Developing Nurse Educators’ Self-Editing Skills in English Writing through a Checklist

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Abstract
This study investigated the efficiency of self-editing to reduce language errors of nurse educators. To achieve this, a checklist was created and 15 nurse educators from three different universities were educated on how to self-edit throughout 10 weeks. Data were obtained through 3 editing tasks before the 10-week education course and 3 editing tasks after the course. The Wilcoxon test analysed pre-tests and post-tests, and found a statistically significant difference in terms of noticing the language errors through self-editing. This study suggests nurse educators use the checklist before submitting a manuscript. Also, this study concludes that self-editing is an efficient way of revealing language errors and increasing accuracy in English writing of nurse educators.

Keywords: Self-editing, Checklist, Nurse educators, Error, Correction

Introduction
Skills for international written communication are critical for nurses (Derouin, et al. 2015) and yet English makes up a small portion of the nursing curriculum (see Asgari, Navab, and Bahramnezhad, 2019) that is crammed with multifarious courses, which entails lack of competence for nurses in English writing. On the other hand, some nurses have robust training and experience in written communication, but few regard themselves as good writers (Kaminski, 2016), which one reason lies beneath the difficulty of writing due to language-related problems. Whereas nurses in profession may have a right to reject the concept of writing, nurse educators (NE) are vitally compulsory to produce written works to keep up with the latest development in the academic world or just because they are required to. In other words, different from nursing professions, language incompetency becomes more apparent for academic nurse educators who desperately need for scholarly writing in English not only to reach a large audience and booster the visibility but also to be kept abreast of new developments in nursing thanks to publications (Oermann and Hays, 2015). Given the multidimensionality of writing, non-Anglophonic NE experience difficulties in producing texts free of error. Accordingly, the literature suggests error correction (EC) methods to reduce writing errors particularly for non-native writers of English (see Ferris, 2012; Muller, Gregoric & Rowland, 2017). Studies investigating EC methods to treat language errors are classified into two strands as teacher correction and peer-review (Diab, 2010); however, neither of them seems to suit perfectly for NE because they do not have a teacher to get treatment and peers are largely too occupied for a request for language edit. Therefore, one more strand in addition to labour-intensive teacher correction and peer-review need to be named: self-editing- which is the writer’s own capability to grammatically treat, and embellish their L2 writing. Although this less time-consuming and arduous EC method proved its efficiency for enhancing writing skills (Tatiana, 2016; Sangeetha, 2020) it was largely overlooked by researchers.
Aware of that “Nurses need to be prepared for life-long learning” (Simson and Courtney, 2002, p.90), NE can increase their self-efficacy by acquiring how to self-edit, which may help them to gain the upper hand for publication (see Saver, 2017 for more publication tips for NE). Accordingly, this study aims to cultivate writing skills of NE through improving NE’s latent skills for self-editing. To achieve this, this study researched the success of self-editing through explicit teaching and created a checklist for self-editing (CSE) (see Appendix C) to help NE to organise their editing process.

**Peer-Review Vs. Self-Editing in L2 Writing**

NE hanker to write free of errors, which necessitates comprehensive language skills. However, all efforts to calibrate writing would be pointless without writer’s attentive struggle on the process of error treatment. In line with that, while some studies (e.g. Satake, 2020) emphasized the importance of peer correction, some stated the advantage of teacher correction (e.g. Tiruneh, 2020); meanwhile, self-editing was largely not offered as an option, which may be because it requires an advanced level of linguistic skill.

Peer review is essential for collaborative learning; however, there are some reservations regarding the efficiency of it when it comes to the issue of reliability. Writing is a multidimensional skill that necessitates knowledge of vocabulary, grammar, content, and organisation (Demiray Akbulut, 2018). Therefore, many writers do not want to be edited by their peers because they may not have sufficient language competence to provide reliable assessment or they are simply lack of evaluation skills or laziness (Sunahase, Baba, & Kashima, 2019). Furthermore, although peer review may be available for student writers, it is not as much possible as for adult academic writers because their peers would frequently be occupied with a pile of work; from academic studies to occupational workload. To sum up the cons and pros of peer feedback it can be concluded that peer feedback seems to be useful in reducing anxiety level of student writers; on the other hand, there are some reliability concerns regarding this type of editing and for adult writers like academicians it would not be readily available to find a peer to review or request such a demand from a colleague.

