

2021

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Recommended Citation

Perks, B. J., Colpitts, B. D., & Michaud, M. (2021). The Role of Individual Preferences in the Efficacy of Written Corrective Feedback in an English for Academic Purposes Writing Course. *Australian Journal of Teacher Education*, 46(10).
<http://dx.doi.org/10.14221/ajte.2021v46n10.1>

This Journal Article is posted at Research Online.
<https://ro.ecu.edu.au/ajte/vol46/iss10/1>

The Role of Individual Preferences in the Efficacy of Written Corrective Feedback in an English for Academic Purposes Writing Course

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Abstract: This study examined the effectiveness of written corrective and the role of individual differences (ID) in the uptake of the feedback. Data was taken from a nine-week, English as a foreign language (EFL) writing course from 101 intermediate (n=101) students at a private university in Kobe, Japan. Using an explanatory sequential mixed methods design, quantitative data was first collected concerning writing errors, followed by qualitative semi-structured interviews. Three classes were placed into either two treatment groups (direct and indirect) or a control group, and completed four writing tasks (pre-test, post-test and two delayed post-tests). The study found the two treatment groups showed significant improvements on local and global errors, whereas the control group did not. Additionally, the qualitative component elicited the influence of affective factors. The study adds to the body of literature addressing the impact of written corrective feedback, specifically on students' self-editing strategies.

Introduction

Student preferences for learning can affect attitude, anxiety, motivation, and their overall success. Individual preferences for receiving corrective feedback (CF) is a relatively under-researched phenomenon in the field of second language acquisition (SLA). The present study investigated how important learners' beliefs on written corrective feedback (WCF) are on their own acquisition of language and in particular, academic writing skills and grammatical accuracy. Early corrective feedback studies focused on which form was most effective, with researchers producing varying findings advancing either indirect (using error codes to draw attention to an error) or direct forms (explicit feedback which clearly identifies and explains the error) as being more effective (Chandler, 2003; Ferris, 2002; Kubota, 2001)(see Table 1).

1. Indirect WCF using VT Verb Tense error
I never work [BP1] as a cashier until I get[BP2] a job there.

[BP1]VT

[BP2]VT

Direct WCF using VT Verb Tense error

2. I **had** never worked [BP1] as a cashier until I got[BP2] a job there

[BP1]~~work~~ = worked

[BP2]~~get~~ = got

Table 1: Examples of Usages of Indirect and Direct WCF

In contrast, more recent CF research places a greater focus on explaining the role of students' beliefs in determining the effectiveness of CF (Mahfoodh & Pandian, 2011; Rummel & Bitchener, 2015; Sheen, 2011). The overarching theory in this study is *individual difference* (ID), which is the premise that if a student believes that the type of feedback he/she is receiving is effective, then he/she may be more willing to engage with the feedback than a student who does not hold that belief (Sheen, 2011).

CF studies to date have mostly been either limited to quantitative group experimental studies examining which form of CF is more effective (Ellis, Loewen & Erlam, 2006; Ellis, 2012; Goo & Mackey, 2012; López et al., 2018; Shintani et al., 2014), or qualitative studies that explore students' thoughts on CF (Ferris, 2006; Hedgcock & Lefkowitz, 1994; Kulhavy & Stock, 1989; Mahfoodh & Pandian, 2011; Sheen, 2011). However, what is lacking is a clearly demonstrated correlation between learners who receive their preferred feedback type and produce an uptake in errors; in other words, whether the corrective feedback they receive produces a correct response in their writing. Uptake is operationalised in this study to measure the learners' reduction in writing errors after receiving corrective feedback (Lyster and Ranta, 1997).

The present study was undertaken at one private university near Kobe, Japan, and examined the impact of students' preferred type of CF on the improvement of their writing ability. The study examined three English as a Foreign Language (EFL) writing classes: one class which received its preferred treatment, one class which did not, and a third class which served as a control group and received no corrective feedback. Specifically, the study aimed to explain why receiving preferred CF during a treatment session increases uptake on targeted grammatical errors (verb tense, word order, word form, and correct usage of plural or singular just to name a few).

Literature Review

Research from a variety of SLA scholars highlights Japanese university students' difficulty in writing academic essays, underscoring the fact that these students often encounter difficulties in producing academic papers of the quality most study abroad destination universities demand (Nishigaki, Chujo, McGoldrick & Hasegawa, 2007; Takagi, 2001; Yasuda, 2014). Specifically, the problem is their inability to employ the conventions of academic writing and grammatical accuracy in English, even after years of EFL training. This is a trait they share with other learners across EFL in Asia (Gholami, Nejad, & Pour, 2014). Most SLA researchers

agree that English grammar instruction and academic writing instruction is essential if EFL students are to achieve their educational writing goals in producing a university level writing composition (Baleghizadeh & Gordani, 2012). Despite CF being extensively researched in the context of EFL writing, theoretical questions remain as to its beneficial impact on second language (L2) learning and acquisition. The usefulness of CF in writing was initially questioned in Truscott's (2001) argument that the only value WCF could add to the SLA field is in identifying surface-level writing errors, such as spelling and punctuation, but not complex structural errors.

WCF is an instructional reaction to correct a learner's written errors in writing. This reaction to a learner's errors and the interaction undertaken to correct it are encompassed in the *interaction hypothesis* which posits that input, possibly in the form of WCF, will push students to modify their output in future productions (Hatch, 1978; Long, 1981; Lyster, Saito & Sato, 2013). To fully test this theory, studies need to measure output in the form of new writing compositions, not just revisions of the same paper, to test if the participants have fully integrated the WCF. Studies by Ferris (2006) and Ashwell (2000) found target groups improved accuracy after receiving written CF; however, the post-test in this study only measured revision rather than the writing of a new text. A limitation in the research to date is that there have only been a few recent studies including this vital element. A caveat to the interaction hypothesis is the cognitive processes of the learner noticing the input, comprehending the corrections, integrating, and producing correct output (Gass, 1988; Gass & Mackey, 2020). An interrelated theory, the *pre-search availability theory* proposed by Kulhavy and Stock (1989) argued that feedback effectiveness is predicated on how much learners have to search for the answers themselves before feedback is given. This assertion was later corroborated by Shao (2015) who redefined it as *research availability*.

