While the motivation/autonomy interface has generated considerable interest over the past two decades, much is still unknown with regard to how learners actually motivate themselves and how they manage their motivation over time, especially as it impacts and is impacted upon by their capacity to control their learning. This study examines the results of a semester-long action research project conducted in a university elective course on learner autonomy, in which the participants were surveyed on their initial self-motivational techniques and instructed on the use of a variety of others, and then asked to set a short-term learning goal and report their weekly self-motivational strategy use as well as document their goal progress. Comparisons of these data and scores on an end-of-course measure of autonomy suggest that the most autonomous learners may use a greater variety of self-motivational strategy types and that they may have a greater tendency to engage in self-encouragement.

The number of study hours required to attain the necessary proficiency to effectively use a second language (L2) for academic and professional purposes (i.e., B2 on the Common European Framework of Reference for Languages) exceeds what most Japanese university language programs can typically provide. On the basis of TOEIC equivalency scores at time of enrollment, for instance, the average Japanese university student would need an estimated 1,000 additional hours of instruction (45 courses meeting 90 minutes per week over 15 weeks) to reach such an advanced level before graduation (Lyddon, 2011). As few learners have even the option of taking sufficient coursework for this many contact hours, most will likely need to exercise a considerable degree of autonomy to achieve such an ambitious goal.

Benson (2011) has defined learner autonomy as “the capacity to take control of one’s own learning” (p. 58, emphasis added). This applies to all decisions regarding all aspects of learn-
ing, including determining objectives, defining scope and sequence, selecting methods and techniques, setting locations and schedules, and evaluating outcomes (Holec, 1981). Though not synonymous with self-instruction, learner autonomy certainly implies substantial learning beyond the classroom. As Ushioda (2008) noted, however, learners who rely on teachers to motivate them are unlikely to exhibit the necessary efforts outside of class to sufficiently develop their communicative proficiency. While the capacity to take control of one’s learning does not necessarily entail the exercise of it (Benson, 2001; Holec, 1981; O’Leary, 2009), there seems to be a contingency between the latter and motivation, although the exact nature of their interrelation is unclear. In a previous study of mine (Lyddon, 2011), motivation proved to be one of the most commonly recurring themes in the final reflective essays in the learner autonomy course I taught. Although this course addressed the topic of motivation, it did not deal directly with the issue of self-motivation, which might have been the next logical step.

Dörnyei and Ushioda (2011) define self-motivation as “taking charge of the affective dimension of the learning process” (p. 58). In the interest of fostering self-motivation, Dörnyei (2001) has suggested the following five categories of strategies:

- Commitment control (e.g., imagining the positive consequences of reaching one’s goal),
- Metacognitive control (e.g., reminding oneself of one’s deadline),
- Satiation control (e.g., modifying an activity to make it more fun or more challenging),
- Emotional control (e.g., encouraging oneself verbally in instances of success), and
- Environmental control (e.g., eliminating sources of interference, such as noise).

Thus, the purpose of the present study was to explore the motivation/autonomy interface by investigating the following four research questions:

(a) Is there a relationship between overall self-motivational strategy use and learner autonomy?
(b) Is there a relationship between categorical self-motivational strategy use and learner autonomy?
(c) Is there a relationship between individual self-motivational strategy use and learner autonomy?
(d) Is there a change in self-motivational strategy use over time?

Method

Participants

The participants in this study were 39 third- and fourth-year university students at a small, predominantly male prefectural university in southern Tohoku, devoted entirely to computer science and engineering. Based on TOEIC score equivalents, the majority of learners at this institution historically rate no higher than A2 (elementary) in all skills on the Common European Framework of Reference, even after five semesters of university study. These learners were all enrolled in a 15-week English elective course on learner autonomy, for which I was not only the researcher but also the instructor.

Procedure

The course followed the same basic format as that described in Lyddon (2011), namely a three-phase cycle of raising awareness, changing attitudes, and transferring roles with respect to motivation, learner strategies, community building, and self-monitoring, as suggested by Scharle and Szabó (2000). In the
present implementation, however, the second phase began with the students setting short-term learning goals to be attained by the end of the course. The aim of subsequently revisiting the four major themes introduced in the previous phase was then to connect each of them with the realization of these short-term learning goals.

Another noteworthy difference was a shift in emphasis toward self-motivation during the revisiting of learning strategies in Week 8 (see Appendix 1 for the course outline), when the learners were given a 44-item survey of their self-motivational strategy use. The items were grouped according to Dörnyei’s above-mentioned five categories, and each consisted of a 6-point frequency scale, from always to never (see Appendices 2 and 3 for the Japanese version that was actually administered and an English translation, respectively). After the survey, the lesson focused on the possible applications of 31 different self-motivational strategies as exemplified in my own personal language learning (see Appendix 4 for the reference document that was distributed to the students).

From that week forward, the learners were assigned a weekly learning log documenting their progress toward a short-term goal they had chosen. Along with the log, each week they were asked to submit a self-motivation strategy checklist indicating any and all strategies they had used (see Appendix 5). They were also required to turn in a reflective self-evaluation (see Appendix 6). These three related assignments were collected five times over the remainder of the semester.

