., 2018), however the emotional intelligence, regulation and well-being of teachers themselves has also explored (see: Dewaele, Chen, Padilla & Lake, 2019) and been deemed crucial to the EFL classroom, particularly in a field with a relative high burn-out rate (MacIntyre, Gregersen & Mercer, 2019). Reporting on findings of each of these numerous studies is quite beyond the scope of this paper, however, summarizing, one could posit that teachers with high levels of emotional intelligence

fared far better, and were able to manage far better the stresses of the classroom (Mercer et al., 2016; Dewaele & Mercer, 2018; Dewaele & Li, 2018; Li & Rawal, 2018). Beyond mental and physical resilience, teachers require the ability to regulate emotion, and this is something which has been argued should be taught in both pre- and in-service teachers (King et al., 2020).

A host of empirically validated PP classroom activities and interventions exist which offer teachers a wide variety of approaches to increase both communicative competencies and wellbeing in students, as well as the wellbeing of teachers (see: Oxford, 2017; MacIntyre, Gregersen & Mercer, 2019). However, not unlike every EFL classroom, every teacher is different, and being mindful of both one's own emotional tenor, and that of the students' in order to promote wellbeing is desirable, effectual and necessary.

Finally, speaking as a practitioner it is hoped that the findings and suggestions put forth within this paper would further find an audience with researchers, teachers, lecturers and EFL language facilitators within Japanese EFL context. Primarily it is hoped that this will serve first and foremost students, but hopefully teachers and administrators as well. As far as suggestions supporting the further implementation of communicative teaching methods (CLT), this is nothing novel, however this paper might then stand as further impetus for administrators to rethink the current method with which EFL is taught within secondary school in preparation for the all-important university entrance exams. Realistically this paper will probably never be read by – let alone behoove meaningful action by - those in positions to make truly impactful changes, however one would hope that it would not seem implausible that continued research and vigilance might one day tip the scales towards a more fruitful situation.

7. Conclusion

In order to diagnose students' mindsets, the Language Mindset Index (LMI) (Lou & Noels, 2016) was embedded within a larger survey which looked to also assess individual factors and EFL proficiency comprising the quantitative portion of a mixed methods study. Factor analysis of the results aligned with Lou and Noels' model along a two-factor plane (the *growth* and *fixed* dimensions), but contradicted their three- and six-factor models in that a secondary four-factor model was instead produced. These four factors (*achievement potential via hard work* (growth), *general change potential* (growth), *innate hinderances* (fixed), and *age-related hinderances* (fixed)) suggest most notably that students see L2 learning as feasible along two paths on the growth dimension: via hard work, or via favorable circumstances without conscious effort. Along the fixed dimension, challenges which surfaced had to do with age, as well as immutable biological factors seemingly. Factor analysis provided limited support for the LMI, however the instrument held strong along the two-factor dimension, and as diagnosing students as growth or fixed mindset subscribers was the primary goal, it was along this path I proceeded.

As much of the literature has shown, mindsets can be powerful predictors of students' ability to learn and progress within an academic (or other) setting. However, within a Japanese university context, the relationship between EFL proficiency and growth mindset appears minimal, and the relationship between EFL proficiency and fixed mindsets appears non-existent. Further undermining the EFL/growth mindset relationship are the glaringly fixed mindset utterances from growth mindset subscribers (diagnosed as such via the survey) gleaned in the qualitative data. These contradictions add credibility to what Mercer and Ryan assert is a culturally fostered "socialized script" (2010) in which students learn to espouse the efficacy of hard work, but

may *in fact* feel innate talent holds more weight in this regard. Supporting this assertion is the generally unchanging nature of students' growth mindsets over their university tenure, despite marked increases in their EFL proficiency (including TOEIC scores, self-rated proficiency (SRP) and willingness to participate in interviews (WTPI)) as well as a host of other factors it can assumed. Students' fixed mindsets throughout university do decline however, suggesting - as they progressively reject the fixed statements with age - perhaps the emergence of an independence, or even recognition of the efficacy of their own EFL learning journey.

Even further undermining the mindset/EFL relationship, is the fact that the statements in the LMI themselves are - in the case of growth mindsets - of a nature decidedly positive or optimistic (grammatically and semantically speaking), and in the case of fixed mindsets, decidedly negative/pessimistic. This makes it entirely possible that within the survey, students were responding – at least in part – to this optimistic/pessimistic aspect of the LMI statements, and not just growth or fixed mindset dimensions.

Shifting gears to Research Questions 2-2.2, and the second phase of the study which involved one-hour semi-structured interviews with 11 students who volunteered to do so via the survey, themes which surfaced which were common to all students (*Commonalities*) included:

- 1. A virtually universal distain for entrance exams
- 2. Positive, negative and nil fluence of the ALT
- 3. The double-edge sword of intra-class competition
- 4. Self-depreciating view of English skills.
- 5. Notion of Japanese people as universally nervous and timid.
- 6. Recognition that English isn't necessary.
- 7. Students' conception of there being "real" and "fake" English
- 8: The English classroom is too serious
- 9. Frustration and disappointment reaction pathways while using English in real life
- 10. Real life experiences as perceived as either positive or negative depending on the interaction's ability to provide hospitality to foreigners in Japan.

Themes which hinged on students' proficiency (and were hence *not* common to all) listed in order of my interpretation of their importance included:

Theme 1: Facing and overcoming fear of judgement and nervousness

Theme 2. Failure of the *yakudoku* classroom.

Theme 3. Media consumption preferences.

Theme 4: Mindset contradiction statements in growth mindset students

Theme 5: The effects of parental support seem varied.

Although a host of themes surfaced within this study, as mentioned earlier, Theme 1 and Theme 2 from the second list above were arguably the most consequential, and – importantly the two are inexorably linked. The weight of these two themes is evidenced not just by the students' insistence within the interview data, but is also corroborated by the number of examples cited, and hence the hefty word count dedicated to them in this paper. Indeed, the main challenge facing students along their EFL journey is a fear of making mistakes, being judged and nervousness, which is intertwined with classroom practices geared in large part towards passing the all-important university entrance exam. So much so, that within the students interviewed, it was virtually only those who in essence conquered this fear and came to terms with the inevitability of mistakes in their language learning process who flourished; populating the 'more proficient' category within this study. Those who struggled had seemingly internalized many of the behavioral expectations present within the boring, rote-learning-laden, often complicated, frustrating and ineffectual yakudoku (literally meaning 'read and translate') classroom, as well as to many Confucian cultural tenets more broadly including silence, reverence and passivity with relation to the 'sage on the stage' teacher and hierarchal norms. They feared making mistakes and being judged (both by foreigners, and by fellow classmates/teachers/nationals as well), feared

overseas travel, shied away from praise, and viewed Japanese people generally as anxious and timid; a self-fulfilling prophecy perhaps. As these cultural norms become increasingly codified in secondary school classroom behavior with the ever-looming and ever-approaching threat of university entrance exams (Butler & Iino, 2005) (which test anything but communicative competence), they fuel a feedback loop of fear, trepidation, silence, an inability to respond or communicate in English on even a basic level, and perhaps most importantly, an over-familiarity the *yaku-doku* classroom itself (King, 2013; Ocampo, 2016) (along with its *juku* (cram school) cousin); spurring an arguably more detrimental misunderstanding as to *how* to learn language (King, 2013; Kikuchi, 2006; Allen, 2016)

These two themes (fear and trepidation & failure of the *yakudoku* classroom) clash vehemently with all of the three main pillars of Positive Psychology (see: Seligman & Csikszent-mihalyi, 2000); Theme 1 with *positive subjective experience* and *positive individual traits*; and Theme 2 with *positive institutions*. With this in mind, one might make the argument – as has been done - for the fruitfulness of empirical measurement of students' psychological well-being (for an extensive overview see: Dewaele, Chen, Padilla and Lake, 2019). Lake (2013) was among the first to adopt PP principles into empirical measurement in second language acquisition (SLA) research, and as Dewaele, Chen, Padilla and Lake (2019) argue, Horwitz' (1986) Foreign Language Classroom Anxiety Scale in fact could also be argued to be SLA's first venture into PP and SLA. However, clearly the answer to whether or not happier and more relaxed (less anxious) students learn language better, is a resounding yes (MacIntyre, 2017) and so from a practitioner's standpoint – faced with all the psychological baggage Japanese EFL students bring with them from secondary school - the question becomes not "To what extent are students hampered by a psychological lack of well-being?" or "Would PP be effectual in my classroom?" but

rather "How can I as quickly and effectively as possible implement the tenets of PP into my classroom?".

Unfortunately, Japan presents a unique challenge in this regard. University entrance exams are still used as the measure of a student's worth, and as mentioned earlier, they measure not actual linguistic ability or communicative competence, but – generally speaking - more abstract knowledge about English. The amount of effort necessary, or way one would go about implementing infrastructural overhaul in this regard is beyond the scope of this paper, but one step in the right direction would be to have *jukus* teach exclusively material which subscribes to CLT or – or ideally and – PP tenets as a counter to the influence of the yakudoku classroom. One of the more jarring findings of this study was how ineffectual jukus have seemed to be, and as private individually ran companies, jukus – as opposed to the monolith that is the Japanese public education system – are in a position to shift their approach to EFL education far more easily. Here however part of the challenge would be convincing the consumer (parents of the students attending jukus who are concerned primarily with their son's/daughter's ability to navigate university entrance exams) that paradoxically not solely focusing on traditional rote memorization/test preparation will ultimately cumulate in (among a host of other positive outcomes) better test scores.

Naturally one could recommend university EFL level teachers implement PP and CLT methods as well, and the discussion section of this paper outlines some ideas as to how to implement these, however another deceptively simple thing teachers can do, is to simply explain to students on the first day of their first university EFL class that unlike high school, they *will* be expected to speak English in this, and most likely their other university EFL classes as well. Ex-

plain that as a teacher, you are less concerned about them making mistakes and answering perfectly, and more concerned with the effort they are putting into communication, and the class generally. Explain that counter to what/how they may have learned, practice, and actually *using* the language is the best way to learn. As well, humanize yourself for them. Tell them a story about your own follies and misgivings with regards to learning a second language, and show them that you are not the 'sage on the stage' that they might have expected, but a facilitator of language, and quite possibly a friend. Explain that as a teacher, when you speak to them, you are not "attacking" them, but are genuinely interested in them, and would like to know them better. In my experience, all of mitigates the "deer in the headlights" response which my colleagues and I have discussed *ad nauseum*, and sets a more ideal and clear tone for the rest of the term.