The mediating factor of students' reaction to WCF effectiveness is also a recent addition in studies in this field and needs to be explored further. Initially, Schmidt (1990) stated the amount of attention a learner gives to feedback may be affected by mediating cognitive, motivational, and affective factors, which are likely to have an impact on language acquisition. This was supported by Sheen's (2011) study, which was the first to observe students' ID when receiving CF. There is a need for a better understanding of this practice due to the difficulty Japanese university students experience in producing formal writing texts that conform to academic writing conventions. Previous research has not fully explained why ID in students is important in increasing academic writing accuracy.

Various attempts have tried to show a quantifiable link showing whether learners who receive their preferred feedback type produce an uptake in error reduction. Learners' aptitude and individual differences in WCF have been explored by Sheen (2011), and Hedgcock and Lefkowitz (1994). These studies produced non-conclusive findings as to whether learners' preference for certain types of feedback could affect their uptake. However, few or no studies have specifically investigated the effect of preferences on the uptake and retention of WCF, though several have indirectly found support for the idea that beliefs can affect students' use of WCF (Colpitts, 2016; Mahfoodh & Pandian, 2011; Storch & Wigglesworth, 2010). Rummel and Bitchener's (2015) findings are the most conclusive findings to date indicating a causal relationship: students who received their preferred type of feedback demonstrated a quantifiable decrease in errors, however the study used a small sample size ($n=42$).

The present paper aims to provide insight exploring whether and to what degree receiving their preferred WCF influences Japanese, university EFL students' writing accuracy when

revising their written work. The paper begins by outlining the framework of the study: the research questions, methodology, participants, research design, and sampling technique. The quantitative and qualitative instruments which were used are then described with reference to their intended roles in data collection. Following this, the authors explore the results of both data analyses, and how the two disparate data sets were integrated, as suggested in the literature (Creswell & Creswell, 2018; Creswell & Plano Clark, 2017; (Guetterman, Feters, & Creswell, 2015). Finally, the implications of these results are detailed in the Discussion section, after which a brief conclusion is offered along with the study's limitations.

Research Questions

The present study aims to address the following research questions:

1. How do students' preferences for a written corrective feedback type impact their writing accuracy?
2. Does receiving the preferred written corrective feedback affect writing accuracy?
Arising from research question two, is one sub-research question:
 - 2a. Which form of written corrective feedback is more effective over multiple writing tasks in terms of students' ability to self-edit in academic writing?

Study Significance

It is evident that there is a need to resolve the inadequacies in the academic writing ability of Japanese EFL students. The current study examined the value of WCF and attempted to disprove the notion that ID has no impact on improving students' writing accuracy. This was measured by assessing how well the two treatment groups (direct and indirect) were able to significantly improve their linguistic accuracy on several grammatical items as compared to a control group. The intended aim of this study was not to add to the extensive literature on whether one type of written CF works in the long term, but rather to assess the effectiveness of WCF for developing students' self-editing strategies. The study also aimed to test Kulhavy's (1989) theory by providing one treatment group (indirect) with metalinguistic feedback codes to show students where and what type of error is present, without identifying the error. The direct group, by contrast, received explicit feedback on their errors.

Methodology

The present study employed an explanatory sequential mixed methods design (ESMMD) in which a quantitative data collection phase was succeeded by a qualitative phase in order to provide greater understanding of the results of the first phase (Creswell & Plano-Clark, 2017). This design was chosen in consideration of a recent shift to move from quantitative studies to mixed methods studies in attempting to understand the effectiveness of WCF (Ferris, 2006; Mahfoodh & Pandian, 2011; Rummel & Bitchener, 2015; Sheen, 2011). An ESMMD is said to be "QUAN→qual" and is the most common approach found in Mixed Methods Research (MMR) studies (Teddlie & Yu, 2016).

Research Participants & Sampling

This study used a convenience sampling technique from five intact first year classes at a private university in Kobe, Japan. The classes consisted of 101 first year university students ($n=101$) for the quantitative phase of the study, all of whom consented to participation. The students were aged between 18 to 21, were economics majors, and were taking six to eight hours of English classes a week, with most being exposed to formal English instruction since junior high school. From the initial 101 students, 10 ($n=10$) volunteered to participate in the second phase of semi-structured QUAL interviews (four males and six females). Their opinions regarding the type of CF they received were elicited and compared.

Convenience sampling was determined to be the most appropriate for the present study. This is because it is a non-random sampling technique under which participants are selected for availability, accessibility, and or the willingness to volunteer (Dörnyei, 2007). It has been noted to be effective in establishing breadth (Etikan, 2016; Teddlie & Yu, 2016), which is consistent with the goals of the quantitative phase of the present study, and this form of sampling within a researcher's institution has been said to be the most common approach used in SLA studies (Dörnyei, 2007).

First year university students were selected to give the researchers information required to test writing conventions errors because they were less likely to have received university-level English academic writing instruction. Their regularly scheduled classes were accessible; thus, students were more willing to volunteer in the present study due to there being no additional time commitment required of them to participate in the treatment sessions. Moreover, random sampling would have required an additional time commitment from the participants, which could have restricted the participant numbers. Additionally, had participants left the experiment, it could have made the groups incomparable (Rosenthal & Rosnow, 2009).

However, non-random sampling has validity concerns, due to the possibility of differences between the groups affecting their comparability (Muijs, 2012). One means of addressing this issue is to choose subjects who meet some pre-established criteria (Seliger & Shohamy, 1989). The participants in the groups were thus matched alongside a range of variables, including university year, age, and previous English proficiency test scores (e.g., TOEIC, TOEFL, IELTS). As there is a lack of consensus on which type of CF is most effective, the application of different or no CF was not determined to be detrimental to the students' learning.