Having decided the efficiency of self-editing to improve the academic writing skills of nurses, the researchers conducted studies on how to develop this skill, one of which was about workshops that generally lasted two or three days and required active participation of the nurse writers (e.g. Jackson, 2009; Richardson & Carrick-Sen, 2011; Horstman & Theeke, 2012). Over the years, workshops were introduced as a means of equipping nurses to publish their work and improve their writing skills (Derouin, et al. 2015). However, short-range treatments like workshops do not appear to come off with the desired long-term effect. Aware of this, Dewar (2012) incorporated writing workshops for nurse writers into an 8-week practice-based course. Course evaluations revealed that novice nurse writers were more confident in their writing ability and believed their skills increased as a result of the combination of workshop and evidence-based course. Despite the success of this alliance, the method holds some infelicities: nurse writers are too occupied to keep on long-term full-day courses and Covid 19 and their possible derivatives harden people gatherings. As evidence, considerations for such events are at the minimum level these days and recovery is not sighted on the horizon, at least in anytime soon.

Another problem as to self-editing is that nurse writers remain uninformed about how to apply self-editing on their writing, and they need a track to follow. Kasule and Lunga (2010) showed that writers frown on self-editing, and this attitude is largely because they regard it as a complex and difficult task. Even educators of language occasionally take a dim view of it on the grounds that they do know where to start and how to take the best advantage of it (Hojeij & Hurley, 2017). The majority of studies frequently gather around the nursing profession and neglect NE who work at high education institutions to raise nurses.

**Study Purpose**

This study aims to improve the self-editing skill of NE with the help of the CSE (built for this study) which NE can follow while self-editing. Also, the study argues that a 10-week online course on self-editing skill together with the CSE may contribute NE to reduce their language errors in L2 writing, and
hence enhance the chance for publication. The null hypothesis for this research is that an online course for the acquisition of self-editing skill for NE can have an effect tantamount to workshops incorporated with weeks of courses that oblige to sacrifice more time, effort, and cost. The study argues that NE may significantly reduce their language errors if they self-edit through the CSE that is composed of the categorization of 29 language errors.

Methodology
Participants
The participants are NE from three Turkish universities pioneered in the field of Nurse Education and were selected through the criterion sampling method. This experimental group, five from each university and 15 in total, were all in pursuit of improving their academic writing and granted their consent to take part in the study after have been informed about the purpose of the research. The universities offer Turkish medium classes. A semi-structured questionnaire (Appendix A) was constructed for this research and included leading and dichotomous questions to collect data about the participants, and accordingly to constitute NE sample. The questionnaire was delivered to 127 NE in three universities through surveymonkey.com and 69 returned. It was not blinded in case there might be a need of seeking clarification on vague responses. To detail NE sample selection procedure, because the participants had different English exam results such as IELTS, TOEFL, Pearson, YDS (a local exam measuring English level), and YÖK Dil (another local exam), we had better create a benchmark to average them; therefore, if we imagine a benchmark that scores between 0-10, their scores of English ranged between 2 and 10. Those who are under 5 and over 7(Q2) and who take supplementary English courses (Q4) were excluded. Twenty-five of them stated that they edit their texts while 17 participants indicated that they ask for a peer-review (Q5). The Q6 showed that Changes in Language is the most occupying part of editing. Almost all of the participants were aware of self-editing method (Q7). Forty-eight participants considered self-editing to be an efficient way of lowering language errors.

Materials
Four instruments were employed for data collection: a semi-structured questionnaire (for participant selection), one diagnostic editing task (to ensure homogeneity of the group), six editing tasks (for statistical analyses; 3 before and 3 after the online course), and a CSE (to use for post-tests; after the online course). The diagnostic editing task required the participants to edit a page with 800 words. Diagnostic editing task was evaluated bya second-rater; expert in the field to determine the degree of agreement among the raters, and an inter-rater concordance of 0.91 (Cohen’s kappa coefficient) was found. On the other hand, different from diagnostic editing task, each of six editing tasks (3 for pre-test and 3 for post-test) for statistical analyses was composed of 2500 words.

Procedure and Analyses
This is 17-week research and composed of four phases (Table 1); Phase 1 was allocated to complete pre-study analyses; Phase 2 collected data for pre-test; Phase 3 included an online course on how to improve self-editing skills through teacher instruction and exemplary studies and Phase 4 collected data for post-test. Participants had to actively attend to all sessions (Appendix B for detail) in Phase 3 throughout 10 weeks (single day and 2 hours a week). Some NE were not able to participate in the sessions because they had to work, but these sessions were later compensated. In phase 3, NE were trained on how to edit a text before submitting it for publication. The items in the CSE (Appendix C) were followed. The tasks in Phase 1, 2, and 4 were delivered and demanded to be returned before the week ended. The participants were not instructed on content analysis or organisation because the study focused on reporting only the editing of language errors. Another thing to keep in mind is that the CSE was not used in the phase 2 that constituted the data for the pre-test while it was used in phase 4 that created the data for the post-test.
Table 1 The Study Schedule

