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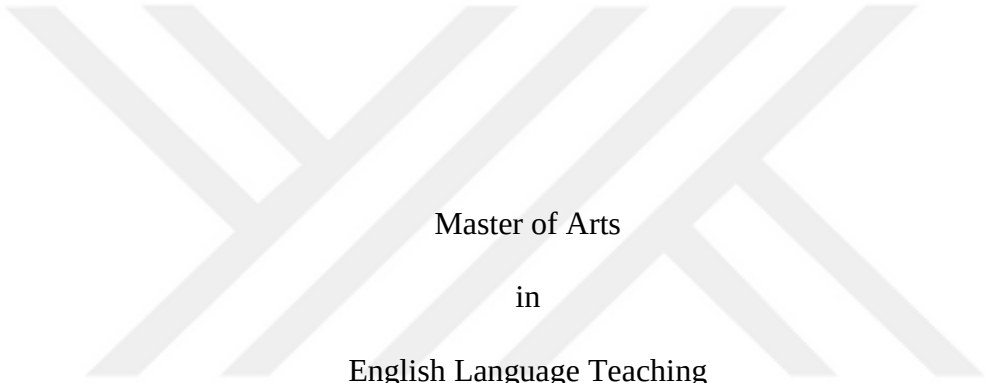
WHATSAPP: A MOBILE INSTANT MESSAGING TOOL TO ENHANCE STUDENTS'
WRITING PERFORMANCE THROUGH DIALOGUE JOURNALING

EBRU NOYAN

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WhatsApp: A Mobile Instant Messaging Tool to Enhance Students' Writing Performance
Through Dialogue Journaling

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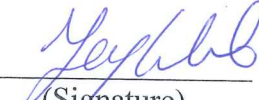
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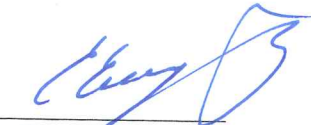
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ABSTRACT

Conducted in a mixed method design, this study attempts to explore the effects of WhatsApp and Pen and Paper dialogue journaling techniques on university students' writing performance in English language and also to compare their efficacy in terms of both writing success and students' attitudes toward the incorporation of these techniques into EFL classes. Forty-five freshmen students from Sociology department of Batman University, a state university in the south-east of Turkey, participated in the current study in three homogenous groups of 15, namely WhatsApp dialogue journaling (WDJ), pen and paper dialogue journaling (Pap DJW) and the control group, with respect to their writing success and the information they provided on a pre-questionnaire. The two experiment groups (WDJ and Pap DJW) received 12 treatment sessions having the same topics in each session while the control group had no treatment except weekly class requirements. During each session, students in WDJ group were expected to create online dialogues on the previously provided topics by the researcher through an online WhatsApp group on their smartphones in contrast to Pap DJW group who were required to respond their teacher with almost one page individual entries regarding the same topics as the compared group. Data relating to the efficacy of the two dialogue journal writing techniques on students' English writing skills were collected through a pre and post writing test administered to all groups. Considering the question on students' attitudes, both experiment groups were expected to answer an open ended questionnaire, including four questions, at the last treatment session. To ensure the reliability of the study, the results of the pre and post tests were scored by the same three English teachers through an analytic scoring scale for writing exams (adapted by Hemmati & Soltanpour, 2012). To analyze the quantitative results obtained from the pre and posttests, the researcher employed Paired-Samples T-test and one-way analysis of variance (ANOVA) to determine the differences in scores among the three groups. On the other hand, for the qualitative data provided by the open ended questionnaire on

attitudes, a content analysis was applied. Upon analyzing the relevant data, all groups showed a significant progress in overall writing proficiency on the posttests when compared with their pretests. However, regarding the components of the writing skill namely organization, grammar, content, vocabulary and mechanics skills, vocabulary skills of WhatsApp group and organization skills of the control group were found to have not been affected significantly by the treatment or the class work as the other components while pen and paper group showed progress for all. Additionally, there was no significant difference among all these groups in terms of neither overall performance nor writing components. Finally, the participants in both pen and paper and WhatsApp group had positive attitudes towards integrating these dialogue journaling techniques into their writing.

Key words: WhatsApp, dialogue journaling, writing performance, achievement in writing, English as a foreign language, pen and paper dialogue journaling, mobile learning, social media

KISA ÖZET

Karma metod dizaynı ile yürütülmüş olan bu çalışma, WhatsApp ve geleneksel kağıtkalem diyalog tarzı günlük yazma tekniklerinin, üniversite öğrencilerinin İngiliz dilinde yazma becerilerine olan etkisini ölçmeyi ve bu iki tekniği İngilizce yazma becerisi üzerindeki etkileri ile öğrencilerin bu teknikleri İngilizce derslerinde kullanmaya karşı tutumları açısından karşılaştırmayı amaçlamaktadır. Bu çalışmaya, Türkiye'nin güney doğusunda yer alan Batman Üniversitesi Sosyoloji Bölümünde okuyan kırk beş öğrenci katılmıştır. Katılımcılar, kendilerine önceden uygulanan ve sonunda yazma becerisini ölçen bir sorunun yer aldığı bir bilgi anketinin verilerine dayanarak, WhatsApp diyalog tarzı günlük yazma grubu (WDJ), kağıt-kalem diyalog tarzı günlük yazma grubu (PapDJW) ve kontrol grup olmak üzere her biri on beş öğrenciden oluşan üç gruba ayrılmış, ardından bu gruplarla bir ay boyunca farklı aralık ve miktarlarda çalışılmıştır. Çalışmanın birlikte yürütüldüğü iki deney grubu, (WhatsApp DJW and Pap DJW) her biri farklı konuda olmak üzere; haftada üç, ayda toplam on iki kez uygulama seansına maruz kalmışken, kontrol grubundan haftada üç saat olan ders içi aktivitelerinin dışında farklı hiçbir uygulama ya da aktivite beklenmemiştir. WhatsApp grubundaki öğrencilerden, araştırmacının da dahil olduğu bir WhatsApp grubunda, her uygulama başlamadan yarım saat önce araştırmacı tarafından verilen konu hakkında çevrimiçi tartışma ve paylaşımda bulunmalarını beklenmiş; kağıt kalem grubundaki öğrencilerden ise, her birine araştırmacı tarafından önceden tedarik edilmiş bireysel bir günlük defterine, yine aynı konularla ilgili sorulara cevap vermeleri ve onları yorumlamaları istenmiştir. Araştırmada kullanılan veriler bütün gruplara uygulanan ön ve son test tekniğiyle toplanmıştır. Ayrıca uygulamanın son seansında öğrencilerden, söz konusu teknikleri kullanmaya karşı tutumlarını ölçmek amacıyla, açık uçlu sorulardan oluşan bir tutum testi -karşılıklı diyaloglar içerisinde- uygulanmıştır. Öğrencilere uygulanan ön ve son testler, çalışmanın güvenilirliğinin sağlanması açısından, biri araştırmacı olmak üzere aynı üç farklı İngilizce öğretmeni tarafından “yazma sınavları için analitik puanlama ölçeği”

(Hemmati&Saltanpour, 2012) kullanılarak puanlanmış ve bu puanların ortalamaları hesaplanmıştır. Her üç grubun ön ve son testleri arasında ve grupların kendi içlerinde genel yazma becerisi ve alt yazma becerileri açısından anlamlı farklılıklar olup olmadığını ortaya çıkarmak için, testlerden elde edilen nicel sonuçlara SPSS (Statistical Packages for Social Sciences) sürüm 21 veri analiz programı kullanılarak Eşleştirilmiş İki örneklem t Testi ve ANOVA (One-way analysis of variance) testleri uygulanmıştır. Diğer yandan, öğrencilere uygulanan tutum anketinden elde edilen nitel veriler için detaylı bir içerik analizi yapılmıştır. Söz konusu verilerin analizinin sonucunda, bütün grupların son testte ön teste göre genel yazma becerisi açısından anlamlı bir başarı sergiledikleri görülmüştür. Ancak yazma becerisinin alt becerileri olan içerik, organizasyon, kelime, gramer ve teknik beceriler ele alındığında; kağıt-kalem grubunun her beş beceride de son testte ön teste göre anlamlı bir başarı gösterdikleri görülmüşken, WhatsApp grubu öğrencilerinin kelime becerisi, kontrol grubu öğrencilerinin ise organizasyon becerileri açısından diğer dört beceride olduğu gibi son testte anlamlı bir başarı gösteremediği ortaya çıkmıştır. Araştırmadan elde edilen diğer bir bulgu ise; her üç grup kıyaslandığında aralarında ne genel yazma becerisi ne de alt yazma becerileri açısından anlamlı bir farklılık gözlenmediğidir. Son olarak, bu araştırmanın bulgularına göre, öğrencilerin kağıt-kalem ve WhatsApp diyalog günlüğü yazma tekniklerinin İngilizce yazma derslerinde kullanılmasına karşı olumlu tutumlara sahip olduğu sonucuna varılmıştır.

Anahtar Kelimeler: WhatsApp, dil öğrenme yöntemi olarak WhatsApp, diyalog tarzı günlük yazma, İngilizce yazma becerisi, yabancı dil olarak İngilizce, geleneksel yöntem ile diyalog tarzı günlük yazma, mobil öğrenme, sosyal medya

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LIST OF ABBREVIATIONS

EFL	English as a Foreign Language
WDJ	WhatsApp Dialogue Journaling
PAP DJW	Pen and Paper Dialogue Journal Writing
ANOVA	One-way Analysis of Variance
ITU	International Telecommunication Union
ECAR	Educause Center for Analysis and Research
ICT	Information and Communication Technology



CHAPTER I: INTRODUCTION

Today, technology seems to have entered in many lives at a large extent. Many people are exposed to several different technological devices nearly in all living areas. Making communication easier, mobile phones might easily be observed to be the most popular of these devices and used by people in all ages. With the help of developing technology, mobile phones are seen to have new innovative features which has provided them to be named as smartphones. Offering easy communication everywhere through internet and enabling quick access to e-mails and social networking sites, smartphones have an important role in today's modern life. (Montag, et al., 2015).

