

A Systematic Literature Review: Direct and Indirect Feedback Strategies in EFL Contexts

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Article information	Abstract
<p>Article history: Received: 17 Jun 2023 Revised: 25 Sep 2023 Accepted: 26 Oct 2023</p> <p>Keywords: Direct feedback Indirect feedback Systematic literature review Feedback in EFL contexts</p>	<p><i>To date, there has been mounting research evidence on the impact of written corrective feedback. In response to this, reviews have been conducted to condense either findings or methodologies through the combined analysis of EFL and ESL studies. Although syntheses shed light on the topic, no one provides exclusive insights into EFL realities. Therefore, this systematic literature review was proposed to synthesize methodologies, findings, and research suggestions of EFL articles analyzing direct and indirect feedback, two widely debated and employed strategies in classrooms, with either a focused or unfocused scope. Through a seven-step protocol suggested by Petticrew and Roberts (2006), 21 EFL primary studies published between 2012 and 2022 were selected from the bibliometric dataset of Crosthwaite et al. (2022), which contains articles retrieved from the Scopus database. The papers were read through to answer five research questions on methodologies, findings, and study suggestions. The results show that most EFL studies were quasi-experimental adopting a quantitative approach with a pretest-posttest-delayed-posttest or pretest-posttest design, and the strategies significantly impinged on grammar and non-grammar aspects. Suggestions are given to further study the impact of feedback under different conditions such as targets, proficiency levels, and strategies and scope with a comparative nature.</i></p>

INTRODUCTION

A natural developmental stage in second language (L2) acquisition (Ferris, 2011) is making errors. However, if they are not attended to through either instruction or feedback, their fossilization may occur (Lightbown & Spada, 2013). Consequently, instructors apply correction strategies to make L2 learners aware of the differences between their target language (TL) and their developing language and, hence, help them reach mastery in the TL. In this line, written corrective feedback (hereafter WCF) has become a commonly used technique to correct errors in writing.

WCF is considered a key classroom practice for reacting to writers' errors (Bagheri & Rassaei, 2022). It is provided in written form from different sources and is characterized by its adaptability in terms of scope and strategies. To illustrate, feedback can come from oneself, peers, teachers, or software. Its scope can be focused (targeting a specific number or category of errors) or

unfocused (correcting every error in a task) (Cárcamo, 2020). Besides, its strategies can be indirect (indicating errors through codes or cues only), direct (marking errors and providing their correct forms), electronic (given via electronic means such as email, chats, or forums), reformulation (rewriting inaccurate constructions), and metalinguistic (locating an error and explaining its nature) (Ellis, 2009). Overall, it seems that, thanks to its versatility, WCF has become widely applied in writing.

Because of its popularity, WCF has received much research attention. To date, there has been a proliferation of studies (Crosthwaite et al., 2022) to understand its impact on the development of writing. Mainly, authors have studied and debated the effects of direct and indirect strategies (Crosthwaite et al., 2022; Ferris, 2011; Mohebbi, 2021). Studies like Afruzi et al. (2022), Aghajanloo et al. (2016), and Bozorgian and Yazdani (2021) advocate for the benefits of direct feedback, whereas Fukuta et al. (2019), Jamalinesari et al. (2015), and Mujtaba et al. (2020) advocate for the benefits of indirect feedback. In addition, investigations have found benefits in either scope approach but with no final decision as to which fares better (e.g., Aghajanloo et al., 2016; Budianto et al., 2020; Frear & Chiu, 2015; Lee et al., 2021; Mohammadreza, 2022; Rahimi, 2019). Thereupon, there is no consensus on the impact of either strategies or scopes.

Since the amount of research information on WCF is mounting, authors have attempted to synthesize it in either narrative (e.g., Ferris, 2012) or more structured (e.g., Liu & Brown, 2015) literature reviews. Narrative reviews are entirely based on experts' perspectives, and systematic literature reviews (SLR) are more structured studies that include focused methods and rigorous protocols (Bearman et al., 2012). Of either nature, some works have provided class teachers with condensed information about the impact of WCF on writing accuracy (e.g., Ferris, 2012; Mao & Lee, 2020), while others have synthesized methodologies, which is more useful information for researchers (e.g., Crosthwaite et al., 2022; Liu & Brown, 2015). As a result, reviews have provided WCF results for either researchers or teachers, so a review targeting both populations is needed.

Another limitation in previous reviews is describing the status of WCF as a whole. First, syntheses included multiple correction strategies to conclude the effects of feedback (e.g., Mao & Lee, 2020), so results explain that WCF can have a positive impact on error correction but they do not identify which strategy or strategies are effective. Further, studies like Crosthwaite et al. (2022) encompassed papers on varied research topics such as perceptions, strategies, and even other reviews to suggest future investigations. However, it is unknown in which feedback areas those suggestions can fit. Consequently, these broad findings may make teachers and researchers indecisive when selecting a strategy or methodology due to the lack of specificity.

