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Praise in the EFL Classroom: A Growth Mindset Perspective

Abstract

This study investigates how praising students' success in tasks affects the performance of other students who were not successful. Possible and impossible crossword puzzles were used as an experiment to engender fixed mindsets in half of the sample. The average time to complete a crossword puzzle at the pre-test was compared to the average time to complete the same puzzle at the post-test. The results showed that students given possible crossword puzzles were able to make significant improvements in the speed with which they could complete the puzzle at the post-test stage. However, such improvements in performance were not seen among the students who had been temporarily primed into a fixed mindset during the experiment through the use of the impossible crossword puzzles. Reasons behind these results as well as pedagogical implications related to effective ways of giving praise and other feedback will be discussed.

Keywords: growth mindset, failure, feedback, university students, praise

In recent years, there has been an increasing number of studies in the field of psychology looking at mindsets, especially those investigating the benefits of having a growth mindset and the ramifications of possessing a fixed mindset (e.g., Dweck & Yeager, 2019; Gunderson, Sorhagen, Gripshover, Dweck, Goldin-Meadow, & Levine, 2018). The concept of mindsets has evolved over time and can be described as the beliefs individuals hold regarding (1) the malleability of their ability in a particular field; (2) the control they feel they have to improve their ability in a field; and (3) how they deal with failure (Dweck, 1999). In this study, I focus on the second of these facets of mindsets.

Investigating mindsets and the reasons why students may have growth or fixed mindsets may be especially relevant in English as a foreign language

(EFL) environments. As suggested through Krashen's (1982, 1985) input hypothesis, students learn most efficiently when challenged to take calculated risks with language at a level slightly above their current ability is essential for making solid progress in their proficiency (i.e., $i + 1$). Such a willingness to make mistakes at a level just above one's current ability is closely linked to the concepts related to a growth mindset. In other words, to improve in a foreign language, a learner inevitably has to be willing to take a certain degree of risk in using the language with the possibility of making mistakes or encountering difficulties. Having a growth mindset is known to make learners more willing to take calculated risks and persevere on tasks (Dweck, 2009; Mercer, 2012). Yet, despite the strong positive relationship between moderate risk-taking and improvements in language proficiency (Arnold, 1999; Dewaele, 2012), the amount of research related to the mindsets of students studying in EFL environments is still rather limited. In this paper, I focus on the second facet of mindsets centering on the sense of control one feels over one's ability to improve in a language. I discuss how praising certain students' ability in a university EFL classroom may lead other students in the classroom to feel that their efforts will not lead to higher proficiency: a characteristic of a fixed mindset.

Literature Review

Response to Failure

The ways humans react to challenging tasks which involve a perceived risk of failure have been investigated by various researchers in the field of psychology. Perhaps the seminal work in this field began with the study by Seligman, Maier, and Geer (1968) who conducted an intervention of electric shocks that the subjects (i.e., dogs) had no control over. In the post-test, the dogs did not even attempt tasks that they had previously been able to complete successfully in the pre-test. The phenomenon of becoming unable to complete a task successfully that one could do beforehand was coined *learned helplessness*. Seligman et al. (1968) suggested that all animals, including humans, tend to give up when faced with tasks with which they feel they have no control over the outcomes.

A few years later, an investigation conducted by Dweck and Reppucci (1973) attempted to link the phenomenon of learned helplessness and the attributions children give for their successes or failures to complete tasks. In the study, elementary-school-aged children were given colored blocks and asked to replicate patterns that had been shown to them. Some children were given

problems that were relatively easy to solve, whereas others were given tasks that were impossible to solve. The findings of Dweck and Reppucci's (1973) study suggested that when given challenging puzzles some children simply gave up, even though they had initially had sufficient motivation and the ability to complete the puzzles. Others, however, thrived on the challenges and saw them as opportunities to learn. These children had positive reactions toward situations in which others simply fell into a state of learned helplessness. Dweck (1975) has also argued that children can be alleviated from the state of learned helplessness if they can be trained to attribute their failures to a lack of effort rather than low aptitude for their chosen field.

A large number of studies related to humans' approaches to highly challenging tasks continued to be published over the next few decades. For example, in self-worth theory, Covington (1992) suggested that some children purposefully make little or no effort in their studies when they are faced with circumstances in which they feel they may fail. This is especially salient in the classroom, where children's egos and self-confidence are developed. Covington (1992) suggests that some children use self-handicapping strategies. They purposefully make little effort because if they try hard to overcome challenges and still fail, this can damage their egos. They feel that peers and family members view their failures as indications of not being smart enough, so it would be more beneficial for their self-confidence if they made little effort and were seen as lazy. More recent studies have had similar findings (e.g., Johnson, Gooding, Wood, Taylor, & Tarrier, 2011; Johnson, Panagioti, Bass, Ramsey, & Harrison, 2017).

Based on decades of research on learned helplessness (Seligman et al., 1968), attribution theory (Weiner, 1986), and self-worth theory (Covington, 1992), Carol Dweck and her colleagues proposed the implicit theories framework (Dweck, Chiu, & Hong, 1995; Dweck & Leggett, 1988) as an explanation for understanding the differences between humans who are willing to risk failure in difficult situations and those who avoid the risks and choose easier, yet less beneficial pathways.