The surpassing technological growth particularly in education and industry has also a great impact on the language learning environment (Thurairaj, et al., 2014). It is quite common to see students spending a great deal of time on their smartphones for online or offline communication nowadays. The overuse of smartphones, therefore, seems to have urged teachers to change attitudes and seek for educational benefits and ways to incorporate smartphones into the class work.

Opinions and practices on these issues vary from teacher to teacher and from researcher to researcher. Consequently, this causes an increasing concern on how to use smartphones effectively for instructional purposes. Investigating the learning practices of mobile technology, the researchers suggested a number of advantages of smartphone integration into English as a Foreign Language (EFL) classes. Enabling such features and properties as different communicative applications, a mobile camera, instant messaging platforms and easy access to social networking sites (SNS) through the internet connection, smartphone use for literacy practices in EFL classes were found to improve students' reading and writing performance. (Lee & Kim, 2013; Alkhezzi & Al-Dousari, 2016; Hazaea & Alzubi, 2016). Moreover, it has been suggested that mobiles devices have potential to provide several grammar and vocabulary

practices demonstrating to have a positive effect on these skills (Lee & Kim, 2013; Alkhezzi & Al-Dousari, 2016). Through many studies, it has also been confirmed that students in higher education institutions have positive feelings and attitudes towards smartphone practices as a part of class work or using them for other purposes including interaction with teachers and other students (Van de Bogart, 2011; Parajuli, 2016).

1.1. Purpose of the Study

Writing is one of the most challenging skills to be improved for EFL starter level learners because it is a complex activity and needs production of previously gained vocabulary and grammar knowledge. Instead of finding ways to facilitate the writing process, teachers are usually prone to correct the grammatical errors in writing works which results in unwillingness and anxiety for students most of the time (Garlikov, 2000). However, looking for the methods allowing students to express themselves properly in English writing is accepted to have several benefits for their future life (Alber-Morgan, Hessler & Konrad, 2007). To achieve this aim, a communicative writing technique, namely dialogue journaling, was first applied with native and nonnative sixth grade English speaking students in California (Peyton, 1993).

The traditional pen and paper dialogue journaling technique are commonly preferred by many EFL teachers (Dunlap, 2006). This includes initiating the conversation by giving students a topic and allowing 10-15 minutes to write. Students then give their paper journals to the teacher to obtain a response. Some studies on the effectiveness of dialogue journal writing confirm that this traditional technique has a significant effect on students writing performance (Denne-Bolton, 2013); however, as technology grows, students' interests have also changed and this required teachers to seek for modern ways of teaching to have their attention. For example; the numbers on smartphone usage among people nowadays show that it dominates our daily life at a great extent (Montag, et al., 2015). It is possible to find out how people make strong relations with a smartphone every day. Seeing the the popularity of smartphone

technology especially among students at school and noticing WhatsApp instant messaging application to be a driving force for communication, this mobile application has taken a great attention recently.

WhatsApp is especially popular among young people which explains why students are mostly busy with their smartphones during and after the class time. This situation creates one of the most challenging problems that English teachers have while preparing course plans. As students engage in the technology more, teachers also feel the need to update themselves to provide an attractive classroom environment and enjoyable activities to get students' interest.

Considering that WhatsApp is a popular online mobile tool and it provides group interaction and collaboration among students contrary to the traditional pen and paper way of dialogue journaling including just two people's interaction, writing online dialogue journals via a WhatsApp group might be a new trend and an effective writing technique for EFL students to improve their writing skill in collaboration. For the purpose of seeing the effects of WhatsApp dialogue journaling on five writing components and overall success in writing and comparing this modern way's effects with the traditional one, conducting a research which investigates the students' writing performance through an online group dialogue journaling including the teacher and students all as participants in collaboration is a need.

In the light of these issues, the first aim of this study is to explore whether dialogue journaling technique has a positive effect on elementary level Turkish university EFL students' overall success in writing and achievement in writing components. The second aim of this study is to investigate whether WhatsApp dialogue journaling group surpasses the traditional pen and paper dialogue journaling in terms of writing overall achievement and performance in five writing components. Additionally, this study aims to explore whether participants have positive attitudes towards the journaling practice via the target kind of technique as a class requirement

and whether there is any significant difference between the attitudes of these two distinct groups.

1.2. Research Questions

The following research questions were posed to achieve the purposes of this study:

1. Is there any difference between the pre and posttest mean scores of pen and paper, WhatsApp and control groups in terms of overall performance and five components (content, organization, grammar, vocabulary, mechanics) of English writing skill?
2. Is there any difference between the mean scores of pen and paper, WhatsApp and control group in terms of overall performance and five components (content, organization, grammar, vocabulary, mechanics) in English writing on the posttests?
3. What are the students' attitudes in pen and paper and WhatsApp groups towards using the target dialogue journaling technique in English writing classes?

The following hypotheses will be tested for the identified research questions:

- a) There is a statistically significant difference between the pre and posttest mean scores of pen and paper and WhatsApp groups in terms of writing overall performance and five writing components namely content, organization, grammar, vocabulary and mechanics.
- b) There is a statistically significant difference on the posttest scores of Pen and Paper, WhatsApp and control groups in terms of writing overall performance and five writing components in the favor of WhatsApp group.

1.3. Significance of the Study

The current study will provide implications of new writing techniques to be used in English language classes at university level for practitioners. In addition, through the qualitative and quantitative sources, the results of the data obtained from this study will contribute to producing new ideas in the process of planning and organizing the course plan, activity and

material selection in English writing courses for lecturers teaching at universities. This study is also significant in the field since it aims to provide new perceptions of using technological devices for instructional benefits, which will presumably be well appropriate for today's digital native students.

1.4. Definitions of Key Terms

Dialogue journaling: It is defined as a written conversation in which a communication between students and teachers is held on a regular basis. The teacher and students respond each other's comments and questions and usually initiate new topics to discuss in the journal. No error correction is applied during the journaling process in which the teacher is just a participant like the student rather than being the evaluator or scorer. (Peyton, 1993)

Pen and paper dialogue journaling: This is a conventional way of dialogue journal writing. It refers to a written dialogued conversation carried out at two or three day intervals between the teacher and a student in this group. In the present study, a day was allocated to the student and the teacher each. They submitted their journals to each other in the following day to receive a relevant response.

WhatsApp: It is a communication tool available as a smartphone application facilitating the exchange of videos, pictures, voice calls and instant messages with the help of the internet connection (Montag, et al., 2015). WhatsApp is accepted as one of the most important features of a smartphone as it enables easy communication via text or voice messages between two or more people.

WhatsApp dialogue journaling: This refers to an online dialogued written communication among the students at a certain time through WhatsApp instant messaging tool in the present study. The students and the teacher in this group exchanged ideas, shared photos or videos, posted comments on the related issues in the previously organized treatment sessions.

Writing: It is defined as a process through which students create and express their ideas with relevant letters and symbols in any language (Biria & Jafari, 2013). In this study, five components of writing (content, organization, vocabulary, grammar and mechanics) were examined besides overall competence in English writing skill.

1.5. Basic Assumptions

The assessment of participants' improvement in five writing components and overall performance in writing was based on the means of the pre and posttest in this study. The researcher assumed that all forty-five participating students showed their maximum performance without any cognitively or affectively preventing problems and attempted no cheating during the test times. Additionally, within the treatment time, all experiment group participants were assumed to have produced their entries by themselves rather than requesting help from any competent person. Another assumption of this study is related to the raters who scored the pre and posttest by using a previously provided writing scale. They were assumed to score the tests with full motivation and care like the researcher did.

1.6. Organization of the Study

Five chapters are included in this thesis project. Chapter one presents an introduction part comprising issues related to background of this study and providing the statement of problem, definition of key terms, the research questions and hypotheses, the purpose of the study, basic assumptions and methodology overview in details. This chapter specifically enables an understanding of necessary information for further chapters.

The second chapter presents literature review as a guide for understanding other studies conducted in the field and the philosophy of this study. Including a synthesis of suggestions from several research on the related issues, this chapter explains the necessity of conducting this thesis project.

Providing information about the methodology, chapter three comes after explaining the review of literature. Based upon the research questions, the setting and participants, the procedure of treatment, data analysis, instruments for data collection and the design of the research are clearly presented in this chapter.

Besides, chapter four is seen to present the quantitative and qualitative results upon analyzing the data results while chapter five serves as the discussion part for the relating results in respect with the relevant literature and the conclusion, limitation and implications parts for further studies. In the final part, this thesis project provides the reference and appendices sections.

1.7 Overview of Methodology

This study was conducted in a mixed-method design using questionnaires and a writing proficiency test in the pre-post-test design to collect the necessary data. To answer the posted research questions, forty-five Sociology students who were volunteer and meeting the required qualifications considering the information obtained from a background questionnaire and a writing exam in Batman University were selected as participants. The data provided by this questionnaire was used to assign the students in three homogenous groups in terms of writing proficiency and other particular requirements.

All forty-five students took the pre-test at the same time and place. The tests were scored by three different raters including the researcher herself with the help of an analytic scoring scale for measuring EFL writing skill. All participants had three hours English course in a week including speaking, listening, reading, writing, grammar, vocabulary and pronunciation activities. The two experiment groups had also twelve treatment sessions in which they wrote dialogue journals in the frame of pre-determined rules as contrary to the control group students who just had twelve hours course in four weeks with the others.

After 4-week intervention, a posttest was administered to all students to measure the improvement rate based on the sessions. Descriptive and statistical analyses of the collected data were provided by using SPSS, a software program used for statistical analysis.



CHAPTER II. REVIEW OF LITERATURE

2.1. Introduction

The aim of this research is to explore the potential effects of WhatsApp dialogue journaling and pen and paper dialogue journaling techniques on English writing skills of university students, investigate the level of satisfaction towards these practices and compare these two techniques in terms of success in writing skill and attitudes. To understand the necessity of conducting such a research, previous studies emphasizing the related issues were reviewed. Therefore, this chapter has provided detailed information about (1) mobile learning and mobile assisted language learning, (2) social media and examples of social media (Facebook, Twitter and WhatsApp), (3) and dialogue journaling as a writing technique with a review of studies relating them. The chapter then has explained the theoretical framework that this study is based on and ends with a summary to have an in-depth knowledge.