At the end of the term, the learners all wrote an essay entitled “How I Have Become a More Autonomous Learner over the Course of this Semester” as part of their final exam. As those seeking to please the teacher may tend to put on a semblance of autonomous behavior (Breen & Mann, 1997), the learners were instructed not only to describe any changes in their awareness, attitudes, and actions but to explain them specifically in terms of their understanding of the concept of autonomy as the basis for their evaluation.

After submission, the essays were sorted into three broad categories, roughly representing good, fair, and poor demonstration of autonomy, and then ranked within these three levels. Unfortunately, no other qualified rater was available to corroborate these rankings, so as course instructor I was also the sole evaluator. However, I did re-sort the papers on a separate day and refine my criteria as necessary to ensure the reliability of the assigned grades.

Because of space restrictions and a massive amount of data, the focus of the analyses here will be limited to comparisons on only three collection times (i.e., the 1st, 3rd, and 5th). Furthermore, they will only deal with those aspects of the study that could be handled quantitatively. As such, they involve the checklists and the final essay, the other elements needing to await treatment in a follow-up.

Results

Preliminary Analyses

Of the 39 participants, those with incomplete data were excluded, thus leaving 24 in the eventual analyses. A two-sided chi-square test of independence comparing the categorical distribution of the final essay scores of those who were included and those who were not was nonsignificant at the .05 alpha level: $\chi^2 (2, N = 39) = .248, p = .88$. Thus, learner autonomy as defined for this study did not appear to be a determining factor in whether students completed all their assignments.

To answer the first question, whether there was a relationship between overall self-motivational strategy use and learner autonomy, Spearman rank order correlations were calculated between final essay scores and raw numbers of total strategies used on each checklist at collection times 1, 3, and 5, the results
of which appear in Table 1. While this correlation appears to improve over time, it is still nonsignificant at the .05 alpha level.

### Table 1. Correlations Between Overall Self-Motivational Strategy Use and Learner Autonomy Over Time

<table>
<thead>
<tr>
<th>Time</th>
<th>ρ(22)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.082</td>
<td>.70</td>
</tr>
<tr>
<td>3</td>
<td>.065</td>
<td>.76</td>
</tr>
<tr>
<td>5</td>
<td>.265</td>
<td>.21</td>
</tr>
</tbody>
</table>

*Note. Probabilities all for two-tailed tests.*

For the second question, whether there was a relationship between categorical self-motivational strategy use and learner autonomy, rank order correlations were similarly calculated for raw numbers of strategies used within categories at each time. Once again, however, none of these correlations showed to be significant at the .05 alpha level (see Table 2).

### Table 2. Correlations Between Categorical Self-Motivational Strategy Use and Learner Autonomy Over Time

<table>
<thead>
<tr>
<th>Category</th>
<th>Time 1</th>
<th></th>
<th>Time 3</th>
<th></th>
<th>Time 5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ρ(22)</td>
<td>Sig.</td>
<td>ρ(22)</td>
<td>Sig.</td>
<td>ρ(22)</td>
<td>Sig.</td>
</tr>
<tr>
<td>Commitment</td>
<td>-.043</td>
<td>.84</td>
<td>.083</td>
<td>.70</td>
<td>.054</td>
<td>.80</td>
</tr>
<tr>
<td>Metacognitive</td>
<td>-.169</td>
<td>.43</td>
<td>-.057</td>
<td>.79</td>
<td>.068</td>
<td>.75</td>
</tr>
<tr>
<td>Satiation</td>
<td>.076</td>
<td>.73</td>
<td>.294</td>
<td>.16</td>
<td>.337</td>
<td>.11</td>
</tr>
<tr>
<td>Emotional</td>
<td>.198</td>
<td>.36</td>
<td>.157</td>
<td>.46</td>
<td>.361</td>
<td>.08</td>
</tr>
<tr>
<td>Environmental</td>
<td>-.031</td>
<td>.89</td>
<td>-.124</td>
<td>.56</td>
<td>.225</td>
<td>.29</td>
</tr>
</tbody>
</table>

*Note. Probabilities all for two-tailed tests.*

For the third question, whether there was a relationship between individual strategy use and learner autonomy, rank-biserial correlations were calculated between final essay scores and the use of each individual strategy (Table 3). At Time 1, no correlations were significant at the .05 alpha level, the highest being .374 (p = .07). At Time 3, only reaching a point of no return (e.g., registering for a test and then having to study or forfeit the registration fee) was significantly correlated at the .05 alpha level (ρ = .440, p = .03). Moreover, at Time 5, this particular strategy was no longer significant, whereas two others were, namely imagining the consequences of making mistakes (ρ = -.427, p = .04) and thinking that the embarrassment of making mistakes will not last long (ρ = .496, p = .01); however, a one-sided Fisher’s exact test showed the relationship between the use of these two strategies to be nonsignificant at the .05 alpha level (p = .45). As 31 tests were conducted at each time interval, it should also be pointed out that the critical p value for maintaining a familywise Type I error rate of .05, would be .002, thus rendering even these few meager findings nonsignificant for the purposes of any confirmatory analysis.