It is also worth noting that just because this paper advocates the virtues of PP, and recommends that mindset research - with regards to university EFL in Japan - be foregone, other researchers should not be deterred from engaging in mindset research within an EFL context.

However, this study does the raise an interesting question with regards to how these mindsets interface with culture and EFL more broadly. Lou and Noels' (2016) original study was conducted in Canada, however future research might look to see how mindsets and EFL interface in other cultures. With respect to PP in a Japanese context, future research might look to see what impact positive educational interventions and curriculums have on language, communicative, and well-being gains for students. Although, as Lazerus (2003) points out, cross-sectional studies, despite dovetailing with researchers' schedule more conveniently, cannot capture true change as effects, and hence longitudinal research in this vein would be ideal.

In conclusion, where culture and the language learning domain meet, mindset research has received very little attention, particularly in light of how ubiquitous the theory has been to 153

educators around the globe to date. In light of how effective and simple many interventions have been shown to be, a gap certainly exists which this study attempted to address. To this end, this study began by measuring the extent to which growth and fixed mindsets affect Japanese university EFL students, as well as more generally, what other factors impact their language learning journey. As was revealed, the tool used to measure students' mindsets within a language learning context (Lou & Noels' Language Mindset Index (2016)) had a limited fit within a Japanese context. Also, it was discovered that students are minimally impacted by both growth and fixed mindsets, and far more so by affective factors such as fear and trepidation in communicative situations, as well as an unwillingness to "come out of their shell" so to speak. It was the scale of these affective factors which behooved the author to recommend mindset research be deserted in Japanese EFL, and instead rather the tenets of positive psychology - which far more directly address said affective factors – be adhered to.

7.1 Limitations

Several limitations must be acknowledged. Firstly, as this study was done at two universities in South Japan, external validity is limited. Also, as with any cross-sectional study, directional and causal interpretations as well as general conclusions are also limited. Translation was complex with regards to the LMI as well, and as there is no such thing as a 'perfect translation', especially with languages so different as Japanese and English, there is always going to be some

warping of the original meanings. To this, the reader is asked to note that great effort was expended hiring two translators to translate, then back translate the study, and then correct again for accuracy following the piloting phase.

As this was the author's first major research project, many things became clear to in retrospect. Firstly, after having gathered the data it was realized that many of the questions added into the survey were fairly superfluous and unnecessary. In retrospect, the intention was to funnel all of this information into some kind of conclusion in order to answer research question 1.2 What is the relationship between students' mindsets and their linguistic and social histories (demographic information such as where students grew up; to what extent English was used and study was encouraged; how much exposure students had to native English-speaking foreigners etc.)? However, in retrospect, no formal plan as to how the data was to be analysed existed. In hindsight, the thinking was that if the data were sufficiently organised/categorised/etc., then finding the patterns within the quantitative data was something the software, as well as the statistician employed, would have no problem identifying, and something which would take minimal effort/time; the whole process from the outset appeared a bit more "input -> output". Admittedly, the detriments of a lack of knowledge with regards to statistical analysis became evident and the fact that the study was designed to be primarily exploratory allowed, in a sense, the ability to be vague with what had been planned for the data analysis in the proposal. Statistical analysis as the author has come to know it is as much an art as it is science, and coming to realization was a steep learning curve involving many YouTube video tutorials, and two textbooks purchased after the fact.

The fact that it took more time than originally projected explains the improvisation employed in the interview participant selection and the creating of the overall mindset index (OMI)

in order to get an *as-broad-a-range-as-possible* sample of students. In the interest of replicability, it would have been ideal to have a set method with which this was done. However, of the just over 100 (out of over 850) students who left contact details, essentially the author just "eyeballed" students who generally ranked higher, average and lower on the OMI; taking into consideration – as mentioned earlier – sex/gender, the university they attended etc. In that vein, the aforementioned "superfluous survey questions" were not entirely useless, and frankly they did provide a way of breaking the ice and a starting point with the students interviewed.

In fact, as has become clear in hindsight is the extent to which improvising the OMI was perhaps detrimental. Subtracting a fixed mindset score from a growth one is an expedient way to get a sense of a student's overall mindset score, and makes sense if one subscribes to the idea that mindsets are more of a continuum. However as other scholars have argued (Karwowski, 2014), and this study's findings appear to support (see Section 6.4), is the fact that they appear more so to be independent constructs with respect to ESL learning and hence in this light the OMI was to some degree a misstep.

Another thing which was rather limiting was the number of fourth year students who ended up participating in the survey. As mentioned earlier in the quantitative analysis, only seven replied, which is why it was thought prudent to combine third- and fourth-year students into one metric in the relative quantitative metrics. This was not ideal but the way in which other teachers were asked to help with the survey (that is, as many as was possible while minimizing intrusion by promising them that "all they had to do was display the QR code for the students, give them ten minutes and 'be done with it'") left few options for remedying the situation. It would seem fewer teachers with fourth year classes were willing to participate, however, compounding this is fact that these classes also tend to be smaller, and the students busier. As well,

the author's status as a part-time teacher at the two schools limited the social pool primarily to teachers who teach the younger students.

In retrospect, one interesting idea which fell by the wayside was that of having students in the interviews answer a couple questions which would have elicited mindset-related information; for example, simply ask students what percent they feel L2 learning is talent, and what percent is hard work. This could have been compared to their overall mindset index gleaned in the survey. However, with that said, having *not* asked allowed for a more organic surfacing of some of the contradictory fixed mindset statements discussed in Section 6.4 *Making the case for socialized scripts*.

Another factor worth noting is that advocacy for the promotion of happier and more relaxed students via PP does not imply that students' well-being is by any means the sole responsibility of the EFL teacher. Students' lives, journeys, and experiences are all unique, and hence to hang the well-being of a student in her entirety on – what is often – a single 90-minute class each week is unrealistic. However, again, the promotion of said well-being is undeniably a worthy pursuit, and doing so within an EFL context does so in a way which also provides subject matter for the lessons, as well as – specifically in a Japanese context - an optimistically framed window through which students can come to see and understand the broader world.

One final thing worth noting is in regards to social class and language learning. Although Japan is considered to be an entirely homogenous country in terms of racial or even economic identity, this is not the case (Weiner, 2009; Occhi, 2010), and in this paper's reference to "Japanese people" or "Japanese culture", implying that it might be, or even "othering" was certainly not my intent. Rather the terms were used as shorthand for what is – not unlike most nations – a country which is diverse and internally unique.

Regarding socio-economic status, all too often contemporary language researchers overlook the diversity here as well (Vandrick, 2014; Occhi, 2010) and although this was not the intent, it having been overlooked is regrettable particularly with one of the research questions specifically looking to investigate "individual and background factors". In Japan socio-economic status is generally stratified fairly closely along the area in which one grew up; with "upperclass" living in mostly urban areas and "lower-class" in more rural areas. In the survey students were asked – in this respect - which area they grew up in, but a few confounding variables informed the eventual abandoning of this inquiry. Firstly the Japanese word for 'rural' (田舎) used in the survey has fairly negative connotations which might have affected how students responded. In retrospect, with more attention this might have been alleviated, but perhaps more to the point, it is only subsequent to the research in which the author has realized that shying away from more fully addressing this may have had more to do with his own reservations in asking students on the survey (and even more so in the interviews) about such matters. Reflectively, this probably stems from the author's own upbringing having grown up well below the poverty line in a single-parent trailer-park home in rural Saskatchewan, Canada. Reflecting, the author can confidently assert that had he himself been asked related questions in an interview at that age, he would have felt at least uncomfortable, and at most embarrassed and resentful. In terms of power differentials, it would have only served to further distance the interviewee from the interviewer. Considering the already-existing considerable imbalances in this study, and the related aim to put students at ease and get them to open up, for better or for worse going down – what might have otherwise been – a fruitful path was avoided.

7.2 Future Research

The factor analysis undergone within this study suggested that Japanese EFL students subscribe less to concepts like general language intelligence or second language intelligence, and more so to the notion that language learning is something which bifurcates between time consciously spent studying in a traditional textbook/classroom sense, and a more natural acquisition process which sees the student immersed in a culture which allows for acquisition to occur more naturally and in a similar way to a first language.

Interestingly in a certain light this bifurcation aligns with the interview finding that students harbour a notion of there being both a *real* English – that is English which is used for communicate purposes in real and everyday life - and *fake* English; that is English from a textbook which is studied in class and done so for purely outcome-focused reasons such as the passing of exams. Importantly, as this study and other literature has shown, it is not until students reach more communicative environments – whether this be homestays or even university classes with a more communicative focus – that students begin to enjoy and thrive in their second language, and in this vein, it would seem imperative to do away with the *yakudoku* classrooms which stymy said enjoyment and real proficiency gains.

To this end, future research might address mindset and positive psychology theories in terms which are more learner-focused – as opposed to outcome-focused - and as was mentioned earlier, an apt place to begin might be in a Japanese cram school (*juku*) setting. As this study has shown the efficacy of *jukus* is almost startlingly limited with respect to their ability to teach EFL (see Section 6.7), and from this perspective it would seem there is little to lose. Interventionist research of this nature might find itself subject to strong pushback in the public school system, and this is because, as Chodkiewicz and Boyle (2017) point out (and as was further illustrated in

Section 6.6), logistical constraints such as curriculum mandates, overcrowded classrooms and teacher-related factors can all affect the quality an intervention might have. *Jukus* on the other hand are not beholden to any curriculum constraints besides that of the expectations of the paying parent, in my experience as a *juku* teacher, there has never been a classroom with more than 10 students present. Finally, teacher-related factors would simply be a matter of the *jukus*' hiring policy itself.

