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Research Paper

The Impact of Audio-visual Feedback on Academic Writing Task Procrastination

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Abstract
This research was conducted to investigate whether audio-visual feedback affects the medical students' procrastination in writing. This is a quantitative experimental study investigating 50 medical students studying at *Shiraz University of Medical Sciences* in the 2019-2020 fall semester who had taken an English compulsory writing course. They were assigned into two academic writing classes. Each group consisted of 25 male and female students. To collect data, the researchers applied the Procrastination Assessment Scale for Students. The items were scored on a five-point Likert scale ranging from 1 (never procrastinate) to 5 (always procrastinate). Descriptive and inferential statistics were applied to analyze the data. Results revealed that procrastination was decreased in both groups receiving audio-visual and traditional feedback, but providing audio-visual feedback was more effective in decreasing procrastination levels in writing of these students. This finding can help writing

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instructors develop innovative modes of instruction to improve the learners' performance and their active engagement in the writing process.
Keywords: Traditional Feedback, Audio-visual Feedback, Writing Performance, Academic Procrastination

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1. Introduction

According to Jahin and Idrees (2012), writing seems complex and hard for learners since writers should make a normal balance between numerous issues like purpose, content, audience, mechanics, organization, and vocabulary in their writing drafts. It is a demanding skill, especially in English as a foreign language (EFL) setting, where using English is very limited (Du, 2020; Gholaminejad, Moinzadeh, Youhanaee, & Ghobadirad, 2013; Jabali, 2018; Tillema, 2012).

In spite of the teachers' attempt to help students improve their writing competence, pupils usually become fed up with it and hesitate to write because of the perceived difficulty of foreign language writing (Khojasteh, Shokrpour, & Kafipour, 2015).

Researchers have found in their studies that procrastination in academic tasks, especially in writing term papers, is common among most undergraduate and graduate students (Ackerman & Gross, 2005). Academic procrastination involves postponing an academic task or undertaking an academic activity, such as preparing for exams, or writing a term paper in the last minutes of the expected deadline (Ackerman & Gross, 2005).

Based on the literature, there are several possible reasons for procrastination. The first reason is that a person is unable to wisely manage his/her time and feels overwhelmed when facing a task. The inability to focus on the target work is the second cause of procrastination, which may be due to several distractions such as noise, or a cluttered desk. The third factor is fear of failure. The fourth one is the negative belief people have about their abilities.

Furthermore, perfectionism and personal problems may also hinder one's progress in this regard (Burka & Yuen, 1990; Milgram, Marshevsky, & Sadeh, 1995; Rothblum, Solomon, & Murakami, 1986; Solomon & Rothblum, 1984). Besides, procrastination has been shown to lead to lower levels of life satisfaction among people (Balkis, 2013), lower well-being, and higher stress (Çelik & Odaci, 2020; Duru & Balkis, 2017; Sirois & Tosti, 2012). Moreover, a considerable number of students had high levels of procrastination, leading to permanent problems and reduced academic achievement (Hayat et al., 2020).

There are different reasons behind postponing writing assignments, for example, lack of involvement with the topic, existence of limitation to choose the writing format (Gray 2017), and fear of the writing task, which is common among over 50 percent of students (Fritzsche, Young, & Hickson, 2003; Onwuegbuzie, & Collins, 2001). In Ho's (2016) view, inadequate skills in writing, time framework, and concern for negative feedbacks were indicated to be among other reasons for this postponement.

Some other factors may be psychological inflexibility (Eisenbeck et al., 2019), low patience (Harrington, 2005), performance difficulty and distress (Seo, 2008), low socioeconomic status (Chow, 2011), lack of a conductive workplace (Pigg, 2014), insufficient self-regulation and self-efficacy (Stewart, Stott, & Nuttall, 2016), attention control or self-regulation (Abdi Zarrin et al., 2020; Hong et al., 2021), and age, which have been found to be among the other factors in procrastination.

Moreover, in the field of writing, English writing experts believe that feedback is an essential factor in improving writing skills and, as it has been elaborated before, insufficient writing skill is among the factors that lead to procrastination (Ho, 2016). On the other hand, one of the most significant problems that instructors encounter in teaching writing composition is how to

give feedback on the students' writing (Graham & Harris, 2005; Graham, Harris, & Hebert, 2011; Graham, Harris, & Santangelo, 2015; Graham, Hebert, & Harris, 2015; Graham & Perin, 2007a, 2007b; Zarei & Khazaie, 2011).

Teacher written feedback, (pen and paper feedback), as one of the initial ways of providing feedback, is constantly practiced by instructors. Mack (2009) adduces that the instructor's written feedback is any explanations, questions, or error corrections that are provided on the students' writing tasks. In this kind of feedback, teachers usually send the students home to struggle alone with both composition and teacher's written feedback on that composition. During this mode of feedback, we can usually find the misinterpretation between the teacher and the learner. There is an unclear concept between what teachers give and what students are eager to understand (Lee, 2008). This misfit between the learners' concepts and those of the teacher certainly influences the effectiveness of the instructors' written feedback. Therefore, the students always feel confused about how to deal with the feedback received in their revising work. Yet, despite the diligence of instructors in promoting teaching methodologies, the performance of students is not satisfactory in writing skills (Bless, 2017). Therefore, the researchers in this study decided to foster the learners' writing skills by incorporating new technologies to help the teachers enhance their writing instruction. The key benefit is discovering new modes to help both teachers to enhance their writing instruction and students to boost their writing skills. One of the other main advantages is incorporating technology in teaching, in this case providing Audio-Visual Feedback (AVF) which might pave the way for both teachers and students to alleviate the aforementioned problems. Moreover, teachers' perceptions of the influence of such tools and methods in writing instruction are limited, and this procedure will increase the instructors' familiarity with new technologies and methodologies. Moreover, it is worth noticing that with

the help of audio-visual feedback, instructors can show more attention toward the details and the given feedback would be more comprehensive, especially in a new era when the world is affected by the Covid-19 pandemic.