2.2 Mobile Learning

According to the 2016 Information and Communications Technology (ICT) facts and figures report published by the International Telecommunication Union (ITU), 95 % of global population, which is nearly seven billion, live in a mobile-cellular network area. With the increasing popularity of mobile lines and the developments in today's technological world, mobile devices seem to be used in several different parts of people's life.

The common mobile devices such as laptops or tablets serving as personal computers with a wireless network and PDA (Personal Digital Assistant) which is an electronic personal information agenda to keep names or addresses have been improved increasing their features and numbers in the last decade. As these computers continued to be expanded in features including a video and photo camera or GPS, a new device called as smartphone, which is a kind of mobile device, replaced them offering many of these features and several applications actively used by a lot of people for various reasons (Atici & Goksu, 2013).

The growth in this technology has affected many areas. The field of education is one of those affected by advancements because of students' diversified and increasing needs (Bansal & Joshi, 2014). In addition to the electronic learning (e-learning) which is a way of enhancing learning through electronic devices using multimedia technologies, mobile learning (m-learning) has also emerged as a supplementing tool to the traditional way of learning in many educational institutions today.

M-learning has attracted so many researchers that different perspectives have been attained on its definition. According to Mcconatha, Praul, and Lynch (2008), M-learning is defined as the learning facilitated via small mobile tools such as smartphones. Alzaza and Yaakub (2011) considers M-learning as the next generation of e-learning utilizing mobile devices to provide benefits to the learning process while Mirski and Abfalter (2004) define it as a form of distance learning which provides instructional materials for teachers and students through a wireless handheld tool. In a narrow sense, Alexander (2004) describes mobile learning as the use of mobile tools as mediator for any learning process inside and outside the class. To define it in a broad sense, M-learning is referred to any learning that takes place whenever or wherever the learner takes the advantages of mobile technology (Parajuli, 2016).

As seen in many researchers' definitions, mobile learning is seen as a substantial instructional technology in education. It facilitates students' learning through collaborating and exchanging ideas in a technological environment (Al-Emran, Elsherif & Shaalan, 2016). With the increasing use of this type of learning in higher educational institutions, its academic benefits or learner acceptance and attitudes towards integrating mobile technology in class work started to be investigated by the researchers. A survey by ECAR (Educause Center for Applied Research, 2012) indicated that undergraduate students expect technology use to engage in the learning process and their instructors showed 21 % increase in desiring for technology integration in class work in two-year time. The results also demonstrated an increase in the

number of mobile devices including laptops, smartphones and tablets that students use for educational purposes. This is because students believe that technology benefits them and it has a great impact on their success. This survey also reported that students are satisfied when their institutions provide the academic progress information (73 %), learning management systems (70%) or course materials (70%) through a mobile delivery system.

Likewise, Bansal and Joshi (2014) obtained positive findings in relation to students' expectancies, beliefs and attitudes towards mobile use in learning process. Based on a questionnaire and interviews applied to 37 teacher trainees in India, this study concluded that students had favorable attitudes towards m-learning and m-learning was agreed to offer flexibility of accessing several various resources (76%), increase social interactivity (81%) and be collaborative (82%).

These findings continued to be supported by many other studies in the following years (Al-Emran, Elsherif & Shaalan, 2016, Parajuli, 2016, and Al Hunaiyyan, Alhajri & Al-Sharhan, 2016). It was concluded that regardless of gender, age or level, students received m-learning as attractive and believe that it allows freedom to learn at any time or anywhere. Educators were also reported to have positive attitudes towards M-learning. In another study, besides having strong positive attitudes, students were suggested to be eager to use mobile apps in class (Briz-Ponce et al., 2017).

To identify its academic benefits, m-learning has been suggested to raise students' technological awareness, facilitate collaboration in teams, assist disabled students motivating them to attend the classes from a distance, provide sharing of knowledge and thus develop learning outcomes (Al-Emran, Elsherif & Shaalan, 2016). The next part will cover the usage of m-learning in language teaching process.

2.2.1 Mobile Assisted Language Learning

Seeing that it can be used to serve the instructional objectives and students display positive behaviors towards its use, mobile learning has also attracted researchers in specific educational areas. Today mobile learning principally refers to tablet PCs or smartphones while previously it referred to the laptops, which means to get what you want whenever and wherever you want (Fattah, 2015). Considering the constant and easy access to today's modern telecommunication technology and the incredible applications that the mobile devices involve, investigating the effectiveness and practicability issues of mobile device use in foreign language education has been one of the main focuses by several researchers.

Upon reviewing the literature, many usages of mobile tools for language learning outside and inside the classrooms have been suggested. For example, Thornton and Houser (2003) claimed that by sending the target vocabulary items to students' mobile phones at multiple times via text messages, students' retention can be increased providing students opportunities to remember the words well. Similarly, in another study including 44 Japanese students as participants (2005), Thornton and Houser suggested that sending the words through mobile phone e-mail delivery at certain periods is more preferable by students compared with studying the paper or Web materials (%71). In addition, this study also concluded mobile word learning to be better in students' success. Mobile devices have also been suggested to be used in language classrooms to distribute listening materials, to create writing circles so that students have fun while writing, check comprehension and get feedback from students (Fattah, 2015). In this sense, especially the language education in the large classes where it is hard to teach all students within the class time may be supported through utilizing a mobile communication tool.

As mobile education has become popular, a search for the benefits of various functions in these communication devices has also been attempted. According to the literature, the most common benefits of these devices in foreign language learning seems to be enabled via

multifunctional smartphone applications. Some researchers explored the efficacy of specific applications being installed on smartphones to facilitate language learning. According to Lee&Kim (2013), students' writing proficiency is affected by using a language learning application in smartphones positively. Besides, students can benefit from the instructional feedback that the system provides for. In a similar vein, Agca and Ozdemir (2013) researched the effects of a mobile environment on language learning regarding English vocabulary. Through 2D barcodes placed on the course book pages, the multimedia content was presented to students via mobile technology. The researchers concluded that a mobile assisted learning environment offering images, definitions and text based presentations increased the vocabulary success of students.

Attempts to explore the benefits of integrating mobile devices into language learning process continued in further years as well. In an aim of investigating the success of App-based spelling learning through mobile tools, 29 college students were taught by using a mobile App namely LINE during 6 weeks. The results indicated developments in spelling capabilities of English and high satisfaction for utilizing the assistance of mobile learning (Shih, Lee & Cheng, 2014). Examining the efficacy of mobile tools integration into English language classes in reading skills, another study revealed that students' text participation, code breaking, text using and analyzing practices show significant improvements at certain amounts by the help of online sources, offline and online dictionaries, mobile camera and other related mobile functions (Hazaea&Alzubi,2016). Similar to the former studies, vocabulary achievement was examined by Basal, Yilmaz, Tanriverdi &Sari (2016) through a study in which the participants were fifty university students in Turkey; however, differently this time, English idioms were taught to the experiment group via the target mobile application while the control group was exposed to traditional activities. Through pre and post measurements, the experiment group outperformed

the control group in learning English idioms which supports the prior findings by Agca & Ozdemir (2013).

As for students' attitudes towards incorporating a mobile device in language classrooms, researchers seem to come up with similar views that students would like to use it and they find engagement with mobile technology enjoyable and highly motivating (Thornton&Houser, 2005; Van De Bogart, 2011, Shih, Lee & Cheng, 2015). It is clear from this review of literature that using various functions of mobile devices, particularly mobile Apps in cell phones, to improve certain skills in language learning, students and educators seem to have highly benefited from mobile assisted language learning (MALL). Considering this gradual rise in interest and popular communication trends among people, social media platforms providing instant communication through the mobile Apps have also been scrutinized to offer more in-depth knowledge, which is discussed in the next part.

2.3. Social Media

Social media is a concept that has become the top of many peoples' agenda in many work or study areas today. There seems to exist a great desire among people in all ages to utilize a variety of benefits provided by this communication platform. It is defined as a group of Internet-based applications, which is technologically and ideologically based upon Web 2.0, a platform in which applications and the content are produced and perpetually modified by all the participant users in collaboration (Kaplan and Heinlein, 2010).

With the help of the effective social media applications that the mobile computing devices provide, now people can exchange information quickly and easily which has created the great popularity of this new communication platform. Thus, playing an important role in the world, social media sites such as You Tube, Twitter, Facebook, Instagram, Pinterest, Blogs, Snapchat, etc. have been examined by several researchers so far. It has been suggested that people mainly use social media for easy and quick communication because it is where

people are by the help of the smartphone applications and it is used for many other purposes specifically like advertising, marketing, keeping diaries or building patient relationships (Terry, 2017).

Likewise, the rise of social media has also led to educational and professional advantages which engage students into conscious learning (Rehm & Notten, 2016). Many researchers have achieved quite satisfying results with regards to social media use for educational purposes. For instance; according to Veletsianos and Kimmons (2016), social media platforms are inexpensive and accessible ways of engaging medical students in learning process besides affecting their online presence positively. Moreover, Rezaei and Meshkati (2017) have found high awareness and positive attitudes towards the employment of social media and some educative potentials that social media tools offer.

Moreover, another study suggested that social media tools may provide instructional activities which increase participation in class work especially for silent students and also students' anxiety of raising questions may reduce since they are not in front of the peers in classroom (Wheeler, Yoomans & Wheeler, 2008).

Next sections will exemplify and explain some studies in education on today's popular social media platforms, Facebook, Twitter and WhatsApp.

2.3.1. Facebook

Facebook is a social networking platform which people can easily create an online account on its website or the smartphone application and use it to communicate via online posts, comments, pictures, videos, etc. It has been reported as the most popular of all social networking sites (SNS) adopted by college students considering its common use by 90 % per cent of 3000 participant students (Dahlstrom, de Boer, Grunwald, & Vockley, 2011) and 96 % per cent of 1127 students (University of New Hampshire, 2010).

Aiming to explore its practicability for instructional use, a number of studies highlighted Facebook as a supportive academic tool for students' academic activities in that it reinforces active group participation and sharing of beneficial educational materials (Sharma, Joshi, & Sharma, 2016). A study including 300 undergraduate participant students from Universiti Sains Malaysia suggested that students accept Facebook possible to be utilized as online environment to facilitate learning and they demand their teachers integrate it into learning objectives (Kabilan, Ahmad & Abidin, 2010). Supporting the findings of this study, Manasšjevic et al. (2016) have indicated that students find Facebook appropriate for exchanging course related information and helpful for creation of collaborative group work.