| Phase | Duration | Content |
|-------|----------|---------|
| 1     | 1 week   | Completing the self-editing diagnostic task by participants |
|       |          | First and second-raters’ analyses |
|       |          | Calculating inter-rater agreement |
|       |          | Skewness and Kurtosis test |
| 2     | 3 weeks  | Editing of three tasks for pre-test |
|       |          | One task for each week |
|       |          | The CSE was not introduced. |
| 3     | 10 weeks | Online course |
| 4     | 3 weeks  | Editing of three tasks for post-test |
|       |          | One task for each week |
|       |          | The CSE was used |

Table 2 The Number of Errors in Each Task

| Error Type                  | Error (Task 1) | Error (Task 2) | Error (Task 3) |
|-----------------------------|----------------|----------------|----------------|
| Spelling                    | 5              | 6              | 4              |
| Word missing                | 2              | 1              | 1              |
| Move word / Word order      | 2              | 1              | 2              |
| Redundant word              | 3              | 4              | 4              |
| Wrong word                  | 0              | 1              | 1              |
| Wrong form of the word      | 2              | 1              | 1              |
| Punctuations                | 5              | 5              | 5              |
| Capitalization error        | 1              | 2              | 5              |
| Articles                    | 2              | 1              | 2              |
| Weird wrong collocation     | 2              | 2              | 2              |
| Word formality              | 0              | 1              | 1              |
| Hedges / Boosters           | 1              | 1              | 2              |
| Pronoun agreement           | 1              | 1              | 1              |
| Subject/verb agreement      | 2              | 1              | 1              |
| Quantifiers / Determiners   | 1              | 1              | 1              |
| Place of adverbs            | 0              | 1              | 0              |
| Place of Adjectives         | 1              | 0              | 0              |
| Preposition error           | 2              | 2              | 1              |
| Relative clause error       | 1              | 2              | 1              |
| Tense error                 | 2              | 2              | 3              |
| Active or Passive voice     | 0              | 1              | 1              |
| Conditional sentence        | 1              | 0              | 0              |
| Modal verbs                 | 2              | 1              | 1              |
| Embedded phrases            | 0              | 0              | 1              |
| Need for a new sentence     | 1              | 0              | 0              |
| Need for a new paragraph    | 0              | 1              | 1              |
| Unclear sentence            | 2              | 1              | 1              |

For the analyses, the diagnostic self-editing tasks were analysed through Skewness and Kurtosis test to determine the normality of the data distribution. The test results revealed a non-normal distribution of data; therefore, a non-parametric test was used for the analyses. Accordingly, non-parametric Wilcoxon signed test determined whether NE group had a statistically significant difference based on pre- and post-tests.

Scoring the Tasks

The editing tasks for pre-test and post-test were the same to be able to see the progression clearly on the same texts. In other words, three editing tasks were filled by the participants two times; one for pre-test and one for post-test. Each task had some language errors (see Table 2) that had to be corrected by the participants and each correction scored 1 point, hence the participants were granted an accumulated score for each task. Then each task was statistically analysed to reveal whether there was a significant difference. The participants could obtain a maximum score of 42 for the first task; 40 for the second task, and 39 for the third task.
Sentence structure error | 1 | 0 | 1
--- | --- | --- | ---
Maximum Score | 42 | 40 | 39

### Results

Before the start of phase 3 (10-week course on self-editing), the participants were requested to edit 3 tasks and the same texts were edited again in the wake of phase 3. The scores of the participants averaged and presented in Figure 1 (see Appendix D for score details).

![Figure 1 Average Scores of Participants](image)

The distribution of the scores ranges from 7 to 34; in other words, the data distribution shows a major variance from the average points shown in Figure 1. Figure 2 represents the distribution of the scores.

![Figure 2 Distribution of Scores](image)

The results showed that the average scores of NE increased in post-tests. To reveal whether these increases are statistically significant, the Wilcoxon test was employed. The pre- and post-test results of task 1 showed that 10-week course found a statistically significant difference in improving nurse educators’ skill of self-editing ($Z = -3.416, p < .001$); similarly task 2 ($Z = -3.415, p < .001$), and task 3 ($Z = -3.415, p < .001$).