This line of research could be particularly fruitful beyond the potential it may have to affect students' EFL proficiency and overall well-being; which is no small feat in itself. However, beyond this it could theoretically overhaul a \$12 billion industry (Dawson, 2010) in which there has been very little research conducted to date (recall there has been one article in the last 40 years (Lowe, 2015)), and perhaps even set an example which the public education system in Japan would be forced to take note of.

However, the fact that *jukus* themselves are in their entirety outcome focused – and sold as such to the public as such – presents a challenge. They are exam preparation schools, and so convincing students' parents that EFL proficiency and well-being are related could prove difficult. Furthermore, as Sakui (2004) points out, often even students themselves view more communicative EFL lessons as something more akin to playtime and not real study. All of which is to say that were said research to show the efficacy of positive psychology within the classroom, there would still be an uphill battle in shifting public opinion. However, it is hard to imagine within Japan's EFL learning sphere a more pertinent battle to fight.

References

- Aberdeen, T. (2013). Yin, RK (2009). Case study research: Design and methods. Thousand Oaks, CA: Sage. *The Canadian Journal of Action Research*, 14(1), 69-71.
- Allen, D. (2016). Japanese cram schools and entrance exam washback. *The Asian Journal of Applied Linguistics*, *3*(1), 54-67.
- Aronson, J., Fried, C. B., & Good, C. (2002). Reducing the effects of stereotype threat on African American college students by shaping theories of intelligence. *Journal of experimental social psychology*, 38(2), 113-125.
- Babic, S. (2019). Book Review: Positive Psychology Perspectives on Foreign Language Learning and Teaching. Edited Collection by Danuta Gabryś-Barker and Dagmara Galajda. *JOURNAL FOR THE PSYCHOLOGY OF LANGUAGE LEARNING*, *1*(1), 142-147.
- Bandura, M., & Dweck, C. S. (1985). The relationship of conceptions of intelligence and achievement goals to achievement-related cognition, affect and behavior. *Unpublished manuscript, Harvard University*.
- Bartz, D. E. (2018). Managers effectively using positive psychology and its attributes of flow, mindfulness, mindset, optimism, and happiness. *International Journal of Education and Human Developments*, 4(4), 26-32.
- Bernat, E., & Gvozdenko, I. (2005). Beliefs about Language Learning: Current Knowledge, Pedagogical Implications, and New Research Directions. *TESL-EJ*, 9(1), n1.
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child development*, 78(1), 246-263.
- Boaler, J. (2013, March). Ability and mathematics: The mindset revolution that is reshaping education. *In Forum*, 55 (1), 143-152)
- Bourdieu, P. (1990). Structures, habitus, practices. The logic of practice, 52-65.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Braun, V., & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers?. *International journal of qualitative studies on health and well-being*, 9.
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2018). Thematic analysis. *Handbook of research methods in health social sciences*, 1-18.
- Brown, J. D. (2016). Statistics Corner: Questions and Answers About Language Testing Statistics. Tokyo: JALT Testing and Evaluation Special Interest Group.
- Brown, J. D., & Yamashita, S. O. (1995) English Language Entrance Examinations at Japanese Universities: What Do We Know.
- Burnette, J. L., O'Boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mind-sets matter: A meta-analytic review of implicit theories and self-regulation. Psychological Bulletin, 139, 655–701
- Burns, L. V. F., & García, M. R. (2017). Comparative Language Learning Beliefs: Why Aptitude Matters. *Studies in Linguistics and Literature*, *I*(2), 129.
- Butler, Y. G., & Iino, M. (2005). Current Japanese reforms in English language education: The 2003 "action plan". *Language Policy*, 4(1), 25-45.

- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of personality and social psychology*, 56(2), 267.
- Chen, J. F., Warden, C. A., & CHANG, H. T. (2005). Motivators that do not motivate: The case of Chinese EFL learners and the influence of culture on motivation. *TESOL quarterly*, 39(4), 609-633.
- Chen, W. W., & Wong, Y. L. (2015). Chinese mindset: theories of intelligence, goal orientation and academic achievement in Hong Kong students. *Educational Psychology*, 35(6), 714-725.
- Cherkowski, S. (2018). Positive Teacher Leadership: Building Mindsets and Capacities to Grow Wellbeing. *International Journal of Teacher Leadership*, 9(1), 63-78.
- Chiu, C. Y., Hong, Y. Y., & Dweck, C. S. (1997). Lay dispositionism and implicit theories of personality. *Journal of personality and social psychology*, 73(1), 19.
- Chodkiewicz, A. R., & Boyle, C. (2017). Positive psychology school-based interventions: A reflection on current success and future directions. *Review of Education*, *5*(1), 60-86.
- Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The psychologist*, 26(2), 120-123.
- Claro, J. (2016). Japanese first-year engineering students' motivation to learn English. *Studies of Human Science*, 12, 67-105.
- Claro, S., Paunesku, D., & Dweck, C. S. (2015). Mindset equals income as a predictor of achievement. Unpublished manuscript, Stanford University, Stanford, CA.
- Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Proceedings of the National Academy of Sciences*, 113(31), 8664-8668.
- Coghlan, D., & Brannick, T. (2014). *Doing action research in your own organization*. 4th ed. London, UK: Sage
- Collett, P., & Berg, M. (2020). Validating the Language Mindsets Inventory. In P. Clements, A. Krause, & R. Gentry (Eds.), *Teacher efficacy, learner agency. Tokyo: JALT.* https://doi.org/10.37546/JALTPCP2019-22
- Colosimo, R., & Xu, Y. (2006). Research on shame: implications for English as a second language nursing students. *Home Health Care Management & Practice*, 19(1), 72-75.
- Connelly, L. M., & Peltzer, J. N. (2016). Underdeveloped themes in qualitative research: Relationship with interviews and analysis. *Clinical nurse specialist*, 30(1), 52-57.
- Creswell, J. W. (2009). <u>Mixed methods procedures</u>. *In Research design: Qualitative, quantitative and mixed methods approaches* (3rd ed., pp. 203–226). Thousand Oaks, CA: Sage.
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The counseling psychologist*, 35(2), 236-264.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research*, 209, 240.
- Dewaele, J. M., & Dewaele, L. (2020). Are Foreign Language Learners' Enjoyment and Anxiety Specific to the Teacher? An Investigation into the Dynamics of Learners' Classroom Emotions. *Studies in Second Language Learning and Teaching*, 10(1), 45-65.
- Dewaele, J. M., & Li, C. (2018). Emotions in second language acquisition.
- Dewaele, J. M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in second language learning and teaching*, 4(2).

- Dewaele, J. M., & Mercer, S. (2018). 11 Variation in ESL/EFL Teachers' Attitudes towards their Students. *Language teacher psychology*.
- Dewaele, J. M., Chen, X., Padilla, A. M., & Lake, J. (2019). The flowering of positive psychology in foreign/second language teaching and acquisition research. *Frontiers in psychology*, 10, 2128.
- Dewaele, J. M., Witney, J., Saito, K., & Dewaele, L. (2018). Foreign language enjoyment and anxiety: The effect of teacher and learner variables. *Language teaching research*, 22(6), 676-697.
- Diener, C. I., & Dweck, C. S. (1978). An analysis of learned helplessness: Continuous changes in performance, strategy, and achievement cognitions following failure. *Journal of Personality and Social Psychology*, 36(5), 451-462
- Dierkes, J. (2010). Teaching in the shadow: Operators of small shadow education institutions in Japan. *Asia Pacific Education Review*, 11(1), 25-35.
- Diseth, Å., Meland, E., & Breidablik, H. J. (2014). Self-beliefs among students: Grade level and gender differences in self-esteem, self-efficacy and implicit theories of intelligence. *Learning and Individual Differences*, 35, 1-8.
- Doyon, P. (2000). Shyness in the Japanese EFL class: Why it is a problem, what it is, what causes it, and what to do about it. *The Language Teacher*, 24(1), 11-16.
- Dweck, C (2006) Mindset. Random House NY.
- Dweck, C. (2015). Carol Dweck revisits the growth mindset. Education Week, 35(5), 20-24.
- Dweck, C. S. (1975). The role of expectations and attributions in the alleviation of learned help-lessness. *Journal of personality and social psychology*, *31*(4), 674.
- Dweck, C. S. (1991). Self-theories and goals: Their role in motivation, personality, and development. In *Nebraska symposium on motivation* 38(3), 199-235.
- Dweck, C. S. (2000). *Self-theories: Their role in motivation, personality, and development*. Psychology Press.
- Dweck, C. S. (2008). Mindsets and Math. Science Achievement, 2, 1-1.
- Dweck, C. S., & Bempechat, J. (1983). Theories of intelligence and achievement motivation. *Learning and motivation in the classroom*. *Hillsdale*, *NJ*: *Erlbaum*.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological review*, 95(2), 256.
- Dweck, C. S., & Reppucci, N. D. (1973). Learned helplessness and reinforcement responsibility in children. *Journal of personality and social psychology*, 25(1), 109.
- Dweck, C. S., & Sorich, L. (1999). Mastery-oriented thinking. Coping, 11, 232-251.
- Dweck, C. S., Chiu, C. Y., & Hong, Y. Y. (1995). Implicit theories and their role in judgments and reactions: A word from two perspectives. *Psychological inquiry*, 6(4), 267-285.
- Dweck, C., & Molden, D. C. (2000). *Self theories*. Handbook of competence and motivation, 122-140.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, 14(4), 532-550.
- Elliot, A. J., & Dweck, C. S. (Eds.). (2013). *Handbook of competence and motivation*. Guilford Publications.
- Elliott, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, *54*(1), 5–10.
- Epstein, S. (1990). Handbook of personality: Theory and research. New York: Guilford.