2. Literature Review

2.1 Procrastination

Academic procrastination refers to delaying academic tasks like doing homework or studying for exams (Milgram, Mey-Tal, & Levinson, 1998; Slomon & Rothblum, 1984). As Steel (2007) states, all factors in postponing the accomplishment of the academic task lead to anxiety and academic procrastination. The factors that are negatively correlated with procrastination are students' psychological health (Kim, Fernandez, & Terrier, 2017; Kim & Seo, 2015; Schraw, Wadkins, & Olafson, 2007; Shokeen, 2018), conscientiousness (Ferrari & Pychyl, 2012), intrinsic and extrinsic motivation (Prat-Sala & Redford, 2010), and self-regulation (Gao, Lochbaum, & Podlog, 2011; Klassen, Krawchuk & Rajani, 2008). On the other hand, the factors that have been found to be positively correlated with procrastination are suicide inclination (Klibert, Langhinrichsen-Roling, Luna, & Robichaux, 2011), and psychological distress (Rice, Richardson, & Clark, 2012).

Empirical investigation to prevent or reduce the procrastination level is somehow scarce; however, a number of studies conducted in this field demonstrate that it can be successfully controlled. For example, Schmitz and Wiese (2006) designed self-regulation training skills targeted at the decline of self-reported procrastination. They found a considerable drop in self-reported procrastination and instead, an increase in the students' self-efficacy.

In another study, Häfner, Oberst, and Stock (2014) explored a similar training design focusing on two factors including time management and planning strategies. They found out that the level of procrastination decreased in the students who received the trained program; consequently, the reported

studies reveal that self-regulation training, targeted at the decline of self-reported procrastination, can reduce the level of procrastination. Also, some other studies demonstrate that the lower the students' grades are, the more procrastination behaviors they have (Beswick, Rothblum & Mann 1988).

In another study conducted by Alizadeh Salteh, Yagiz, Hamdami, and Sadeghi (2013), a close examination of four university teachers' comments on the papers of 32 student writers revealed that writing teachers provide common and identical comments, which mainly deal with language-bound errors and problems. They hardly seem to expect students to re-examine the text beyond its surface level. In their study, almost 97 percent of teachers' comments directed students' attention at low-level skills such as punctuation, spelling and grammatical structure. Teachers' comments did not seem to communicate to student writers the meaning of revision anything more than editing or proofreading. The results also indicated that students did not attribute any other meaning to revision than tidying-up or copy-editing.

2.2 Audiovisual Feedback

Based on the study by Abdi and Mohammadi Darabad (2012), corrective feedback has a positive effect on improving students' grammatical accuracy in writing. In this regard, audiovisual feedback as a new mode, provides the students with an opportunity to receive the instructor's response audibly and visually (Thompson & Lee, 2012). Audiovisual feedback or screencast feedback is one of the newly raised methods of writing feedback delivery, in which students can obtain a considerable amount of audio-visual feedback (Yee & Hargis 2010). In this mode of feedback, the instructor cares more about the student's opinions than only frameworks in writing (Tajalizadeh Khob & Rabi, 2014). Regarding the quick development of science and technology, the rise in multimedia technology in creating audio, visual, and animation has a vital role in English teaching classes in the new era. Several studies indicated

that multimedia technology played a positive role in promoting students' motivation and enhancing their activities in English classes (Hekmatzadeh, Khojasteh, & Shokrpour, 2016).

In Iran, the traditional teacher's written feedback is still common among most instructors, while the students' lack of motivation to make significant achievements in their writings shows inefficiency of this traditional writing instruction (Khojasteh, Shokrpour, & Kafipour, 2015). Nowadays, in higher education, audio-visual feedback rather than traditional feedback is incorporated into teaching and learning (Abdous & Yoshimura, 2010; Abrahamson, 2010; Bracher, Collier, Ottewill, & Shephard, 2005; Cann, 2007; Henderson & Phillips, 2015; Jalilifar, Varnaseri, Saidian, & Khazaie, 2014; West & Turner, 2015).

In a study, Kerr and McLaughlin (2008) aimed to examine a blended approach by creating written feedbacks and then providing screencast feedback on the participants' essay. They realized that learners' opinion about audio-visual feedback was more positive compared to written feedback. In the same vein, Mathew and Alidmat (2013) found out that the students could recall the information for a longer time through audio-visual feedback.

In another related study, Jones, Georghiades, and Gunson (2012) explored the influence of teacher's written feedback compared to audiovisual feedback. They concluded that the students' reaction towards the instructor's voice was positive; besides, it was possible to store the digital feedback more easily for future reference; however, in the teacher written feedback, lack of handwritten legibility could be a problem. Furthermore, according to Daniel (2013), audio-visual feedback provides interest and motivation for learning; it saves time and explains the idea easily and precisely.

Based on the study conducted by Rouhi and Vafadar (2014), in terms of writing, both web-based and collaborative corrective feedback improved

learners' L2 writing, but the former revealed some superiority over the latter. According to Henderson and Phillips (2015), learners' opinion about audio-video-based feedback is that it is more individualized compared to text-based feedback.

Moreover, in another study Moradian and Hossein-Nasab (2019) investigated whether written corrective feedback (WCF) and written language bring about improvement in English foreign language (EFL) learners' compositions. The results of the study demonstrated that the indirect WCF group producing written language significantly outperformed the mere indirect WCF group on the posttest.

Furthermore, audio-visual feedback can be perceived more easily (West & Turner, 2015) and students feel positive with their instructor's attention in this mode of feedback (Anson, Dannels, Laboy, & Carneiro, 2016). Therefore, audio-visual feedback promotes their interactions in writing (Campbell & Feldmann, 2017).

As witnessed by Halwani (2017), reading and writing improved when instructors used audio-visual aids and multimedia to help the learners to grasp the issue and become interactive in the classroom with no fear of having problems due to shyness.