Similarly, the context in which reviewed papers were conducted is not considered. This lack of differentiation between English as a foreign language (EFL) and as a second language (ESL) may have impacted the results of reviews since contexts could have influenced the selection of methodologies and the results of reviewed papers. To illustrate, Ferris (2011) and Reid (2005) explain that ESL and EFL learners make different errors, so target linguistic structures should not be similar between EFL and ESL studies; hence, generalizing the effects of a strategy over all types of errors may be inappropriate. Moreover, Ferris (2011) maintains that some WCF

strategies that work in EFL may not work in ESL because EFL learners have a more formal English education. Hence, encompassing all strategies in reviews and concluding that they are effective might be inapplicable to some settings. Finally, ESL and EFL learners present different behaviors and levels of motivation (Hedgcock & Lefkowitz, 1994; Sato & Storch, 2020). Usually, ESL students do not attend feedback as much as EFL ones since their main goal is to meet a school requirement rather than improve their language to become EFL-competent users. Then, there may be strategies that work better with EFL than with ESL learners. Briefly, contextual factors influence the effect of a teaching method (Prabhu, 1990), so differentiating contexts should be considered when conducting reviews so that reported results may be more representative of realities.

For the abovementioned, there is a need to provide teachers and researchers with information that may be both more descriptive of their reality and focused on commonly used feedback strategies rather than broad insights. Therefore, this SLR is posited to synthesize both methodologies and findings of EFL studies comparing direct and indirect feedback with either a focused or unfocused scope. The findings will hold value for researchers and teachers working in EFL settings in having a vivid picture of the current state of research on direct and indirect feedback in EFL contexts. A comparison between ESL and EFL settings is beyond the scope of this SLR.

LITERATURE REVIEW

In the light of mushrooming WCF studies, some works have attempted to synthesize findings as well as methodological features. These studies have adopted either a narrative or a more structured nature to analyze influential papers making important contributions to map the state of WCF.

In the case of narrative reviews, Ferris (2012) laid out a summary of results from studies arguing that WCF had positive effects in helping students master grammatical aspects like article use. Bitchener (2012), for his part, found that focused WCF effectively impinged on grammar accuracy and low-proficiency learners benefited from direct feedback, whereas advanced ones benefited from indirect feedback. Despite the positive effects, Lee (2012) found scarce evidence showing that WCF research outcomes have directly impacted the real classroom. Thus, she suggested leaving lab-like settings to conduct classroom-based studies and identify which factors (e.g., proficiency level, student motivations, and institutional contexts) influence WCF provision. In this respect, Bitchener (2012) affirmed that there were factors determining how successful students could process WCF and listed motivation, context, and class activities as influential variables. In sum, the authors recognized that context, types of feedback, and learners' characteristics can influence both processing and provision of feedback.

In this line, Lee (2019) declared that learners did not efficiently process nor did they respond to unfocused feedback because it cognitively overwhelmed them. Further, the scope was time-consuming for teachers since it impeded them from working with other important writing aspects, so focused feedback was suggested. However, Lee advised further research into scope

and strategies to learn how different variables influence WCF provision and processing, and Bitchener (2012) suggested including more complex and idiosyncratic grammatical targets and not only traditional ones such as the simple past tense or article use. In short, teaching-learning variables may alter the effects of WCF.

Regarding SLRs, Liu and Brown (2015) synthesized methodologies from feedback studies and found that reporting moderating variables like the presence/absence of grammar instruction or length of writing was often missing. They also identified classroom-based research and unfocused feedback as frequently adopted features in papers and recommended future research on how participants' characteristics can influence the retention of WCF gains in the short and long term. Closely related, Chong (2019) urged for WCF studies embracing personal and contextual factors after observing that quasi-experimental designs with a control group and pretest-treatment-posttest(s) measurement were common to investigate the impact of diverse feedback strategies on word-level errors of low, intermediate, and advanced English learners. Most of his reviewed studies were from the USA and New Zealand. Mao and Lee (2020), for their part, tracked the advancement of studies on feedback scope by focusing on methodologies, too. They explained that quantitative studies were dominant, so data coming from qualitative and mixed-methods designs were needed for a comprehensive picture of WCF effects. Besides, they stressed that there is little attention to the impact of scope on writing development, so they advocated for research into comparing focused and unfocused feedback as well as analyzing how learners' cultural background and cognitive/affective factors can act as moderating variables.

Finally, Crosthwaite et al. (2022) embarked on a bibliometric analysis of the development of WCF research to pinpoint: 1) highly researched topics and languages; 2) highly cited authors and works; and 3) the most productive journals and geographical sources. The authors reported that English was the main target language of studies, and interest in studying writing performance and peer, direct, and indirect feedback had increased over the last decade. Likewise, they noticed that Ferris, Bitchener, and Lee were highly cited authors, and the USA, China, and Iran had become the most productive countries in feedback research with a high citation frequency in the field. Lastly, they propose future studies conducted in authentic classrooms, at different educational and proficiency levels, and in underrepresented regions.

Based on the aforementioned syntheses, it is evident that the narrative reviews mainly focused on WCF effects, whereas SLRs addressed methodologies and the evolution of research. Although this information on effects serves to value WCF as a class tool, it is still too broad since all narratives and the SLR by Mao and Lee (2020) provide information on the overall impact of feedback with no specification as to which strategy may be more effective than another and under which conditions. Hence, it is not clear for class teachers to select one feedback strategy and/or scope to apply in writing lessons. In addition, the insights provided by SLRs into research designs, data reports, and feedback research development, regardless of context, target L2, WCF strategy, or target linguistic structure, are useful for researchers only. To finish, the findings of the cited reviews are grounded on a mixture of EFL and ESL papers, thus, neglecting context differences and their influence on the research decisions and results of a study. To be specific, Ferris (2012), Bitchener (2012), Liu and Brown (2015), Mao and Lee (2020), Crosthwaite et al.