### Table 3. Correlations Between Individual Self-Motivational Strategy Use and Learner Autonomy Over Time

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Time 1</th>
<th></th>
<th>Time 3</th>
<th></th>
<th>Time 5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ρ(22)</td>
<td>Sig.</td>
<td>ρ(22)</td>
<td>Sig.</td>
<td>ρ(22)</td>
<td>Sig.</td>
</tr>
<tr>
<td>Imagine positive consequences of success</td>
<td>.084</td>
<td>.70</td>
<td>.075</td>
<td>.73</td>
<td>.211</td>
<td>.32</td>
</tr>
<tr>
<td>Imagine negative consequences of failure</td>
<td>-.045</td>
<td>.83</td>
<td>.047</td>
<td>.83</td>
<td>.047</td>
<td>.83</td>
</tr>
<tr>
<td>Imagine wasted efforts in quitting</td>
<td>-.037</td>
<td>.86</td>
<td>-.024</td>
<td>.91</td>
<td>-.129</td>
<td>.55</td>
</tr>
<tr>
<td>Remind self of deadline</td>
<td>-.074</td>
<td>.73</td>
<td>-.067</td>
<td>.76</td>
<td>.174</td>
<td>.42</td>
</tr>
<tr>
<td>Focus on first step</td>
<td>-.012</td>
<td>.96</td>
<td>.024</td>
<td>.91</td>
<td>.389</td>
<td>.06</td>
</tr>
<tr>
<td>Strategy</td>
<td>Time 1</td>
<td>Time 3</td>
<td>Time 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ρ(22)</td>
<td>Sig.</td>
<td>ρ(22)</td>
<td>Sig.</td>
<td>ρ(22)</td>
<td>Sig.</td>
</tr>
<tr>
<td>Try to start without thinking too much</td>
<td>.220</td>
<td>.30</td>
<td>-.090</td>
<td>.68</td>
<td>-.239</td>
<td>.26</td>
</tr>
<tr>
<td>Perform ritual</td>
<td>*</td>
<td>*</td>
<td>.106</td>
<td>.62</td>
<td>.083</td>
<td>.70</td>
</tr>
<tr>
<td>Remind self of goals</td>
<td>-.219</td>
<td>.30</td>
<td>.146</td>
<td>.50</td>
<td>.154</td>
<td>.47</td>
</tr>
<tr>
<td>Identify and avoid distractions</td>
<td>.114</td>
<td>.60</td>
<td>-.352</td>
<td>.09</td>
<td>-.127</td>
<td>.55</td>
</tr>
<tr>
<td>Schedule regular breaks</td>
<td>-.201</td>
<td>.35</td>
<td>.088</td>
<td>.68</td>
<td>.094</td>
<td>.66</td>
</tr>
<tr>
<td>Use positive self-talk</td>
<td>.000</td>
<td>1.00</td>
<td>-.077</td>
<td>.72</td>
<td>.090</td>
<td>.68</td>
</tr>
<tr>
<td>Imagine consequences of mistakes</td>
<td>-.219</td>
<td>.30</td>
<td>-.138</td>
<td>.52</td>
<td>-.427</td>
<td>.04</td>
</tr>
<tr>
<td>Take refreshment break</td>
<td>-.073</td>
<td>.73</td>
<td>.086</td>
<td>.69</td>
<td>-.025</td>
<td>.91</td>
</tr>
<tr>
<td>Modify activity for fun or challenge</td>
<td>-.037</td>
<td>.87</td>
<td>.257</td>
<td>.23</td>
<td>.341</td>
<td>.10</td>
</tr>
<tr>
<td>Imagine more interesting study purpose</td>
<td>.088</td>
<td>.68</td>
<td>.047</td>
<td>.83</td>
<td>.133</td>
<td>.53</td>
</tr>
<tr>
<td>Encourage self for successes</td>
<td>.299</td>
<td>.16</td>
<td>.132</td>
<td>.54</td>
<td>.326</td>
<td>.12</td>
</tr>
<tr>
<td>Focus on fortunate study circumstances</td>
<td>.374</td>
<td>.07</td>
<td>.074</td>
<td>.73</td>
<td>.217</td>
<td>.31</td>
</tr>
<tr>
<td>Share feelings with others</td>
<td>.053</td>
<td>.80</td>
<td>.241</td>
<td>.26</td>
<td>.053</td>
<td>.80</td>
</tr>
<tr>
<td>Pray</td>
<td>-.046</td>
<td>.83</td>
<td>-.066</td>
<td>.76</td>
<td>-.066</td>
<td>.76</td>
</tr>
<tr>
<td>Recall past successes</td>
<td>.251</td>
<td>.24</td>
<td>.160</td>
<td>.45</td>
<td>.056</td>
<td>.79</td>
</tr>
<tr>
<td>Look for positive aspects of failures</td>
<td>.270</td>
<td>.20</td>
<td>.064</td>
<td>.77</td>
<td>.361</td>
<td>.08</td>
</tr>
<tr>
<td>Look for humor in embarrassments</td>
<td>.140</td>
<td>.51</td>
<td>.247</td>
<td>.25</td>
<td>.091</td>
<td>.67</td>
</tr>
<tr>
<td>Remember temporary nature of embarrassment</td>
<td>.121</td>
<td>.57</td>
<td>-.052</td>
<td>.81</td>
<td>.496</td>
<td>.01</td>
</tr>
<tr>
<td>Create useful diversions</td>
<td>-.080</td>
<td>.71</td>
<td>.056</td>
<td>.79</td>
<td>-.065</td>
<td>.76</td>
</tr>
<tr>
<td>Use relaxation or meditation techniques</td>
<td>.107</td>
<td>.62</td>
<td>-.213</td>
<td>.32</td>
<td>.063</td>
<td>.77</td>
</tr>
<tr>
<td>Eliminate sources of interference</td>
<td>-.117</td>
<td>.59</td>
<td>-.067</td>
<td>.76</td>
<td>.370</td>
<td>.08</td>
</tr>
<tr>
<td>Eliminate temptations</td>
<td>.049</td>
<td>.82</td>
<td>-.174</td>
<td>.42</td>
<td>.206</td>
<td>.33</td>
</tr>
<tr>
<td>Organize group study session</td>
<td>.028</td>
<td>.90</td>
<td>-.165</td>
<td>.44</td>
<td>-.092</td>
<td>.67</td>
</tr>
<tr>
<td>Make promise or public commit-</td>
<td>-.092</td>
<td>.67</td>
<td>-.165</td>
<td>.44</td>
<td>-.092</td>
<td>.67</td>
</tr>
<tr>
<td>ment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass point of no return</td>
<td>.088</td>
<td>.68</td>
<td>.440</td>
<td>.03</td>
<td>.352</td>
<td>.09</td>
</tr>
<tr>
<td>Ask friends for encouragement</td>
<td>-.008</td>
<td>.97</td>
<td>-.157</td>
<td>.46</td>
<td>-.157</td>
<td>.46</td>
</tr>
</tbody>
</table>