Implicit Theories

Implicit theories offer an understanding of the reasons for humans' reactions when faced with situations in which they feel they may fail (Dweck, 1999; Dweck, Chiu, & Hong, 1995; Dweck & Leggett, 1988). According to implicit theories, the way one reacts when faced with challenging situations can be divided into two theories: an entity theory and an incremental theory. The entity theory refers to the belief that ability is innate and that regardless of the efforts one may exert, the level of proficiency will not change. Therefore, it is better to avoid challenging tasks—which such individuals believe will most likely result

in failure—because failure is seen as a sign of being unintelligent: a state also known as *fixed mindset*. In contrast, those with an incremental theory have strong beliefs that ability is malleable, and with hard work, anyone is capable of reaching high levels of proficiency and performance in their chosen fields. Even if one experiences failure, those with an incremental theory believe that that failure brings about opportunities to learn and build one’s capabilities: a state known as a *growth mindset*.

Dweck (1999) explains, however, that the distinction between the entity theory and incremental theory is not clear-cut. It is possible, and in fact more likely than not, that one will hold an entity theory for one field and the incremental theory in another. Therefore, it may be possible, for example, that students have an entity theory for mathematics; they believe that their efforts to study mathematics are meaningless. However, the same students may possess the incremental theory in athletics, holding the belief that if they practice hard enough, they can become more skilled at the sport they choose to play.

Through the results of a large number of studies, implicit theories have proved to be an accurate way of describing humans’ beliefs regarding the innateness of ability in various fields (e.g., Knee, 1998; Ommundsen, 2001). In order to share the benefits of having an incremental theory with a wider audience, Dweck (2006) employed a more accessible terminology for implicit theories: *mindsets*. As such, outside of the field of psychology, the entity theory has since been more commonly referred to as the *fixed mindset*, and the incremental theory as the *growth mindset*. In order to connect with the large body of work in education and practitioner perspectives, in this paper, I shall use the mindset terminology.

Mindsets

Although the notion of growth mindsets has received much attention and support in the fields of psychology and education, it is not without its critics. Orosz, Péter-Szarka, Bóthe, Tóth-Király, and Berger (2017), for example, criticized studies that appeared to give support for the growth mindset, suggesting that the effects were only temporary: Students who had previously had fixed mindsets and were changed to growth mindsets through various interventions returned to display traits of the fixed mindset once they went back to regular routines and learning. Sisk, Burgoyne, Sun, and Macnamara (2018) followed this up by arguing that having a growth mindset does not necessarily result in higher academic achievement. Dweck (2018) addressed these issues by arguing that the criticisms were based on the results of performances in quizzes, not on real grades or standardized test scores. A few years earlier, Dweck (2015) had expressed concerns that the growth mindset had been misunderstood, and that

many believed simply praising effort alone and telling children, “You can do anything!” would lead to success in their chosen fields. However, Dweck (2015) warned that giving such praise may lead to a *false growth mindset*: the belief that it is effort and effort alone that will lead to one’s success. Yet, the growth mindset is not just about expending effort. The growth mindset is not “practice makes perfect.” The growth mindset asserts the idea that *perfect* practice makes perfect—it involves the use of strategies, persistency in meaningful work, calling upon metacognitive skills, and receiving honest and helpful feedback and praise from mentors. In this study, I investigate the effects of a particular form of feedback, namely, praise.

Praise

The detrimental effects of praising for children’s abilities have been well documented in the field of psychology. Mueller and Dweck (1998), for example, suggested that students who were praised for their ability (e.g., “You are really smart!”) were less likely to take on future challenging tasks. It was argued that because children like to be praised and want to be praised, they tend to avoid situations in which they may not be praised. So, for example, if children have been praised for their ability to successfully complete tasks in the past, they are more likely to choose easy tasks that they feel they will complete successfully rather than slightly challenging tasks, in order to be assured of the praise. In contrast, although they may learn something through the challenging tasks, they could also possibly fail, and as a result would not receive any praise. As Dweck states, “Praising students’ intelligence gives them a short burst of pride, followed by a long string of negative consequences” (Dweck, 2007, p. 36).

In another study, Kamins and Dweck (1999) discussed the negative effects of praising and criticizing *the person* rather than *the process* when carrying out a task. In the study, when children themselves were criticized after making mistakes (e.g., “I am very disappointed in you”), it led to students not feeling good about the tasks, losing self-confidence, blaming themselves for not being able to complete the tasks, and showing signs of helplessness in their responses: all traits of the fixed mindset. On the other hand, when feedback for being unable to complete a task successfully was based on the process (e.g., “Maybe you could think of another way to do it”), children were able to come up with strategies and solutions to amend the problems.

It has also been reported that praising for ability can lead to cheating (Leis, 2014; Zhao, Heyman, Chen, & Lee, 2017). For example, Zhao et al. (2017) conducted an experiment with 300 preschool children in China and showed that children who were praised for being smart tended to cheat in the final task of a game in order to receive a prize. In other words, it was so important to look

good and receive the praise that the learners were more likely to cheat to ensure that kind of perceived favorable outcome. Leis (2014) used an experiment with junior high school students (i.e., 14–15 years old). In the study, students who had been primed into a fixed mindset were observed cheating by misspelling simple words on purpose and making changes to the test papers in order to produce correct answers. By cheating, these students were able to show others that they had been successful, whereas in fact they had not.