- Falout, J. (2012). Coping with Demotivation: EFL Learners' Remotivation Processes. *TESL-EJ*, *16*(3), n3.
- Falout, J., & Falout, M. (2005). The other side of motivation: Learner demotivation. In K. Bradford-Watts, C. Ikeguchi, & M. Swanson (Eds.) *JALT 2004 Conference Proceedings* (pp. 280-289). Tokyo: JALT.
- Falout, J., Elwood, J., & Hood, M. (2009). Demotivation: Affective states and learning outcomes. *System*, *37*(3), 403-417.
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International journal of qualitative methods*, 5(1), 80-92.
- Fewell, N. (2010). Language learning strategies and English language proficiency: An investigation of Japanese EFL university students. *Tesol Journal*, 2(1), 159-174.
- Finch, W. H. (2019). Exploratory factor analysis. Thousand Oaks, CA: Sage
- Flora, D. B., & Flake, J. K. (2017). The purpose and practice of exploratory and confirmatory factor analysis in psychological research: Decisions for scale development and validation. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 49(2), 78.
- Foliano, F., Rolfe, H., Buzzeo, J., Runge, J., & Wilkinson, D. (2019). Changing mindsets: Effectiveness trial. *National Institute of Economic and Social Research*.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broadenand-build theory of positive emotions. *American psychologist*, *56*(3), 218.
- Fredrickson, B. L. (2013). Positive emotions broaden and build. In *Advances in experimental social psychology* (Vol. 47, pp. 1-53). Academic Press.
- Frydenberg, E. (2017). Positive psychology, mindset, grit, hardiness, and emotional intelligence and the construct of resilience: A good fit with coping. In *Coping and the Challenge of Resilience* (pp. 13-28). Palgrave Macmillan, London.
- Fujikawa, M., フジカワミキ, & 富士川美紀. (2014). A study of the communicative approach in Japanese English education: Inquiry into the degree of compatibility of Communicative Language Teaching in Japan. *Komazawa University of Foreign Languages*, 16, 123-131.
- Furukawa, E., Tangney, J., & Higashibara, F. (2012). Cross-cultural continuities and discontinuities in shame, guilt, and pride: A study of children residing in Japan, Korea and the USA. Self and Identity, 11(1), 90-113.
- Gabryś-Barker, D., & Gałajda, D. (Eds.). (2016). *Positive psychology perspectives on foreign language learning and teaching*. Switzerland: Springer International Publishing.
- Gallo, E. (2016). "I Want to Be Happy as a Teacher". How Emotions Impact Teacher Professional Development. In *Positive Psychology Perspectives on Foreign Language Learning and Teaching* (pp. 249-266). Springer, Cham.
- Gan, Z., Humphreys, G., & Hamp-Lyons, L. (2004). Understanding successful and unsuccessful EFL students in Chinese universities. *The modern language journal*, 88(2), 229-244.
- Gao, X. A. (2010). Strategic language learning: The roles of agency and context. Multilingual Matters.
- Gardner R.C. (2019) The Socio-educational Model of Second Language Acquisition. In: Lamb M., Csizér K., Henry A., Ryan S. (eds) The Palgrave Handbook of Motivation for Language Learning. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-28380-3_2

- Gardner, R. C. (1985). Social psychology and second language learning: The role of attitudes and motivation. Arnold.
- Gardner, R. C. (2010). *Motivation and second language acquisition: The socio-educational model* (Vol. 10). Peter Lang.
- Good, C., Aronson, J., & Inzlicht, M. (2003). Improving adolescents' standardized test performance: An intervention to reduce the effects of stereotype threat. *Journal of Applied Developmental Psychology*, 24(6), 645-662.
- Gray, D. (2014) Doing research in the real world. SAGE Publications Ltd.
- Gunderson, E. A., Gripshover, S. J., Romero, C., Dweck, C. S., Goldin-Meadow, S., & Levine, S. C. (2013). Parent praise to 1-to 3-year-olds predicts children's motivational frameworks 5 years later. *Child development*, 84(5), 1526-1541.
- Guz, E., & Tetiurka, M. (2016). Positive emotions and learner engagement: insights from an early FL classroom. In *Positive psychology perspectives on foreign language learning and teaching* (pp. 133-153). Springer, Cham.
- Hammersley, M. (2008). Questioning qualitative inquiry: Critical essays. Sage.
- Heine, Steven J. "Self as cultural product: An examination of East Asian and North American selves." *Journal of personality* 69.6 (2001): 881-905.
- Henderson, V. L., & Dweck, C. S. (1990). Motivation and achievement.
- Hinenoya, K., & Gatbonton, E. (2000). Ethnocentrism, cultural traits, beliefs, and English proficiency: A Japanese sample. *The modern language journal*, 84(2), 225-240.
- Holliday, A. (1999). Small cultures. Applied linguistics, 20(2), 237-264.
- Hong Y., Chiu C., Dweck, C.S. & Lin, D., (1998) A test of implicit theories and self-confidence as predictors of responses to achievement settings. Unpublished manuscript.
- Horwitz, E. (2001). Language anxiety and achievement. *Annual review of applied linguistics*, 21(1), 112.
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *Tesol Quarterly*, 20(3), 559-562.
- Horwitz, E. K. (1999). Cultural and situational influences on foreign language learners' beliefs about language learning: A review of BALLI studies. *System*, 27(4), 557-576.
- Horwitz, E.K. (2008). Becoming a Language Teacher, A Practical Guide to Second Language Learning and Teaching. Boston: Pearson Education, Inc.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Humphries, S. C., Burns, A., & Tanaka, T. (2015). "My head became blank and I couldn't speak": Classroom factors that influence English speaking. *The Asian Journal of Applied Linguistics*, 2(3), 164-175.
- Humphries, S., & Burns, A. (2015). 'In reality it's almost impossible': CLT-oriented curriculum change. *ELT journal*, 69(3), 239-248.
- Ishida, H (2007) Stratification in higher education: A comparative study. In Shavit, Y., Arum, R. & Gamoran, A., (Eds.) *Japan: Educational Expansion and Inequality in Access to Higher Education*. (pp. 63-86) Stanford University Press.
- Japan's English Proficiency Drops Among Non-English-Speaking Countries (2019) <u>nippon.com</u>. Retrieved from: <a href="https://www.nippon.com/en/japan-data/h00594/japan%E2%80%99s-english-proficiency-drops-among-non-english-speaking-countries.html#:~:text=Accord-ing%20to%20a%202019%20survey.ninth%2Dplace%20ranking%20in%202018.

- Ji, L. J., Nisbett, R. E., & Su, Y. (2001). Culture, change, and prediction. *Psychological science*, 12(6), 450-456.
- Käferböck, S. J. (2019) The Positive EFL Classroom: A conceptual analysis of Positive Education (PE) and its compatibility with Austrian EFL education.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
- Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental psychology*, *35*(3), 835.
- Kamins, M. L., Morris, S. M., & Dweck, C. S. (1996). Implicit theories as predictors of goals in dating relationships. In *conference of the Eastern Psychological Association*, *Washington*, *DC*.
- Karwowski, M. (2014). Creative mindsets: Measurement, correlates, consequences. *Psychology of Aesthetics, Creativity, and the Arts*, 8(1), 62.
- Kikuchi, K. (2006). Revisiting English entrance examinations at Japanese universities after a decade. *JALT journal*, 28(1), 77.
- Kikuchi, K. (2009). Listening to our learners' voices: what demotivates Japanese high school students? *Language Teaching Research*, *13*(4), 453-471. Suemith, M. E. (2011). The Communicative Language Teaching Approach: Theory and Practice. *Magister Scientiae*, (30), 1-9
- King, J. (2013). Silence in the second language classroom. Springer.
- King, J. (2013). Silence in the second language classrooms of Japanese universities. *Applied linguistics*, 34(3), 325-343.
- King, J., Yashima, T., Humphries, S., Aubrey, S., & Ikeda, M. (2020). Silence and anxiety in the English-medium classroom of Japanese universities: A longitudinal intervention study. *East Asian perspectives on silence in English language education*, 6, 60.
- King, R. B. (2016). A fixed mindset leads to negative affect. Zeitschrift für psychologie.
- King, R. B., McInerney, D. M., & Watkins, D. A. (2012). Studying for the sake of others: The role of social goals on academic engagement. *Educational Psychology*, 32(6), 749-776.
- Knee, C. R. (1998). Implicit theories of relationships: Assessment and prediction of romantic relationship initiation, coping, and longevity. *Journal of Personality and Social Psychology*, 74(2), 360.
- Kobayashi, Y. (2001). The learning of English at academic high schools in Japan: Students caught between exams and internationalisation. *Language Learning Journal*, 23(1), 67-72.
- Kossakowska-Pisarek, S. (2016). Pedagogical Implications of Positive Psychology: Positive Emotions and Human Strengths in Vocabulary Strategy Training. In *Positive Psychology Perspectives on Foreign Language Learning and Teaching* (pp. 93-114). Springer, Cham.
- Krashen, S. (1982). Principles and practice in second language acquisition.
- Lake, J. (2013). 13 Positive L2 Self: Linking Positive Psychology with L2 Motivation. *Language learning motivation in Japan*, 71, 225.
- Lam, G. (2014). A theoretical framework of the relation between socioeconomic status and academic achievement of students. *Education*, 134(3), 326-331.
- Lamis, D. A., Saito, M., Osman, A., Klibert, J., Malone, P. S., & Langhinrichsen-Rohling, J. (2014). Hopelessness and suicide proneness in US and Japanese college students: Depressive symptoms as a potential mediator. *Journal of Cross-Cultural Psychology*, 45(5), 805-820.