As for the use of Facebook for language education, it is claimed to reduce the writing anxiety of students (Ponnudurai & Jacob, 2014). Furthermore, the use of Facebook as class requirement is suggested to bring improvement in students' EFL writing skills and receives great involvement even from the students showing little interest in the learning activities (Buga, et al., 2014). Finally, as Winet (2016) has pointed out, adopting a mobile messaging app like Facebook can both increase students' motivation and satisfaction and accelerate the learning process in EFL context.

2.3.2. Twitter

Twitter is one of the popular social media sites allowing people to interact with each other in an online environment. According to the usage report of the company, 328 million people actively use Twitter and it receives one billion visits per month (Twitter, 2017). It invites users to express what is happening at that time or what they think about some specific news by using photos, videos or comments, or "tweets" limited to 140 characters. It also provides them an opportunity to share again, or so called "retweet" others' posts and even send private messages. Tang and Hew (2017) define Twitter as one of the microblog services enabling individual users to develop real time communication from the mobile application on its website

or through SMS supporting the fact that it has a quite easy access just with a simple internet connection every time.

A study with 92 undergraduate students by Bicen and Cavus (2012) showed that the majority of the college students (40%) spend more than four hours of a typical day time on Twitter with mostly sharing quotes, music, videos, magazine news or videos. However, the researchers realized that the instructional materials are the least shared by these students which supports the findings of a study from University of New Hampshire explaining the use of Twitter as mainly for social reasons (89 %) or entertainment purposes (79 %). They also concluded that 34 % of students, the highest percentage in the study, access their accounts on a mobile phone which has excited the educators and researchers demanding to combine the advantages of mobile learning with the use of Twitter to facilitate learning.

Attracting such a high number of users, particularly college students, Twitter-assisted learning was expressed to be highly motivating in reading and writing classes by EFL college students (Cheng, 2012). In the same study, this technique showed improvement in reading and writing skills; nonetheless, regarding the writing skills, it showed no superiority over the learning with non-Twitter based interactive writing tasks. In the researcher's view, it might be related to the interactive aspects of both reading and writing techniques used by experiment and control groups. In a similar vein, some studies support Cheng in that Twitter is seen as favorable and positively contributive to the instructional experiences of learners (Reames, et al., 2016). Additionally, Twitter has been found as a quite effective language learning tool to study with and thus improve the pronunciation of target words in English (Mompean & Fouz-Gonzalez, 2016).

2.3.3. WhatsApp

WhatsApp, a smartphone application installed by many people recently, provides an instant online communication whenever or wherever required. It offers users numerous ways

of communication such as group talks, individual chats, broadcast messages or WhatsApp calls so that they can share simple texts, multimedia files, contact numbers or even information of location (Anglano, 2014). Users need to install the related app on their smartphone and with their phone number to get a profile associated with a user name, an avatar (a personal photo, a graphic file, etc.) or the status line. However, communication via WhatsApp requires a constant internet connection which may be a bit costly for some people.

The undeniable popularity of WhatsApp around the world has been attracting a number of researchers lately. The findings of relating studies verified this application's growing popularity among people. According to Montag, et al. (2015), WhatsApp revealed to constitute 19.85 % of daily smartphone usage, which is 161.95 minutes per day. The statistics of the same study has also demonstrated that young people are more interested in this communicative application. The domination of WhatsApp on our daily life and young people's extensive interest recently tickled the researchers' mind and made them investigate the ways WhatsApp can be beneficial in education. That's why this research was primarily focused on WhatsApp rather than the other social media platforms.

2.3.3.1. WhatsApp in Education

The rise in popularity of WhatsApp has brought questions in relations with its availability and efficacy or the level of satisfaction towards its employment in education, which triggered numerous studies to be conducted to answer these questions. The respecting previous research was seen to be highly controversial due to both negative and positive findings reported by the researchers.

Some studies were seen to find the use of WhatsApp in education as influential, motivating and superior to face-to face learning (Amry, 2014; Trenkov, 2014; Barhoumi, 2015; Nitza & Roman, 2016; So, 2016). Academically, WhatsApp was suggested to be an effective and facilitating tool for exchanging ideas (Amry, 2014; Barhoumi, 2015). Moreover, it was

found to provide in-depth relations and a pleasant environment (Bouhnik & Deshen, 2014), easy share of course related information (Barhoumi, 2015; Willemse, 2015) and a quick access to educational activities and materials (Bouhnik & Deshen, 2014). Furthermore, it was suggested to create a collaboration among students (Bansal & Joshi, 2014; Willemse, 2015), provide communication opportunities for post course sharing as a continuation of class learning (Bouhnik & Deshen, 2014; Trenkov, 2014), offer synchronous feedback and serve other useful applications (Trenkov, 2014). Technically, WhatsApp was reported to be advantageous in terms of simple operation, constant availability, immediacy and low prices (Bouhnik & Deshen, 2014).

In respect with the students' attitudes towards the educative WhatsApp use, some researchers presented quite positive results as well (Amry, 2014; Nitza & Roman, 2016; So, 2016). In Trenkov's study (2014), for instance, students pointed out that WhatsApp enabled them a no restricted area to express themselves freely and therefore increased participation. In another study by Bansal & Joshi (2014), students seemed to find the WhatsApp practice enjoyable and educationally useful.

On the other hand, some negative findings on the efficacy of WhatsApp use in education have also been found. For example, Bansal & Joshi (2014) concluded that married students find WhatsApp disruptive and thus traditional learning techniques in classroom are more preferable by them. In a similar vein, Bouhnik and Deshen (2014) referred WhatsApp as sometimes disadvantageous because technical problems or internet disconnection may occur or not all students may have a smartphone. They also expressed that WhatsApp has potential of irrelevant messaging and being irritating, therefore it sometimes may turn to be a preventing tool for meaningful communication. Likewise, according to Yeboah and Ewar (2014), WhatsApp chats take too much time of students, cause concentration deficiencies, distract learners from

processing the assignments and lead to problems for balancing academic preparation and related online activities.

2.3.3.2. *WhatsApp in Language Education*

Because this research mainly focuses on improving English language skills, this section will try to explain the findings of the previous research conducted on the efficacy of WhatsApp integration into language learning process. In this line, literature can be said primarily to emphasize the effectiveness of WhatsApp on different components of students' writing skills such as word choice, voice, sentence structure or mechanics. Nonetheless, there were still seen some little research focusing on the other skills in language learning as well as students' attitudes. Besides, the literature not only showed the advantages relating WhatsApp use, but it also identified some negative results with respect to empirical studies or students' reflections on language learning through incorporation of WhatsApp.

When examining the positive results, the most common finding is that WhatsApp is a quite effective device to improve the poor writing skills in English (Alsaleem, 2013; Fattah, 2015). In this regard, it was claimed to enable a great academic success in English writing voice (Alsaleem, 2013; Hani, 2014), generating ideas (Fattah, 2015), the ability of mechanics and punctuation (Fattah, 2015; Adujar, 2016), creating good sentence structures (Fattah, 2015; Adujar, 2016), effective word choice (Alsaleem, 2013; Hani, 2014; Fattah, 2015; Adujar 2016; Jafari & Chalak, 2016), teaching idioms (Basal, Yılmaz, Tanrıverdi & Sari, 2016) and acquisition of collocations (Ashiyan & Salehi, 2016). Besides its satisfying effects on writing skills in language, WhatsApp has also been suggested to create a higher disposition toward reading English texts among students (Plana, et al., 2013). Also, it helps the removal of a huge tripping block out of students' way while reading (Taj, Ali, Sipra & Ahmad, 2017). Another important finding on WhatsApp is that there is no gender effect in use and both female and male learners may benefit from it at the same amount (Ashiyan & Salehi, 2016; Taj, Ali, Sipra

& Ahmad, 2017). Finally, in addition to English, Arabic language was also revealed to be affected significantly by WhatsApp use in terms of the academic success in four skills, particularly vocabulary and sentence structure (Yaman, 2016).

Considering students' behaviors of WhatsApp in English classes and attitudes, Alsaleem (2013) asserted that students find it enjoyable. It was also suggested to be motivating and satisfying (Plana, et al., 2013, Winet, 2016) and students are willing to integrate it in class work as a requirement (Fattah, 2015). Furthermore, according to the study by Mistar and Embi (2016), students believe that WhatsApp help them to learn the language better as it is easy to use and offers quick share of information and they would like to continue in using it as a supporting learning tool.

In other respects, Yeboah and Ewar (2014) pointed out that WhatsApp destroys the sentence structure and spelling in English. Moreover, in Andujar's study (2016), it has been found to have no effect on syntactic complexity and sentence diversity.

As it was seen above, the findings on the beneficial use of WhatsApp are slightly controversial. However, as parallel with the purpose of this research, to clarify its other modes of use in language education, information about dialogue journaling and examined studies were also explained in the next part.

2.4. Dialogue Journaling

Requiring high level of skills, writing may be a quite complex process for many EFL students who face difficulties in producing accurate writings relating to organizing discourse, creating sentence structures, deciding correct words, the use of effective styles or generating ideas (Madkour, 2016). A solution to such problems has persistently been investigated according to the recent research. Concordantly, dialogue journal writing has been found to be one of the referenced techniques by most teachers and educators in order to teach English to adult learners nowadays (Kim, 2005). This instructional strategy has proved to have a number

of advantages by offering an interactive engagement as well as authentic practice for both teachers and students in EFL classrooms (Peyton, 1993; Dunlap, 2006; Denne-Bolton, 2013).

Peyton (1993) defines dialogue journaling as a written conversation enabling one-to-one communication between teacher and learners on a regular basis in or out of the class time during a school year, a course or semester time. Students are free to write as much as they would like and receive a response by peers or the teacher relating to their questions or comments. The teacher is a participant and may initiate new topics or ask questions as well rather than being an evaluator who corrects the writing pieces.