Mindsets in SLA

The literature on mindsets in the field of Second Language Acquisition (SLA) is still relatively limited. One of these first contributions was made by Mercer and Ryan (2009) who conducted comparisons of the mindsets of Japanese and Austrian students studying English at the university level. In the study, semi-structured, in-depth interviews were carried out with five Austrian and four Japanese EFL university students. Mercer and Ryan (2009) suggested that Japanese students were inclined to have a more uniformed growth mindset for language learning, displaying stronger beliefs in the benefits of persistence and effort, in comparison with the Austrian students, whose responses showed a more variable tendency.

Some other studies have looked at the benefits of having the growth mindset for learners in English as a second language (ESL) environments. Waller and Papi (2017), for example, investigated the differences between having a fixed mindset and a growth mindset on the reactions to written corrective feedback of 147 foreign university students studying in the United States. The results suggested that those with a growth mindset accepted the feedback more willingly, as it was viewed as beneficial for improving their writing ability. Those showing a tendency toward a fixed mindset, however, viewed written corrective feedback negatively, as it was “an invalidation of the positive image they [had] been trying to project” (Waller & Papi, 2017, p. 62).

In another study conducted in an ESL environment, Lou and Noels (2016) investigated the effect one’s mindset has on one’s language learning goals and how those students reacted to failure. The 150 students who took part in the study were from various cultural backgrounds, and it was suggested that students with growth mindsets, regardless of their linguistic self-confidence, saw failure in a positive manner, using it as a driving force to achieve success in future endeavors. In their study, Lou and Noels (2016) used mock research articles that encouraged either the growth mindset or the fixed mindset. Students who had read the article encouraging a fixed mindset showed tendencies toward a helpless state, especially those who had high self-perceived linguistic proficiency. In the study, the students with the fixed mindset tended to give

up striving for their goals, because they surmised that “language aptitude is fixed and it determines their language success” (Lou & Noels, 2016, p. 29).

Lou and Noels (2016) also suggested various strategies for teachers to promote the growth mindset in their classrooms, such as: (1) giving lectures explicitly explaining the benefits of possessing a growth mindset over a fixed mindset; (2) advocating the importance of failure as a part of the learning process; and (3) interactions with the teacher. In the present study, I especially considered the interactions that students have with their teacher in a classroom environment. I chose to focus on interactions regarding praise and feedback from teachers based on students’ successful or unsuccessful performances in tasks carried out in the language classroom. I was interested whether praising students for success would have a detrimental effect on those students who were unable to complete the tasks given to them, which were deliberately impossible.

The Study

Research Question

In the present study, I aim to answer the following research question: Does praising students for success result in other students in the classroom who have been unsuccessful showing characteristics of a fixed mindset?

Based on the results of an earlier study of the same design (Leis, 2014) with younger learners, it was hypothesized that students experiencing failure would tend to give up more readily—one trait of the fixed mindset.

Participants

A total of 81 Japanese university students participated in the study. Based on their scores in the TOEIC1 (i.e., 314), participants’ proficiency could be described as ranging between levels A1 and A2 on the CEFR scale. The mean age was 19.18 (SD = .95) and there were 47 females and 34 males. The students were divided into a control group and an experiment group at random. The control group had 23 female and 17 male participants, while the experiment group had 24 female and 17 male subjects. There was no significant difference in the mean age of the participants in the two groups ($p = .62$).

The experiment was conducted as part of a regular weekly English communication course conducted by the researcher. The students were told that the puzzles being solved in class were simply some fun activities to learn English

and would not affect their regular grades. Although the students were required to write their student numbers on the puzzle booklets, these were used only for demographics. At the end of the experiment, informal consent was received from the students, and they were ensured of anonymity in any published works.

Methodology

This study was inspired by the experiments conducted by Dweck and Reppucci (1973) and Mueller and Dweck (1998), but with a second-language acquisition aspect added. Also, whereas Dweck and Reppucci (1973) and Mueller and Dweck (1998) had used blocks and asked participants to recreate patterns using the blocks, in the present study, I had participants complete crossword puzzles in English with simple vocabulary items.

Furthermore, the studies by Dweck and Reppucci (1973) and Mueller and Dweck (1998) were conducted one-on-one with the subjects, which does not reflect an authentic classroom setting. In the present study, I aimed to create an authentic learning environment by having all 81 participants do the crossword puzzles in the same classroom at the same time. Therefore, as is often seen in regular classes, some participants were experiencing failure, even though their peers were being successful, and vice-versa. The experiment followed a pre-test–experiment–post-test design, with comparisons being made between the speed with which subjects could complete the crossword at the pretest stage and the speed at the post-test stage.

Pretest. First, participants were given booklets containing the crossword puzzles and told not to open or turn pages in the booklets until instructed to do so. Participants were also told that they must not look at other students' booklets. The front covers of the booklets were identical. However, the numbers of the puzzles inside the booklets were colored coded (i.e., puzzle numbers printed in black for the experiment group and puzzle numbers printed in red for the control group) so the students could be divided into the control group and experiment group at random. Neither the researcher nor the students were aware of who was in the control group and who was in the experiment group when distributing the booklets. This reflected an authentic classroom in which some students would be successful in completing a task and others would not.

After answering simple questions related to age and gender, the participants were asked to turn to Crossword 1 (i.e., the pre-test), and a timer displayed on a screen at the front of the room was started. In the pre-test, participants had to complete the crossword by entering the words *egg*, *cake*, *cook*, and *clock*, with pictures used as hints. Students were instructed to raise their hands and say "Finished!" when they had completed the crossword. Then, they wrote the number of seconds it took them to complete the puzzle in their puzzle book-

lets. As in the study conducted by Dweck and Reppucci (1973), it was thought a faster time to complete the puzzles at the post-test stage would be an accurate indication of improved performance and perseverance.