(2022), and Chong (2019) included ESL papers mostly, so their results and conclusions may not be representative enough of EFL realities.

Under those circumstances, there is a need for a synthesis of the effects of specific feedback strategies and methodologies employed by studies conducted in a particular context. Therefore, this SLR is proposed to synthesize both methodologies and findings of studies comparing direct and indirect feedback with either a focused or unfocused scope in EFL settings. Both researchers and teachers working in EFL contexts may benefit from this SLR in selecting research methods and feedback strategies for their work areas based on their reality.

Research questions

This SLR seeks to answer the following questions:

- 1) What are the sampling features in EFL studies comparing direct and indirect feedback with either a focused or unfocused scope?
- 2) What are the features of research design in EFL studies comparing direct and indirect feedback with either a focused or unfocused scope?
- 3) What target linguistic structures are investigated in EFL studies comparing direct and indirect feedback with either a focused or unfocused scope?
- 4) What are the effects of direct and indirect feedback with either a focused or unfocused scope in EFL studies?
- 5) What are future research suggestions in EFL studies comparing direct and indirect feedback with either a focused or unfocused scope?

METHODOLOGY

This SLR adopted the seven-step protocol suggested by Petticrew and Roberts (2006) because it provides a transparent methodology “to conduct literature search and synthesize findings in order to generate collective research evidence to provide answers to some focused research questions” (Chong, 2019, p. 73). Besides, it includes previously-set inclusion-and-exclusion criteria for selecting studies that eliminate bias for well-known research (Bearman et al., 2012). Overall, the protocol is “an explicit plan of ... [one’s] proposed work [and] such transparency ensures ... [that one] produce[s] a rigorous review” (Petticrew & Roberts, 2006, p. 51). The steps involved in the protocol were:

Step one: Formulating research questions

Five research questions were posed for this SLR. The questions aim to synthesize methodologies, findings, and research suggestions of EFL studies investigating the effects of direct and indirect feedback with either a focused or unfocused scope in EFL studies on writing errors.

Step two: Selecting a timeframe and a repository

A timeframe between 2012 and 2022 was established for article search. This period was selected because research comparing direct and indirect feedback with either a focused or unfocused scope had gained prominence during this last decade (Crosthwaite et al., 2022). Also, between 1991 and 2012, only one EFL comparative study of the strategies was published as discovered in the bibliometric dataset of Crosthwaite et al. (2022). Finally, review studies analyzing papers published before 2012 encompassed a small number of EFL studies of which none focused on the two-debated feedback strategies (e.g., Bitchener, 2012; Ferris, 2012). Consequently, this SLR included studies belonging to the 2012-2022 period.

For the article search, the bibliometric dataset of Crosthwaite et al. (2022) served as a repository. One reason for its selection is that it contains works retrieved from the Scopus database. Scopus is considered of high validity because works go through a strict process of selection and evaluation conducted by an independent Content Selection and Advisory Board which ensures only high-quality data are indexed (Baas et al., 2020). Further, the dataset is the result of a bibliometric study. According to Crosthwaite et al. (2022), bibliometrics allows researchers to study the evolution and research productivity of a field in the long term. In this sense, the dataset is a comprehensive coverage of WCF research encompassing articles, books, and book chapters published between 1991 and 2022 and retrieved from several renowned journals.

Step three: Establishing inclusion and exclusion criteria

In this step, the criteria for the inclusion and exclusion of articles were determined. Table 1 explains that only primary studies conducted in EFL contexts and focused on the comparison of direct and indirect feedback provided by teachers were selected.

Table 1
Inclusion and exclusion criteria

Description	Include	Reasons for selection	Exclude
Year of publication	2012-2022	scarce evidence of studies comparing direct and indirect feedback before 2012	before 2012
Nature of publication	peer-reviewed and primary articles	mounting amount of published literature in WCF	chapter in books, thesis, dissertations, position papers, conference proceedings, and reviews, among others.
Target language	English	the main target language in WCF studies	Other languages
Context of the study	EFL	underrepresentation in SLRs and narrative reviews	ESL

Description	Include	Reasons for selection	Exclude
Focus of the study	comparison of the effects of direct and indirect feedback with either a focused or unfocused scope provided by teachers	to determine the effects of these strategies when compared in similar conditions	Studies not comparing direct and indirect feedback
Feedback strategies	direct and indirect provided by teachers	two-widely debated and applied strategies in classrooms	Other feedback strategies or provision modes

Step four: Conducting a literature search

The article search for this SLR was conducted in the bibliometric dataset of Crosthwaite et al. (2022). This Excel dataset contains 493 references divided into tabs according to periods. Specifically, the search focused on the 2011-2022 tab and found 411 articles. Because metadata of articles were provided in columns such as title, abstract, year, or document type, Excel search filters were applied to the columns to locate articles complying with the selection criteria.

Step five: Screening and appraising the search results using the criteria

Guided by specific terms input into the Excel search filters and the selection criteria, the screening and appraisal of papers were as follows:

- 1) Works of 2011, books, and book chapters were eliminated first.
- 2) The filters of title and abstract helped locate undesired articles through specific terms and discard them whenever they did not comply with the selection criteria after fully reading their abstracts.
 - a. The term “ESL” produced two things: 1) actual ESL papers and 2) papers including “ESL” for introduction purposes but were EFL in nature (e.g., Khodadadi, 2021).
 - b. The terms “perspectives”, “beliefs”, “perceptions”, “peer feedback”, “automated feedback”, “metalinguistic”, and “engagement” were searched, and works exclusively focusing on those topics were excluded.
 - c. Publications like syntheses, meta-analyses, and reviews were removed after inputting such terms.