Similarly, West and Turner (2016) reported that screencast feedback created better guidance for students in revising their writing, enhanced the learners' involvement in drafting, and helped them write more correctly. Using multimedia modes, in this case, audio-visual feedback, in teaching makes the learners feel relaxed because this mode of instruction is provided individually (O'Malley, 2011; Sirakaya & Ozdemir, 2018, Zheng, Chu, Wu, & Gou, 2018).

Although the research on the writing process is growing (e.g., Brick & Holmes, 2014; Henderson & Phillips, 2014), the number of studies that have examined technological tools to improve different models of instruction in

writing classrooms is limited (Henderson & Phillips, 2015). Considering the problems mentioned about the traditional written feedback on students' papers, which leads to academic procrastination, it seems logical to conduct a study in EFL contexts to find if there is a significant connection between types of feedback, traditional teacher written feedback versus audio-visual feedback, and the students' procrastination in writing. To this end, the following research questions were formulated:

1. What is the students' level of procrastination (the respondents' overall score in the questionnaire) before and after providing traditional and audio-visual feedbacks?
2. Does the type of feedback (audio-visual vs. traditional) affect students' procrastination in writing?

3. Methodology

3.1 Design of the Study

This study aimed to investigate whether audio-visual feedback in writing can influence the academic procrastination of medical university students studying at Shiraz University of Medical Sciences. Therefore, the researchers applied a quantitative-experimental design.

3.2 Participants

The sample population was all medical students studying at Shiraz University of Medical Sciences in the fall semester of 2019-2020, who had taken a 3-unit academic writing course, compulsory for third-semester medical students. Out of 6 compulsory writing classes, two classes were chosen randomly to be involved in this study. Each group consisted of 25 male and female students (totally 50 students). Their age ranged from 20 to 24, and their English language level was upper intermediate. All these students had already passed pre-university and general English courses prior taking academic writing course. The participants in the experimental group received audiovisual feedback while

the students in the control group received traditional feedback (pen and paper feedback).

3.3 Instrument

3.3.1 Procrastination Assessment Scale for Students (PASS) Questionnaire

To collect data, we applied the Procrastination Assessment Scale for Students (PASS). It is a 5-item Likert scale questionnaire, originally prepared by Solomon and Rothblum (1984). The researchers translated the questionnaire into Persian to make sure that the participants comprehend the items. Content validity of the items in the translated version of the questionnaire was estimated by three TEFL experts. In preparing the final version of the questionnaire, these experts suggested some changes involving the edition, deletion, or addition of items. The reliability coefficient was determined to be 0.81, which was within the acceptable level.

This questionnaire has two parts. The first part evaluates the students' tendency to eliminate the procrastination. The authors in this study used the second part that evaluates the students' procrastination behavior. Both parts focus on six areas namely, writing a term paper, studying for an exam, keeping up with weekly reading assignments, performing administrative tasks, attending meetings, and performing academic tasks. There are eighteen questions and for each area of procrastination, three questions were assigned. The first question measured the procrastination frequency, the second one investigated the level of procrastination difficulties and problems in completing assignments, and the third question assessed the person's willingness to decrease procrastination. These items were scored on a five-point Likert scale ranging from 1 (never procrastinate) to 5 (always procrastinate). Other areas may also affect writing. Moreover, it is a multi-dimensional questionnaire. To maintain validity and reliability of the

questionnaire, it is not possible to just focus on writing sections due to its limited number of questions.

3.3.2 Screen Capture and Video Recording Software: Snagit

To capture the video and audio outputs, the instructor in the audiovisual feedback group used Snagit (provided by the university officials to all lecturers), which was a screenshot program letting the instructor quickly capture her screen, adding additional comments, and easily sharing the videos with others. Snagit creates images and videos to give feedback and creates clear documentation, so it is the best program to be used by the writing instructor to provide feedback on the students' written assignments. After opening the System Tray, we can select the Snagit icon to access the Capture Window.

3.3.3 A Writing Tablet to Give Feedback

To visually explain the concepts, the instructor in the experimental group used *Intuos Art Creative Pen & Touch Tablet*. Among different writing teachers only this instructor provided the aforementioned graphic tablet herself to be able to create more comprehensive feedback and demonstrate the necessity of incorporating technology in teaching and in learning. While Snagit was recording the whole session, the instructor used a writing tablet to provide feedback.

Having different brushes, highlighters, and color pens or pencils, the writing instructor could give color-coded feedback to medical students in experimental group to make this process more effective.

3.4 Data Collection Procedure

The researchers gave the students in both groups the academic procrastination questionnaire at the beginning of the semester, and after analyzing the data, they found that the students were homogeneous in terms of procrastinating before the treatment. The researchers then gave the questionnaire to the

students at the end of the semester to see if their mode of writing instruction affects the students' procrastination or not.

3.4.1 Experimental group: The receivers of audio-visual feedback

Participants in the experimental group received audiovisual feedback and were trained on how to use this kind of digital feedback. During this academic writing course, the instructor assigned the participants different writing tasks, and students were required to write them at home as part of their class activity and handed in their typed assignments (no hand-written assignments were allowed) to their writing instructor via email, or WhatsApp. Then, the writing instructor provided audio-visual feedback, a screencast video using images, pictures, animation, illustrations, drawings, and narration rather than simply words, to each and every one of the students separately and sent back the recorded audio-visual feedback to the students via WhatsApp. In providing the aforementioned feedback, the writing instructor used the *snagit* software, a screenshot program letting the instructor quickly capture her screen, adding additional comments, and easily sharing the videos with others. Furthermore, she applied the writing tablet, Intuos Art Creative Pen & Touch Tablet, with different brushes and highlighters to create more effective feedback. Among different writing classes in that semester, only this writing instructor had that writing tablet to provide audiovisual feedback to her class, while the instructors of other writing classes provided pen and paper feedback.

3.4.2 Control group: the receivers of traditional feedback

Students in this group received traditional feedback (pen and paper feedback) for their assignments. They were asked to do the assignments at home and hand in their typed assignments to their writing instructor the next session in the class. No hand-written assignments were allowed to prevent the instructor's misunderstanding due to illegibility. In the following sessions, the writing

instructor provided the answers (the pen and paper feedback) to the students in the classroom.