Both the control group and experiment group had the same puzzle for the pre-test. If the students had not finished after one minute had passed, the participants were told to stop and write “60 seconds” as their times. The correct answers were not given to the students until the end of the experiment. Appendix A shows the puzzle used in the pre-test of this study.

Experiment. The experiment was made up of Crossword 2 to Crossword 5 (i.e., a total of four crosswords). All of the crossword puzzles given to the participants in the control group were relatively straightforward and easy to complete (See Appendix B). The process for the experiment was the same as the pre-test, with a timer displayed on a screen at the front of the room, and students saying “Finished!” after completing the crosswords, before recording the number of seconds it took to complete each puzzle in their booklets.

The participants in the experiment group were given puzzles with the same words as those in the control group, but the designs of the crosswords were slightly altered (i.e., extra cells were added to the crosswords or their designs were slightly different) in order to make the puzzles impossible to complete (See Appendix C). This was done with a view to temporarily create an experience of failure among those in the experiment group and the feeling that the participants were not in control of the outcome, thus leading them to give up on the task (i.e., one characteristic of the fixed mindset).

Furthermore, when participants who completed the puzzles said, “Finished!” I praised them in ways such as, “Excellent!” “Wow, you are really good at this!” and “That was so fast!” This praise for students’ ability to complete the tasks successfully was given in order to generate a fixed mindset among the students of both groups (Mueller & Dweck, 1998). All students who completed the puzzles were praised in these ways. However, the possible puzzles were given only to the students in the control group. Thus, only these students were praised, unless students in the experiment group cheated to complete the puzzles (e.g., adding extra cells or misspelling words). The students who were unable to complete the puzzles successfully were told, “Don’t worry. Some people can do these kinds of puzzles and some cannot.” This kind of feedback was given in an attempt to prime a fixed mindset among students in the experiment group. Although our mindsets are deeply ingrained within ourselves, they can be changed (Dweck, 2006). In this study, it was thought that the simple method described above could be used to prime a temporary fixed mindset in the students in a similar way to the mock articles used in the study by Lou and Noels (2016).

Throughout the entire experiment, once the time limit (i.e., 60 seconds) had passed for each stage, I said to the students who had been unable to com-

plete the puzzles, “Don’t worry, it is okay. Some people can do these kinds of puzzles, and some people cannot” in both English and the students’ mother tongue (i.e., Japanese). This feedback was intended to create comparisons between the students who could complete the tasks and those who could not. When students with fixed mindsets are compared to others by, for example, teachers, sports coaches, parents, and peers, they tend to find excuses for not being as good as the other students (Dweck, 2006), give up and make no effort on purpose (Covington, 1992). Some may even turn to cheating in order to show others that they can actually do it (Leis, 2014; Zhao, Heyman, Chen, & Lee, 2017).

Post-test. The sixth crossword in the booklets acted as an immediate post-test. This crossword puzzle used exactly the same words as those used in the pre-test (i.e., *egg*, *cake*, *cook*, and *clock*), but with different pictures and crossword design (See Appendix A). Due to the effect of prior experience, it can be expected that when one does the same task a second time, performance should improve (Whalley, Cutting, & Beck, 2017).

At the end of the experiment, the booklets were collected, and participants were told that some puzzles had been made impossible on purpose so they could not be completed. This was done in order to assure the students that it was not their lack of ability or effort, but the design of the study that prevented them from completing the tasks.

Ethical Issues

There are some questions surrounding ethical issues of early studies of implicit theories and the negative effects of purposefully giving feedback to students that may be harmful. I was concerned with similar ethical questions about the method of feedback given in this study. This feedback was given in an attempt to reflect the kind of praise suggested by various teaching handbooks (see the section on teachers’ praise for students’ ability below). In the hope of overcoming any possible ethical issues resulting from the feedback given in this experiment, at the conclusion of the study, I gave the students a short and simple explanation of mindsets, the reasoning behind conducting the experiment, as well as received informal consent to use the results of the experiment for research purposes. In addition, I also gave a 30-minute workshop on the benefits of having a growth mindset in one’s language studies to counter any possible temporary fixed mindsets that may have been primed within the experiment.

Data Analysis

The times indicated on participants' pre-test and post-test puzzles were entered into SPSS Version 23 for analyses. Paired samples *t*-tests were conducted to measure the differences in times within each group to complete the pre-test and post-test puzzles for each group. Then, a mixed-design analysis of variance (ANOVA) was conducted to measure differences between the groups in the improvements in time to complete the puzzles at the post-test stage. That is, I conducted the mixed-design ANOVA to find out whether the students in the experiment group would improve their times as much as the students in the control group.

Table 1.

Results of the pre-test and post-test for the control and experiment group

Group	Test	Time (SD)	95% CI
Control	Pre	32.01 (14.93)	27.23, 36.78
	Post	22.15 (10.67)*	18.73, 25.56
Experiment	Pre	28.07 (14.09)	23.39, 32.50
	Post	26.90 (13.86)	22.68, 31.61

Notes: Times are displayed in seconds; * $p < .001$.