The first two search stages filtered out 398 articles, leaving 95. Then, the terms “direct” and “indirect” were entered into the filters of title and abstract, resulting in 27 articles. After analyzing their abstracts, 23 were kept since four addressed only one feedback strategy and not their comparison. Finally, during the full reading of the 23 papers, two more (i.e., Crosthwaite et al., 2020; Sherpa, 2021) were discarded because they were identified as ESL in their methodology sections. In total, 21 studies were part of this SLR as shown in Table 2.

Table 2
A list of journals and articles included

SCOPUS indexed journal	Articles included
English Language Teaching	1. Hashemnezhad & Mohammadnejad (2012)
Journal of Asia TEFL	2. Han (2012)
Journal of Writing Research	3. Mirzaii & Aliabadi (2013)
Theory and Practice in Language Studies	4. Esfandiari, Yaqubi, & Marzban (2014)
Journal of Social Sciences	5. Jabulani (2015)
Asian EFL Journal	6. Ruegg (2015)
Indonesian Journal of Applied Linguistics	7. Septiana, Sulisty, & Kadarisman (2016)
Turkish Online Journal of Educational Technology	8. Üstünbaş & Çimen (2017)
Journal of Asia TEFL	9. Tan & Manochphinyo (2017)
Journal of Asia TEFL	10. Suzuki, Nassaji, & Sato (2019)
International Journal of Innovation, Creativity and Change	11. Akmal (2019)
The Modern Language Journal	12. Nicolás–Conesa, Manchón, & Cerezo (2019)
Language Testing in Asia	13. Nemati, Alavi, & Mohebbi (2019)
Language Related Research	14. Esmaeeli & Sadeghi (2020)
Studies in English Language and Education	15. Budianto, Sulisty, Widiastuti, Heriyawati, & Marhaban (2020)
Computer Assisted Language Learning	16. Sarré, Grosbois, & Bruderermann (2021)
LEARN Journal	17. Tatsanajamsuk & Saengboon (2021)
Journal of Language and Linguistic Studies	18. Khodadadi (2021)
Language Teaching Research Quarterly	19. Khaki & Tabrizi (2021)
English Teaching and Learning	20. Bagheri & Rassaei (2022)
Cogent Education	21. Ghoorchaei, Mamashloo, Ayatollahi, & Mohammadzadeh (2022)

Step six: Synthesizing findings

At this stage, articles were fully read to answer the research questions. For questions one to four, a coding system was designed and grounded on previous reviews (e.g., Liu & Brown, 2015; Plonsky & Gass, 2011), and for question five, content analysis was applied. Generally, frequencies and percentages were calculated for each question, and the results were displayed in seven tables. The details of the codes and analyses are explained next.

Research question 1: Sampling features

The coding system for sampling features consisted of five variables: region, L1, English proficiency, educational setting, and age. The indicators of the L1 variable were open since they depended on the country in which the study was conducted, but, for the other variables, the indicators were fixed levels based on Liu and Brown (2015).

Research question 2: Research design features

This section focused on research designs and measurement of the treatment. For the former,

the variable design included four categories: experimental, quasi-experimental with a control group, quasi-experimental without a control group, and action research. Specifically, experimental and quasi-experimental designs were differentiated on: 1) quasi-experimental studies employ intact classes, purposive, or convenience sampling (Mackey & Gass, 2022), and 2) experimental studies require control groups with no treatment and participants random assignment to study groups from large populations (Creswell, 2015; Liu & Brown, 2015). In the measurement of the treatment, six type categories were established: a series of new writing tasks, a series of drafts, posttest only, pretest/posttest, pretest/posttest/immediate posttest, and pretest/posttest/delayed posttest. Mackey and Gass (2022) and Keck et al. (2006) emphasize that posttests, also known as immediate posttests, are applied between zero and seven days after treatment and become delayed posttests when they are applied after seven or 14 days or even after two or three months. Hence, studies using the terms posttest and immediate posttest interchangeably (e.g., Esmaeeli & Sadeghi, 2020; Tan & Manochphinyo, 2017) were included in the pretest-posttest-delayed-posttest type in this SLR.

Research question 3: Target linguistic structures

First, feedback scope helped sort 20 articles into focused and unfocused. Then, based on Budianto et al. (2020), each scope was subdivided into error types, i.e., grammatical and non-grammatical. In the case of the one study comparing scopes, error type was its only subdivision. Finally, within error types, the targets category was established and left open since the information depended on what studies had focused on.

Research question 4: Effects of direct and indirect feedback

To identify the effects of each feedback strategy, articles were classified based on scope. There were 11 focused and nine unfocused studies, but these figures changed because there was one scope-comparison work whose results were split and assigned to their corresponding scope. Thereby, the findings came from 12 focused and 10 unfocused papers. Then, within each scope, the strategies variable (i.e., direct and indirect) was created to tally how many times each strategy produced statistically significant, non-significant effects, and how many times such values were not reported. Finally, to analyze the comparison of the effects of the strategies, a similar categorization was adopted except for the variable strategies in which values for differences in favor (which strategy fared significantly better), no difference (similar significant effects), and not reported (no existing information) were considered this time.