Research Design

A week prior to the pre-test the students were given information regarding the nature of the research in the participant consent form, specifically explaining the difference between direct and indirect feedback. Following this consent form, the students were given a questionnaire so as to find out about their written WCF beliefs. The students were randomly assigned into treatment groups regardless of whether they stated they preferred direct or indirect feedback, with some students receiving their preferred feedback type and others receiving a feedback option other than the one they selected. This was done with the aim of trying to determine if beliefs and preferences affect uptake.

Participants were randomly assigned to the indirect WCF group, direct WCF group, or a control group. The direct WCF treatment group only received direct feedback, the indirect WCF treatment group only received indirect feedback, and the control group received no feedback in response to errors committed. In the case of the direct group, the errors were identified on the student's writing tasks and the errors were corrected, the errors were also identified in the indirect group; however, no corrections were made, and the students were just provided with feedback from their instructor using metalinguistic codes (see Table 1). The codes used were: VT (verb tense), WF (word form), MW (missing word), WW (wrong word), ART (article), SVA (subject-verb agreement), SOBA (so, or, but, and), TS (topic sentence), and CS (concluding sentence). Experimental research was used to determine whether a specific treatment of WCF type influences uptake in writing accuracy outcome. The study determined how these groups scored on an uptake on writing errors. Using experimental treatment groups and a control group has proven value, reliability, and validity from previous corrective feedback research (Ellis, Sheen, Murakami & Takashima, 2008; Ferris, 2012; Perks, 2015, Rummel & Bitchner, 2015).

Uptake is central to corrective feedback studies, being used as the marker for effective corrective feedback / instruction. Uptake is used to refer to the repair rate of the student's response, in this study this was focused on writing forms of response in terms of a reduction of specific targeted grammatical errors and misuse of writing convention features in academic writing. Uptake was proven effective in this study if the students could accurately recognise and correct their writing after the teacher's correction, in other words recognise their verb tense error and then in subsequent writing tasks reduce or eliminate those targeted errors.

The treatment sessions consisted of four 150-200 word writing tasks, where either direct WCF or indirect WCF were given to respondents on 12 grammatical and content/organisation errors (see Appendix A). A group measurement of uptake on eliminating these errors was considered to be an indication of retention of WCF within the group.

Quantitative Instrument

The study executed a pre-treatment sorting questionnaire to all the participants. This closed-ended questionnaire documented the participants' preference for either direct or indirect forms of written corrective feedback. It was an efficient tool in surveying a potentially large sample of 101 students (Somekh & Lewin, 2011), as opposed to conducting individual interviews. Regardless of the participants' chosen preference, they were given WCF based on group allocation, effectively sorting participants into either receiving or not receiving their preferred WCF. This data collection technique is suitable in analysing the independent variables of preferred WCF form and type of WCF received. A pre-treatment session Chi-square test determined if the participants were in their preferred WCF group. This test was appropriate for isolating the two correlating variables of preferred WCF type and receiving WCF type. The random sorting process was designed to yield a reasonable number of participants receiving and not receiving their preferred WCF type for further data analysis.

Qualitative Instrument

In the second phase of the study, semi-structured interviews were conducted to elicit students' views about the feedback they received during the study (Ferris, 2012; Rummel & Bitchner, 2015) and expound on the QUAN results. An interview guide was developed (Appendix B) in an attempt to enhance the quality of data elicited in this phase of the study prior to the interviews. The guide was piloted using a technique called expert assessment in which a qualitative expert was consulted regarding the development of the guide (Kallio et al., 2016).

All interviews were recorded and transcribed, and the researcher conducting the interviews took extensive field notes. This researcher was also a fluent English and Japanese speaker. While students were encouraged to choose either English or Japanese when answering questions, most responded in Japanese or mixing both languages. Questions were similarly asked in Japanese and English depending on the students' level of proficiency and comfort. Allowing research participants to answer in their native language is said to enhance the quality of data (Dörnyei & Taguchi, 2010).

An ESMMD requires that the participants in the qualitative phase have also completed the quantitative phase of the study. Thus, students from the initial pool of 101 were asked to volunteer to participate in the second phase of the study in return for a small honorarium. Ten students agreed to participate in the interviews. The composition of participants from each group was as follows: direct group (1 female/0 males), and indirect group (4 females/ 5 males). No students from the control group volunteered to participate.

Results

Quantitative Analysis

In order to answer Research Question 2, exploring the relationship between students' beliefs about written CF and their performance after receiving written CF that either matched or did not match their beliefs needed to be investigated. As previously mentioned at the beginning of the study, students were asked their preference which type of feedback they preferred and which type of feedback they would like to receive in a writing class. Table 2 contrasts students' preferred feedback type with the treatment group they were designated. From the outset it is evident that most students preferred direct feedback, and as a result most of the participants in the indirect group were in their non-preferred group. Explaining ID in WCF in this study was possible because some participants were not in their preferred WCF treatment group.

		Preferred Group			
		Direct	Indirect	Control	Total
Designated Group	Direct	29	7	6	42
	Indirect	42	11	6	59
	Total	71	18	12	101

Table 2: Designated Group and Preferred Group Crosstabulation

In the direct group, 85% of students were in their preferred group and 15% were not. The indirect group was skewed in the opposite direction, with 43 students or 81% of the students not being allocated to their preferred WCF group, and 11 or 19% receiving their preferred WCF. Additionally, 12 students were in the control group. The finding for students' WCF preference towards direct forms of feedback is consistent with other researchers' findings in this area (Ellis et al., 2008; Lee, 2008; Ferris, 2010; Westmacott, 2017). This likely reflects Japanese EFL learners preference for having their errors corrected more explicitly (Motlagh, 2015). This could be due to the common way in which foreign languages are taught in Japan, which extols the importance of grammar instruction and error aversion. It seems that students who are accustomed to a teacher-centered environment express a preference for having their errors corrected directly by the teacher, who is seen as the source of knowledge.