Upon reviewing the literature, studies seemed mainly to emphasize on two ways of dialogue journaling technique namely the conventional and electronic way of dialogue journaling. In the conventional way of dialogue journaling, which was the more preferred one in EFL classrooms until a brief time ago, students and teachers create their journal entries with a pen and paper and mostly in classroom with no integration of technological devices. On the other hand, electronic dialogue journaling requires a teacher-student or student-student interaction through an electronic platform (Naba'h, 2012). Both ways of dialogue journal writing were investigated in an attempt to explore their academic efficacy and the potential attitudes. The results showed that with no direct error correction of students' mistakes, dialogue journal writing creates an authentic and non-threatening atmosphere (Peyton, 1993). Also this is an effective technique in terms of gaining the knowledge about students' personal problems and interests through the strong relationship created between student and teacher. Moreover, receiving an ongoing feedback, teachers can easily be informed about their progress in language and interest levels to be used for future planning. Similarly, Kim (2005) stated that by practicing dialogue journaling on a daily base, students explore new ideas, use the language in real and meaningful context, feel free while expressing themselves and have the opportunities of learning a new culture and sharing their own.

What is controversial about dialogue journaling is that when considering academically, practicing dialogues was suggested to have no significant effect on EFL writing performance (Richards, 1995; Yoshihara, 2008). Contrarily, according to Song (1997) dialogue journaling is highly effective on improving the writing quality in English. This is supported by Alsaleem (2013) and Madkour (2016) who conducted studies based on online electronic dialogue journaling respectively WhatsApp and Google documents. WhatsApp dialogue journaling indicated statistically significant improvements in two important writing factors, voice and vocabulary choice. As for dialogue journaling via Google documents, as well as the word choice and voice, the results also revealed improvement in students' writing styles.

In consideration of attitudes, dialogue journaling via both electronic and conventional ways mainly received positive comments from learners (Wang, 1996; Run & Beach, 2005; Yoshihara, 2008, Madkour, 2016). Students were found to perceive it as useful for creating strong relationship and continuing the class work and a good way to be efficient in writing (Wang, 1996; Ruan & Beach, 2005; Thorson, 2011). However, with 53% percentage, participants in the study by Madkour (2016) expressed reluctance in practicing electronic dialogue journaling due to the lack of technological experience.

One of the other investigated issues in literature is whether electronic dialogue journaling namely e-mail shows better results than traditional dialogue journaling with pen and paper in the success of writing production. On this basis, researchers were found to have compared particularly the same electronic tool, e-mail, and shared similar results which concluded it to be more effective than the conventional pen and paper way on writing achievement (Wang, 1996, El-Koumy, 2008; Naba'h, 2012). E-mail as a journaling technique was asserted to reduce anxiety of writing in English and have more instructional benefits when compared with the pen and paper way (Foroutan, 2012). In a similar vein, the superiority of e-mail over pen and paper relating to overall writing achievement and language use in writing

was reported while the same research concluded no significant difference for mechanics, content, word choice and organization (Foroutan, Noordin & bin Hamzah, 2013).

As indicated in the reviewed literature, several studies have focused on the use of dialogue journal writing in EFL classes over years. Whereas little research concluded with controversial results on instructional benefits of this technique in writing, participants were found to perceive it as to be beneficial in learning writing and useful for creating strong relationship and continuing the class work (Wang, 1996; Ruan & Beach, 2005). Considering the information obtained from the recent literature on the efficacy of electronic based dialogue journaling and positive attitudes towards this kind of journaling practice, integrating it into English classes seem to have potential to be useful. Yet, with the rapid improvements in technology, students' interests and needs have also changed and thus, the fact that the new appearing trends also require to be researched must be taken into account. In this sense, the growing popularity of WhatsApp mobile application among students brings the need for an elaborative search of its use as a dialogue journaling technique and academic effects in language classrooms. With little research regarding online dialogue journaling via WhatsApp in the literature, the necessity of conducting a study exploring the efficacy of WhatsApp dialogue journaling on university EFL students' writing performance is quite obvious.

2.5. Theoretical Framework

This research is theoretically based on the Framework for the Rational Analysis of Mobile Education (FRAME) model (Koole, 2009). According to this model, mobile learning is defined as a process arising from the convergence of mobile technologies, social interaction and learning capacities of humans. The model is supposed to be beneficial in the design of learning and teaching strategies for mobile education through a consideration of personal and social aspects of learning besides technical characteristics of mobile tools. It refers to the similar concepts as those found in social learning theories such as Collaborative Learning (CL) by

Vygotsky (1934) who first proposed that learning takes place through communications and collaborative interactions that students have with their teachers, peers, or other experts. This concept is largely derived in Vygotsky's sociocultural theory in which learning is viewed as a social process activated by the Zone of Proximal Development (Dillenbourg, 1999). However, the FRAME model emphasizes the role of technology by using the mobile device as an active component rather than simply focusing on the cultural-historic development (Koole, 2009).

This study is directly affected by The FRAME theory as the students are in a social activity in which interaction is a key. It refers to a learning model in which learners use various virtual and physical situations via an interaction mediated through technology with other people, systems or information at any place and time (Koole, 2009).

2.6. Summary

Overall, this chapter has presented a review of studies conducted on a) mobile learning and mobile assisted language learning, b) social media (with examples of Facebook, Twitter and WhatsApp), c) WhatsApp in education and language learning and d) dialogue journal writing technique respectively. Finally, the chapter has explained the theoretical framework that this study was based on.

Upon reviewing the studies discussed in this chapter, mobile learning and mobile assisted language learning were seen to have a great emphasis by the researchers. The results of studies found that mobile learning facilitates students' learning through collaboration and share of knowledge, develop learning outcomes and thus has a great impact on the success. Moreover, students and educators were found to be highly satisfied with mobile integration into class work and school delivery system. Considering the language education, the reviewed studies in this chapter suggested that mobile learning affects students' writing proficiency, vocabulary knowledge and spelling capability positively.

The studies focusing social media and some social media platforms such as Facebook and Twitter besides in terms of their educative effects were also discussed in this chapter. Overall, the use of social media platforms in education was found to have instructional benefits and receive high demands to be used by students. Considering the language learning, Facebook was found to have a positive effect on improving students' writing skills. Likewise, Twitter was suggested to impact the writing, reading and pronunciation skills positively. Therefore, they were claimed to accelerate the learning process in EFL context. Additionally, studies showed that students find them quite motivating and contributive to instructional experiences.

Another discussed issue in this chapter, WhatsApp, which is considered as both an online mobile learning tool and a social media platform in this study, was suggested to have several instructional benefits for nearly all language skills. Particularly the writing skill was found to have attracted many researchers whose studies explored its efficacy on almost all writing components. Academically, on one hand, this online app was found to improve the poor writing skills in English in terms of the ability of mechanics and punctuation, voice, creating good sentence structures, generating ideas, effective word choice, teaching idioms and acquisition of collocations. On the other hand, WhatsApp was claimed to destroy the spelling and sentence structure in English as well as possessing no effect on sentence diversity and syntactic complexity.

The final issue discussed in this chapter, the dialogue journal writing technique, was found effective to improve writing skills in some studies while it was also suggested to have no influence on students' writings at all. Moreover, the effects of the pen and paper dialogue journaling and electronic journaling have been compared in several studies and electronic one was claimed to be superior by many researchers. However, this review showed that most of the electronic dialogue journaling studies focused mainly on dialogue journaling through e-mail and rather less attention has been paid on the effects of a kind of dialogue journaling through

WhatsApp. While reviewing the literature, just one study was found to investigate the effectiveness of WhatsApp dialogue journaling use on writing in English, however it was seen to focus primarily on the voice and word choice in Saudi students' writing. Therefore, with the purpose of filling this gap in the literature and enabling more information on WhatsApp dialogue journaling, this study tried to investigate the effects of this online App on Turkish university students' overall performance in writing and achievement in writing components by comparing it with traditional pen and paper dialogue journaling. This study will also attempt to reveal the success of pen and paper dialogue journaling on English writing skill and the attitudes towards these two techniques.

CHAPTER III: METHODOLOGY

The current study was conducted to explore the effects of dialogue journal writing on English writing performance and also to compare the effectiveness of WhatsApp DJW and pen and paper DJW techniques on writing achievement besides comparing attitudes towards these techniques at a state university in Batman, Turkey. This chapter discusses the methodology used for this study and is divided into five main sections: research questions, participants and setting, instruments, procedure, and data analysis. The first section will describe the three research questions that guided this thesis. In the second section, the participants and setting of the study will be introduced. The third section will address the data collection instruments and materials used. In the fourth section, the data collection procedure used in this study will be described. The last section will explain the data analysis methods.

3.1. Research Questions

This study intended to reveal whether dialogue journaling technique has a positive effect on elementary level Turkish university EFL students' performance in overall writing skill and writing components. The second aim of this study is to investigate whether WhatsApp dialogue journaling group surpasses the traditional pen and paper dialogue journaling in terms of writing achievement. Additionally, this study aims to explore whether participants have positive attitudes towards the target dialogue journal writing techniques as a class requirement. For these purposes, the present study will investigate the following research questions:

1. Is there any difference between the pre and posttest mean scores of pen and paper, WhatsApp and control groups in terms of overall writing success and five components (content, organization, grammar, vocabulary, mechanics) of English writing skill?
2. Is there any difference between the mean scores of pen and paper, WhatsApp and control group in terms of overall writing success and five components (content, organization, grammar, vocabulary, mechanics) in English writing on the posttests?

3. What are the students' attitudes in pen and paper and WhatsApp groups towards using the target dialogue journaling technique in English writing classes?

The following hypotheses will be tested for the identified research questions:

- a) There is a statistically significant difference between the pre and posttest mean scores of pen and paper and WhatsApp groups in terms of writing overall success and five writing components.
- b) There is a statistically significant difference on the posttest scores of Pen and Paper, WhatsApp and control groups in terms of writing overall success and five writing components in the favor of WhatsApp group.

3.2. Participants and setting

Participants of this study were chosen from a Sociology class at Batman university, a state university in the southeast part of Turkey. This class was chosen due to its feature of being the researcher's most populated class. The class including 45 students (12 male, 33 female) were explained the aim, procedure and the length of the study and were asked to participate voluntarily. Considering that this practice would be contributing to their English language performance, all students accepted to take a part in this study. The study was conducted in the Fall term of 2016-2017 academic year. The students were taught elementary level English regarding their results in a proficiency exam administered in the beginning of the term by the university.