Research question 5: Research suggestions

To process the suggestions from articles, content analysis was applied since, through it, a “pool of diverse responses is reduced to a handful of key issues in a reliable manner” (Dörnyei & Dewaele, 2023, p. 99). Hence, this analysis involved: 1) reading each section of suggestions, 2) marking key points in colors, and 3) grouping similar highlighted points into nine broader categories.

Step seven: Discussing findings and making suggestions and implications

First, after analyzing the data, a discussion of the findings under the light of the literature was conducted. Then, the implications of the findings and the suggestions for future studies were established.

RESULTS AND DISCUSSION

The results of this SLR are accompanied by a discussion of each research question because when there is a large amount of information, the best option is to combine the results and discussion sections for the sake of readability (Liu & Brown, 2015).

Research question 1: Sampling features

Table 3 informs about the sampling features of studies comparing direct and indirect feedback with either a focused or unfocused scope in EFL contexts. First, regularly researched contexts were in Asia (80.95%), specifically Iran (e.g., Ghoorchaei et al., 2022; Khodadadi, 2021), universities (57.14%) and intermediate levels (33.33%) (e.g., Budianto et al., 2020; Nicolás–Conesa et al., 2019). Further, language institutes (33.33%) gained research attention (e.g., Budianto et al., 2020; Khodadadi, 2021). Lastly, moderating variables such as L2 proficiency level (23.81%), mother tongue (L1) (76.19%), and the age of participants (42.86%) were not frequently reported in EFL studies (e.g., Akmal, 2019; Sarré et al., 2019).

Table 3
Sampling features

Variable	Indicator	N	%
Region	Africa	1	4.76
	Asia	17	80.95
	Europe	3	14.29
	Latin America	0	0
L1	Azeri/Turkish	3	14.29
	Thai	1	4.76
	Mixed ^a	1	4.76
	Not reported	16	76.19
English proficiency	Advanced	1	4.76
	Intermediate	7	33.33
	Elementary	5	23.81
	Mixed ^b	3	14.29
	Not reported	5	23.81
Educational setting	University	12	57.14
	High school	2	9.52
	Elementary/middle school	0	0
	English Institute	7	33.33

Variable	Indicator	N	%
Age	Adult (18+)	7	33.33
	Teen (13-17)	3	14.29
	Children (1-12)	1	4.76
	Mixed ^c	1	4.76
	Not reported	9	42.86

^a Chinese Mandarin and Cantonese languages (Han, 2012).

^b Esmaeeli and Sadeghi (2020) studied pre- and upper-intermediate levels and Budianto et al. (2020) studied advanced and elementary levels. Both with results by levels. Tatsanajamsuk and Saengboon (2021) studied elementary and intermediate levels but no results by level.

^c Esmaeeli and Sadeghi (2020) included teens and adults but no results by age.

Based on the findings, EFL research on direct and indirect feedback is scarce in Africa, Europe, and Latin America and most reports do not indicate variables such as age, proficiency level, and L1. Future research should come from those regions to identify the impact of those feedback strategies on students who learn English and have a different L1. Since variables like context and L1 can influence feedback provision and processing (Bitchener, 2012; Lee, 2019), it would be useful to identify which strategy effectively impinges on writing errors of English learners whose L1 is Spanish, German, French, or another language and how similarities/differences between the L1 and L2 can affect learners process feedback. In addition, elementary, middle, and high schools require attention. Lack of evidence in these contexts may be due to limitations on accessing study participants such as parents' consent for minors or population availability to researchers and can limit a comprehensive understanding of the impact of direct and indirect feedback at all EFL educational levels.

Language institutes, on the contrary, have become a productive source of EFL studies which makes it another niche for researchers apart from universities. Researching in institutes can facilitate population access and consent for minors since most of them attend lessons for their will to learn English. Also, because of will, studies can investigate to what extent motivation influences feedback processing in institutes compared to universities since, in universities, most EFL students take English classes to meet a requirement. In sum, language institutes can continue to broaden insights into the impact of direct and indirect feedback in EFL contexts. Lastly, 42.86% of studies did not specify age ranges or averages. They just indicated that their participants were enrolled in universities or institutes (e.g., Sarré et al., 2019; Septiana et al., 2016). It is known that institutes have populations ranging from children to adults, so not differentiating these groups implies that everyone learns homogeneously which is not real. If institute teachers working with children applied either a direct or indirect feedback strategy which was found positive in institutes working with adults, the first instructors may not obtain the desired results because of the influence of age on the processing of feedback. Likewise, the effects of a feedback strategy should not be generalized to any proficiency level since it may not have the same effects at all levels. Hence, distinguishing age groups as well as proficiency levels and reporting them in studies is pivotal. In this sense, researchers should leave the idea of one size fits all (Jabulani, 2015), and future EFL investigations should accurately report their sampling features so that feedback effects cannot be suppressed by mismatches between study participants and regular students in terms of age and proficiency level.