In the present study, gains were recorded in student writing accuracy, not just on spelling errors or discrete grammatical errors, but complex grammatical errors referring to meaning and sentence structure. These findings contradict Truscott's (2001) theory on the usefulness of corrective feedback in writing that argues that the only value of written CF in SLA is in identifying basic writing errors such as spelling but not complex grammatical errors. That students were able to identify more complex error types is demonstrated in Table 3. Table 3 identifies the frequency of different kinds of errors committed (e.g., VT = Verb Tense; see full list in appendix A) by each group in the pre-test, post-test, first delayed post-test, and second delayed post-test.

	Direct				Indirect				Control			
	T1D	T1F	T2D	T2F	T1D	T1F	T2D	T2F	T1D	T1F	T2D	T2F*
VT**	27	14	40	18	50	16	45	24	17	15	13	10
WF	16	9	36	17	55	14	50	20	30	24	8	8
WW	46	18	55	20	105	24	75	32	45	39	20	20
MW	31	15	50	24	95	26	50	23	32	29	20	20
ART	15	10	35	17	40	16	35	15	14	11	5	5
SVA	6	2	12	6	22	7	15	7	6	4	4	2
SOBA	7	2	10	3	45	19	35	14	8	6	6	0
TS	9	4	14	5	10	1	20	9	4	3	2	0
CS	6	6	16	6	16	2	15	7	10	9	1	0

*Delayed Pre-Test 1 (T1D), Final Post-Test 1 (T1F), Delayed Post-Test 2 (T2D), and Final Post-Test 2 (T2F)

**T - Verb Tense, WF - Word Form, WW - Wrong Word, MW - Missing Word, ART - Article, SVA - Subject/Verb Agreement, SOBA - So, Or, But, And, TS - Topic Sentence, CS - Concluding Sentence

Table 3: Comparison of Frequency of Error Types by Treatment Group

Regarding the errors found in the students' writing samples, the researchers found a high concentration of errors in the following areas: verb tense, wrong word, missing word, and articles. Across the three groups, a high number of verb tense errors were found that may be attributed to the intermediate level of the students. Verb tense, wrong word choice, and missing word errors are most common among EFL learners, and this is more relevant among Japanese university students as they do not get enough practice when it comes to writing paragraphs and essays (Asaoka & Usui, 2003). Despite this, word form errors were considerably lower than other error groups. This could possibly be attributed to the focus on these errors that occurs in many English language classes in Japan. Subsequently, the noticeably large error counts regarding articles could be due to the fact that the Japanese language lacks articles and as a result, Japanese students often have difficulties with article usage (Asaoka & Usui, 2003).

Again, the pre-test and post-test scores represent drafts and finals of the same essay. This was operationalized in the study to test the interaction hypothesis. Furthermore, to fully test this theory this study measured output in the form of new writing compositions in the delayed post and delayed post-test two, not just revisions of the same paper, to test if the participants have fully integrated the WCF. Similar studies found target groups improved accuracy after receiving written CF (Ashwell, 2000; Ferris, 2006); however, the post-test in these studies only measured revision rather than the writing of a new text. Including a measurement on a new writing composition in uptake can assess the efficacy of WCF for developing students' self-editing strategies. To this effect, the pre-tests and post-tests aimed to answer the research question 2a: Which form of written corrective feedback is more effective over multiple writing tasks in terms of students' ability to self-edit in academic writing?

Descriptive statistics were calculated on the two treatment groups to address this question. The percentages reflect correct performance on the writing test task, which is 100% of

the total test. The scores are the percentages reflecting correct performance on the target structures and measuring accuracy over the 12 target errors on the four writing tasks. Differences between groups were also calculated. Table 4 displays the number of errors committed by each treatment group in each of the four assigned writing tasks.

Group	n	Pre-test		Post-test		Delayed Post-test 1		Delayed Post-test 2	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Direct	36	10.31	1.51	5	1.15	7.06	1.41	4.58	1.98
Indirect	55	9.57	1.32	3.94	1.26	8.24	8.34	3.84	4.00
Control	28	9.36	4.01	10.57	4.38	7.25	2.70	6.54	2.10

Table 4: Mean and Standard Deviation (SD) of Errors by Group Per Task

As can be seen in Table 4, the mean percentages on errors (see Table 3 for error types) at four testing periods—one pre-test and three post-test—were calculated separately for each of the three groups. The indirect group recorded the lowest number of errors committed in the delayed post-test two, which suggests that this form of WCF resulted in the highest amount of uptake overall. Curiously though, despite outperforming the other groups overall, the direct and control groups outperformed the indirect group in the first delayed post-test. The regression among the indirect group in the first delayed post-test may be a point for greater examination in future studies.

Qualitative Analysis

Students from all three treatment groups were invited to participate in the second phase of data collection, by offering their thoughts on the WCF process. Students’ responses were gathered and analyzed holistically. The interviewer analysed the data using two-cycle qualitative coding (Saldaña, 2015). Respondents’ answers were first examined, and emergent themes were coded. Another of the researchers then checked the data codes to ensure they accurately addressed the main themes that appeared in the data. These codes were then refined and narrowed by the research team. This process was done to achieve inter-rater reliability, thus enhancing the rigour of the study and to provide the researchers with a “more attuned perspective” (Saldaña, 2015, p. 11).

Five themes emerged from the QUAL portion of the research: 1. benefits of engaging in WCF; 2. perceptions of difficulty with WCF and English writing; 3. commitment to study outside of class; 4. feelings of nervousness regarding receiving feedback; and 5. students’ previous learning experiences and its impact on their expectations. The first theme encompassed similar benefits students perceived in the process of engaging in WCF. The second theme covered students’ self-assessed deficiencies in English writing and reasons for this. The third theme related to the amount of time and effort students put into understanding the feedback they were given, and into correctly revising their mistakes. The fourth theme concerned how the process of engaging in WCF made students feel. Finally, the fifth theme identified trends in

students' previous writing experience and how that impacted their expectations of the teacher and the feedback. The themes are detailed in Table 5.