- Lazarus, R. S. (2003). Does the positive psychology movement have legs? *Psychological inquiry*, 14(2), 93-109.
- Lee, K. R., & Oxford, R. (2008). Understanding EFL learners' strategy use and strategy awareness. *Asian EFL Journal*, 10(1), 7-32.
- Leppink, J. (2017). Revisiting the quantitative—qualitative-mixed methods labels: Research questions, developments, and the need for replication. *Journal of Taibah University Medical Sciences*, 12(2), 97-101.
- Leppink, J., Winston, K., & O'Sullivan, P. (2016). Statistical significance does not imply a real effect. *Perspectives on Medical Education*, 5(2), 122-124.9
- Levy, S. R., & Dweck, C. S. (1998). Trait-versus process-focused social judgment. *Social Cognition*, *16*(1), 151-172.
- Levy, S.R. (1998) *Children's static versus dynamic conceptions of people: Their impact on intergroup attitudes*. Doctoral dissertation, Columbia University, New York.
- Levy, S. R., Stroessner, S. J., & Dweck, C. S. (1998). Stereotype formation and endorsement: The role of implicit theories. *Journal of personality and social psychology*, 74(6), 1421.
- Li, C., Dewaele, J. M., & Jiang, G. (2019). The complex relationship between classroom emotions and EFL achievement in China. *Applied Linguistics Review*, *1*(ahead-of-print).
- Li, C., Jiang, G., & Dewaele, J. M. (2018). Understanding Chinese high school students' foreign language enjoyment: Validation of the Chinese version of the foreign language enjoyment scale. *System*, 76, 183-196.
- Li, W., & Rawal, H. (2018). Waning and waxing of love: unpacking layers of teacher emotion. *Chinese Journal of Applied Linguistics*, 41(4), 552-570.
- Licht, B. G. (1984). Sex Differences in Achievement Orientations: An " A" Student Phenomenon. ERIC Clearinghouse.
- Licht, B. G., & Dweck, C. S. (1984). Determinants of academic achievement: The interaction of children's achievement orientations with skill area. *Developmental psychology*, 20(4), 628.
- Licht, B. G., & Shapiro, S. H. (1982, August). Sex differences in attributions among high achievers. In *meeting of the American Psychological Association, Washington, DC*.
- Lier, L. V. (2007). Action-based teaching, autonomy and identity. *International Journal of Innovation in Language Learning and Teaching*, 1(1), 46-65.
- Lockhart, K. L., Nakashima, N., Inagaki, K., & Keil, F. C. (2008). From ugly duckling to swan?: Japanese and American beliefs about the stability and origins of traits. *Cognitive Development*, 23(1), 155-179.
- Lomas, T., Waters, L., Williams, P., Oades, L. G., & Kern, M. L. (2020). Third wave positive psychology: broadening towards complexity. *The Journal of Positive Psychology*, 1-15.
- Lopez, S. J., & Snyder, C. R. (Eds.). (2009). *The Oxford handbook of positive psychology*. Oxford University Press.
- Lou, M. (2014) Changing Language Learning Mindsets: The Role of Implicit Theories of L2 Intelligence for Goal Orientations and Responses to Failure. Unpublished Masters Thesis. Department of Psychology. University of Alberta
- Lou, N. M., & Noels, K. A. (2016). Changing language mindsets: Implications for goal orientations and responses to failure in and outside the second language classroom. *Contemporary Educational Psychology*, 46, 22-33.

- Lou, N. M., & Noels, K. A. (2017). Measuring language mindsets and modeling their relations with goal orientations and emotional and behavioral responses in failure situations. *The Modern Language Journal*, 101(1), 214-243.
- Lou, N. M., & Noels, K. A. (2019). Sensitivity to language-based rejection in intercultural communication: The role of language mindsets and implications for migrants' cross-cultural adaptation. *Applied Linguistics*, 40(3), 478-505.
- Lowe, R. J. (2015). Cram schools in Japan: The need for research. *The Language Teacher*, 39(1), 26-31.
- Lund, T. (2012). Combining qualitative and quantitative approaches: Some arguments for mixed methods research. Scandinavian journal of educational research, 56(2), 155-165.achievement gaps at scale. Proceedings of the National Academy of Sciences, 113(24), E3341-E3348.
- MacIntyre, P. D. (1995). How does anxiety affect second language learning? A reply to Sparks and Ganschow. The modern language journal, 79(1), 90-99
- MacIntyre, P. D. (2016). So far so good: An overview of positive psychology and its contributions to SLA. In *Positive psychology perspectives on foreign language learning and teaching* (pp. 3-20). Springer, Cham.
- MacIntyre, P. D. (2017). An overview of language anxiety research and trends in its development. *New insights into language anxiety: Theory, research and educational implications*, 25, 53.
- MacIntyre, P. D., & Gardner, R. C. (1991). Methods and results in the study of anxiety and language learning: A review of the literature. *Language learning*, 41(1), 85-117.
- MacIntyre, P. D., & Mercer, S. (2014). Introducing positive psychology to SLA. *Studies in Second Language Learning and Teaching*, 4(2), 153-172.
- MacIntyre, P. D., Gregersen, T., & Mercer, S. (2019). Setting an agenda for positive psychology in SLA: Theory, practice, and research. *The Modern Language Journal*, 103(1), 262-274.
- MacIntyre, P., & Gregersen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination.
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *AISHE-J: The All Ireland Journal of Teaching and Learning in Higher Education*, 9(3).
- Mercer, Ryan & Williams (2012). *Psychology for language learning: Insights from research theory and practice*. Palgrave Macmillan.
- Mercer, S. (2011). Understanding learner agency as a complex dynamic system. *System*, 39(4), 427-436.
- Mercer, S. (2012). Dispelling the myth of the natural-born linguist. *ELT journal*, 66(1), 22-29.
- Mercer, S., & Ryan, S. (2009). A mindset for EFL: Learners' beliefs about the role of natural talent. *ELT journal*, 64(4), 436-444.c cc
- Mercer, S., & Ryan, S. (2009). A mindset for EFL: Learners' beliefs about the role of natural talent. *ELT journal*, 64(4), 436-444.
- Mercer, S., & Ryan, S. (2010). A mindset for EFL: Learners' beliefs about the role of natural talent. *ELT journal*, 64(4), 436-444.
- Mercer, S., Oberdorfer, P., & Saleem, M. (2016). Helping language teachers to thrive: Using positive psychology to promote teachers' professional well-being. In *Positive psychology perspectives on foreign language learning and teaching* (pp. 213-229). Springer, Cham.

- Merrill, B., & West, L. (2009). Using biographical methods in social research. Sage.
- Meyers, M. C., van Woerkom, M., de Reuver, R. S., Bakk, Z., & Oberski, D. L. (2015). Enhancing psychological capital and personal growth initiative: *Working on strengths or deficiencies*. *Journal of counseling psychology*, 62(1), 50.
- Mori, Y. (1999). Epistemological beliefs and language learning beliefs: What do language learners believe about their learning?. *Language learning*, 49(3), 377-415.
- Mruk, C. J. (2013). *Self-esteem and positive psychology: Research, theory, and practice*. Springer Publishing Company.
- Mueller, C. M., & Dweck, C. S. (1997). Implicit theories of intelligence: Malleability beliefs, definitions, and judgments of intelligence. *Unpublished data cited in: Dweck, CS (1999) Self-Theories: Their Role in Motivation, Personality and Development. Philadelphia, PA: Psychology Press.*
- Murphey, T., Falout, J., Elwood, J., & Hood, M. (2009). Inviting student voice. *Accepting alternative voices in EFL journal articles*, 211-235.
- Murphy, M. C., & Dweck, C. S. (2010). A culture of genius: How an organization's lay theory shapes people's cognition, affect, and behavior. *Personality and Social Psychology Bulletin*, *36*(3), 283-296.
- Mystkowska, A. (2014). The role of mindsets in foreign language learning: A person-in-context perspective. In Language learning, discourse and communication (pp. 133-147). Springer, Cham.
- Naiman, N. (1978). The Good Language Learner. Research in Education Series No. 7.
- Nash, R. (2002). The educated habitus, progress at school, and real knowledge. *Inter-change*, 33(1), 27-48.
- O'Donnell, K. (2003). Uncovering first year students' language learning experiences, attitudes, and motivations in a context of change at the tertiary level of education. *JALT Journal*, 25(1), 31-62.
- Ocampo, M. B. (2016). Brainwaves of Emotion among Japanese EFL Learners as Proof of the Effectiveness of Family Environment Mode Approach (FEMA). *PEOPLE: International Journal of Social Sciences*, 2(1).
- Occhi, D. J. (2010). Language and Education in Japan: Unequal Access to Bilingualism. *Anthropology and Education Quarterly*, 41(1), 116.
- Oliver, P. (2010). The student's guide to research ethics. McGraw-Hill Education (UK).
- Ommundsen, Y., Haugen, R., & Lund, T. (2005). Academic self-concept, implicit theories of ability, and self-regulation strategies. *Scandinavian Journal of Educational Research*, 49(5), 461-474.
- Oxford, R. L. (2017). Anxious language learners can change their minds: Ideas and strategies from traditional psychology and positive psychology. *New insights into language anxiety: Theory, research and educational implications*, 179-199.
- Parrish, B. (2006). Teaching Adult ESL, A Practical Introduction. New York: McGraw Hill ESL/ELT.
- Parrish, T. B., Merickel, A., Pérez, M., Linquanti, R., Socias, M., Spain, A., ... & Delancey, D. (2006). Effects of the Implementation of Proposition 227 on the Education of English Learners, K-12: Findings from a Five-Year Evaluation. Final Report for AB 56 and AB 1116. *American Institutes for Research*.
- Paunesku, D. (2013). Scaled-up social psychology: Intervening wisely and broadly in education (Doctoral dissertation, Stanford University).

- Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational psychology review*, 18(4), 315-341.
- Picho, K., Maggio, L. A., & Artino, A. R. (2016). Science: the slow march of accumulating evidence. *Perspectives on Medical Education*, *5*(6), 350-353.
- Preacher, K. J., & MacCallum, R. C. (2003). Repairing Tom Swift's electric factor analysis machine. *Understanding Statistics*, 2(1), 13–43. https://doi.org/10.1207/S15328031US0201_02
- Rattan, A., Good, C., & Dweck, C. S. (2012). "It's ok—Not everyone can be good at math": Instructors with an entity theory comfort (and demotivate) students. *Journal of Experimental Social Psychology*, 48(3), 731-737.
- Rattan, A., Savani, K., Naidu, N. V. R., & Dweck, C. S. (2012). Can everyone become highly intelligent? Cultural differences in and societal consequences of beliefs about the universal potential for intelligence. *Journal of Personality and Social Psychology*, 103(5), 787.
- Reed, J. R. (2018). The Impact of Teaching Approaches on Motivation in Japanese Secondary Education and Strategies For Overcoming Demotivation in University Students.
- Revelle, W. R. (2019). psych: Procedures for psychological, psychometric, and personality research, R package 1.8.4.
- Robins, R. W., & Pals, J. L. (2002). Implicit self-theories in the academic domain: Implications for goal orientation, attributions, affect, and self-esteem change. Self and Identity, 1(4), 313–336.
- Ryan, R. M., & Deci, E. L. (2006). Self-regulation and the problem of human autonomy: Does psychology need choice, self-determination, and will?. *Journal of personality*, 74(6), 1557-1586.
- Ryan, S. (2009). Self and identity in L2 motivation in Japan: The ideal L2 self and Japanese learners of English. *Motivation, language identity and the L2 self*, 120, 143.
- Sakui, K. (2004). Wearing two pairs of shoes: Language teaching in Japan. *ELT journal*, 58(2), 155-163.
- Sakui, K. (2007). Classroom management in Japanese EFL classrooms. *JALT JOURNAL*, 29(1), 41.
- Sakui, K., & Gaies, S. J. (1999). Investigating Japanese learners' beliefs about language learning. *System*, 27(4), 473-492.
- Savignon, S. J. (2002). Communicative Language Teaching: Linguistic Theory and Classroom Practice. In S. J. Savignon, Interpreting Communicative Language Teaching: Contexts and Concerns in Teacher Education (pp. 1-27). New England: Yale University Press.
- Schmidt, J. A., Shumow, L., & Kackar-Cam, H. Z. (2017). Does mindset intervention predict students' daily experience in classrooms? A comparison of seventh and ninth graders' trajectories. *Journal of youth and adolescence*, 46(3), 582-602.
- Scovel, T. (2001). *Learning new languages: A guide to second language acquisition*. Boston, MA: Heinle & Heinle.
- Seligman, M. E. (1972). Learned helplessness. *Annual review of medicine*, 23(1), 407-412.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology [Special issue]. *American Psychologist*, 55(1), 5-14.

- Sisk, V. F., Burgoyne, A. P., Sun, J., Butler, J. L., & Macnamara, B. N. (2018). To what extent and under which circumstances are growth mind-sets important to academic achievement? Two meta-analyses. *Psychological science*, 29(4), 549-571.
- Spenner, M (2017) growth mindset; Trend or real science?
- Stake, R. E. (2013). Multiple case study analysis. Guilford press.
- Stankov, L. (2010). Unforgiving Confucian culture: A breeding ground for high academic achievement, test anxiety and self-doubt?. *Learning and Individual Differences*, 20(6), 555-563
- Stevenson, H. W., Lee, S. Y., Chen, C., Stigler, J. W., Hsu, C. C., Kitamura, S., & Hatano, G. (1990). Contexts of achievement: A study of American, Chinese, and Japanese children. *Monographs of the society for research in child development*, i-119.
- Stigler, J., & Hiebert, J. (1997). Understanding and improving classroom mathematics instruction: An overview of the TIMSS video study. In *ACER National Conference* 1997 (pp. 52-65).
- Suemith, M.E (2011) The Communicative Language Teaching Approach: Theory and Practice Symonds, J. E., & Gorard, S. (2010). Death of mixed methods? Or the rebirth of research as a craft. *Evaluation & Research in Education*, 23(2), 121-136.
- Taie, M., & Afshari, A. (2015). A Critical Review on the Socio-educational Model of SLA. *Theory and Practice in Language Studies*, 5(3), 605-612.
- Teddlie, C., & Tashakkori, A. (2011). Mixed methods research: Contemporary issues in an emerging field. In N. K. Denzin & Y. S. Lincoln, (Eds.), *The SAGE handbook of qualitative research* (pp. 285–299). Thousand Oaks, CA: Sage.Twenge, J. M. (2019). The sad state of happiness in the United States and the role of digital media. *World Happiness Report*, 2019.
- Twenge, J. M., Spitzberg, B. H., & Campbell, W. K. (2019). Less in-person social interaction with peers among US adolescents in the 21st century and links to loneliness. *Journal of Social and Personal Relationships*, 36(6), 1892-1913.
- Ushioda, E. (2009). A person-in-context relational view of emergent motivation, self and identity. *Motivation, language identity and the L2 self*, 215, 228.
- Vandrick, S. (2014). The role of social class in English language education. *Journal of Language*, *Identity & Education*, 13(2), 85-91.
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331(6023), 1447-1451.
- Wang, S., Wright, R. & Wakatsuki, Y. (2020, November 29) In Japan, more people died from suicide last month than from Covid in all of 2020. And women have been impacted the most. CNN. https://www.cnn.ph/world/2020/11/29/japan-suicide-covid19-women.html
- Weiner, M. (Ed.). (2009). *Japan's minorities: the illusion of homogeneity* (Vol. 38). Taylor & Francis.
- Wheeler, G. (2012) The akahon publications: Their appeal and copyright concerns. *Shiken Research Bulletin 16*(1).
- White, M. A., & Murray, A. S. (2015). Building a positive institution. In *Evidence-based approaches in positive education* (pp. 1-26). Springer, Dordrecht.
- Willig, C. (1999). Beyond appearances: A critical realist approach to social constructionism. *Social constructionist psychology: A critical analysis of theory and practice*, 37-51.

- Włosowicz, T. M. (2016). Adult learners' expectations concerning foreign language teachers and the teaching-learning process. In *Positive psychology perspectives on foreign language learning and teaching* (pp. 267-285). Springer, Cham.
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The qualitative report*, 20(2), 134-152.
- Yeager, D. S., Paunesku, D., Walton, G. M., & Dweck, C. S. (2013, May). How can we instill productive mindsets at scale? A review of the evidence and an initial R&D agenda. In white paper prepared for the White House meeting on "Excellence in Education: The Importance of Academic Mindsets," available at http://homepage.psy. utexas. edu/HomePage/Group/YeagerLAB/ADRG/Pdfs/Yeager et al R&D agenda-6-10-13. pdf.
- Yeager, D. S., Trzesniewski, K. H., & Dweck, C. S. (2013). An implicit theories of personality intervention reduces adolescent aggression in response to victimization and exclusion. *Child development*, 84(3), 970-988.
- Yeager, D. S., Walton, G. M., Brady, S. T., Akcinar, E. N., Paunesku, D., Keane, L., ... & Gomez, E. M. (2016). Teaching a lay theory before college narrows achievement gaps at scale. *Proceedings of the National Academy of Sciences*, 113(24), E3341-E3348.
- Yettick, H., Lloyd, S., Harwin, A., Riemer, A., & Swanson, C. B. (2016). Mindset in the Classroom: A National Study of K-12 Teachers. *Editorial Projects in Education*.
- Zhao, W., Dweck, C. S., & Mueller, C. (1998). Implicit theories and depression-like responses to failure. *Unpublished manuscript*.

Appendix A: Survey Items

Survey

Hello. This survey should take about 10 minutes. The purpose is to better understand your thoughts opinions and experiences regarding English language learning, and is research for a teacher at this school. It is entirely voluntary and is entirely anonymous. Continuing with the survey comprises informed consent that your answers will be used in the research. If any questions make you uncomfortable, please feel free to skip them but please answer all the questions

as best you can. Thank you so much for your participation!

Section 1

- 1. Sex. M-F
- 2. Age
- 3. University (Shimonoseki Kitakyudai)
- 4. If Shimonoseki, ——>which group (1-23)?
- 5.1. If Kitakyudai, -> which group (A-G)?

Section 2

6. Major/Department

173

7. Current year (1-2-3-4) 8. Type of area you grew up in (rural, suburbs, urban) 9. Prefecture 10. Nationality (Japanese - Other) 11. What kind of high school did you go? 12. Did you do a course which majored in English? (Yes - No) 13. How did you enter university (Entrance exam - Recommendation) 14. I've interacted in English with foreigners (Almost never, Probably as often as most of my classmates, More often than most of my classmates, Very often) Section 3 15. Did you begin studying English before 5th grade? (Yes - No) 16. Did you use English with your family at home growing up? (Yes - No) 17. Did you do an overseas homestay at any point? —->If yes, for how long? Where? 18.Did you study at a cram school? 19.1 If yes, —-> How many times? (Once a week, Twice a week....) --> For how many years? (less than one, more than one, more than two...) Section 4

174

Please rate how much you personally agree or disagree with these statements. There are no right or wrong answers. I'm interested in your opinion. The term "*language intelligence*" refers to the capacity to use spoken and written language, your native language and perhaps other languages, to express what's on your mind and to understand other people. People with a high language intelligence display an ability with words and languages and are typically good at reading, writing and telling stories. (1 =strongly disagree, 2 =moderately disagree, 3=slightly disagree, 4=slightly agree, 5=moderately agree, 6=strongly agree)

- 20. You have a certain amount of language intelligence and you can't really do much to change it.
- 21. How good you are at using a foreign language will always improve if you work at it.
- 22. People can't really learn a new language after they reach adulthood
- 23. To a large extent, a persons's biological factors (ie: brain structures) determine his/her abilities to learn new languages
- 24. No matter who you are you can significantly change your language intelligence level
- 25. Everyone could do well in foreign languages if they tried hard, whether young or old.
- 26. It is difficult to change how good you are at foreign languages.
- 27. Your language intelligence is something about you that you can't really change much
- 28. Even if you try, the skill level you achieve in a foreign language will advance very little if you learn it when you're an adult.
- 29. You can always substantially change your language intelligence.

- 30. In learning a foreign language, if you work hard at it, you will always get better.
- 31. Regardless of the age at which they start, people can learn another language well.
- 32. To be honest, you can't really change your language intelligence
- 33. Many people can never do well in foreign language even if they try hard because they lack natural language intelligence.
- 34. How well a person speaks a foreign language depends on how early in life they learned it.
- 35. You can always change your foreign language ability.
- 36. No matter how much language intelligence you have, you can always change it quite a bit.
- 37. How well a person learns a foreign language does not depend on age; anyone who works hard can be a fluent speaker in that language.