Research question 2: Research design features

Table 4 shows that all the EFL studies comparing the direct and indirect strategies adopted a quasi-experimental design with (57.14%) or without (42.86%) a control group (e.g., Khaki & Tabrizi, 2021; Nicolás–Conesa et al., 2019) similar to Chong (2019). Adopting this type of design may be because of the available populations to researchers. Put differently, researchers may have decided to allot time to study the strategies' impact rather than spend time on sending permission forms to access populations unconnected to them. One benefit of this design is that it produces meaningful results for authentic classrooms because of the use of intact classes as participants. Intact classes are an alternative in L2 research when randomization is not possible and produce sound face validity and results when investigating an instructional method (Mackey & Gass, 2022). Consequently, quasi-experimental research with intact classes (e.g., Bagheri & Rassaei, 2022; Jabulani, 2015) is still valuable.

However, analyses of the direct and indirect strategies from other design types are needed in EFL settings to add insights into the effects of the strategies from diverse sources. Mao and Lee (2020), for instance, remark that qualitative data can produce relevant results for authentic classrooms, so mixed-methods and pure qualitative research are suggested. Similarly, experimental designs are called for. Interestingly, some works identified themselves as experimental in this SLR, but they did not meet one of the two key requirements to be so (e.g., Budianto et al. 2020; Han, 2012). Particularly, random assignment appears to be the problem in adopting such a design as some studies did include control groups with no treatments (e.g., Khodadadi, 2021; Nemati et al., 2019). As a result, they were classified as quasi-experimental resulting in 0% experimental designs. Future reports should accurately differentiate between quasi- and experimental designs so that researchers, especially novice ones, can be better informed for possibly conducting research with varied designs.

Table 4
Research design features

Design	N	%
Experimental research	0	0
Quasi-experimental without a control group ^a	9	42.86
Quasi-experimental with a control group	12	57.14
Action research	0	0

^a Here is the only mixed-methods study (i.e., Tatsanajamsuk and Saengboon, 2021). The other 20 were quantitative adopting either design.

Table 5 indicates that treatments were generally measured through either pretest-posttest or pretest-posttest-delayed-posttest tools (e.g., Mirzaii & Aliabadi, 2013; Suzuki et al., 2019). These findings are similar to Chong (2019) but contrary to Liu and Brown (2015) who found only the pretest-posttest design frequently. The difference might be the result of analyzing EFL studies focused on direct and indirect feedback unlike Liu and Brown (2015) who studied ESL and EFL papers on WCF. Moreover, Liu and Brown (2015) analyzed papers until 2014 which encompasses only two out of the ten years of growing evidence in direct and indirect feedback (Crosthwaite et al., 2022). Briefly, it seems that EFL research on direct and indirect strategies

has specific patterns, unlike WCF research. Hence, the importance of reviewing methodologies investigating the impact of specific feedback strategies rather than generalizing broad results to specific strategies and/or contexts. Finally, the posttest-only design was not adopted (0%). It seems that studies on direct and indirect feedback in EFL settings followed Bitchener and Ferris's (2012) premise that not knowing pre-treatment conditions constitutes a flaw in WCF studies because only the comparison of initial and post-treatment states produces accurate results. Therefore, future EFL research should continue with pretest-posttest designs and hopefully add delayed posttests to find out the effects of the strategies in the long term.

Table 5
Measurement of treatment

Type	N	%
A series of new writing tasks	2	9.52
A series of drafts	2	9.52
Posttest only	0	0
Pretest and posttest	8	38.10
Pretest, posttest, immediate posttest ^a	1	4.76
Pretest, posttest, delayed posttest	8	38.10

^a Study by Jabulani (2015)

To close, this SLR delineates the main characteristics of the terms quasi- and experimental design and posttest/immediate and delayed posttests which seem to be confused when reporting research designs and treatment measures (e.g., Budianto et al., 2020). Researchers, especially novices, can benefit from these clear-cut definitions included in the Methodology section, step six, research question 2 of this report to distinguish the aforementioned terms when reading or typing articles. Also, these straightforward characterizations can prevent detrimental decisions like applying short-spanned tests. Jabulani (2015), for instance, applied his immediate posttest a day after his posttest, and this could have overwhelmed participants (Truscott & Hsu, 2008) and affected their performance and interest. In sum, using the provided definitions as a standard could reduce confusion and/or issues in feedback research.

Research question 3: Target linguistic structures

To begin, Table 6 presents that 52.38% of articles addressed the focused scope of feedback (e.g., Ghoorchaei et al., 2022; Hashemnezhad & Mohammadnejad, 2012), whereas 42.86% investigated the unfocused approach (e.g., Khaki & Tabrizi, 2021; Ruegg, 2015). Particularly, only one study (i.e., Sarré et al., 2019) compared both. In terms of error types, both focused and unfocused feedback examined the impact of the direct/indirect strategies on grammatical errors (e.g., Esfandiar et al., 2014; Üstünbaş & Çimen, 2017), but only the unfocused approach addressed the non-grammatical type (47.62%) (e.g., Akmal, 2019; Budianto et al., 2020). More specifically, common grammar targets were the simple past tense (19.05%) and articles (14.29%) (e.g., Nemati et al., 2019; Suzuki et al., 2019) similar to Chong (2019), whereas common non-grammar targets were vocabulary (33.33%) and mechanics (28.57%) (e.g., Mirzaii & Aliabadi, 2013; Septiana et al., 2016). It is worth mentioning that unfocused papers generally labeled non-grammatical targets as content, organization, or mechanics, whereas grammar targets were not specifically delineated owing to the correction nature of the scope.