Note. Probabilities all for two-tailed tests.

a. Although the learners were given the option for each category of adding strategies of their own, no unlisted strategies were reported at any time.

* No one reported performing a ritual at Time 1.

Finally, to answer the question of whether there was a change in strategy use over time, paired samples t-tests were conducted to compare the mean overall raw strategy numbers between Times 1 and 3, Times 3 and 5, and Times 1 and 5. However, as the means were exactly 9.0 and the standard deviations nearly identical at 4.19 – 4.22 at each time, the results were unsurprisingly nonsignificant.

Secondary Analyses

With the aim of developing a profile of more and less autonomous learners in spite of the negative results in the preceding analyses, I pursued a new strategy, which was to exclude those learners represented by the middle third of the ranked essay scores so as to create two extreme groups. The first step in the
The actual analysis was then to compare the numbers of learners at the highest and lowest levels of autonomy using strategies in each category at each time (Table 4).

**Table 4. High and Low Autonomy Group Learner Reports of Strategy Use by Category Over Time**

<table>
<thead>
<tr>
<th>Category</th>
<th>Time 1 High</th>
<th>Time 1 Low</th>
<th>Time 3 High</th>
<th>Time 3 Low</th>
<th>Time 5 High</th>
<th>Time 5 Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Metacognitive</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Satiation</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Emotion</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Environmental</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>All 5</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Although the numbers were similar in most cases, more highly autonomous learners appeared to have a greater tendency to use satiation strategies. Two-sided Fisher’s exact tests for use vs. non-use of this category by autonomy level, however, were non-significant at the .05 alpha level (p = 1.00 for Time 1, p = .13 for Time 3, and p = .28 for Time 5). It is also interesting to note that in the end four of the eight most highly autonomous learners indicated using strategies from all five categories, whereas only one of the least autonomous learners did, though this result was similarly nonsignificant at the .05 alpha level (p = .28).

The second step in the new analysis was to compare the variety of strategy categories invoked by individual learners in each group over time (Tables 5-7). Whereas the less autonomous group showed a slight, steady decline in mean number of strategy categories used, the more autonomous group showed a temporary increase before returning to its initial level. Independent samples t-tests at the .05 alpha level revealed no significant differences in these means at any of the three data collection times: Time 1 t(14) = .000, p = 1.00, Time 3 t(14) = .798, p = .44, Time 5 t(14) = .947, p = .36. Interestingly, however, the mode value for the more autonomous learners was two points higher in the end.

**Table 5. Descriptive Statistics for Learner Reports of Strategy Categories Used at Time 1**

<table>
<thead>
<tr>
<th>Autonomy Level</th>
<th>M</th>
<th>Mdn</th>
<th>Mode</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>3.75</td>
<td>4.0</td>
<td>4</td>
<td>.707</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Low</td>
<td>3.75</td>
<td>4.0</td>
<td>4</td>
<td>.707</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

**Table 6. Descriptive Statistics for Learner Reports of Strategy Categories Used at Time 3**

<table>
<thead>
<tr>
<th>Autonomy Level</th>
<th>M</th>
<th>Mdn</th>
<th>Mode</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>4.00</td>
<td>4.5</td>
<td>5</td>
<td>1.414</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Low</td>
<td>3.50</td>
<td>3.0</td>
<td>3</td>
<td>1.069</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