3.5 Data Analysis

To analyze data, the researchers applied descriptive and inferential statistics to answer the first and second research questions, respectively. To make sure that both groups of students in this study were homogenous in terms of their procrastination, the researchers used an independent samples t-test to compare the students' responses to the procrastination questionnaire in the two groups. After treatment, paired samples t-test was again applied to examine the students' responses in each group to the questions before and after treatment. Furthermore, independent samples t-test was used to check the responses in both groups after treatment to see the level of procrastination in each group.

4. Result

First, as depicted in Table 1, the researchers tested the responses provided by the students in the two groups (traditional feedback vs. audio-visual feedback) before starting the treatment to ensure that students in both groups were homogenous in terms of their procrastination level.

Table 1
Procrastination mean score of the respondents before receiving traditional vs. audio-visual feedback

Groups	Mean	SD	Sig.
Traditional Feedback	4.22	.58	.452
Audio-Visual Feedback	44.07	.64	

As shown in Table 1, the procrastination mean score in the traditional feedback group (m=4.22) was higher than the participants assigned to the audio-visual group (m=4.07). To find out whether this difference is significant, an independent samples t-test was conducted. As shown in the Table, this difference was not found significant (sig.= .452), so it can be concluded that the procrastination level of both groups was identical before providing traditional and audio-visual feedback to the participants.

The first research question was to investigate the procrastination level of the respondents and the aspects in which the respondents procrastinated more frequently before and after treatment. Descriptive statistics used to answer this question are shown in tables 2 and 3.

As displayed in Table 2, the total mean score of procrastination is 4.14 out of 5. According to the scoring system, scores higher than 3.5 are considered as high, and those below 2.5 low, and the scores between 3.5 and 2.5 are considered as medium. Therefore, the respondents were high procrastinators before treatment. Moreover, the students mostly procrastinated in "writing a term paper", Studying for an exam, and "Keeping up with weekly reading assignments" followed by performing academic tasks, attending meetings, and Performing administrative tasks. Accordingly, the respondents were high procrastinators in all areas.

Table 2
Descriptive statistics for the students' procrastination level before treatment

Areas of Procrastination	Mean	SD	Rank
Writing a term paper	4.78	33	1
Studying for an exam	4.66	49	2
Keeping up with weekly reading assignments	4.50	27	3
Performing administrative tasks	3.51	69	6
Attending meetings	3.60	75	5
Performing academic tasks in general	3.80	88	4
Total	4.14	56	-----

Table 3 shows the respondents' procrastination level after treatment. According to this table, the overall procrastination mean score of the respondents was 2.95, which is between 2.5 and 3.5; therefore, it shows they became medium procrastinators after treatment. Regarding areas of procrastination, they mostly procrastinated in performing academic tasks, performing administrative tasks, and attending meetings, followed by writing a term paper, keeping up with weekly reading and studying for an exam. Respondents were high procrastinators in performing academic tasks

(m=3.59), whereas they were low procrastinators in studying for an exam (m=2.41) and keeping up with weekly reading assignments (m=2.46). The respondents were medium procrastinators in writing a term paper (m=2.95), performing administrative tasks (m=3.19), and attending meetings (m=3.15). As shown in Table 3, the respondents' level of procrastination degraded after treatment in general.

Table 3
Descriptive statistics for the students' procrastination level after treatment

Areas of Procrastination	Mean	SD	Rank
Writing a term paper	2.95	.78	4
Studying for an exam	2.41	.43	6
Keeping up with weekly reading assignments	2.46	.25	5
Performing administrative tasks	3.19	.89	2
Attending meetings	3.15	.65	3
Performing academic tasks in general	3.59	.39	1
Total	2.95	.56	-----

To answer the second research question and find out the effect of the traditional and audio-visual feedback on the procrastination level of the respondents, we analyzed both groups through inferential statistics using paired and independent samples t-test.

Table 4 indicated that the respondents' procrastination mean score before providing traditional feedback was 4.22, which decreased to 3.89 after providing traditional feedback to the students. Therefore, it seems that the traditional feedback lowered the students' level of procrastination. However, to examine whether this difference was statistically significant, we used paired samples t-test. This test showed that the difference was not significant (sig= .102); therefore, it was concluded that traditional feedback did not have any

considerable effect on the students' level of procrastination and the students remained high procrastinators even after receiving traditional feedback.

Table 4
Procrastination level in the group instructed by traditional feedback

Traditional Feedback Group	**Mean**	**SD**	**Sig.**
Before Treatment	4.22	.58	.102
After Treatment	3.89	.58	

The same procedure was followed to see the effect of audio-visual feedback on the students' level of procrastination. As shown in Table 5, the respondents in this group were high procrastinators (4.07) before receiving audio-visual feedback, but they became low procrastinators (m=2.04) after receiving this kind of feedback; therefore, it seems that audio-visual feedback successfully lowered the students' level of procrastination from high to low; however, to find if this difference was significant, we ran paired samples t-test. The results (sig.=.001) showed that this difference was significant, so it can be claimed that audio-visual feedback was effective in changing the students from high procrastinators to low procrastinators.

Table 5
Procrastination level in the group instructed by audio-visual feedback

Audio-Visual Feedback	Mean	SD	Sig.
Before Treatment	4.07	.64	.001
After Treatment	2.04	.55	

Finally, the students' mean scores after receiving traditional and audio-visual feedback were compared. According to Table 6, the procrastination mean score for students who received traditional feedback was higher (m=3.89) in comparison with the students who received audio-visual feedback (m=2.04). Independent samples t-test confirmed the significance of this difference (sig.= .005); therefore, it can be concluded that the students who received traditional feedback had a higher level of procrastination in comparison with those who received audio-visual feedback. Moreover, the

students who received traditional feedback remained high procrastinators while the procrastination of those who received audio-visual feedback decreased, and they became low procrastinators.