Although grammar mastery is important in writing, there are other crucial aspects requiring attention. Following Truscott (1996), correction can also focus on aspects like content, organization, and form; hence, EFL research on direct and indirect feedback adopting either scope should examine such aspects, particularly the impact of focused feedback on non-grammatical targets. Similarly, more studies should contrast the impact of scopes under equal/similar conditions. Regarding linguistic targets, structures other than articles and the simple past should be addressed. It was seen that most of the reviewed studies acknowledged that their targets were based on past ESL papers regardless of what their EFL participants or populations actually struggled with, so researchers need to bear in mind that ESL and EFL learners make different errors because errors are context-dependent and influenced by L1 and the amount of L2 exposure (Ferris, 2011; Reid, 2005). Therefore, future studies should select targets made by their actual populations. This selection could be through the analysis of learners' past tasks, consults with previous teachers, or teaching experience. Ultimately, the goal is to reflect authentic classrooms and, when possible, not to replicate studies or use frequent-error lists because limiting feedback research to specific targets with the same methodologies suppresses diversity, originality, and creativity (Crosthwaite et al., 2022) and may not reflect EFL realities.

Table 6
Feedback scope and targets

Scope	Type	Target	N	%
Focused (52.38%)	Grammatical	Simple past	4	19.05
		Relative pronouns	1	4.76
		Prepositions	1	4.76
		Quantifiers	1	4.76
		Articles	3	14.29
		Past perfect tense	1	4.76
		Present continuous	1	4.76
		Present perfect simple	1	4.76
		Calque	1	4.76
		Collocations	1	4.76
		Present participle adjectives	1	4.76
		Past participle adjectives	1	4.76
		S-V agreement	1	4.76
			Non-grammatical	
Unfocused (42.86%)	Grammatical	Any error	9	42.86
	Non-grammatical	Content	5	23.81
		Organization	5	23.81
		Vocabulary	7	33.33
		Mechanics ^a	6	28.57
		Style	1	4.76
		Tone	2	9.52
		Register	1	4.76
Structure	2	9.52		

Scope	Type	Target	N	%
Focused vs. Unfocused (4.76%)	Grammatical	Any error	1	4.76
	Non-grammatical	Vocabulary	1	4.76
		Mechanics	1	4.76
		Style	1	4.76
		Tone	1	4.76
		Register	1	4.76

^a Punctuation and spelling

Research question 4: Effects of direct and indirect feedback

To start, the impact of the strategies was analyzed separately. Table 7 indicates that most EFL studies presented significant effects ($p < .05$) of direct and indirect feedback, which implies that either strategy may help master (non-)grammatical writing aspects (e.g., Bagheri & Rassaei, 2022; Jabulani, 2015). Also, few papers reported no significant ($p > .05$) effects (e.g., Ghoorchaei et al., 2022; Septiana et al., 2016), yet authors recognized that the strategies did cause a positive change in grammar accuracy. Thus, contrary to Truscott (1996; Mohebbi, 2021), direct and indirect feedback should not be completely abandoned since they may have a favorable impact on EFL writing development.

Unlike Mao and Lee (2020), who obtained inconclusive and conflicting scope results in their review, this SLR found that either scope appears to work with direct or indirect strategies in EFL contexts (e.g., Akmal, 2019; Khodadadi, 2021). The absence of a trend in results may be for reviewing ESL and EFL articles simultaneously and feedback scopes or strategies indistinctively. In this sense, some strategies and scopes may work better with ESL than EFL students owing to characteristics like L2 proficiency, L1, or motivation to attend feedback, so review results can be conflicting. Thereupon, works synthesizing WCF results from ESL and EFL papers provide a broad picture that may not be representative of all realities; hence, reviews with a specific focus like this one are needed.

Table 7
Effects of each strategy

Scope	Strategies	P < .05		P > .05		Not reported	
		N	%	N	%	N	%
Focused	Direct feedback	9	75	3	25	2	16.67
	Indirect feedback	8	66.67	3	25		
Unfocused	Direct feedback	7	70	2	20	2	20
	Indirect feedback	7	70	1	10		

After analyzing the strategies individually, Table 8 presents which one fared significantly better when compared. First, direct feedback with a focused scope (e.g., Esmaeeli & Sadeghi, 2020; Nemati et al., 2019) was favored. Second, 41.57% found both strategies equally beneficial ($p > .05$) when adopting a focused scope (e.g., Esfandiar et al., 2014; Nicolás–Conesa et al., 2019). Lastly, a comparable number of studies favored either strategy with an unfocused scope (e.g., Akmal, 2019; Tan & Manochphinyo, 2017).

Apparently, direct feedback has a greater impact on the development of EFL writing than indirect feedback. Perhaps, its explicit correction nature accounts for its effectiveness as learners are provided with correct forms, leaving no room for inaccurate correction guesses. In fact, Ellis (2009) sees direct feedback as a clear error-correction guide that facilitates learning. However, the benefits of indirect feedback cannot be overlooked. Although most studies were conducted in universities and intermediate levels, it is not feasible to state one strategy is more effective than another since contradicting findings are present. To illustrate, the same proficiency levels did not prefer the same feedback strategy, and different proficiency levels preferred the same strategy (e.g., Nemati et al., 2017; Nguyen et al., 2021). Therefore, research on how the strategies' impact may change from one EFL setting to another considering learners' characteristics and preferences is suggested.