Considering the scores of the writing task in the background questionnaire administered to students beforehand and students' preference in what groups they would like to take part in as well as the availability of the necessary possessions (smartphone, internet access, etc.), three homogenous groups equivalent in mean in terms of language proficiency were formed to avoid the selection bias which also ensured the internal validity. Fifteen students were selected for

each group including one control and two experimental groups namely WhatsApp dialogue journal writing (WhatsApp DJW) and pen and paper dialogue journal writing (Pap DJW).

3.3. Data collection Instruments

Data for the purpose of this study, which was conducted in a mixed method design, was collected through multiple instruments: (a) a writing test (pre-posttest), (b) a background questionnaire (with familiarity questions and a writing proficiency activity), (c) an attitude questionnaire (including open-ended questions).

3.3.1. Writing test

To provide the quantitative data used for this study, a pre-test and a post-test were administered (See Appendix A). These two tests were the same in topics and consisted of two alternatives. These two writing tests were first piloted in a different class including twenty-six university students who were at the same English level with the target group. To measure the reliability of the test, the test-retest method was administered in a different class involving twenty-six students on two different days having a two-week time period between. Based on the minimum and maximum time that pilot students spent during the first test, thirty-five minutes were found appropriate to allocate. The coefficient value of Pearson Correlation between test-retest results was calculated and, with 0.96 coefficient rate, the test was accepted to be reliable for the aim of current study.

For validity concerns, two other English teachers apart from the researcher were asked to review the first version of the test with the aim of evaluating its practicability and appropriateness regarding the issues of content, students' age, interests and level in English. Based upon the comments and suggestions, the test was revised and included sub-questions under each writing topic to help and remind participants of the topic they preferred to write about.

3.3.2. Background questionnaire

Before separating the target class into three homogenous groups considering the proficiency levels, familiarity and volunteering, a background questionnaire was administered to whole forty-five students (See Appendix B).

The questionnaire provided information about students' age, gender, familiarity with technology and WhatsApp, frequency of being online via a mobile phone, writing proficiency, whether they have a smartphone or not, etc. Students were also asked for a voluntarily participation in this project and to prefer a group to be assigned in.

At the end of the questionnaire, a writing proficiency activity was included which expected students to write a short paragraph about the assigned topic. Two different raters scored the paragraphs and then the average of these scores was attained as the main score. Considering these scores and the information obtained from the questionnaire, forty-five students were assigned in three homogenous groups.

3.3.3. Attitude questionnaire

Data considering students' attitudes towards using the dialogue journal technique via both WhatsApp and pen and paper was obtained through a questionnaire (See Appendix C) including open-ended questions. However, the questionnaire was not administered on a different piece of paper. They rather were asked to students in the last treatment session when they were expected to express their feelings through dialogue journaling on the target writing tool.

3.4. Procedure

A mixed research design including both qualitative and quantitative data was utilized in the present study to explore the effects of dialogue journal writing on EFL writing performance and compare an online DJW technique (WhatsApp) with the conventional way of dialogue journaling (pen and paper). Forty-five freshmen university students from Sociology department

in Batman University were explained the aim, procedure, duration and possible benefits in the second half of the Fall term in 2016-2017 academic year. Their consent was taken to take part in the study. Subsequently, they were given a background questionnaire including questions aiming to find out whether they are familiar with WhatsApp, have an easy access to Internet and possess a smartphone or not. A paragraph-writing activity was also included at the end of the questionnaire to obtain information about their writing proficiency. Students' paragraphs were graded by the researcher and two external scorers and evaluated with other information obtained from the questionnaire. Considering the results, participants were divided into three homogeneous groups named the control group and two experimental groups (WhatsApp DJW and Pen and Paper DJW). The groupings were shared with participants in case any disapproval occurs. After no opposition was attained, time for the pretest which was in the following week was agreed together. The duration of the pre- and post-test were decided as thirty-five minutes. Once the pre-test was given, a time schedule indicating the dates were given to the experimental groups and then the intervention sessions held during four weeks (twelve sessions) started. The procedures of this intervention for both experimental groups and control group were explained in the next sections.

3.4.1. Procedure for experimental groups

This study included two experimental groups: a) WhatsApp group, b) pen and paper group. Following parts will attempt to provide the procedure of the intervention sessions in these groups separately.

3.4.1.1. Procedure for experimental group 1: WhatsApp DJW group

This group included fifteen students who had an easy access to Internet with a Wi-Fi connection, possessed a smartphone and usually preferred WhatsApp for communication. The researcher was the sixteenth member of the group as a facilitating participator but also as an observer and coordinator when it was necessary. Each week the members had previously agreed

three sessions at 8pm on the planned day. The average duration for conversations was around three hours. Participants were reminded the discussion time and the rules thirty minutes before each session. This time was allocated to enable full participation and preparation for the discussion on WhatsApp. During the conversations, an anxiety free environment was aimed to be provided. Each student shared his or her feelings, thoughts and experience with the day's discussion topic. They were free to comment on others' entries, post any videos or pictures and create casual talks spontaneously as well as asking each other and the researcher some questions. They usually seemed eager to reply as soon as possible; however, to avoid confusion and not to miss any entry, they were asked to wait each other's comment and then to write theirs. With the same aim, the researcher sometimes called the names who were quiet or offline. Despite the researchers' efforts to provide a smooth flow of conversation and full participation, there were still some silent students or those who commented on not every entry.

These sessions were usually held in two or three day intervals so as not to bother participants too much, which possibly would decrease their motivation towards active participation. Even so, some participants were still seen to express or comment on nothing more than posting just one paragraph entry in some sessions while some others were seen to be very active during the whole time. The twelve WhatsApp sessions were explained and exemplified in the intervention section below.

3.4.1.2. Procedure for experimental group 2: Pen and paper DJW group

Including fifteen other students, this group was expected to write their responsive or initiative entries on a notebook previously supplied by the researcher during each journaling session. Similar to the WhatsApp group, they wrote their entries on three different days throughout four weeks to reach a total of twelve sessions. The discussion topics and the date for each session were the same as the WhatsApp group, but dissimilarly, they wrote the dialogue journals individually at home within almost one-day time while the others were in an online

group and obliged to response spontaneously. They were also given a time schedule comprising the date of the sessions and asked to follow the necessary rules. Every student finished writing and submitted the journals to the researcher on the agreed time so that the researcher answered their questions, made comments and initiated a different discussion topic for the next session. The researcher also had a similar schedule and she had to finish responding to each of fifteen journals on the same day and return them to their owners.

As this was a mutual communication between the teacher and the student, they were free and confident to ask and answer any questions and discuss on whatever they would like. Some students even attempted to share and ask about the teacher's or their own private life. The researcher kindly commented on every entry each time and ended hers with a new discussion topic, which was the same as what she did in WhatsApp group. In the final session, similar to WhatsApp DJW group, students were expected to write about their feelings and thoughts of the journaling process to obtain information about attitudes. The details about the twelve pen and paper sessions were presented through some images provided in the next part.

3.4.1.3. Procedure for the intervention sessions

The procedure of the twelve intervention sessions in both experimental groups were quite like each other. Therefore, sampling two images from each session with discussion topics and the questions (See Appendix D) were provided for both groups in the following part.

a) Session 1 (23.11.2016)

The first session started at 8 pm, and the topic and related questions initiating the discussion are quoted as below:

Researcher: "Describe your school day/day today" You can inform us about (1) what time you got up, (2) what time and how you went to school, (3) how many classes you had, (4) what classes they were, (5) what you did after school and finally (6) whether it was a good day for you. Write at least ten sentences to describe your day please."

In the following, there are sampling images of WhatsApp and pen and paper group students' replies based on these questions.