Theme	# of Respondents Elicited From	Key Factors (# of Instances in Data)
1. Benefits of engaging in WCF	8	<ul style="list-style-type: none"> ● Perceived decrease in number of mistakes (8). ● Improvement in surface-level errors (4). ● Improvement in global writing skills (5).
2. Perceptions of difficulty with WCF and English writing	7	<ul style="list-style-type: none"> ● Difficulty in giving WCF (6). ● Found activity fun (2) and rewarding (1).
3. Commitment to study outside of class	6	<ul style="list-style-type: none"> ● 30 minutes - 1 hour of revisions outside of class (2). ● Little to no work outside of class (2). ● Unaccustomed to homework (1).
4. Feelings of nervousness regarding receiving feedback	7	<ul style="list-style-type: none"> ● Did not feel nervous about receiving WCF (7). ● Did feel nervous (2): wants Japanese language support (1); lacks computer proficiency (1).
5. Students' previous learning experiences and its impact on their expectations.	6	<ul style="list-style-type: none"> ● More relaxed atmosphere than high school English classes (2). ● Want Japanese language support (2). ● CF helps understand mistakes (2).

Table 5: Emergent Themes in Student Interview Data

Eight of the 10 students made explicit reference to the benefits of WCF. Among them, the most common response was that they perceived a decrease in the number of mistakes they made. While four of those students noted an improvement in surface level-errors, such as spelling and grammar, five commented that they had made improvements in deeper writing skills. Among these improved skills, was the ability to better structure sentences and paragraphs, a greater capacity to gather and order their ideas in written English, and proficiency in expressing themselves more clearly using simpler words. One student commented that she did not feel that the number of mistakes she made had decreased.

Seven students also discussed their own perceived inadequacies when writing in English. Six of the 10 students expressly stated they found the process of conducting WCF from somewhat to very difficult, while two found it not so difficult. The most common reason for this appeared to be a lack of experience with WCF and English writing in general. However, two students noted that they found the activity fun and although one said though she found the process difficult, she also felt it was rewarding when she was able to fix her own mistakes. Six of the students commented on the amount of time and effort they committed to completing their assignments outside of class. Two students reported doing 30 minutes to an hour of revision, while another two reported doing little to none. One student also commented that he was unaccustomed to doing homework. One student challenged the trend, simply reporting that she did a lot of extra work related to the WCF at home.

The fourth theme identified by the researchers was students' feelings about engaging in the process of WCF. Seven of the respondents did not report feeling nervous about the process of WCF and although two did report feeling nervous when receiving peer review, the process did

not interfere with the majority of students when it came to engaging in WCF. Of the two that did feel nervous, one reported that more difficult points should have been explained in Japanese, while the other cited a lack of computer proficiency as his reason for feeling uncomfortable with WCF.

The final salient theme revolved around students’ previous learning experiences in English classrooms and how that impacted their expectations. Six of the 10 students made some reference to this. Cultural variations in teaching style seemed to emerge, as students noted that they had not participated in this kind of activity in high school. Two students commented that their English teacher (who is Australian) was not as strict as their Japanese English teachers. While the students did not elaborate in detail, they did mention that the class had a more relaxed atmosphere and that they were unaccustomed to receiving feedback on writing. This might suggest differing teaching styles that affect the differing learning practices and pedagogical approaches of the Japanese and Australian education systems. Two students also stated they had wished some difficult points had been explained in Japanese, though the contrary opinion—that the teacher using only English pushed the students to speak and listen in English—was also expressed. Another two students noted that receiving CF helped them understand mistakes, which they said had been lacking in previous English classes. The cultural and pedagogical legacies left from students’ previous learning experiences may connect to their ID.

Discussion

This study’s findings add to a growing body of recent written CF research which found that written CF can lead to improved accuracy regarding certain linguistic features (Bitchener, 2008; Mahfoodh & Pandian, 2011; Sheen, 2011). In the present study, students showed improvements from the pre-test to the first delayed post-test. Significant gains were also seen on the second delayed post-test. This seems to indicate that students who received written CF were able to benefit from the feedback provided, even after several weeks. With the treatment (direct and indirect) groups recording a higher reduction in errors and a capacity to significantly improve their linguistic accuracy on twelve grammatical items. This rejects the null hypothesis that there is no significant difference between specified groups. The control group did not improve to the same extent as the treatment groups, and this indicates that the improvement of the feedback groups was not just the result of practice or exposure to the language from other sources. The study further demonstrated a correlational link between learners receiving their preferred feedback type and an uptake in errors. Students were asked whether or not they received their preferred treatment in a follow-up survey, and this was contrasted with their reduction in targeted errors. The results are displayed below in Table 6.

	Received the type of feedback they believed to be most helpful	Did not receive the type of feedback they believed to be most helpful
Reduced targeted errors	67	7
Did not reduce targeted errors	14	11

Table 6: Students Able to Eliminate Errors on Writing Task 4

This finding answers the second research question proposed in this study. RQ2 Does receiving the preferred written corrective feedback affect writing accuracy? Similar findings were found in Rummel & Bitchener's (2015) study and were the most conclusive findings to date indicating a causal relationship: students who received their preferred type of feedback showed a significant decrease in errors in a quantifiable measure of uptake. The present study, however, provides evidence to support these results with a much larger sample size.

Regarding research question 2 examining the effect of beliefs on WCF, this study added to the emerging area in this field that beliefs regarding the type of feedback that is most effective and helpful for the future influenced the Japanese participants' uptake of the written CF they received. Most of the students who received the type of feedback that they believed to be most effective were able to eliminate the targeted error category from their writing while the other students were not. Such results support the findings of other studies which showed learners who did not believe the feedback they received to be effective were reluctant to use it in their revisions and future writing (Rummel & Bitchener, 2015; Storch & Wigglesworth, 2010).