Table 1 shows a summary of the results of this study. The results of the paired samples *t*-tests indicated that, as had been expected, the performance of those in the control group improved significantly with large effect sizes: $t(40) = 4.06$, $p < .001$, $d = .76$. The 95% confidence intervals (95% CI) had no overlap between the pre-test and post-test, confirming the significantly faster speed with which students could complete the puzzles at the post-test. The large effect sizes and lack of overlap in 95% CI suggest that substantial improvements were indeed observed, despite the relatively small sample size, and that similar results would be expected if the experiment were to be conducted again. On the other hand, the experiment group, as had been hypothesized, did not see any notable improvement in the speed with which the participants were able to complete the puzzles: $t(41) = .36$, $p = .76$. Significant overlaps in 95% CI between the pre-test and post-test for the experiment group confirmed the lack of improvement in speed the second time the students did the crossword puzzle.

To follow up the *t*-tests measuring the differences in times within the two groups, the improvements in times between the two groups were also measured through a mixed-design ANOVA. This was done to confirm whether the experiment group did indeed make significantly less improvement than the

control group. The analysis showed that the differences were significant with medium effect sizes: $F(1, 79) = 4.58$, $p = .04$, $\eta_p^2 = .06$.

These analyses support the hypothesis given earlier in this paper that the performance of students experiencing failure in an environment in which others were experiencing success, and were being praised for that success, would be affected in a negative way. Reasons for this lack of improvement will be discussed in the next section.

Discussion and Pedagogical Implications

The results of the present study suggest that when students are in a state in which they feel they have no control over the outcome, one of the characteristics of the fixed mindset, it results in lower persistence. As holding a growth mindset is known to be beneficial for a number of academic outcomes (Dweck, 2018) and given that persistence in academic studies tends to lead to higher achievement (Duckworth, Peterson, Matthews, & Kelly, 2009), these results may provide pedagogical insights for researchers and language instructors. Recent studies suggest many teachers appear to be investing little time in developing the growth mindsets of their students, even if they themselves have growth mindsets (Haimovitz & Dweck, 2017). Therefore, it behooves teachers to reflect on concrete ideas for teachers to incorporate into their classrooms that develop strong growth mindsets among their students. This is especially important for language teachers to keep in mind as they encourage their students to take calculated risks in their learning and endeavor to study at a difficulty slightly higher than their current skill.

Comparisons with Other Students

Students learn in ways which are unique to each individual. Therefore, it is helpful when teachers provide personalized coaching to each student in their classrooms so that a student feels that the teacher is not comparing one individual's level of performance to another but rather, "emphasis is placed on the uniqueness of the individual student, the tenets of self-direction, and the need for student responsibility" (Keefe, 2007, p. 221). Although providing individual instruction may not be easily feasible in overpopulated classrooms, attending to learner uniqueness can help learners feel cared for by their teacher. Giving effective praise to students in the classroom may be one approach to increasing their feelings of being attended to at an individual level.

In the classroom, words of praise for students that do not encourage comparisons with other students can develop the feeling of individualized instruction. Rather than the feedback that was given in this experiment, encouragement such as, “Don’t worry, I am sure you will get the next one!” or “You were so close! Think about a strategy you could use to do better next time” may help students to focus on the process and imagine pathways to success as well as reinforce the sense that the teacher is looking at each student as an individual. The key is to consider other techniques for teachers to use that can help students focus on their individual progress as opposed to comparing their learning outcomes with their peers, for example, the approach to feedback suggested in *the power of yet* (Dweck, 2014).

The discouragement of competition with other students can also be developed through test feedback. Leis and Wilson (2017) argued that language teachers could consider refraining from telling the mean score of the class when returning tests to students, which is a common habit among teachers, especially in Japan. Leis and Wilson (2017) suggested that giving the class average encourages students to compare their own scores with those of other students. As an alternative to giving class averages, Leis and Wilson (2017) recommended the use of an *idio-comparative marking method*, an approach to marking that gives individual students positive and negative comparisons to their previous test scores to show their personal progress. See Leis and Wilson (2017) for more on the idio-comparative marking method.

Teachers’ Praise for Students’ Ability

During the experiment conducted in this study, I made it a point to clearly praise students who were able to successfully complete the crossword puzzles. I did this to intentionally engender a temporary fixed mindset among the students experiencing failure by praising successful students in ways such as, “Wow, you are so smart!” and “You are great students!” These kinds of comments were chosen to reflect the types of praise for proficiency (e.g., Mueller & Dweck, 1998) and praise for person not process (e.g., Hattie & Timperley, 2007; Kamins & Dweck, 1999) that often appear in teaching handbooks focusing on language to use in the classroom. For example, some teaching materials concentrate only on the correct answer without encouraging self-correction when giving feedback to a student who gives an incorrect answer: “No—that’s not right. Will someone else try?” (Gardner & Gardner, 2005, p. 47). Other textbooks simply praise students for giving the correct answer, without any focus on the process the student used to get to that answer: “Good job!” (e.g., Aiba, Fujiwara, Byrd, & Barrows, 2016, p. 40; Matsuzaki Carreira, 2009, p. 11).