Section 5

Rank what you honestly think YOUR ability is from 1-9 in comparison with Japanese university students generally; 1 being approximately the lowest 10% proficiency among all students, 9 meaning you feel you are among the top 10%, and 5 indicating that you are average.

- 38. Reading
- 39. Writing

40. Speaking
41. Listening
42. Vocabulary
43. Grammar
44. Overall proficiency
45. If you can, please share your last TOEIC score
Date:
46. If you can please share your last Eiken score
Date:
47. If you can please share your last TOEFL score
Date:

Would you be willing to be contacted for follow-up interviews? Compensation is 1000 yen per
hour and we would be incredibly grateful to hear what you think! If so, please provide your
name and email, and you will be provided with a participation informant sheet outlining the de-
tails.

Phone number ______. Email ______.

Appendix B: Interview Questions*

This is going to be recorded, but we can stop, pause or quit anytime you like. Please feel free to answer or describe your answers in English or Japanese. Whichever is perfectly fine. If you're unclear about any of my questions at any time, please ask. The most important thing is that you be as honest as possible.

- -Tell me about when you started learning English. How old were you? Whose idea was it?
- -Hobbies? Study outside of school?
- -Would you say you watched/read more Western or Japanese TV/movies/books growing up? How about your friends/family? Can any of them speak English well?
- -Tell me about your senpais (kouhais?) growing up.
- -How much would you say you spoke with you ALT (Assistant Language Teacher) in Jr. high school/high school? What did you think about him/her? What do you think everyone else thought of him/her? Why? Have you interacted much with other foreigners? In what way? How about friends/family members?
- -Have you ever done/thought about doing a homestay? Do you know anyone who has?
- -What kind of marks did you get in English? Were they higher than other classes? Why? How about your friends/family members? How strict were you parents? Did they stress English learning? Who more; your mother or father?

- -What kind of learning activities did you do in Jr. high school/high school? How did you study? Did you do much homework? What did you think of the homework?
- -How would you describe your English teachers you've had?
- -Can you think of any point(s) when you felt particularly enthusiastic to learn English? What caused this?
- -Can you think of any point(s) when you felt like giving up to learning English? Why did you feel this way
- -What do you think are some reasons Japanese people become proficient (or not) in English? What do you think could be done to aid this?
- -Is there any point you thought 'oh, ok, I get it. I can speak English now'?
- -Can you think of any other things you'd like to tell me about your Eng. learning experience up until now?
- *As mentioned earlier, the interviews were semi-structured and the questions listed are a very loose representation of how the interviews went.

Appendix C: PIS

1. Title of Study: Mindsets and Individual Factors; exploring Japanese university students' mindsets, histories and proficiencies.

2. Version Number and Date: Version 3, Dec. 16, 2018

3. Invitation paragraph: You are being invited to participate in a research study. Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and feel free to ask us if you would like more information or if there is anything that you do not understand. Please also feel free to discuss this with your friends, relatives and GP if you wish. We would like to stress that you do not have to accept this invitation and should only agree to take part if you want to.

Thank you for reading this.

4. What is the purpose of the study?

The study is for the thesis requirement for Michael's doctorate degree. The purpose of this interview is to better understand your personal experience as an English learner throughout your life in relation to your English proficiency and learning mindset in order to better understand how

these factors relate. I hope that the study is able to contribute to a greater understanding of what comprises a successful English learner.

Most importantly I want to know your honest opinions. You will not be judged in any way, and everything you say to Michael will be kept absolutely private. The entire interview will be recorded. You do not have to take part and you are free to stop at any time for whatever reason. If you feel uncomfortable at any point, or there are any questions you do not want to answer, please tell Michael.

5. Why have I been chosen to take part?

You have been chosen based on your responses to the survey you filled out some weeks ago, as well as your professed willingness to participate.

6. Do I have to take part?

No you do not. This interview is entirely voluntary.

7. What will happen if I take part?

The interview will be audio recorded and later transcribed. It will then be thematically analyzed and examined. The interview should take no longer than an hour, and Michael is the only researcher. I ask that you please be as honest and open as possible. Your answers will be kept 100% anonymous and you will in no way be judged.

Please tell Michael if you would prefer to do the interview in English or Japanese. Feel free to change from either language during the interview. Michael will follow in the language you choose to use.

8. Expenses and / or payment.

The interview will take no longer than one hour and you will be paid 1000 yen for participating. You are free to withdraw at any point, however know that withdrawal will result in your not receiving the 1000 yen compensation. Feel free to help yourself to the coffee or tea.

9. Are there any risks in taking part?

Michael is interested in your personal history as an English learner, and consequently some of the questions will be personal. If you feel uncomfortable at any point in the interview, please tell me immediately. If any problems occur that you feel uncomfortable discussing with Michael, please feel free to contact Dr. Jenifer Larson-Hall at drlarsonhall@gmail.com

10. Are there any benefits to taking part?

This is a good opportunity for you to think about and reflect on your language learning experience which in itself is can be beneficial. As well, you're welcome to use and practice your English.

11. What if I am unhappy or there is a problem?

If you are unhappy, or if there is a problem, please feel free to let us know by contacting Michael (080-4289-7318) and he will try to help. If you remain unhappy or have a complaint which you feel you cannot come to us with then you should contact the Chair of the Liverpool Online Research Ethics Committee at liverpool-online.com When contacting the Chair, please provide details of the name or description of the study (so that it can be identified), the researcher(s) involved, and the details of the complaint you wish to make.

12. Will my participation be kept confidential?

Everything you say will be kept private. In the final write up, you will be given an alias, no identifying information will be included, and everything you say will be stored privately and protected for 5 years, and then deleted. If you would prefer something be deleted earlier than that you are free to request that. Also, following the interview, you will be contacted and given a copy of the interview (transcribed or recorded) and given the chance to alter anything you see fit.

13. What will happen to the results of the study?

The results of the study may be published. Once the interviews have been transcribed, you will

be given a chance to amend anything you said. Once the write up is finished, I will contact you

and offer to send you an electronic version.

14. What will happen if I want to stop taking part?

You can withdraw at any time during the interview without explanation. However, non-comple-

tion of the interview will result in your not receiving the 1000 yen compensation. Later after you

have been given the opportunity to amend anything you said, the results will be anonymized and

de-identified, and you will no longer have the opportunity to change, have destroyed or take back

anything you have said.

15. Who can I contact if I have further questions?

Please contact:

Michael (Primary researcher)

080-4289-7318

michaelberg78@gmail.com

Or

185

Dr. Kalman Winston (Thesis supervisor)

kalman.winston@online.liverpool.ac.uk

Appendix D: LMI and J-LMI scales items

LMI	J-LMI	Mindset	Scale Item
Age	ML1 ASBi1	GROWTH	Everyone could do well in foreign languages if they tried hard, whether young or old 年齢にかかわらず、努力する事で誰でも外国語が習得出来ると 思う
Age	ML1 ASBi2	GROWTH	Regardless of the age at which they start, people can learn another language well 何歳から始めても、人は他の言語を学ぶことができる
Age	ML1 ASBi3	GROWTH	How well a person learns a foreign language does not depend on age; anyone who works hard can be a fluent speaker in that language どれだけよく外国語を学べるかに年齢は関係ないと思う。一生懸命に勉強すれば、その言語を流ちょうに話せるようになる
L 2 beliefs	ML1 L2Bi1	GROWTH	How good you are at using a foreign language will always improve if you work at it 外国語の運用能力は、それに対して取り組みをすれば常に向上すると思う

L 2 beliefs	ML1 L2Bi2	GROWTH	In learning a foreign language, if you work hard at it, you will always get better 外国語を学ぶにあたって、一生懸命に勉強すれば上達すると思う
Age	ML2 ASBe1	FIXED	People can't really learn a new language after they reach adulthood 大人になってから新しい言語を学ぶ事は難しいと思う
Age	ML2 ASBe2	FIXED	Even if you try, the skill level you achieve in a foreign language will advance very little if you learn it when you're an adult 大人になってから外国語を学ぶと試みても、あまり上達しないと思う
Age	ML2 ASBe3	FIXED	How well a person speaks a foreign language depends on how early in life they learned it どれだけ外国語を上手く話せるかは、どれだけ早い段階で学習したかによって決まると思う
L 2 beliefs	ML2 L2Be2	FIXED	It is difficult to change how good you are at foreign languages 外国語を上手く使えるようになることは難しいと思う

L 2 beliefs	ML3 L2Be1	FIXED	To a large extent, a person's biological factors (ie: brain structures) determine his/her abilities to learn new languages たいていの場合、その人の生物学的要因(すなわち、脳の構 造)が新しい言語を学ぶ能力を決めると思う
L 2 beliefs	ML3 L2Be3	FIXED	Many people can never do well in foreign language even if they try hard because they lack natural language intelligence 多くの人々は、母国語の言語インテリジェンスが欠けているので、どれだけ頑張っても絶対に外国語を上手く使えない
Lang. intelligence	ML3 GLBe1	FIXED	You have a certain amount of language intelligence and you can't really do much to change it 人はある一定の「言語インテリジェンス」を持っており、自分でそれを変えることはできない
Lang. intelligence	ML3 GLBe2	FIXED	Your language intelligence is something about you that you can't really change much 言語インテリジェンスは、自分で大幅に変えることができない

			To be honest, you can't really change your language intelligence
Lang. intelli-	ML3	FIXED	本音を言えば、言語インテリジェンスを本当に変えることはで
gence GLBe3			きないと思う
L 2 beliefs	ML4 -	GROWTH	You can always change your foreign language ability
L 2 deficis	L2Bi2	OKO W III	外国語能力はいつでも変える事ができる
			You can always substantially change your language intelligence
Lang. intelli-	ML4	GROWTH	いつでも自分の言語インテリジェンスを大きく変えることがで
gence	GLBi1		きる
			No matter how much language intelligence you have, you can always
Lang, intelli-	MI 4		No matter how much language intelligence you have, you can always change it quite a bit
Lang. intelligence	ML4 GLBi2	GROWTH	change it quite a bit
		GROWTH	change it quite a bit
		GROWTH	change it quite a bit 自分がどれほどの言語インテリジェンスを持っていたとして
gence		GROWTH	change it quite a bit 自分がどれほどの言語インテリジェンスを持っていたとして も、いつでもそれをかなり変えることができる
	GLBi2	GROWTH	change it quite a bit 自分がどれほどの言語インテリジェンスを持っていたとして も、いつでもそれをかなり変えることができる No matter who you are you can significantly change your language

Appendix E: Analysis of Variables Compared to Growth/Fixed Mindset Scores

In the following table intersecting cells give information regarding the test used (TU) in comparing the corresponding variables, as well as the results; p values, confidence intervals, F statistics as well as Cohen's d.