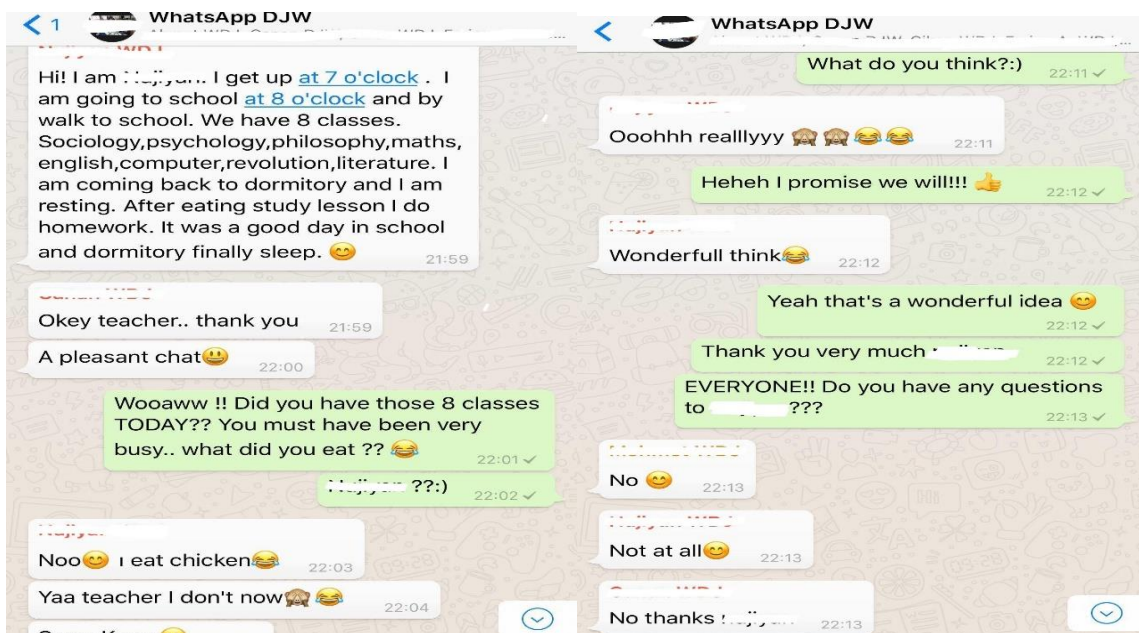


Figure 1: WhatsApp dialogue journaling samples from session 1

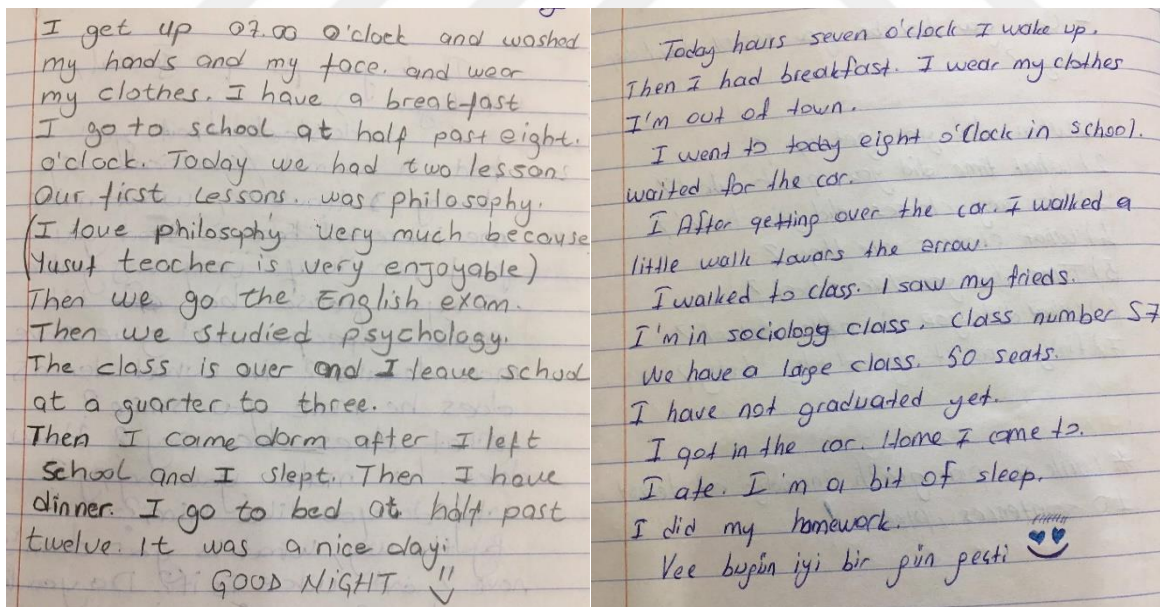


Figure 2: Pen and paper dialogue journaling samples from session 1

b) Session 2 (25.11.2016)

The discussion topic and questions in this session for the both experimental groups are presented in the quotation below.

Researcher: “Hi everyone! Today's topic is the teachers' day. You know that it was a special day for teachers yesterday. Did you celebrate the teachers' day? Do you have any interesting memories from the past with any teacher? Who is your favorite teacher? Why do you like him/her? Do you think this day should be celebrated in our country? Are teachers important people for a country's future? Why/why not? Write your ideas and experiences of this special day including the answers of the questions.”

Regarding these questions, sample replies from the groups are as following.



Figure 3: WhatsApp dialogue journaling samples from session 2

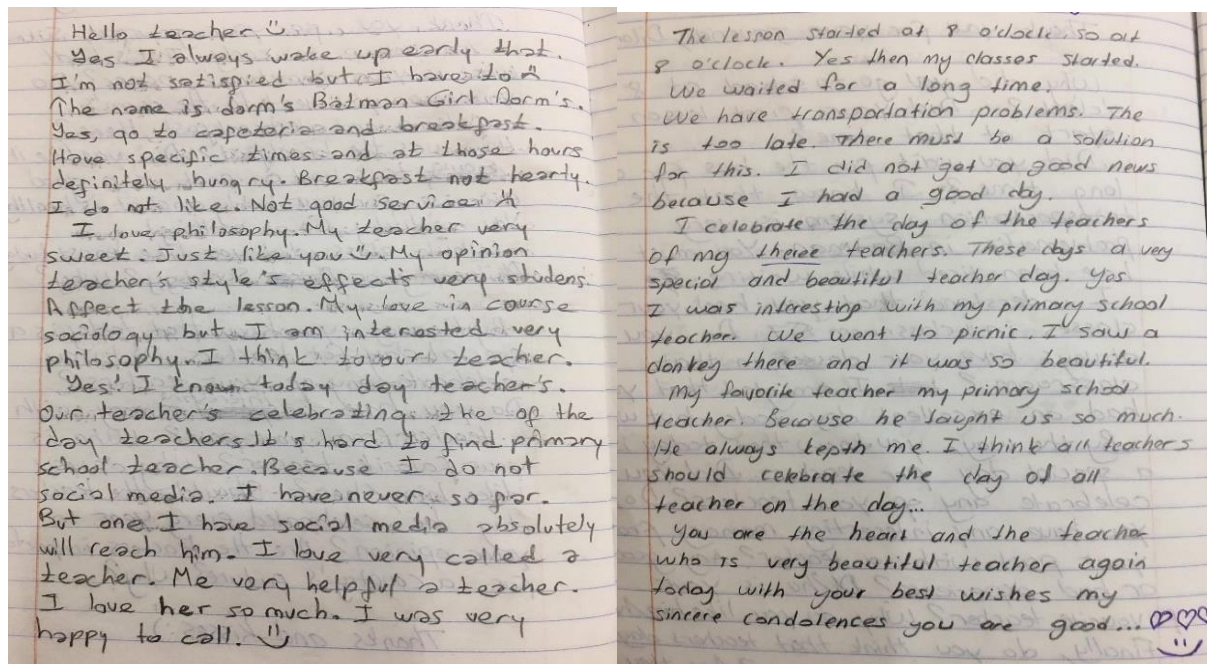


Figure 4: Pen and paper dialogue journaling samples from session 2

c) Session 3 (28.11.2016)

The students in WhatsApp group were informed about the discussion topic and the questions presented below half an hour before the session while they were provided for those in pen and paper group in the previous day by the researcher.

Researcher: "Hello everyone! I am sure that you did lots of interesting things during the weekend, however I guess you may also have had some bad things. Are you ready to discuss about the worst part of your weekend? What was bad about these 3-day holiday? Why do you think that it is bad? What are the effects of it on you or your friends/family? Please tell us what you didn't like at this weekend."

Two images representing the session discussions from both groups were provided below.

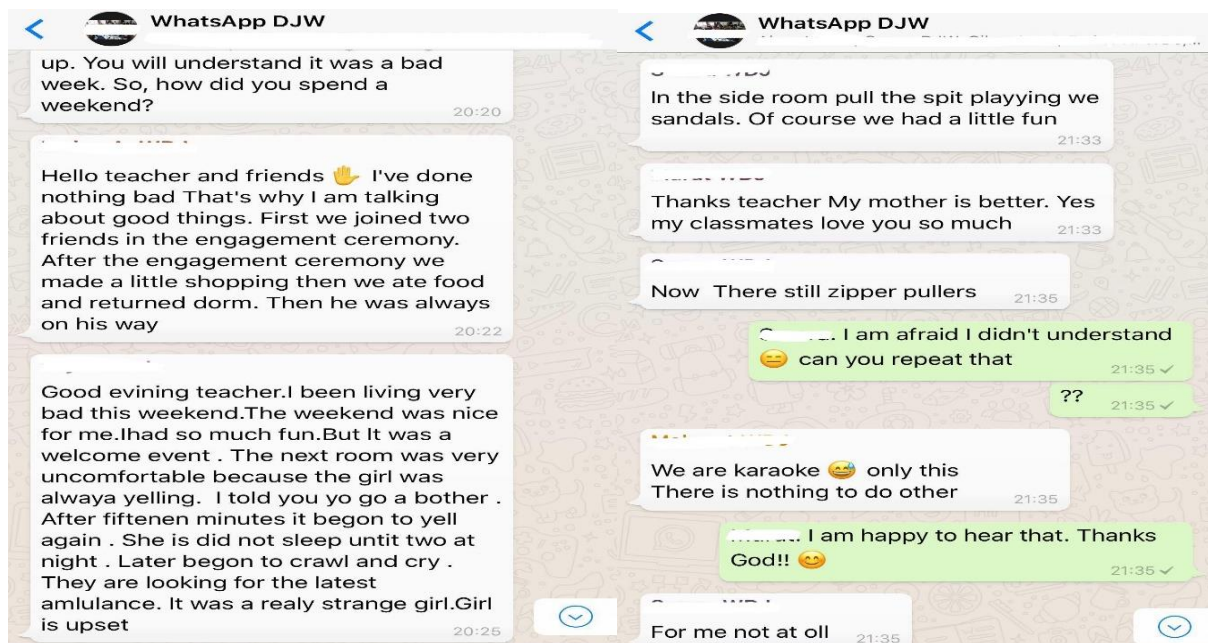


Figure 5: WhatsApp dialogue journaling samples from session 3

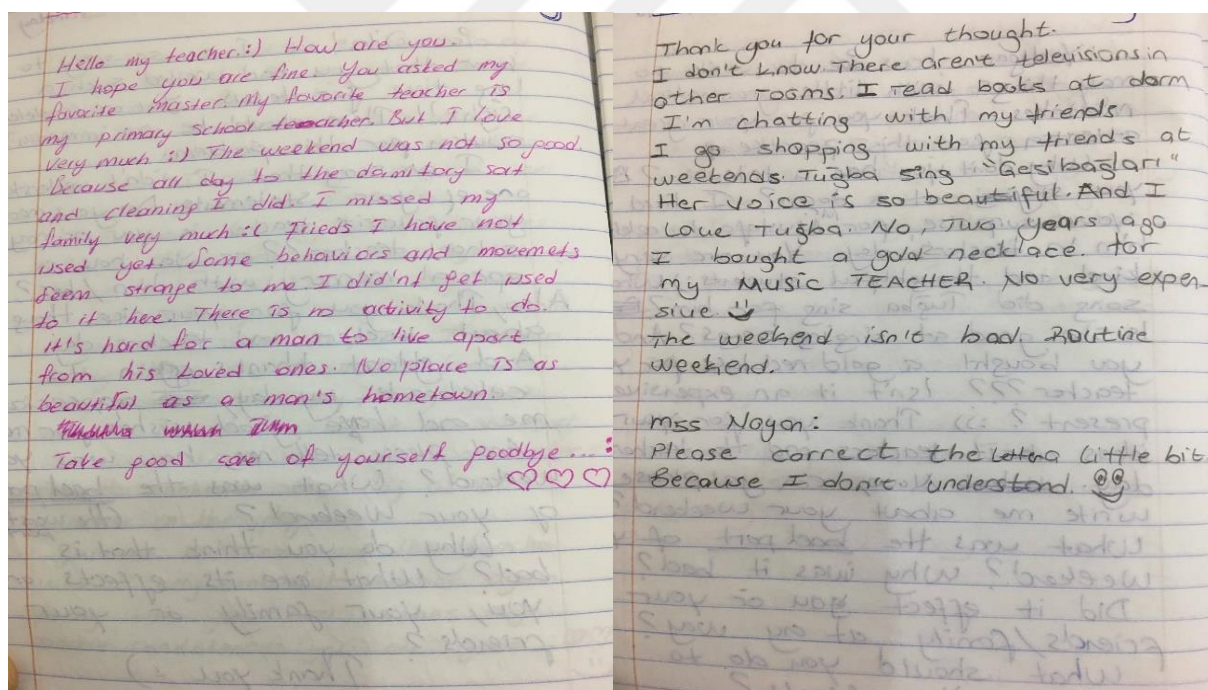


Figure 6: Pen and paper dialogue journaling samples from session 3

d) Session 4 (30.11.2016)