By regularly using feedback that consistently focuses on the process rather than the person, especially when praising or criticizing students, teachers of foreign languages create feelings that the students are in control of how they approach tasks and the success they experience with those tasks. Kamins and Dweck (1999) give examples of praise for person as, “You’re a good boy”; “I’m proud of you”; and “You’re really good at this” (Kamins & Dweck, 1999, p. 842). Such feedback is unproductive, as it results in children developing “a sense of contingent self-worth—that they are only able, good, and worthy when they are successful” (Johnston, 2012, p. 39). Alternatively, teachers who praise students for their efforts and thought processes, encourage students to adopt an approach to learning that suggests ability is malleable and see that change is the result of the hard work one expends (i.e., one aspect of the growth mindset) (Johnston, 2012). Examples of praise focusing on process include, “You must have tried really hard”; and “You found a good way to do it, can you think of other ways that may also work?” (Kamins & Dweck, 1999, p. 842).

Precision of Praise

In this study, students were praised for their performances after they had indicated that they had been able to complete the puzzles successfully. Similar praise might be given in regular classrooms after students have given the correct answer or completed a task successfully. For example, in a model classroom interaction during a task to facilitate speaking, Ong and Murugesan (2007) recommend teachers praise students at the end of an activity: “After several minutes, Mr. Martinez collects the cards and praises the students” (p. 37). Furthermore, the praise given in the above interaction, “That was great” (Ong & Murugesan, 2007, p. 34), does not give students any indication to what “that” is referring—their efforts, the accuracy of their responses, their returning the cards quickly, or various other possibilities. For praise to be effective, it must also be precise and constructive.

Further, in order for praise given to students to be taken in an intended manner, it is vital that teachers carefully consider the timing of feedback. Various studies have suggested that optimal benefits for students can be achieved when praise and other kinds of feedback is provided immediately after the behavior for which that praise is being offered has occurred (Arbel, Hong, Baker, & Holroyd, 2017; Opitz, Ferdinand, & Mecklinger, 2011). In the present study, students were praised after answering correctly, meaning the praise was precisely targeted at that correct answer. This, then, affected the attitudes of students who were unable to come up with the correct answers, as they were ineligible for praise. In EFL classes, when teachers give praise such as “Great” or “Thank you” after students have raised their hands, but before giving their answers,

the praise focuses on the effort the student has made to contribute to the class. Praising students' efforts can strengthen the growth mindset of both the students being praised and those around them. "Immediately providing students with praise for desired behaviour highlights for the student the connection between the desired behaviour and the praise, and prevents inadvertently reinforcing an intervening, less desirable, behaviour" (Alberto & Troutman, 1999, cited in Sutherland, Copeland, & Wehby, 2001, p. 47).

Thus, in order for teachers to encourage students to move away from the belief that they do not have control over the level of their performances (i.e., one aspect of the fixed mindset) and strengthen the attitude that their efforts and willingness to take calculated risks in challenging situations will lead to greater success (i.e., one aspect of the growth mindset), it is vital for language teachers to consider: (1) focusing praise and feedback at an individual level; (2) giving praise for the processes students go through rather than the students as persons; and (3) the precision in how the praise is expressed. Consideration of these three principles may be less likely to contribute to a fixed mindset among students, thus improving their performances in regular classes.

Conclusions

In the present study, I have focused on only one aspect of mindsets: the sense of control one has over an outcome. This feeling of control can be exhibited through one's effort and persistence. In the experiment, I investigated the effects of praise for ability aimed at successful students on those students experiencing failure. The results showed a tendency for these students to give up, with retrograded performance being observed in a post-test in which students would normally be expected to perform well. It could be argued, therefore, that although mindsets are firmly based within our beliefs, they may be changed depending on some negative experience: "[E]ven a single experience of failure can heighten anxiety and depression" (Johnson et al., 2017, p. 19). Building students' motivation to be persistent through difficult periods of study takes time—destroying it may only take one simple negative experience. Based on the results, I have suggested several implications for language teachers: carefully giving praise and test feedback based on individual bases, rather than performing comparisons with other students; and giving praise to students before they answer, in order to target the feedback on their willingness to contribute to class, not the accuracy of their responses.

As with all research, this study has its limitations. First, interviews with some participants in both the control group and experiment group may have

given clearer insights to students' reactions to the crossword puzzles, their feelings about the praise being given by the teacher, and thoughts about the success or lack thereof of other students in the classroom. In similar studies in the future, it would be advisable to add a qualitative component to the investigation, to obtain a more accurate portrayal of the students' perceptions of the praise being given by the instructor.

Second, if interviews had been conducted, I could also have gained an insight as to whether the depleted performance of the students in the experiment group were in fact due to the type of praise being given or simply because they had been expecting another puzzle that they could not solve. There is a possibility that some students had worked out that the puzzles were indeed impossible to complete, which may have served as the impetus for their giving up. This, rather than cheating, could have been the reason why some students added extra cells to the crossword puzzles or purposefully misspelled words to complete the puzzles. The results of the present study are similar to those of Dweck and Repucci (1973) and Mueller and Dweck (1998), in that the students who had received impossible puzzles appear to temporarily have changed their attitudes towards learning in a negative way. Like Mueller and Dweck (1998), in this study, I have focused these results on the praise given to students. In future studies, it may be advantageous to avoid priming a feeling of helplessness through impossible and possible puzzles, instead focusing on two different kinds of praise (i.e., praise for person and praise for process) in similar environments while mindful of ethical concerns. This may give strength to the argument that teachers need to be purposeful in the type of praise they give students in order to develop their growth mindsets.