Test used (TU); White boxes=p<0.05; Grey boxes=p>0.05.	Growth Mindsets	Fixed Mindsets
Fig. 4.3-4.4. TOEIC (national English proficiency test) SCORE	Fig. 4.3. TU: Regr. An. b= 3.0440 [1.5083, 4.58], t(596) = 3.893, p = .0001 F(1,596)=15.15, p<0.001, effect size r ² =0.0231, [0.0053, 0.0526].	Fig. 4.4 TU: Regr. An. b = -1.378 [-3.213, 0.456], t (596)= -1.476 p = 0.141 F(1, 596)=2.177, p=0.14, CI(-0.0062, 0.0009). r ² = .002 [0.0, 0.01546]
Fig. 4.5-4.6. SELF- RATED PROFICIENCY (7 metrics totalled: read- ing, writing, listening, speaking, vocab, gram- mar & overall)	Fig. 4.5 TU: Regr. An. b = 0.034, [0.021 0.046] t (596)= 5.273, p < .001; F(1, 823)=27.8, p<0.001. r ² = 0.032 [0.0125, 0.0595]	Fig. 4.6 TU: Regr. An. b= -0.005 CI[-0.02, 0.010], t (596) = -0.608, p = .543, F(1, 823)=0.3699; p=0.54; r ² = -0.001 [0, 0.9]
	Fig. 4.7 TU: Regr. An. b = - 0.1413 CI[-1.611, 1.328], t = - 0.189 p = .85, F(1, 599)=0.03568 p = .85; r ² = -0.0016; unable to obtain a CI for this.	Fig. 4.8 TU: Regr. An. b = -0.2973 CI[-2.038, 1.443], t = -0.336 p = .737, F(1, 599)=0.1126 p = .73; r ² = -0.0015; unable to obtain a CI for this.
Fig 4.9-4.10. YEAR (years 1, 2, {3&4}; 3&4 collapsed because only 7 4th year responses)	Fig. 4.9. TU: 1-way ANOVA; F(2, 822)=0.6458; p=0.52; (year 1&3): d=0.09; r=0.04; (year 2&3): d=0.01; r=0.01.	Fig. 4.10. TU: 1-way ANOVA; F(2, 822)=4.213; p=0.015; (year 1&3): d=-0.3; r=-0.13; ES(year 2&3): d=-0.29; r=-0.12.
Fig. 4.11-4.12. Students who left their email address in the survey; willing to be interviewed (WTPI)	Fig. 4.11. TU: 2-sample t-test: t(143.09)= -2.3495; p < 0.02; r=0.193; CI: (-3.714, -0.320)	Fig. 4.12. TU: 2-sample t-test: t(141.96)= 1.844; p < 0.067; r=0.153; CI (-0.098, 2.814)

^{*}White boxes denote p<0.05

Appendix F: Summary and Graphical Representation of Fig. 4.13-4.18.

Fig. 4.13. Reported TOIEC Score and Estimated Hours of Juku

The amount students attended cram school seemed to be all but irrelevant with respect to their TOEIC test scores. Indeed, the regression results seemed to show almost no relationship at all between the two factors. Intercept = 506.51, b= 0.05, CI[-0.04, 0.14], t = -1.05 p = .294, F(1, 437)=1.103; p=0.29; r²= -0.0002 cannot calculate CI for effect size.

Fig. 4.14. Self-rated Proficiency (SRP) and Estimated Hours of Juku

Students' own rating of themselves and the amount they attended cram school also seemed unrelated. Indeed, SRP and estimated hours of juku were not statistically significant and appear to have very little relationship at all. Intercept = 4.57, b = 0.0004, CI[-0.0004 0.0012], t = 0.901 p = .368, F(1, 599) = .81; p = 0.3678; r^2 = -0.0003 cannot calculate CI for effect size.

Fig. 4.15 Willingness to Participate in Interviews (WTPI) and Estimated Hours of Juku

Those who left contact details (marked as "1") spent slightly more time in cram school, however the mean difference was not statistically significant. Mean difference = -0.5 [-33.595, 32.532], t(144.41) = -0.0318; p = .9747; r=0.003

T-test summary for Fig. 4.15

Contact Details	n	mean	sd	median	se

Left no details (0)	715	162.01	162.98	120	6.1
Left details (1)	110	162.55	163.38	160	15.58

Fig. 4.13, 4.14 & 4.15; Estimated Hours of Juku and TOIEC/SRP/WTPI

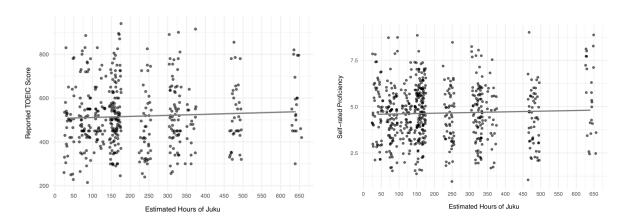


Fig. 4.13. TOIEC Score and Estimated Hours of Juku. Interestingly, the regression results seemed to show almost no relationship at all between the how long a student attended juku and their TOIEC test score. p=0.29; r=-0.0002

Fig. 4.14. SRP and Hours of Juku. How well students rated their own proficiency also seemed to have no relationship to how long they attended a juku. p = 0.3678; r = -0.0003

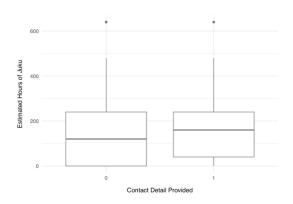


Fig. 4.15 WTPI and Estimated Hours of Juku. Those who left their contact details (1) however, spent slightly more time in juku, however, the difference was not statistically significant. p = .9747; r=0.003

Fig 4.16. Reported TOEIC scores and Presence/Absence of Juku Experience

The mean difference of TOEIC scores of those who attended juku (and those who did not) was *not* statistically significant, however barely so. Interestingly though was the fact that those who *did not* attend cram school reported *higher* TOIEC scores by 28 points on average. Mean difference = 27.5984 [-3.3383, 58.5351], t(236.41)= 1.7575; p = 0.0801; r=0.114.

T-test summary for Fig. 4.16

Contact Details	n	mean	sd	median	se
Left no details (0)	157	544.2	176.42	515	14.8
Left details (1)	441	516.61	146.04	500	6.95

Fig. 4.17 Self-Rated Proficiency (SRP) scores and Presence/Absence of Juku Experience

Whether a student attended cram school or not, they seemed to rank their own proficiencies almost exactly the same. The mean difference for SRP of those who attended juku (supplementary exam preparation school) and those who did not was not only statistically insignificant, but virtually identical. Mean difference = 0.005 [-0.2423, 0.253], t(365.62) = 0.0425; p = .9661; r=0.002.

T-test summary for Fig. 4.17

Contact Details	n	mean	sd	median	se
Left no details (0)	221	4.652	1.64	4.71	0.11
Left details (1)	604	4.647	1.51	4.71	0.06

Fig. 4.18 WTPI (Contact Details Provided) and Presence/Absence of Juku Experience

Students who attended cram school were slightly more likely to leave contact details. Results here are as a crosstab table. Pearson's Chi-squared test used to analyze the results. $X^2(1, N=825) = 1.067$, p = .302. The cell contents (from top to bottom below) are as follows: Count, Row Percent, Column Percent, and Total Percent.

Chi square summary for Fig. 4.18

Contact Details	Not Attended	Attended	Row Total
No	196	519	715
	27.413%	72.587%	86.667%
	88.688%	85.927%	
	23.758%	62.909%	
Yes	25	85	110
	22.727%	77.273%	13.333%
	11.312%	14.073%	
	3.030%	10.303%	
Column Total	221	604	825
	26.788%	73.212%	

Fig. 4.16, 4.17 & 4.18; Juku Experience and TOIEC/SRP/WTPI

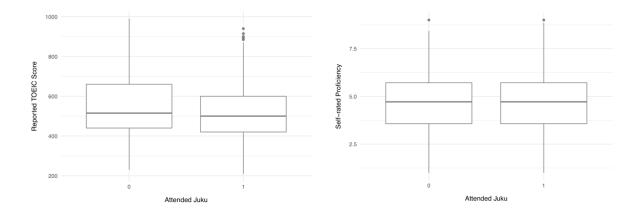


Fig 4.16. TOEIC scores and Juku Experience. The mean difference with respect to TOEIC test scores of students who attended juku, and those who did not was statistically insignificant, however barely so. More notably, this is interesting because - as jukus are exam preparation schools - one would expect an opposite relationship. p = 0.0801; r = 0.114

Fig. 4.17 SRP scores and Juku Experience. Whether students attended preparation school or not appeared to have no relationship to how they rated their own EFL proficiency. p = .9661; r = 0.002.

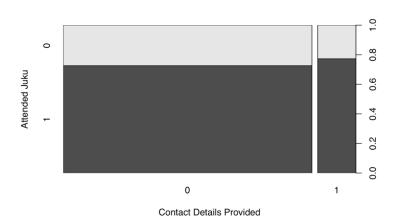


Fig. 4.18 WTPI (Contact Details Provided) and Presence/Absence of Juku Experience. Students who attended exam preparation school appeared to be slightly more likely to leave their contact details. $X^2(1, N=825) = 1.067, p = .302$.
*Note within the mosaic plot the width of the category represents the number