Table 6
Procrastination level in two groups after treatment

Groups	Mean	SD	Sig.
Traditional feedback	3.89	.58	.005
Audio-Visual Feedback	2.04	.55	

5. Discussion

5.1 The First Research Question

The first research question addressed in the present study was "What is the students' level of procrastination before and after providing traditional and audio-visual feedbacks?" It was an attempt to investigate the aspects in which the participants procrastinated more frequently before and after the treatment. Based on the results, the procrastination level in both groups is identical before the treatment, and according to the scoring system, the respondents were high procrastinators before the treatment. In other words, based on the results in general, the students tended to postpone their assignments before receiving treatment. This is in line with the results of the study by Ziegler and Opdenakker (2018). They realized that many students postponed their academic tasks despite their knowledge about its negative results. Furthermore, according to Solomon and Rothblum (1984), procrastination behavior is a prevalent phenomenon among the students, particularly in the tasks for which there is a deadline.

Moreover, the findings revealed that medical students procrastinated mainly in "Writing a term paper", "Studying for an exam", and "Keeping up with weekly reading assignments". This is consistent with the findings of Ackerman and Gross (2005), who realized that a large proportion of academic procrastination belonged to writing term papers or studying for exams. This may be due to the fact that without receiving treatment the students may have

developed anxiety in writing essays, which is in line with the study conducted by Hartono and Maharani (2019). They found a negative connection between writing anxiety and writing performance, which positively affected academic procrastination (Hartono & Maharani, 2019). Moreover, the students in this study might not have had enough self-efficacy to do the task without receiving the necessary instruction. Based on many studies, there is a significant link between the learners' self-efficacy beliefs and their writing performance (Amogne, 2008; Chen & Lin, 2009; Erkan & Saban, 2011; Shah, Mahmud, Din, Yusof & Pardi, 2011; Woodrow 2011). This result is also supported by a survey done by Lakshminarayan, Potdar and Reddy (2013). They found that the participants' low level of self-efficacy led to below-average performance and a high level of procrastination, which may be true about the participants in this study.

Besides, it was found that the students became medium procrastinators after applying the treatment, namely receiving audio-visual feedback. Considering the areas of procrastination, the respondents mostly procrastinated in "Performing academic tasks in general", "Performing administrative tasks", and "Attending meetings. Indeed, the respondents' level of procrastination degraded after treatment in general. This may be due to receiving feedback on their assignments. Fritzsche et al. (2003) also came up with the same results. They realized that the reason behind the participants' procrastination was general distress and not receiving feedback on their assignments or receiving feedback which is confusing.

5.2 The Second Research Question

The second research question was "Does the type of feedback (audio-visual vs. traditional) affect the students' procrastination in writing?" Based on the inferential statistics in the form of paired and independent samples t-test, traditional feedback did not have any considerable effect on the students' level

of procrastination and the students in this group remained high procrastinators (m=3.89). The results of paired sample t-test indicated that the students who were the receivers of audiovisual feedback became low procrastinators (m=2.04); therefore, it can be claimed that audio-visual feedback was effective in changing the students from high procrastinators (m=4.07) to low procrastinators (m=2.04). The result of the students' mean scores after receiving traditional and audio-visual feedback was indicative of the effect of the type of feedback on the students' procrastination. This agrees with the findings presented by West and Turner (2016). They found that screencast provided better guidance for the students along with their active involvement in the revision process. This result is also in line with the findings of other studies (Thompson & Lee 2012). According to their study, most of the learners believed that audio-visual feedback was more meaningful than written comments and, as a result, they were more eager to attempt to revise. Furthermore, Halwani (2017) realized that reading and writing improved when instructors used audio-visual aids, and multimedia to help the learners grasp the issue and they became interactive in the classroom. Moreover, Hekmatzadeh, Khojasteh, and Shokrpour (2016) demonstrated a positive role for multimedia in promoting the students' motivation and their active engagement in English classes

6. Conclusion and Implications

The study showed a considerable relationship between the type of feedback (audiovisual vs. traditional) and procrastination. While the students were high procrastinators before receiving feedback, it was demonstrated that their level of postponement degraded after treatment in general, which was indicative of the positive effect of feedback on procrastination. Furthermore, based on the results, the students who received the audiovisual feedback became low procrastinators after receiving this feedback compared to those in the

traditional group. In fact, the effect of hearing and seeing the teacher's comments on the written assignments simultaneously seems to have a significant positive impact on improving the students' writing skills and decreasing their level of procrastination.

Consequently, it can be claimed that audio-visual feedback was more effective in changing the students from high procrastinators to low procrastinators. Therefore, considering the aforementioned problems in traditional feedbacks, it can be concluded that audiovisual feedback as a new mode of providing feedback is not only superior to a traditional one, but also more effective in decreasing the level of the students' academic procrastination in writing. Hence providing audiovisual feedback to students would be practical assistance in educational systems to reach a better outcome with respect to the context of the revision process. Given the revision process, it is possible for the teacher to create audiovisual feedback any time anywhere as compared to the traditional feedback, which is confined to merely paper feedback.

The findings in this study expanded EFL teachers' attitudes because they can identify new methods in teaching. With this perspective, they can use strategies that are more suitable in improving the students' learning. Accordingly, it would be fruitful for EFL learners in that they can recognize what type of feedback is more appropriate. These findings are also valuable for teachers and researchers, particularly if they are interested in incorporating multimedia aids in the teaching and learning process.

This research provides significant information to EFL writing instructors from a pedagogical standpoint. The findings of this study broaden writing teachers' perspectives by enabling them to recognize fresh techniques of teaching and delivering feedback that are both time- and cost-effective. They can then employ more relevant tactics to help EFL students improve their

writing ability. Students can obtain a significant quantity of aural feedback outside of the classroom with the assistance of electronic feedback and recover from earlier misinterpretations of their teachers' intentions about comments or question marks in assignments. Additionally, students may read professors' feedback for future references anytime and anywhere.