Third, without the use of a questionnaire or other method to investigate students' mindsets before, during, and after the study, it is difficult to conclude that the experience of failure and peers being praised for success did indeed result in the students in the experiment group having fixed mindsets. In future studies, it may be beneficial to consider adding short items related to, for example, confidence or expectancy of success, before doing each puzzle in the experiment (see Leis, 2014). Doing so may give a clearer indication of the dynamics of students' mindsets throughout the study.

These limitations, however, do not necessarily diminish the results of this study, rather they give directions for future investigations in this important area of language education. By considering the suggestions for ways of praising and offering feedback, as presented in this paper, teachers may be able to help students see the benefits of effort and risk-taking in their language learning. Moreover, students may recognize that they do not need to compete with their peers in the classroom; they should focus more on competing with their own previous performances and seeking to improve. When a student approaches learning with a growth mindset and a feeling of "My only rival is the me of

yesterday,” the potential for learning, improved performance, and increased linguistic self-confidence is likely to follow.

Notes

The Test of English for International Communication (TOEIC) is a common test used in Japan to evaluate students' English proficiency. The maximum score is 990 and minimum score is 10.

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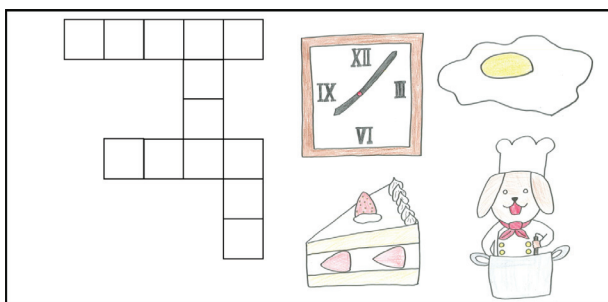
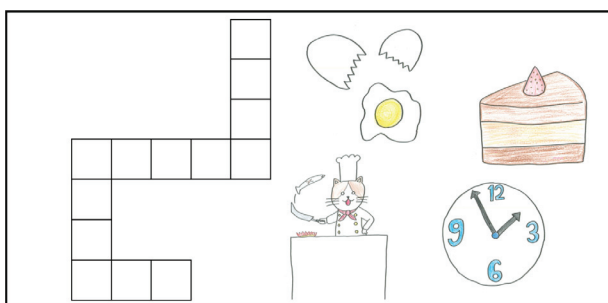
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Appendix A

Pretest and Posttest Puzzles

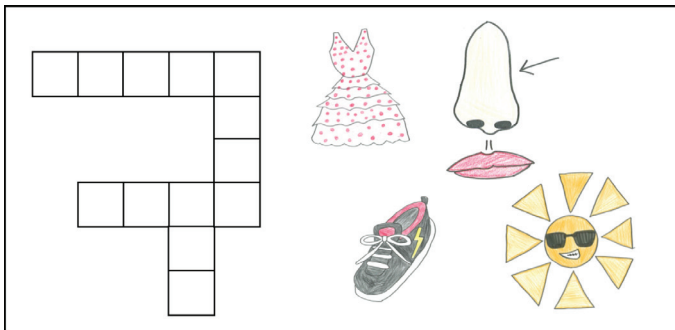
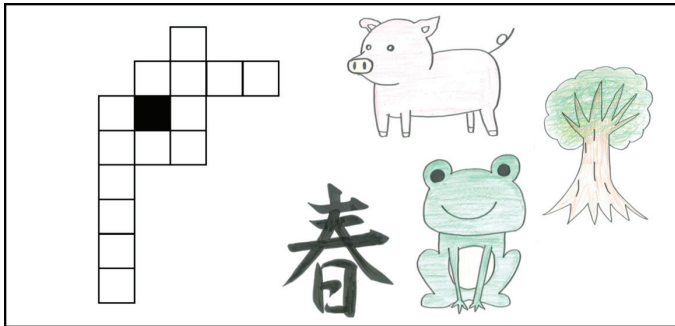
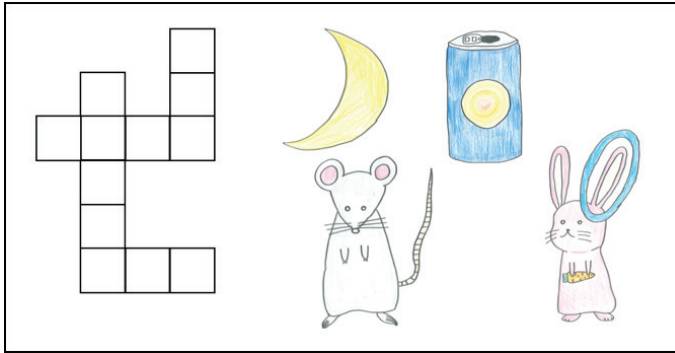
Appendix A shows the puzzles used by both the control group and the experiment group for the pre-test and post-test. The designs of the puzzles slightly differ in the pre-test and post-test but required participants in both groups to write the same words: cake, clock, cook, egg.

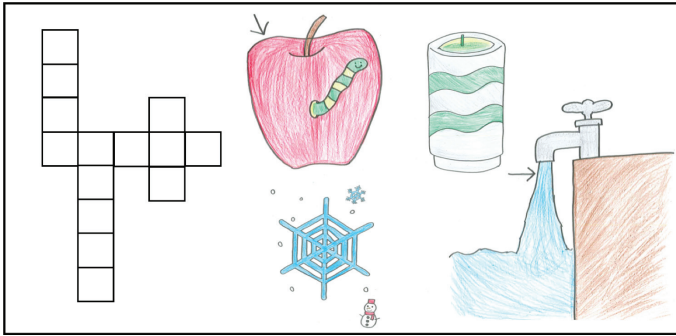


Appendix B

Control Group Experiment Puzzles

Appendix B shows the puzzles given to the control group during the experiment of this study. The participants were required to enter the words (from top puzzle): can, ear, moon, mouse; frog, pig, spring, tree; dress; shoe, nose, sun; apple, snow, tea, water.