This study produced more conclusive findings in that 67 of 81 learners' preferences for certain types of feedback affected their uptake. This supports the idea that beliefs can affect students' use of WCF, as proposed by (Mahfoodh & Pandian, 2011; Storch & Wigglesworth, 2010). The results demonstrate a correlation between Japanese students' preference for having their errors corrected more explicitly and the teacher-centered atmosphere they experienced throughout much of their education. The findings support the notion of the interaction hypothesis in that the treatment given pushed students to adjust their output in subsequent writing tasks. The interviews corroborate these findings, with the majority of students noting that engaging in this kind of iterative writing process, in which they receive guided feedback from their instructor, was new but also beneficial to them. The students perceived a reduction in both surface-level, and structural errors in their own writing. That most students were not nervous during this process also speaks to their willingness to engage in more interactive forms of learning, despite their previous learning experiences.

The current study also tested the pre-search availability theory. The quantitative analysis of student uptake does indeed suggest that students in the indirect group showed the greatest overall improvement from the pre- to post-test, and again from the first to second delayed post-test. This supports the argument that the learners noticed the input, comprehended the corrections, then integrated and produced correct output. This is contrary to the noticing input theory (Gass, 1988) that argues explicit or direct forms of corrective feedback are more effective due to the errors being located and corrected in the writing tasks and that indirect WCF might be ineffective due to no error corrections being given. This adds to the potential for this input to be converted to uptake as suggested by the noticing hypothesis. If the input is salient, students focus on the correct form in revisions or future writings, which are considered output. When considered within such a framework, learners in this study were able to use the input, if it was salient to them, to improve their written accuracy on output in the form of new pieces of writing. In the current study, both feedback groups (direct and indirect) were able to significantly improve their linguistic accuracy and the indirect group was able to use the input, which suggests it was effective.

The focus on teachers being a source of information, rather than facilitator, in East Asian EFL contexts inhibits student ability to improve self-editing skills and error cognizance (Ellis et al., 2008; Lee, 2008; Ferris, 2010; Westmacott, 2017). Again, the findings from the qualitative portion of this study suggest students had positive feelings about engaging in the process of

WCF and its impact on their writing ability. The students lack of confidence in their own writing ability and in fixing their mistakes likely reflects a lack of training in grade school. Students' comments on the treatment were varied, but certain themes emerged. Moreover, 80% of the students interviewed shared positive views regarding WCF. Most notably, there was general sentiment amongst students regarding a feeling of self-improvement in grammar, spelling, syntax, conciseness, and coherence from interviews with them.

The in-depth qualitative interviews conducted after the corrective feedback treatment sessions did explore, and somewhat explain, the mediating factors affecting students' CF preference. Student preferences towards corrective feedback did reflect the notion of ID, in that they did vary from student to student which supports the finding of several previous studies (Rummel & Bitchener, 2015; Sheen 2011). In the indirect group, seven students who did not receive their preferred WCF type described frustration with the teacher not providing explicit corrections on their writing tasks, and two students reported that they felt uncomfortable having a teacher point out all of their mistakes. These comments illustrate the nature of the specific relationship between instructor feedback and student anxiety, exploring student affect with receiving or not receiving their preferred type of WCF in an academic setting. According to Kimura (2008), learner anxiety is a crucial affective factor responsible for individual differences in the success or failure of SLA learning. This is linked to the notion that anxiety generated from instructor feedback could make students feel demotivated or anxious about their writing (Krashen, 1984; Truscott, 1996; Zamel, 1985). What is certain is that motivation is a main factor in second or foreign language achievement (Dörnyei, 2009). What is not certain is whether the factors of motivation involved in students not receiving their preferred WCF type could lead to low motivation and not taking the teachers' feedback seriously (Guenette, 2007). Eight students in the indirect group did state they felt they could not correct the errors themselves and commented that this process was too difficult. Another student commented correcting errors was "bothersome", which highlights a lack of motivation from not receiving their preferred form of WCF.

This is contrasted with four students in the indirect WCF group (their preferred group) reacting more positively, reporting they understood the error code process and expressing pleasure in seeing their mistakes decrease in subsequent writing tasks. These varied comments from the interview highlight the relevance of ID in WCF, displaying the notion that if a student believes that the type of feedback they are receiving is effective, then they may be more willing to engage with the feedback than a student who does not hold that belief.

Conclusion

The aim of this study was to investigate whether the type of WCF influenced the ability of students to improve their linguistic accuracy over a range of grammatical errors and writing conventions, and also whether beliefs had an impact on the degree to which students improved their language accuracy after receiving WCF. In addressing these research questions, the study was able to produce a correlation between learners who received their preferred feedback type and producing an uptake in errors with an in-depth explanation. A major finding from this study was that a clear majority of the students who received the type of feedback that they believed to be most effective were able to reduce targeted errors in writing tasks. Such results support the findings of previous studies (Rummel & Bitchener, 2015; Storch & Wigglesworth, 2010) which

showed learners who did not believe the feedback they received to be effective were reluctant to use it in their revisions and future writing. Investigating mediating factors such as expectations may offer further insight into the true effectiveness of corrective feedback and help understand why corrective feedback works in certain cases but not in others. The results from the writing interventions and student interviews indicate that educators should consider students' ID with reference to CF and to take a more personalized approach to providing feedback: one that recognizes students' beliefs. This lends to the argument that there should be more communication between teachers and students about the type of feedback they receive, thus making them more receptive to the process of corrective feedback in academic writing in formal education.

Limitations

The present study was situated in the Japanese, higher education EFL context and thus may not be applicable to other teaching contexts in and outside of Japan. The lack of participation in the interview phase by members of the direct CF and control groups limited the ability of the researchers to extrapolate insights from the interviews and use them to draw comparisons between the varied experiences students had with different feedback approaches. The researchers thus acknowledge that the findings were restricted by the willingness of certain groups of students to participate and hope this will serve to inform the research design of this and other studies of a similar nature in the future. Future studies on the same theme might aim to elicit more feedback from each treatment group.