7. Limitations of the Study

Despite these promising results, there are nevertheless some limitations. First, this research could not include a large sample of participants, which limits the generalizability of the results because it was confined to only medical students studying at Shiraz University of Medical Sciences. Another limitation concerns the longitudinal aspect of the study because the data were gathered at a limited time. Furthermore, replicating this study might be difficult for other researchers and writing instructors because purchasing the graphic tablet or other similar devices might not be affordable to everyone.

8. Suggestions for Further Research

Future studies can take into account the participants' perspectives and viewpoints regarding audio-visual feedback. Future research may potentially uncover an association between procrastination, writing performance, and students' writing errors.

References

Abdi, Z, S., & Gracia, E. (2020). Prediction of Academic Procrastination by Fear of Failure and Self-Regulation. *Educational Sciences: Theory and Practice*, *20*(3), 34-43.

Abdi, R., & Mohammadi Darabad, A. (2012). Corrective feedback and personality types: An investigation of their effect on grammatical accuracy. *Teaching English Language*, 6(2), 103-128.

Abdous, M. & Yoshimura, M. (2010). Learner outcomes and satisfaction: A comparison of live video-streamed instruction, satellite broadcast instruction, and face-to-face instruction. *Computers & Education*, *55*(2), 733-741.

Abrahamson, E. (2010). Enhancing students' understanding of formative assessment through video-feedback on an undergraduate sports rehabilitation programme. In: Oxford: The Higher Education Academy.

Ackerman, D. S., & Gross, B. L. (2005). My instructor made me do it: Task characteristics of procrastination. *Journal of Marketing education*, *27*(1), 5-13.

Adas, D and Bakir, A. (2013). Writing Difficulties and New Solutions: Blended Learning as an Approach to Improve Writing Abilities. *International Journal of Humanities and Social Sciences, 3*(9), 254-266

Alizadeh Salteh, M., Yağız, O., Hamdami, R., Sadeghi, K. (2013). Editing or revision: An examination of EFL teachers' feedback on writing drafts. *Teaching English Language*, *7*(2), 27-61.

Amoge, D. (2008). An investigation of the correlation among efficacy sources, students' self-efficacy and performance in reading and writing skills*: Bahir Dar University in Focus.* (Unpublished master's thesis), Addis Ababa University, Addis Ababa, Ethiopia http://localhost:80/xmlui/handle/123456789/7607

Anson, C. M., Dannels, D. P., Laboy, J. I., & Carneiro, L. (2016). Students' perceptions of oral screencast responses to their writing: Exploring digitally mediated identities. *Journal of Business and Technical Communication*,*30*(3), 378-411.

Balkis, M. (2013). Academic procrastination, academic life satisfaction and academic achievement: the mediation role of rational beliefs about studying. *Journal of Cognitive & Behavioral Psychotherapies*, *13*(1), 57-74.

Beswick, G., Rothblum, E. D., & Mann, L. (1988). Psychological antecedents of student procrastination. *Australian psychologist, 23*(2), 207-217.

Bless, M. M. (2017). *Impact of audio feedback technology on writing instruction* (Doctoral dissertation, Walden University).

Bracher, M., Collier, R., Ottewill, R. & Shephard, K. (2005). Accessing and engaging with video streams for educational purposes: experiences, issues, and concerns. *ALT-J, Research in Learning Technology*, *13*(2),139-150.

Brick, B., & Holmes, J. (2014). Using screen capture for student feedback. *Eleventh International Conference Cognition and Exploratory Learning in Digital Age, Porto.*

Burka, J. B., & Yuen, L. M. (1983). Procrastination: Why you do it, what to do about it. Reading, MA: Addison-Wesley. https://cmc.marmot.org/Record/.b10531634

Campbell, B. S., & Feldmann, A. (2017). The power of multimodal feedback. *Journal of Curriculum, Teaching, Learning, and Leadership in Education*, *2*(2), 1-6.

Cann, A. J. (2007). Podcasting is dead. Long live video! *Bioscience Education*, *10*(1), 1-4.

Çelik, C. B., and Odaci, H. (2020). Subjective well-being in university students: what are the impacts of procrastination and attachment styles? *British Journal of Guidance & Counselling*, 1-14.

Chen, M. C., & Lin H. (2009). Self-efficacy, foreign language anxiety as predictors of academic performance among professional program students in a general English proficiency writing test. *Perceptual and Motor Skills*, *109*(2), 420-430.

Chow, H. P. H. (2011). Procrastination among undergraduate students: Effects of emotional intelligence, school life, self-evaluation, and self-efficacy. *Alberta Journal of Educational Research*, *57*(2), 234-240.

Daniel, J. (2013). Audio-visual aids in teaching of English. *International Journal of Innovative Research in Science, Engineering and Technology, 2*(8), 3811-3814.

Du, J. (2020). *Non-native English-speaking Engineers' Writing at the Workplace*. Springer.

Duru, E., and Balkis, M. (2017). Procrastination, self-esteem, academic performance, and well-being: a moderated mediation model. *Int. J. Educ. Psychol. 6*, 97–119.

Erkan, D. Y., & Saban, A. (2011). Writing performance relative to writing apprehension, self-efficacy in writing, and attitudes towards writing: A correlational study in Turkish tertiary-level EFL. *The Asian EFL Journal Quarterly*, *13*(1), 164-192.

Eisenbeck, N., Carreno, D. F., & Uclés-Juárez, R. (2019). From psychological distress to academic procrastination: Exploring the role of psychological inflexibility. *Journal of Contextual Behavioral Science*, *13*, 103-108.

Ferrari, J. R., & Pychyl, T.A. (2012). If I wait, my partner will do it: The role of conscientiousness as a mediator in the relation of academic procrastination and perceived social loafing. *North American Journal of Psychology, 14*, 13-24.

Fritzsche, B. A., Young, B. R., & Hickson, K. C. (2003). Individual differences in academic procrastination tendency and writing success. *Personality and Individual Differences, 35*(7), 1549-1557.