**Table 7. Descriptive Statistics for Learner Reports of Strategy Categories Used at Time 5**

<table>
<thead>
<tr>
<th>Autonomy Level</th>
<th>M</th>
<th>Mdn</th>
<th>Mode</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>3.75</td>
<td>4.0</td>
<td>5</td>
<td>1.389</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Low</td>
<td>3.13</td>
<td>3.0</td>
<td>3</td>
<td>1.246</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
The third step was to compare overall strategy use (see Tables 8-10). From these numbers, it appears that the most highly autonomous learners not only used more categories of self-motivational strategies but also greater numbers of strategies within each category. Once again, however, independent samples t-tests of mean strategy use revealed no statistically significant differences at the .05 alpha level at any time: \( t(14) = .067, p = .95 \) for Time 1; \( t(14) = .052, p = .96 \) for Time 3; and \( t(14) = .764, p = .46 \) for Time 5.

Finally, closer examination was given to the results of the original self-motivation strategy inventory, namely to identify individual strategies with Likert-scale differences of at least two points. At this stage, two items stood out. The first was the frequency of imagining the negative consequences of not reaching one’s goal, for which the mode response in the low group was often, as opposed to rarely in the high group. The other was the frequency of positive self-encouragement for instances of success, for which the mode in the low group was rarely, as opposed to often in the high group. To corroborate these data, these results were then compared against instances of reported use of these strategies on the weekly checklists, as shown in Tables 11 and 12. The actual frequency of imagining the negative consequences of failure was not only low but identical for both groups across all times. Self-encouragement, on the other hand, indeed did seem to be more prevalent among the most autonomous learners, although one-sided Fisher’s exact tests at the .05 alpha level were nonsignificant (\( p = .29 \) for Time 1, \( p = .50 \) for Time 3, and \( p = .16 \) for Time 5).

Table 8. Descriptive Statistics for Learner Reports of Individual Strategies Used at Time 1

<table>
<thead>
<tr>
<th>Autonomy Level</th>
<th>M</th>
<th>Mdn</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>8.38</td>
<td>8.5</td>
<td>3.85</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Low</td>
<td>8.50</td>
<td>8.0</td>
<td>3.63</td>
<td>4</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 9. Descriptive Statistics for Learner Reports of Individual Strategies Used at Time 3

<table>
<thead>
<tr>
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<th>Mdn</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
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<td>7.0</td>
<td>4.40</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Low</td>
<td>8.88</td>
<td>7.5</td>
<td>5.25</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 10. Descriptive Statistics for Learner Reports of Individual Strategies Used at Time 5

<table>
<thead>
<tr>
<th>Autonomy Level</th>
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<th>Mdn</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>9.35</td>
<td>9.0</td>
<td>5.83</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Low</td>
<td>7.38</td>
<td>7.0</td>
<td>4.57</td>
<td>2</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 11. Learner Reports of Imagining Negative Consequences of Failure to Attain Goal by Autonomy Level Over Time

<table>
<thead>
<tr>
<th>Autonomy Level</th>
<th>Time 1</th>
<th>Time 3</th>
<th>Time 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>High</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Low</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 12. Learner Reports of Using Self-Encouragement for Success by Autonomy Level Over Time

<table>
<thead>
<tr>
<th>Autonomy Level</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
<th>Time 4</th>
<th>Time 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>High</td>
<td>3</td>
<td>5</td>
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<td>5</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Discussion

The preliminary results of this study showed no significant correlations between learner autonomy and self-reports of overall, categorical, or individual self-motivational strategy use. Moreover, learners on average used nine self-motivational strategies at every time interval, regardless of autonomy level. Closer inspection, however, suggests that the most highly autonomous learners may be using self-motivation strategies from a greater number of categories and that they may also be more likely to engage in verbal self-encouragement.

While these results imply that the focus of learner training in self-motivation might fruitfully be shifted toward variety of strategy use over sheer numbers and that the modeling of positive thinking might also be in order, it must be pointed out that these findings need to be interpreted with caution. Notwithstanding the fact that Dörnyei’s self-motivational strategy categories themselves may even be questionable as their construct validity remains to be demonstrated, these conclusions are based on statistically nonsignificant visual impressions of nominal differences. Unfortunately, studies of such short duration with insufficient numbers of participants to detect even medium-sized effects can rarely provide the kind of incontestable evidence we might like.

These issues aside, as Benson (2011) has rightly pointed out, the very operationalization of autonomy for the purposes of measurement is fraught with difficulty, for there seems to be little consensus as to its truly necessary components. In other words, two learners may be autonomous in entirely different ways, making it hard to quantify them for comparison, and the autonomy measure adopted in this study encompasses merely one narrow set of attributes. Moreover, without an indirect measure of these attributes, determining initial levels of learner autonomy was practically impossible, for it would have required either advanced learner L2 metalinguistic proficiency or suggestive behavioral statements potentially biasing learner responses. As such, although the wording of the final essay prompt was chosen to elicit actual levels of autonomy as well as understanding of the concept, it is possible that some students may have possessed a certain degree of language learning autonomy from the start, in which case they may have been unable to evidence change as directed.