References

- Asaoka, C., & Usui, Y. (2003). Students' perceived problems in an EAP writing course. *JALT Journal*, 25(2), 143-172. <https://doi.org/10.37546/JALTJJ25.2-2>
- Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method?. *Journal of Second Language Writing*, 9(3), 227-257. [https://doi.org/10.1016/S1060-3743\(00\)00027-8](https://doi.org/10.1016/S1060-3743(00)00027-8)
- Baleghizadeh, S., & Gordani, Y. (2012). Motivation and quality of work life among secondary school EFL teachers. *Australian Journal of Teacher Education*, 37(7). <https://doi.org/10.14221/ajte.2012v37n7.8>
- Bitchener, J. (2008). Evidence in support of written corrective feedback. *Journal of second language writing*, 17(2), 102-118. <https://doi.org/10.1016/j.jslw.2007.11.004>
- Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. *Journal of Second Language Writing*, 14, 191-205. <https://doi.org/10.1016/j.jslw.2005.08.001>
- Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing*, 12, 267-296. [https://doi.org/10.1016/S1060-3743\(03\)00038-9](https://doi.org/10.1016/S1060-3743(03)00038-9)
- Colpitts, B. D. F. (2016). Japanese students' perceptions of peer corrective feedback in an EFL classroom. *Acta Humanistica et Scientifica Universitatis Sangio Kyotiensis*, 49, 345-358.

- Creswell, J., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd edition). Sage Publications.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Dörnyei, Z. (2007). Creating a motivating classroom environment. In J. Cummins, & C. Davison (Eds.), *International handbook of English language teaching* (pp. 719-731). Springer.
https://doi.org/10.1007/978-0-387-46301-8_47
- Dörnyei, Z. (2009). *The psychology of second language acquisition*. Oxford University Press.
- Dörnyei, Z., & Taguchi, T. (2010). *Questionnaires in second language research: Construction, administration, and processing* (2nd edition). Routledge.
<https://doi.org/10.4324/9780203864739>
- Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). Effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System*, 36, 353-371. <https://doi.org/10.1016/j.system.2008.02.001>
- Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition*, 28(2), 339-368.
<https://doi.org/10.1017/S0272263106060141>
- Ellis, R. (2012). *The study of second language acquisition*. Oxford University Press
- Etikan, I. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
<https://doi.org/10.11648/j.ajtas.20160501.11>
- Ferris, D. R. (2002). Treatment of error in second language writing classes. University of Michigan Press. <https://doi.org/10.1017/CBO9781139524742.007>
- Ferris, D. R. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 81-104). Cambridge University Press.
- Ferris, D. R. (2010). Second language research and written corrective feedback in SLA: Intersections and practical applications. *Studies in Second Language Acquisition*, 32, 181-201. <https://doi.org/10.1017/S0272263109990490>
- Ferris, D. R. (2012). Written corrective feedback in second language acquisition and writing studies. *Language Teaching*, 45(4), 446-459. <https://doi.org/10.1017/S0261444812000250>
- Gass, S. M. (1988). Second language vocabulary acquisition. *Annual Review of Applied Linguistics*, 9, 92-106. <https://doi.org/10.1017/S0267190500000829>
- Gass, S. M., & Mackey, A. (2020). Input, interaction, and output in second language acquisition. In B. VanPatten, G. D. Keating, & S. Wulff (Eds.), *Theories in second language acquisition: An introduction* (3rd ed., pp. 194-220). Routledge.
<https://doi.org/10.4324/9780429503986-9>
- Gholami, J., Nejad, S. R., & Pour, J. L. (2014). Metadiscourse markers misuses; a study of EFL learners' argumentative essays. *Procedia-Social and Behavioral Sciences*, 98, 580-589.
<https://doi.org/10.1016/j.sbspro.2014.03.454>
- Goo, J., & Mackey, A. (2012). The case against the case against recasts in acquisition. *Studies in Second Language Acquisition*, 33(7), 127-165.
<https://doi.org/10.1017/S0272263112000708>
- Guenette, D. (2007). Is feedback pedagogically correct?: Research design issues in studies of feedback on writing. *Journal of Second Language Writing*, 16(1), 40-53.
<https://doi.org/10.1016/j.jslw.2007.01.001>

- Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *Annals of Family Medicine*, 13(6), 554-561. <https://doi.org/10.1016/j.jslw.2007.01.001>
- Hatch, E. M. (1978). *Second language acquisition: A book of readings*. Newbury House Publishers.
- Hedgcock, J., & Lefkowitz, N. (1994). Feedback on feedback: Assessing learner receptivity to teacher response in L2 composing. *Journal of Second Language Writing*, 3(2), 141-163. [https://doi.org/10.1016/1060-3743\(94\)90012-4](https://doi.org/10.1016/1060-3743(94)90012-4)
- Iwashita, N. (2003). Negative feedback and positive evidence in task-based interaction: Differential effects on L2 development. *Studies in Second Language Acquisition*, 25(1), 1-36. <https://doi.org/10.1017/S0272263103000019>
- Kallio, H., Pietila, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954-2965. <https://doi.org/10.1111/jan.13031>
- Kimura, H. (2008). Foreign language listening anxiety: Its dimensionality and group differences. *JALT Journal*, 30(2), 173-196. <https://doi.org/10.37546/JALTJ30.2-2>
- Krashen, S. D. (1984). *Writing, research, theory, and applications*. Pergamon Press.
- Kubota, M. (2001). Error correction strategies used by learners of Japanese when revising a writing task. *System*, 29, 467-48. [https://doi.org/10.1016/S0346-251X\(01\)00026-4](https://doi.org/10.1016/S0346-251X(01)00026-4)
- Kulhavy, R. W., & Stock, W. A. (1989). Feedback in written instruction: The place of response certitude. *Educational Psychology Review*, 1(4), 279-308. [https://doi.org/10.1016/0361-476X\(90\)90028-Y](https://doi.org/10.1016/0361-476X(90)90028-Y)
- Lee, I. (2008). Student reactions to teacher feedback in two Hong Kong secondary classrooms. *Journal of Second Language Learning*, 17, 144-164. <https://doi.org/10.1016/j.jslw.2007.12.001>
- Long, M. H. (1981). Input, interaction, and second-language acquisition. *Annals of the New York academy of sciences*, 379(1), 259-278. <https://doi.org/10.1111/j.1749-6632.1981.tb42014.x>
- López, M. B., Van Steendam, E., Speelman, D., & Buyse, K. (2018). The differential effects of comprehensive feedback forms in the second language writing class. *Language Learning*, 68(3), 813-850. <https://doi.org/10.1111/lang.12295>
- Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition*, 19(1), 37-66. <https://doi.org/10.1017/S0272263197001034>
- Lyster, R., Saito, K., & Sato, M. (2013). Oral corrective feedback in second language classrooms. *Language Teaching*, 46(1), 1-40. <https://doi.org/10.1017/S02614448120003655>
- Mahfoodh, O., & Pandian, A. (2011). A qualitative case study of EFL students' affective reactions to and perceptions of their teachers' written feedback. *English Language Teaching*, 4(3), 14-25. <https://doi.org/10.5539/elt.v4n3p14>
- Motlagh, L. N. (2015). Who do learners prefer to be corrected by? Teachers or classmates? *Procedia-Social and Behavioral Sciences*, 199, 381-386. <https://doi.org/10.1016/j.sbspro.2015.07.522>
- Morse, J. M., & Niehaus, L. (2009). *Mixed method design: Principles and procedures*. Left Coast Press.