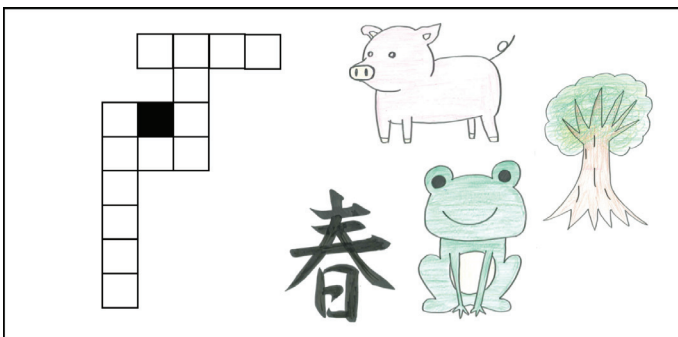
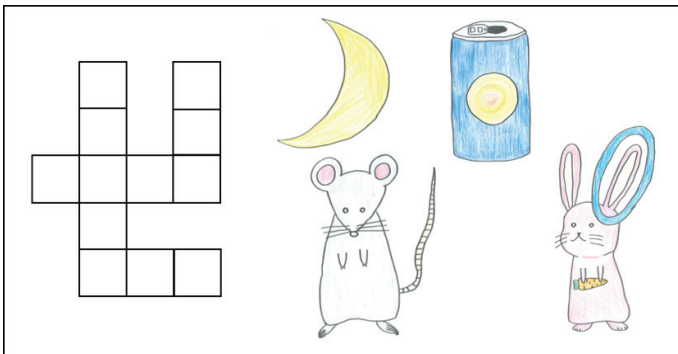


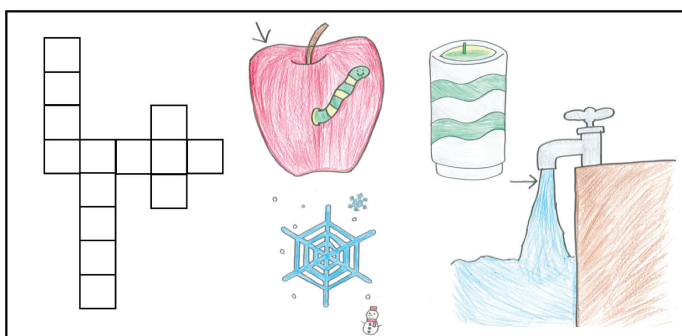
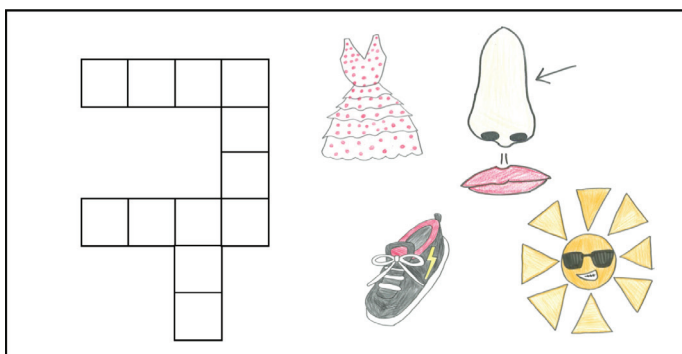


Appendix C

Experiment Group Experiment Puzzles

Appendix C shows the puzzles given to the experiment group during the experiment of this study. The puzzles were designed to be impossible to complete in order to prime a feeling of helplessness and a fixed mindset.





Adrian Leis

Das Lob im EFL-Unterricht: eine Growth Mindset-Perspektive

Zusammenfassung

In der vorliegenden Studie wird untersucht, wie sich das Loben von Studenten, die bei der Ausführung von Aufgaben erfolgreich waren, auf die Leistung sonstiger, erfolgloser Studenten auswirkt. Als Experiment wurden lösbare und unlösbare Kreuzworträtsel verwendet, um bei der Hälfte der Probanden Fixed Mindsets zu erzeugen. Die durchschnittliche Zeit für die Lösung eines Kreuzworträtsels im Vortest wurde mit der durchschnittlichen Zeit für die Lösung desselben Rätsels im Nachtest verglichen. Die Ergebnisse zeigten, dass die Studenten, denen lösbare Kreuzworträtsel aufgegeben wurden, imstande waren, die Geschwindigkeit, mit der sie das Rätsel in der Nachtest-Phase lösen konnten, wesentlich zu verbessern. Solche Leistungsverbesserungen wurden allerdings nicht bei den Studenten beobachtet, bei denen während des Experiments durch die Verwendung unmöglicher Kreuzworträtsel Fixed Mindsets erzeugt worden waren. Im Artikel werden die Gründe der erzielten Ergebnisse sowie pädagogische Implikationen in Bezug auf effektives Lob und andere Feedback-Methoden erörtert.

Schlüsselwörter: Growth Mindset, Misserfolg, Feedback, Studenten, Lob