### Discussion

Disseminating study findings through publication venues is critical to expanding knowledge besides improving community health; however, health care professions aiming to make publications lack support for scientific writing (Isenburg, Lee & Oermann, 2017). Nurse educators (NE), lost in intensive workload, are within the primary sufferers from lacking support to promote their publication apart from a few workshops. One of the foremost calls that may help NE navigate their publishing process successfully is language editing because many have difficulty in revising rejected manuscripts due to language errors. Accordingly, this study investigated how to improve self-editing skills of NE, and created a CSE that NE can use before making a submission. According to the results, neglected as an error correction method, self-editing confirmed its efficiency in reducing language errors in English writing of NE.

Professional development of academic nurses necessitates fluency in English writing (Terry, Carr & Williams, 2013). Similarly, the concept Why all nurses should be authors by Kaminski (2016) emphasises the need for developing NE’s writing ability for three types of audiences: other nurses, health professionals, and the general public. No matter why and to whom they write, the point their attention needs to be drawn is the accuracy of the language because it is the first step to take on the course of writing, particularly if they write for academic purposes where the precise language is not optional but an obligation. To achieve this, NE are to eliminate language errors and this study concluded that an organised self-editing process thanks to the help of the CSE that was presented here may be useful for NE to pave the way for publication.

In the wake of explicit teaching on how to use the CSE, this study revealed that a checklist to follow while self-editing may be beneficial to reduce the number of language errors as a post-writing activity; meanwhile, the advantage of a checklist in health care professions is not new. For example, Rangachari and Mierson (1995) concluded that the checklists can help students to analyse published articles in basic medical sciences. Also, some studies used checklists not for linguistic but in-profession purposes; for
instance, checklist and surgical success (Panesar, et al., 2011); checklist and clinical interpretation (Ferreira, et al., 2020); checklist and success of physical therapy (Yamato, et. al., 2016) and so on. In concise, given that checklists increase the possibility of success by helping to organise the work (See Ross, 2017 for the relation between checklist and practical nurse works), this study suggests NE to use the CSE to reveal language errors, and hence to find change of correction before making a submission.

Apart from the substantial contribution of a checklist to edit language errors, this research investigated whether self-editing could reduce language errors. The statistical analysis revealed that 10-week course on how to self-edit became effective for the reduction of errors and it is hoped that NE gainfully will take this advantage in their prospective studies.“All writing is rewriting” says Donald Murray, and one of the common mistakes in English writing is the lack of a second eye in checking the preciseness of the language and self-editing may be of importance for NE to increase their self-efficacy by decreasing the need for external help. Despite the parsimonious account of self-editing success in the literature, this study supported its efficiency in self-correction in writing. Assuming that many NE counsel for peer-review for language help, this study highlighted that self-editing is also an effective way for error correction. Accordingly, Diab (2011) compared self-editing and peer-review groups in two different studies and found that self-editing was more effective to reduce errors in writing. Similarly, Khaki and Biria (2016) showed that out of two groups of Ph.D. who received peer-feedback and self-editing education, the group of self-editing scored better. The reason why self-editing outperforms peer-review can be because the writer who self-edits more attentively engages in error correction procedure, and hence more carefully edits. This difference of self-editing over peer-review can be attuned to the amount of attention (See Harris, Friedlander, Saddler, Frizzelle, & Graham, 2005; Carver & Scheier, 2012 for the close relationship between attention, strict self-regulation, and academic performance). Therefore, more comparative studies are needed to decide between self-editing and peer review although this study confirmed the efficiency of self-editing through a CSE.

**Conclusion**

There is a paucity of research that investigated the efficiency of self-editing in reducing language errors although it is a critical error correction method. This study concluded that NE may significantly increase their grammatical accuracy if they are offered a training course on how to self-edit. Furthermore, self-editing can help NE to gain time that they might lose awaiting for a peer-review. On the other hand, NE seem to be disorganised on the way of conducting the self-editing process; accordingly, this study presented a CSE through which NE significantly increased their language accuracy. This CSE may be a guide on the course of self-editing. Finally, it is worth noting that this research does not have its aim generalisation to all NE in other countries. Motivation is a critical factor in the success of self-editing (Warsono, 2017); therefore, the study results may show variance with NE who have varied motivation levels due to myriad determinants in other countries. Researchers are recommended to repeat the study, and only then we can be sure about the efficiency of self-editing and the CSE.

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Appendix A

Questionnaire

This study aims to reduce language errors of nurse educators in English writing for publication. For the purpose, the participants are required to attend 10-week online education programme and complete six editing tasks.