Table 8
Comparison of the effects of strategies

Scope	Strategies	Difference in favor		No difference		Not reported	
		N	%	N	%	N	%
Focused	Direct feedback	5	41.67	5	41.67	2	16.67
	Indirect feedback	1	8.33				
Unfocused	Direct feedback	4	40	1	10	2	20
	Indirect feedback	3	30				

To close, this SLR suggests complete reports on the effects of direct and indirect feedback on EFL writing. Some reviewed papers did not report significance (p-value) for individual effects of the strategies (e.g., Khaki & Tabrizi, 2021) or their comparison (e.g., Sarré et al., 2019), and others did not include the results of all studied targets (e.g., Nicolás–Conesa et al., 2019). Furthermore, results reports should be according to levels and not as a whole when including different proficiency levels (e.g., Tatsanajamsuk & Saengboon, 2021). Similarly, in unfocused studies, findings should not be given as writing performance but as categories (i.e., grammar, vocabulary, content, organization, and mechanics) to learn about the impact of feedback strategies on each category.

Research question 5: Research suggestions

Table 9 shows the main suggestions for future EFL feedback studies. The top three suggestions were studying the impact of feedback-related variables (71.43%), varying research designs (61.90%), and analyzing the impact of learner variables (52.38%) (e.g., Bagheri & Rassaei, 2022; Sarré et al., 2019; Suzuki et al., 2019). Also, further research should focus on different feedback strategies (e.g., Khaki & Tabrizi, 2021) and targets other than the already investigated (e.g., Suzuki et al., 2019). Finally, at a low percentage, studies on scope are encouraged (e.g., Nemati et al., 2019). Generally, authors called for originality and variety in EFL research to produce new findings that help understand the impact of feedback under different conditions rather than replicating studies. This is consistent with Crosthwaite et al. (2022) who explain that the existing WCF research has focused on a relatively small number of topics with a quantitative

nature mostly. Finally, this SLR found that there is a lack of studies on scope comparison, different educational and proficiency levels, and varied targets. Hence, future EFL research should include such and different variables.

Table 9
WCF research suggestions

Suggestion	N	%
Study learner variables (proficiency, preferences, learning styles, motivation, comprehension of feedback codes/hints)	11	52.38
Study settings (naturalistic, laboratory, computer-assisted language learning, EFL, ESL)	6	28.57
Vary research designs (instruments, WCF provision procedures, task genres, number of participants, qualitative data)	13	61.90
Study feedback variables (long-term effects, feedback provision frequency)	15	71.43
Study varied targets (grammatical, non-grammatical)	7	33.33
Feedback strategies (direct, indirect, metalinguistic, reformulation, electronic)	7	33.33
Feedback scope (focused, unfocused)	3	14.29
Research to guide future works	1	4.76
No suggestions	3	14.29

CONCLUSION

This SLR provides a comprehensive picture of methodologies, findings, and research suggestions of studies comparing direct and indirect feedback with a focused or unfocused scope in EFL settings. It presents a detailed description of sampling features, methodologies, findings, and research suggestions rather than focusing on one or two aspects, and it provides insights into the two most widely debated and researched feedback strategies. Overall, this study pieces together the insights into direct-and-indirect-feedback effects under different EFL conditions. The benefit lies in that the findings portray the EFL reality rather than the global status of WCF as in other reviews. After all, EFL accounts for a big portion of L2 learning and acquisition.

For classrooms, this SLR implies that direct or indirect feedback with either scope is beneficial, so their application is encouraged to improve EFL writing performance. However, teachers should identify how and where the strategies were applied in studies and compare their learners' characteristics and background to those in studies to differentiate between educational levels, types of errors, or levels of proficiency and hopefully obtain reported results in papers since context differences can influence the impact of feedback. Equally important, teachers could apply either strategy. To this, indirect feedback can save teachers time when grading as they only point out errors through highlighting or cues compared to direct feedback which requires writing down full correct answers. In terms of scope, there is evidence in favor of either approach; however, there is not enough evidence of which one fares better because of the lack of EFL comparison studies. In general, teachers can alternate the application of strategies and scopes which will add variety and dynamism to classrooms.

For researchers, this SLR provides information and suggestions on future research, study designs, and reporting practices in EFL studies comparing direct and indirect feedback with

either scope. First, guidelines for using research terms are given to avoid inaccuracies in research-approach identification or measurement of treatment. Having standard terms can help when replicating studies to understand the same feedback strategies working in different environments. Moreover, qualitative or mixed-methods approaches are called for to counterbalance the number of quantitative studies. In this line, research comparing scope approaches and feedback strategies as well as considering different influencing factors such as targets, L1, proficiency level, age, and educational settings is needed to broaden the insights into feedback on EFL learners. Lastly, replication of studies is suggested when coming from ESL to EFL or from university to other educational levels; otherwise, original studies are preferred to continue mapping the impact of feedback on EFL writing.

Finally, this SLR presents some limitations like any other study. To begin, the analysis of the effects of the strategies in this review considered the comparison of pretests and posttests, so the findings are for the short-term impact. Hence, analyses of studies containing results in the long term are needed. Second, specific results to the impact of the strategies on non-grammar targets were not possible. Although authors specified categories of non-grammatical targets in their studies, they provided results as writing performance and not for each category. Finally, this SLR does not provide information about similarities and differences between the impact of direct and indirect feedback in EFL and ESL settings, so future reviews could address this comparison.

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