Other important limitations of this study are multiple threats to the reliability of the data. For instance, the final essays were evaluated by the course instructor without validation by any other rater. Even assuming perfect rating accuracy, however, as the essays were written in English, it is possible that some learners may actually be more autonomous than their current proficiency level allows them to express. Another issue is that learners may not have reported their strategy use accurately, such as by failing to remember (or even realize) which ones they used. On a related note, some students may simply be applying strategies ineffectively. Finally, as these data were collected in a predominantly male institution, they may not be generalizable to more heterogeneous contexts because of possible gender effects. Hopefully, a follow-up investigation analyzing the weekly self-evaluations collected in this study will yield further insights.
Conclusion

As autonomy merely implies a capacity for control and not necessarily the exercise of it, the ability to self-regulate with respect to motivation is also essential. In this paper I attempted to shed light on this aspect of the motivation/autonomy interface by investigating the role self-motivational strategy use with regard to Japanese university learners’ autonomy in English language learning. Although the findings were inconclusive, it appears that higher levels of this kind of autonomy may be more closely associated with the use of a greater variety of self-motivational strategy types than with sheer numbers of strategies themselves. It is hoped that the development of a more accurate and reliable autonomy measure and a larger learner sample will allow for the exact nature of this relationship to be examined more definitively.

Bio Data

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References


Appendix 1

Learner Autonomy for Lifelong Language Development Course Outline

Preliminary Lessons

- Week 1: Course introduction
- Week 2: Background assessment

Phase 1: Raising Awareness

- Week 3: Motivation
- Week 4: Learning strategies
• Week 5: Community building
• Week 6: Self-monitoring

**Phase 2: Changing Attitudes**
• Week 7: Motivation (revisited): Short-term goal setting
• Week 8: Learning strategies (revisited): Self-motivation
• Week 9: Community building (revisited)
• Week 10: Self-monitoring (revisited)

**Phase 3: Transferring Roles**
• Weeks 11-14: Self-directed learning with individual conferencing on learning logs
• Week 15: Final essay submission

**Appendix 2**

**Self-Motivation Strategy Inventory (Japanese Version)**

**Directions:** For each part of each item, circle the answer choice that best matches your response.

1. 勉強しているときにモチベーションが落ちないように、どのくらいよく、以下のことをしますか?
   • 目標を達成する場合における、将来の肯定的結果を想像する
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
   • 目標を達成できない場合における、将来の否定的結果を想像する
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
   • 今まで費やしてきた努力が無駄になってしまうことを想像する
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
   • その他（具体的に記入して下さい）: ____________________________
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

2. 勉強を怠けたい気持ちに打ち勝つために、どのくらいよく、以下のことをしますか?
   • 提出した期限を再認識する
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
   • 課題の全体よりも、その課題のひとつひとつをクリアすることに集中する
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
   • その他（具体的に記入して下さい）: ____________________________
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

3. 勉強を始める心の準備をするために、どのくらいよく、以下のことをしますか?
   • 儀式、または儀式のように決まってする日常の行為、を行う
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
   • 自分の目標について再認識する
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
   • その他（具体的に記入して下さい）: ____________________________
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

4. 勉強に対する集中力を低下を防ぐために、どのくらいよく、以下のことをしますか?
   • 定期的に休憩をとる
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
   • その他（具体的に記入して下さい）: ____________________________
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

5. 勉強中に集中力が途切れないように、どのくらいよく、以下のことをしますか?
   • 「がんばれ、もう少しだ!」などと、声に出して自分を励ます
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
   • その他（具体的に記入して下さい）: ____________________________
     いつもする 大体いつもする しばしばする 時々する たまにする 全くしない
失敗する場合の否定的結果（リスニングで集中しないと聞き取れない、など）について想像する
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

リフレッシュするために短い休憩をとる
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

その他（具体的に記入して下さい）：____________________________
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

勉強中に退屈しないようにするために、どのくらいよく、以下のことをしますか？
より楽しく、またはより難しくするなどして勉強内容を工夫する
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

よりおもしろい目的のために勉強をしていると想像する
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

その他（具体的に記入して下さい）：____________________________
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

6. 勉強に対して前向きな態度を維持するために、どのぐらいよく、以下のことをしますか？
成果が出たときに言葉に出して自分をほめる
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

自分は大学で勉強できる環境と能力があって幸せだ、と自分の境遇に感謝する
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

その他（具体的に記入して下さい）：____________________________
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

7. 勉強で失敗したときの気持ちを克服するために、どのぐらいよく、以下のことをしますか？
以前成功した時を思い返す
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

失敗が次の成功に役立つなどの前向きな要素を探す
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

その他（具体的に記入して下さい）：____________________________
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

8. 英語の間違いを笑われるなど、何かを学んでいる時に恥ずかしい思いをしたとき、それを克服するために、どのくらいよく、以下のことをしますか？
その状況にユーモアの要素を見出す
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

何か、そんなことがあったことすら覚えていない時がくるだろう、と自分に言い聞かせる
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

その他（具体的に記入して下さい）：____________________________
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