Gao, Z., Lochbaum, M., & Podlog, L. (2011). Self-efficacy as a mediator of children's achievement motivation and in-class physical activity. *Perceptual and Motor Skills, 113*, 969–981.

Gholaminejad, R., Moinzadeh, A., Youhanaee, M., & Ghobadirad, H. (2013). Writing attitudes of Iranian EFL students: A qualitative study. *Journal of Language Teaching & Research, 4*(5), 1138-1145.

Graham, S., & Harris, K. R. (2005). Improving the writing performance of young struggling writers: Theoretical and programmatic research from the center on accelerating student learning. *Journal of Special Education*, *39*(1), 19–33.

Graham, S., Harris, K, & Hebert, M. (2011). *Informing writing: The benefits of formative assessment.* Washington, DC: Alliance for Excellent Education.

Graham, S., Hebert, M. A., & Harris, K. (2015) Formative assessment and writing: A meta-analysis. *Elementary School Journal*, *115*(4), 523–547.

Graham, S., Harris, K., & Santangelo, T. (2015). Research-based writing practices and the common core. *Elementary School Journal*, *115*(4), 498-522.

Graham, S., & Perin, D. (2007a). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology*, *99*(3), 445-476.

Graham, S., & Perin, D. (2007b). Writing next: Effective strategies to improve writing of adolescents in middle and high schools. A report to Carnegie Corporation of New York. *Alliance for Excellent Education*.

Gray, J. (2017). "It's my closest friend and my most hated enemy": Students share perspectives on procrastination in writing classes. *The Journal of Student Success in Writing*, *1*(1), 1-13.

Gropel, P., & Steel, P. (2008). A mega-trial investigation of goal setting, interest enhancement, and energy on procrastination. *Personality & Individual Differences, 45*(5), 406-411.

Hafner, A., Oberst, V., & Stock, A. (2014). Avoiding procrastination through time management: An experimental intervention study. *Educational Studies*. *40*(3), 352-360.

Halwani, N. (2017) 'Visual Aids and Multimedia in Second Language Acquisition', *English Language Teaching*, *10*(6), 53- 56, Available: ISSN 1916-4742.

Harrington, N. (2005). It's too difficult! Frustration intolerance beliefs and procrastination. *Personality and Individual Differences*, *39*(5), 873-883.

Hartono, H., & Maharani, M. M. (2019). English writing anxiety and the writing problems of Indonesia EFL learners. *Advances in Social Science, Education and Humanities Research*, *409*, 513-517.

Hayat, A. A., Jahanian, M., Bazrafcan, L., & Shokrpour, N. (2020). Prevalence of academic procrastination among medical students and its relationship with their academic achievement. *Shiraz E-Medical Journal*, *21*(7): e96049.

Hekmatzadeh, M., Khojasteh, L., Shokrpour, N. (2016). Are Emotionally Intelligent EFL Teachers More Satisfied Professionally? *International Journal of Applied Linguistics & English Literature*, *5*(2), 1-11.

Henderson, M., & Phillips, M. (2015). Video-based feedback on student assessment: Scarily personal. *Australasian Journal of Educational Technology*, *31*(1), 51-66.

Henderson, M., & Phillips, M. (2014, September). Technology- enhanced feedback on assessment. In *Australian Computers in Education Conference*.

Ho, M. C. (2016). Exploring writing anxiety and self-efficacy among EFL graduate students in Taiwan. *Higher Education Studies*, *6*(1), 24-39.

Hong, J. C., Lee, Y. F., and Ye, J. H. (2021). Procrastination predicts online self-regulated learning and online learning ineffectiveness during the coronavirus lockdown. *Personality and Individual Differences*174:110673.

Jabali, O. (2018). Students' attitudes towards EFL university writing: A case study at An-Najah National University, Palestine. Heliyon, *4*(11), 1–25.

Jahin,H. & Idrees, M. W. (2012). EFL major student teachers' writing proficiency and attitudes towards learning English. *Journal of Taibah University, 4*(1), 9-72.

Jalilifar, A. R., Varnaseri, M., Saidian, S., & Khazaie, S. (2014). An investigation into the genre features of funeral announcements: people's view in social communications in focus. *Procedia-Social and Behavioral Sciences*, *98*, 747-756.

Jones, N., Georghiades, P., Gunson, J. (2012). Student feedback via screen capture digital video: stimulating student's modified action. *Higher Education*, *64*, 593-607.

Kerr, W., & McLaughlin, P. (2008). The benefit of screen recorded summaries in feedback for work submitted electronically. IN: Khandia, F. In *12th CAA International Computer Assisted Assessment Conference Proceedings of the Conference on 8th and 9th July* (pp. 153-168).

Khojasteh, L., Shokrpour, N., Kafipour, R. (2015). EFL students' perception toward class participation in General English courses, *Indian Journal of Fundamental and Applied Life Sciences*, *5*(2), 3198-3207.

Kim, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and Individual Differences*, 82, 26-33.

Kim, S., Fernandez, S., & Terrier, L. (2017). Procrastination, personality traits, and academic performance: When active and passive procrastination tell a different story. *Personality and Individual Differences*, *108*, 154-157.

Klassen, R. M., Krawchuk, L. L. & Rajani, S. (2008). Academic procrastination of undergraduates: Low self-efficacy to self-regulate predicts higher levels of procrastination. *Contemporary Educational Psychology*, 33, 915– 931.

Klibert, J., Langhinrichsen-Rohling, J., Luna, A., & Robichaux, M. (2011). Suicide proneness in college students: Relationships with gender, procrastination, and achievement motivation. *Death Studies*, *35*, 625–645.

Lakshminarayan, N., Potdar, S., & Reddy, S. G. (2013). Relationship between procrastination and academic performance among a group of undergraduate dental students in India. *Journal of Dental Education*, *77*(4), 524-528.

Lee, I. (2008). Ten mismatches between teachers' belief and written feedback practice. *ELT Journal, 63*(1), 13-22.