- Nishigaki, C., Chujo, K., McGoldrick, S., & Hasegawa, S. (2007). A cross-sectional contrastive analysis of Japanese students' English composition skills. *The Journal of Asia TEFL*, 4(1), 27-54.
- Nishimuro, M., & Borg, S. (2013). Teacher cognition and grammar teaching in a Japanese high school. *JALT Journal*, 35(1), 29-50. <https://doi.org/10.37546/JALTJJ35.1-2>
- Onwuegbuzie, A. J., & Johnson, R. B. (2006). The validity issue in mixed research. *Research in the Schools*, 13(1), 48-63.
- Perks, B. (2015). Investigating the impact of corrective feedback on inflectional morphemes acquisition. *Vocabulary Education & Research Bulletin*, 2(2), 2-4.
- Rosenthal, R., & Rosnow, R. L. (2009). *Artifacts in behavioral research: Robert Rosenthal and Ralph L. Rosnow's classic books*. Oxford University Press.
<https://doi.org/10.1093/acprof:oso/9780195385540.001.0001>
- Rummel, S., & Bitchener, J. (2015). The effectiveness of written corrective feedback and the impact that learners' beliefs have on uptake. *Australian Review of Applied Linguistics*, 38(1), 66-84. <https://doi.org/10.1075/aral.38.1.04rum>
- Saldaña, J. (2015). *The coding manual for qualitative researchers* (3rd ed.). Sage Publications.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129-58. <https://doi.org/10.1093/applin/11.2.129>
- Seliger, H. W., & Shohamy, E. G. (1989). *Second language research methods*. Oxford University Press.
- Shao, X. (2015). On written corrective feedback in L2 writing. *English Language Teaching*, 8(3), 155-168. <https://doi.org/10.5539/elt.v8n3p155>
- Sheen, Y. (2011). *Corrective feedback, individual differences and second language learning*. Springer Netherlands. <https://doi.org/10.1007/978-94-007-0548-7>
- Shintani, N., Ellis, R., & Suzuki, W. (2014). Effects of written feedback and revision on learners' accuracy in using two English grammatical structures. *Language Learning*, 64(1), 103-131. <https://doi.org/10.1111/lang.12029>
- Somekh, B., & Lewin, C. (Eds.). (2011). *Theory and methods in social research*. Sage Publications.
- Storch, N., & Wigglesworth, G. (2010). Learners' processing, uptake, and retention of corrective feedback on writing: Case studies. *Studies in Second Language Acquisition*, 32(2), 303-334. <https://doi.org/10.1017/S0272263109990532>
- Takagi, A. (2001). The need for change in English writing instruction in Japan. *The Language Teacher*, 25(7) 5-9.
- Teddlie, C., & Yu, F. (2016). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, 1(1), 77-100. <https://doi.org/10.1177/1558689806292430>
- Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language learning*, 46(2), 327-369. <https://doi.org/10.1111/j.1467-1770.1996.tb01238.x>
- Truscott, J. (2001). Selecting errors for selective error correction. *Concentric: Studies in English Literature and Linguistics*, 27, 225-240.
- Westmacott, A. (2017). Direct vs. indirect written corrective feedback: Student perceptions. *Íkala, Revista de Lenguaje y Cultura*, 22(1), 17-32.
<https://doi.org/10.17533/udea.ikala.v22n01a02>
- <https://doi.org/10.17533/udea.ikala.v22n01a02>

Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal*, 86, 54-66. <https://doi.org/10.1111/1540-4781.00136>

Yasuda, S. (2014). Issues in teaching and learning EFL writing in East Asian contexts: The case of Japan. *Asian EFL Journal*, 16(4), 150-187.

Zamel, V. (1985). Responding to student writing. *TESOL Quarterly*, 19(1), 79-101. <https://doi.org/10.2307/3586773>

Appendix A

Local errors — Grammatical/Meaning

VT = verb tense	WF = word form	WW = wrong word	^ = missing word
WO = word order	PL/SL = plural/singular	SP = spelling	Word = unnecessary word

Global errors - Content/organization of Topic Sentence

B = Broad	N = Narrow	A = Announcing
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Appendix B

Interview form

Participant's name

Interview date

Treatment group

Direct / Indirect / Control (Please circle)

Interviewed by

Initial Categorization

Yes No

Did the participant receive their preferred WCF type

Comments:

How did you feel about the feedback you received for the writing assignments?

Was the feedback helpful?

Did the feedback improve your writing skills?

(e.g., constructing a topic sentence, supporting sentence, details and examples and concluding sentence)

Did the feedback reduce your writing errors?

Did the feedback make you feel nervous about your writing abilities?

Did you enjoy receiving feedback? Did you feel the teacher was trying to help?

Did you feel like the teacher was attacking your writing abilities?

Did you read the teacher's comments carefully?