9. 英語の間違えを笑われるなど、何かを学んでいる時に恥ずかしい思いをしたとき、それを克服するために、どのくらいよく、以下のことをしますか？
その状況にユーモアの要素を見出す
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

英語を学んでいる間に恥ずかしい思いをしたとき、それを克服するために、どのくらいよく、以下のことをしますか？

気分転換として、掃除や、ほかの教科の勉強など有効な時間の使い方をする
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

リラックスしたり、瞑想したりできるようなことをする
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

その他（具体的に記入して下さい）：____________________________
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

10. 勉強中にストレスを軽減するために、どのくらいよく、以下のことをしますか？
勉強中に気持ちがあせってしまうのを静める時、どのくらいよく、以下のことをしますか？
自分の気持ちを、ほかの人に聞いてもらう
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

祈る
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

その他（具体的に記入して下さい）：____________________________
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

11. 勉強中に気持ちがあせってしまい静める時、どのくらいよく、以下のことをしますか？
自分の気持ちを、ほかの人に聞いてもらう
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

祈る
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

その他（具体的に記入して下さい）：____________________________
いつもする 大体いつもする しばしばする 時々する たまにする 全くしない

12. 勉強中に適した環境をつくりだすために、どのくらいよく、以下のことをしますか？
### Appendix 3

**Self-Motivation Strategy Inventory (English Version)**

**Directions:** For each part of each item, circle the answer choice that best matches your response.

1) To keep from losing your motivation to study, how often do you do the following?
- **imagine the positive consequences of reaching your goal**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never

- **imagine the negative consequences of not reaching your goal**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never

2) To beat the urge to procrastinate studying, how often do you do the following?
- **remind yourself of your deadline**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never

- **focus on a single step rather than the entire task**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never

- **get started right away without too much more thought**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never

- **something else (please specify: _________________________)**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never

3) To mentally prepare yourself to study, how often do you do the following?
- **perform a ritual**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never

- **remind yourself of your goals**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never

- **something else (please specify: _________________________)**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never

4) To prevent loss of concentration while studying, how often do you do the following?
- **identify common distractions and avoid them**
  - Always
  - Usually
  - Often
  - Sometimes
  - Rarely
  - Never
5) To maintain concentration while actually studying, how often do you do the following?
   - schedule regular breaks
   - encourage yourself verbally with statements like, “Come on, just a little bit more!”
   - imagine the negative consequences of making mistakes
   - take a short break to refresh yourself
   - something else (please specify: _________________________
   - Always Usually Often Sometimes Rarely Never

8) To overcome feelings of failure in your studies, how often do you do the following?
   - focus on your good fortune just having the opportunity and ability to study
   - recall past instances of success
   - look for positive aspects of your unsuccessful experiences
   - something else (please specify: _________________________
   - Always Usually Often Sometimes Rarely Never

9) To overcome embarrassment in your learning, how often do you do the following?
   - look for humorous aspects of the situation
   - remind yourself that you probably won’t even remember the episode long after it’s over
   - something else (please specify: _________________________
   - Always Usually Often Sometimes Rarely Never

10) To relieve stress while studying, how often do you do the following?
    - create useful diversions
    - something else (please specify: _________________________
    - Always Usually Often Sometimes Rarely Never
Always  Usually  Often  Sometimes  Rarely  Never
• use relaxation or meditation techniques
  Always  Usually  Often  Sometimes  Rarely  Never
• something else (please specify: _________________________)
  Always  Usually  Often  Sometimes  Rarely  Never

11) To cope when overwhelmed in your studies, how often do you do the following?
• share your feelings with someone else
  Always  Usually  Often  Sometimes  Rarely  Never
• pray
  Always  Usually  Often  Sometimes  Rarely  Never
• something else (please specify: _________________________)
  Always  Usually  Often  Sometimes  Rarely  Never

12) To create a suitable study environment, how often do you do the following?
• eliminate sources of interference (e.g., noise)
  Always  Usually  Often  Sometimes  Rarely  Never
• eliminate temptations (e.g., television)
  Always  Usually  Often  Sometimes  Rarely  Never
• organize study sessions with other people
  Always  Usually  Often  Sometimes  Rarely  Never
• something else (please specify: _________________________)
  Always  Usually  Often  Sometimes  Rarely  Never

13) To create healthy pressure to study, how often do you do the following?
• make promises or public commitments
  Always  Usually  Often  Sometimes  Rarely  Never
• pass a point of no return
  Always  Usually  Often  Sometimes  Rarely  Never
• ask friends to encourage you
  Always  Usually  Often  Sometimes  Rarely  Never
• something else (please specify: _________________________)
  Always  Usually  Often  Sometimes  Rarely  Never

Appendix 4
Self-Motivation Strategies Examples for my Personal Short-Term Goal of Learning the Meanings and Mastering the Writings of 800 Kanji (Japanese Characters)

Commitment Control Strategies
To keep from losing my motivation, I might
• Imagine the positive consequences:
  If I succeed, I will
  1. solidify my knowledge of familiar kanji
  2. learn the readings and meanings of new kanji
  3. increase my reading comprehension
  4. increase my reading speed
  5. be able to write basic characters when necessary
• Imagine the negative consequences:
  If I fail, I will
  1. need to continue to use a dictionary to look up basic characters when it’s necessary to write them
  2. be a bad role model for my students
• Imagine my wasted effort (after I have been following my plan for a few weeks).