Mack, L. (2009). Issues and Dilemmas: What conditions are necessary for effective teacher written feedback for ESL Learners? *Polyglossia*, 16, 33-39.

Mathew, N.G., & Alidmat, A.O.H. (2013). A study on the usefulness of audio-visual aids in EFL classroom: Implications for effective instruction. *International Journal of Higher Education*, 2(2), 86-91.

Milgram, N. N., Mey-Tal, G., & Levinson, Y. (1998). Procrastination, generalized or specific, in college students and their parents. *Personality and Individual Differences*, *25*, 297-316.

Moradian, M., Hossein-Nasab, M. (2019). Revisiting the role of indirect written corrective feedback in the light of written languaging. *Teaching English Language*, *13*(2), 79-94.

O'Brien, W. K. (2002). Applying the transtheoretical model to academic procrastination. *ProQuest Information & Learning*. Retrieved from https://semanticscholar.org/paper/Applying-the-transtheoretical-model-to-academic-O%E2%80%99Brien/c357147aab93cf4aaa38dd3729a396f8ce3a3c54

O'Malley, P. J. (2011). Combining screencasting and a tablet PC to deliver personalised student feedback. *New Directions in the Teaching of Physical Sciences*(7), 27-30.

Onwuegbuzie, A. J., & Collins, K. M. (2001). Writing apprehension and academic procrastination among graduate students. *Perceptual and Motor Skills*, *92*(2), 560-562.

Ozer, B. U., Demir, A., & Ferrari, J. R. (2009). Exploring academic procrastination among Turkish students: Possible gender differences in prevalence and reasons. *The Journal of Social Psychology*, *149*(2), 241-257.

Pigg, S. (2014). Emplacing mobile composing habits: A study of academic writing in networked social spaces. *College Composition and Communication, 66*(2), 250-275.

Prat-Sala, M., & Redford, P. (2010). The interplay between motivation, self-efficacy, and approaches to studying. *British Journal of Educational Psychology*, 80 (2), 283-305.

Rice, K. G., Richardson, C. M. E., & Clark, D. (2012). Perfectionism, procrastination, and psychological distress. *Journal of Counseling Psychology,* 59 (2), 288-302.

Rouhi, A. & Vafadar, H. (2014). Web-based and collaborative corrective feedback: Exploring options for reducing the dependence on the teacher in l2 writing. *Journal of Teaching English Language and Literature Society of Iran, 8*(2). 59-89.

Schmilz, B., & Wiese, B. S. (2006). New perspectives for the evaluation of training sessions in self-regulated learning: Time-series analyses of diary data. *Contemporary Educational psychology*, *31*(1), 64-96.

Schraw, G., Wadkins, T., & Olafson, L. (2007). Doing the things, we do: A grounded theory of academic procrastination. *Journal of Educational Psychology*, *99*(1), 12.

Seo, E. H. (2008). Self-efficacy as a mediator in the relationship between self-oriented perfectionism and academic procrastination. *Social Behavior and Personality: An International Journal*, *36*(6), 753-764.

Shah P. M., Mahmud W. H., Din R., Yusof A., & Pardi K. M. (2011). Self-Efficacy in the writing of Malaysian ESL learners. *World Applied Sciences Journal (Innovation and Pedagogy for Lifelong Learning)*, *15* (11), 8-11.

Shokeen, A. (2018). Procrastination, stress, and academic achievement among the B. Ed. students. Educational Quest, *9*(1), 125-129.

Sirakaya, D., & Ozdemir, S. (2018). The effect of flipped classroom model on academic achievement, self-directed learning readiness, motivation, and retention. *Malaysian Online Journal of Educational Technology- MOJEST*, *6*(1), 76- 86. https://eric.ed.gov/?id=EJ1165484

Sirois, F. M., & Tosti, N. (2012). Lost in the moment? An investigation of procrastination, mindfulness, and well-being. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 30*(4), 237-248.

Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination frequency and cognitive-behavioral conflates. *Journal of Counseling Psychology*, *31*(4), 503-509.

Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, *133*(1), 65-94.

Stewart, M., Stott, T., & Nuttall, A. M. (2016). Study goals and procrastination tendencies at different stages of the undergraduate degree. Studies in Higher Education, *41*(11), 2028-2043.

Tajalizadeh Khob, M., & Rabi, A. (2014). Meaning-focused audiovisual feedback and EFL writing motivation. *Journal of Language and Translation*, *4*(2), 61-70.

Thompson, R., & Lee, M. J. (2012). Talking with students through screencasting: Experimentations with video feedback to improve student learning. *The Journal of Interactive Technology and Pedagogy*, *1*(1), 1-16.

Tillema, M. (2012). *Writing in first and second language: Empirical studies on text quality and writing processes*. LOT.

West, J. & Turner, W. (2015). Enhancing the assessment experience: Improving student perceptions, engagement, and understanding using online video feedback. *Innovations in Education and Teaching International*, *38*(2), 240-252.

West, J., & Turner, W. (2016). Enhancing the assessment experience: improving student perceptions, engagement and understanding using online video feedback. *Innovations in Education and Teaching International, 53*(4), 400-410.

Woodrow, L. (2011). College English writing affect: Self-efficacy and anxiety. *System*, 39 (4), 510-522.

Yee, K., and J. Hargis. 2010. Screencasts. *Turkish Online Journal of Distance Education, 11*(1), 9–12.

Zarei, G. R., & Khazaie, S. (2011). Is short term memory (STM) modality and gender specific: A study of cell-phone assisted EFL vocabulary learning. *Procedia-Social and Behavioral Sciences*, *30*, 680-684.

Zheng, M., Chu, C., Wu, Y., & Gou, W. (2018). The mapping of on-line learning to flipped classroom: Small private online course. *Sustainability*, *10*(3), 1-14.

Ziegler, N., & Opdenakker, M.-C. (2018). The development of academic procrastination in first-year secondary education students: The link with metacognitive self-regulation, self-efficacy, and effort regulation. *Learning and Individual Differences*, *64*, 71-82.