1. Name : ..........................  
2. Years in work : ..........................  
3. Nationality : ..........................  
4. Score of English : ..........................  
   (please write the exam name and year as well)  
5. Field of Study : ..........................  
6. Do you take English course? (Please circle)  
   YES  
   NO  

7. What at is general your post-writing attitude before publication? (Please circle one)  
   A. I edit it myself.  
   B. I ask my friend to edit it.  
   C. I make it edited through a PC-based programme.  
   D. I do nothing.  

8. (If you marked A in the 7th question) What sort of changes would you make while editing your writing?  
   A. Changes in content  
   B. Changes in organisation  
   C. Changes in Language  

9. Have you heard about self-editing? (Please circle)  
   YES  
   NO  

10. If yes, could you describe it?  

11. Do you think that self-editing is an efficient way of lowering language errors?  
   YES  
   NO  

12. Rate your language ability.  
   A. Excellent   B. Good   C. Average   D. Poor  

13. Would you be consent to take part in this study? (Please circle)  
   YES  
   NO

Appendix B

10-Week Training Programme on Self-Editing

| Week | Content |
|------|---------|
| 1    | Spelling Mistakes  
|      | Tense Errors       |
| 2    | Word missing       |
|      | Word order problem |
|      | Wrong form of word |
| 3    | Preposition errors |
|      | Relative clause problems |
| 4    | Sloppy, Redundant, Missing, Incorrect  
|      | Punctuation  
|      | Capitalization errors |
### Appendix C

**Checklist for Self-Editing**

**My Checklist of Language Errors before Publication**

| Number | Symbol | Type of Error                  | Check                        |
|--------|--------|-------------------------------|------------------------------|
| 1      | Sp     | Spelling                      |                              |
| 2      | ^      | Word missing                  |                              |
| 3      | W / O  | Move word / Word order        |                              |
| 4      | W+     | Redundant word                |                              |
| 5      | Ww     | Wrong word                    |                              |
| 6      | Wf     | Wrong form of the word        |                              |
| 7      | O      | Punctuations                  |                              |
| 8      | C      | Capitalization error          |                              |
| 9      | A      | Articles                      |                              |
| 10     | coll   | Weird / wrong collocation     |                              |
| 11     | inf    | Word formality                |                              |
| 12     | Cau    | Hedges / Boosters             |                              |
| 13     | PA     | Pronoun agreement             |                              |
| 14     | SV     | Subject/verb agreement        |                              |
| 15     | Q / D  | Quantifiers / Determiners     |                              |
| 16     | Adv    | Place of adverbs              |                              |
| 17     | Adj    | Adjectives                    |                              |
| 18     | Prep   | Preposition error             |                              |
| 19     | RC     | Relative clause error         |                              |
| 20     | T      | Tense error                   |                              |
| 21     | A/P    | Active or Passive voice       |                              |
| 22     | Cs     | Conditional sentence          |                              |
| 23     | Mv     | Modal verbs                   |                              |
| 24     | Ep     | Embedded phrases              |                              |
| 25     | Awk    | Need for a new sentence       |                              |
| 26     | //     | Need for a new paragraph      |                              |
| 27     | ?? ??  | Unclear sentence              |                              |
| 28     | Ss     | Sentence structure error      |                              |
| 29     | Auto   | Text inserted into a language processing tool |
### Appendix D
Detailed Scores of Each Participant

| Participant | Pre-test | | | Post-test | | |
|-------------|----------|---|---|----------|---|---|
|             | 1        | 2 | 3 | 1        | 2 | 3 |
| 1           | 15       | 14 | 16 | 25       | 19 | 30 |
| 2           | 19       | 20 | 12 | 28       | 25 | 29 |
| 3           | 14       | 13 | 14 | 26       | 27 | 31 |
| 4           | 19       | 17 | 15 | 24       | 25 | 25 |
| 5           | 16       | 11 | 15 | 19       | 21 | 24 |
| 6           | 17       | 20 | 18 | 22       | 25 | 24 |
| 7           | 8        | 12 | 10 | 18       | 22 | 20 |
| 8           | 11       | 9  | 14 | 25       | 24 | 27 |
| 9           | 17       | 15 | 15 | 20       | 24 | 22 |
| 10          | 12       | 10 | 10 | 20       | 19 | 23 |
| 11          | 16       | 19 | 14 | 28       | 29 | 28 |
| 12          | 24       | 21 | 23 | 32       | 34 | 34 |
| 13          | 13       | 14 | 10 | 16       | 18 | 15 |
| 14          | 7        | 7  | 9  | 16       | 14 | 19 |
| 15          | 18       | 15 | 17 | 26       | 28 | 30 |
| **Average** | **15.06**| **14.46** | **14.13** | **23** | **23.6** | **25.4** |

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