Metacognitive Control Strategies

To beat the urge to procrastinate, I might
• Remind myself of my deadline: 8/22.
• Focus on one step at a time (e.g., studying, testing, reviewing).
• Get started as soon as I have an hour of free time.

To make the most of my study time, I might
• Follow a ritual (e.g., study in the same place at the same time every time and keep my study materials there).
• Remember my goals (i.e., to increase my reading speed and comprehension) so I don’t just study superficially to get the answers right when I test myself short-term.

To prevent loss of concentration, I might
• Identify possible distractions (e.g., TV, cell phone, email, wife) and don’t study near them.
• Take regular breaks (though I probably won’t need them since I will be doing a variety of activities and I won’t be studying more than 60 minutes per day).

To maintain my concentration while studying, I might
• Encourage myself verbally to continue (e.g., “Come on, only three more!”).
• Imagine the negative consequences of making mistakes (e.g., I could confuse similar kanji like 休 and 体, and then I would have to repeat them the next day).
• Take a short break (though I will probably only need one on Saturdays, when I review all the kanji for the entire week).

Satiation Control Strategies

To keep from getting bored, I might
• Modify my activity (e.g., by adding a time factor, trying to finish in less than 60 minutes and, thus, adding an extra challenge to my study).
• Imagine learning for a more interesting purpose (e.g., teaching Japanese).

Emotional Control Strategies

To maintain a positive outlook, I might
• Verbally encourage myself for each success (e.g., saying “Good job!” after every kanji I get right when I test myself).
• Imagine my good fortune compared to many other learners (e.g., I have nice study materials, I can work in a comfortable environment).

To overcome feelings of being overwhelmed, I might
• Share my feelings with someone (e.g., my wife).
• Pray (e.g., ask God for stronger commitment and better focus).

To overcome feelings of failure, I might
• Think of my past successes (e.g., the days when I got all 20 kanji correct, the number of kanji I’ve mastered to that point)
• Think of positive aspects of failure (e.g., why I got some answers wrong and how this information will help me to get them right in the future).

To overcome embarrassment, I might
• Make a joke out of the situation (e.g., writing a letter to the prime minister to complain about the difficulties of Japanese).
• Ask myself whether I will even remember my feelings in a week or so.

To relieve stress, I might
• Create useful diversions (e.g., cleaning up my hair off the floor).
• Practice a relaxation technique (e.g., close my eyes, breathe deeply, count to 10).

Environmental Control Strategies
To create a suitable study environment, I might
• Eliminate any distractions (e.g., by studying in a quiet room).
• Eliminate any temptations (e.g., by studying where there is no computer so I won’t be tempted to check my email).
• Organize a study session with other people (though it might be hard since none of my friends are interested in studying kanji).

To create healthy study pressure, I might
• Make a public commitment (e.g., announcing my short-term goal in class).
• Pass a point of no return (e.g., registering for the Kanken).
• Ask someone for encouragement (e.g., my wife).

Appendix 5
Self-Motivation Strategy Checklist

Directions: Which of the following strategies did you use this week? Check all that apply.

Commitment Control Strategies
_____ I imagined the positive consequences of reaching my goal.
_____ I imagined the negative consequences of not reaching my goal.
_____ I imagined how my efforts so far would go to waste.
_____ Others: ____________________________________________

Metacognitive Control Strategies
_____ I reminded myself of my deadline.
_____ I focused on the first step rather than the entire task.
_____ I tried not to think too much and just get started.
_____ I performed a ritual.
_____ I reminded myself of my goals.
_____ I identified common distractions and avoided them.
_____ I scheduled regular breaks.
_____ I encouraged myself with positive self-talk.
_____ I imagined the consequences of making mistakes.
_____ I took a short break to refresh myself.
_____ Others: ____________________________________________

Satiation Control Strategies
_____ I modified my study activity to make it more fun or challenging.
_____ I imagined I was studying for a more interesting purpose.
_____ Others: ____________________________________________

Emotional Control Strategies
_____ I encouraged myself verbally for my successes.
____ I focused on my good fortune just having the opportunity and ability to study.
____ I shared my feelings with someone else.
____ I prayed.
____ I recalled past instances of success.
____ I looked for positive aspects of my failures.
____ I looked for humorous aspects of my embarrassment.
____ I reminded myself that I probably wouldn’t remember my embarrassment for long.
____ I created useful diversions.
____ I used relaxation or meditation techniques.
____ Others: ____________________________________________

**Environmental Control Strategies**
____ I eliminated sources of interference.
____ I eliminated temptations.
____ I organized a study session with other people.
____ I made a promise or public commitment.
____ I passed a point of no return.
____ I asked friends to encourage me.
____ Others: ____________________________________________

**Appendix 6**

**Reflective Self-Evaluation**
What was your goal last week? How did you try to accomplish it? How well did you succeed? Did you have any problems? If so, how did you handle them? Will you do anything differently next week? If so, what?