The topic and questions that used in this session by the researcher to initiate the discussion was like this: “*Let’s discuss the current news. What happened in Turkey today? What is on news? How do you feel? How did they affect people? Give some details.*” Two examples from session 4 were presented below.



Figure 7: WhatsApp dialogue journaling samples from session 4

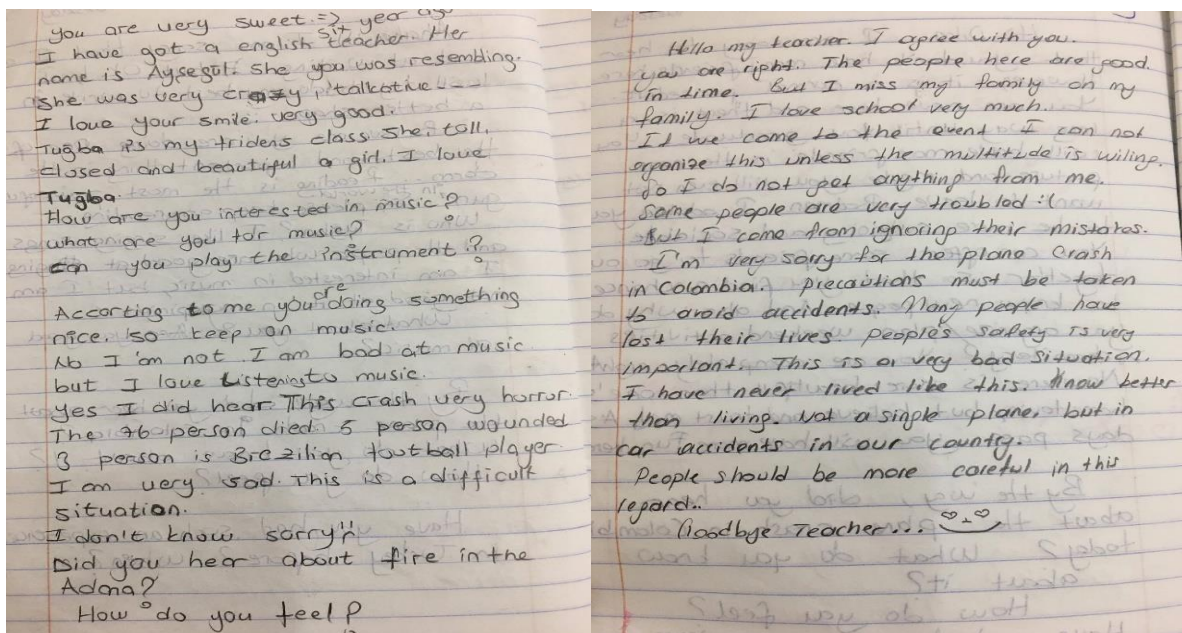


Figure 8: Pen and paper dialogue journaling samples from session 4

e) Session 5 (03.12.2016)

The students in both group and the researcher discussed about the football in this session. The researcher's initiating entry was like this: *"Yesterday Fenerbahce and Feyenoord played a football match. Did you see it? If so, what do you think about the score? Do you think it was fair? If you didn't see the match, you can also tell me/us about something you liked doing today."*

The replies from students in the experimental groups are presented separately in Figure 9 and 10.



Figure 9: WhatsApp dialogue journaling samples from session 5

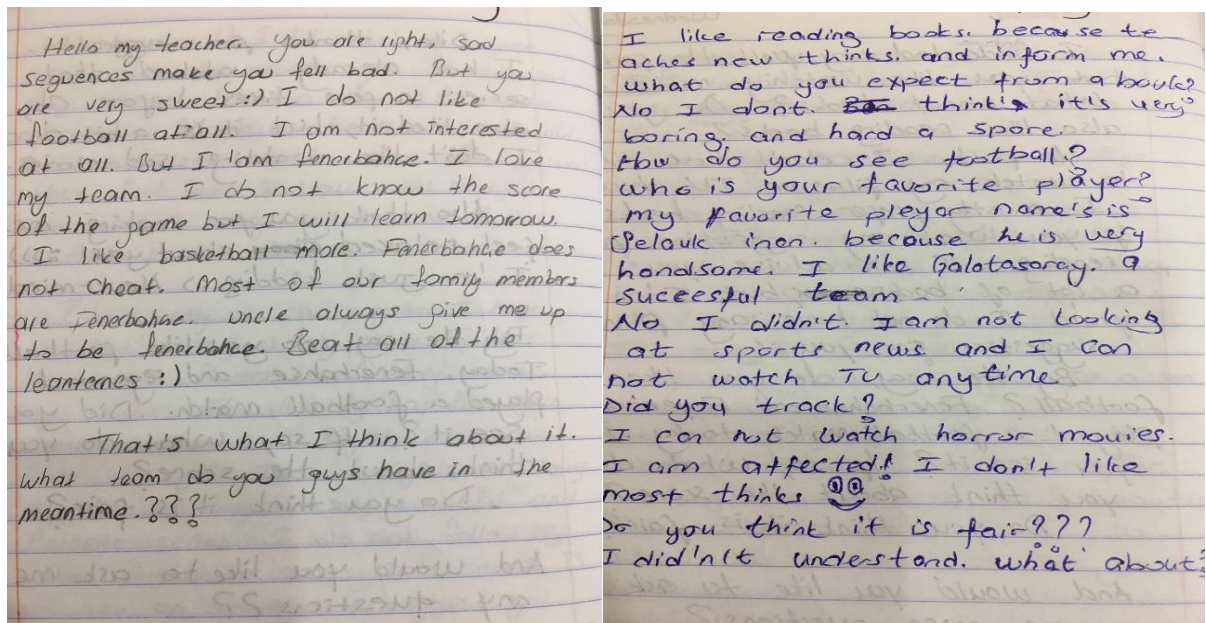


Figure 10: Pen and paper dialogue journaling samples from session 5

f) Session 6 (06.12.2016)

Both groups discussed about a bad event occurred in the previous day in this session. The researcher's beginning entry was *"Let's talk about the living bomb attack in Besiktas. I guess you feel very sad but we need to brainstorm and suggest some possible solutions to protect ourselves and our country from these evil events. You are the country's hope for its future. Therefore, why don't we exchange ideas on what to be done to prevent such bad actions? What can we do as citizens? I will be glad if you share all your feelings and ideas with us/me."* Students answers are presented in the following figures.

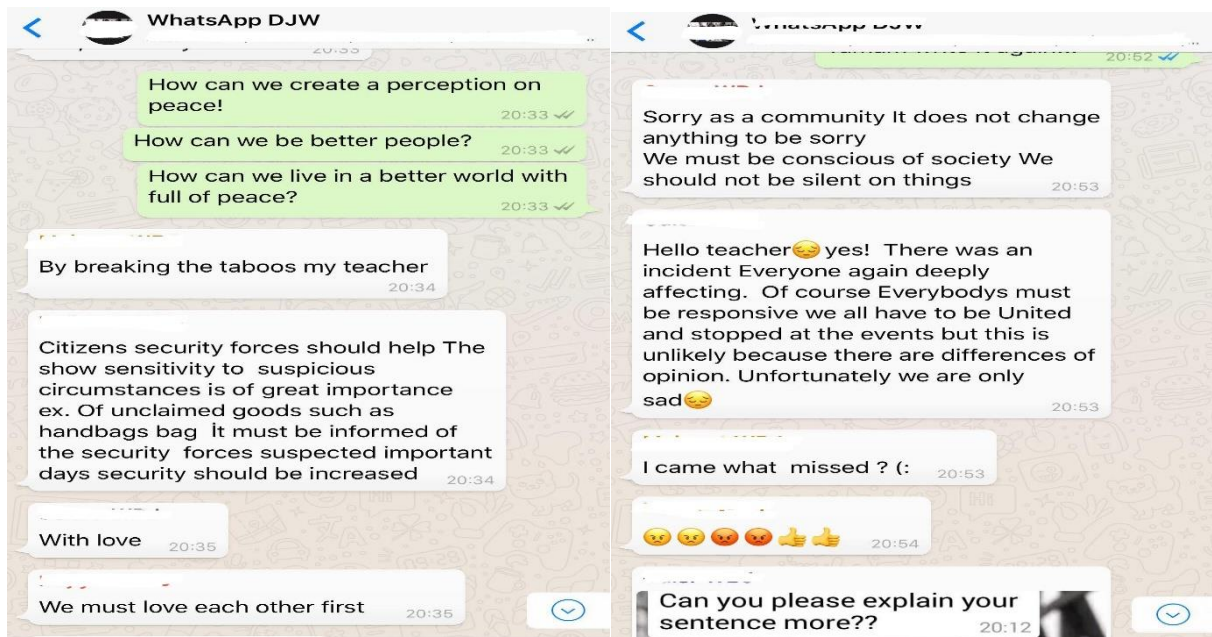


Figure 11: WhatsApp dialogue journaling samples from session 6

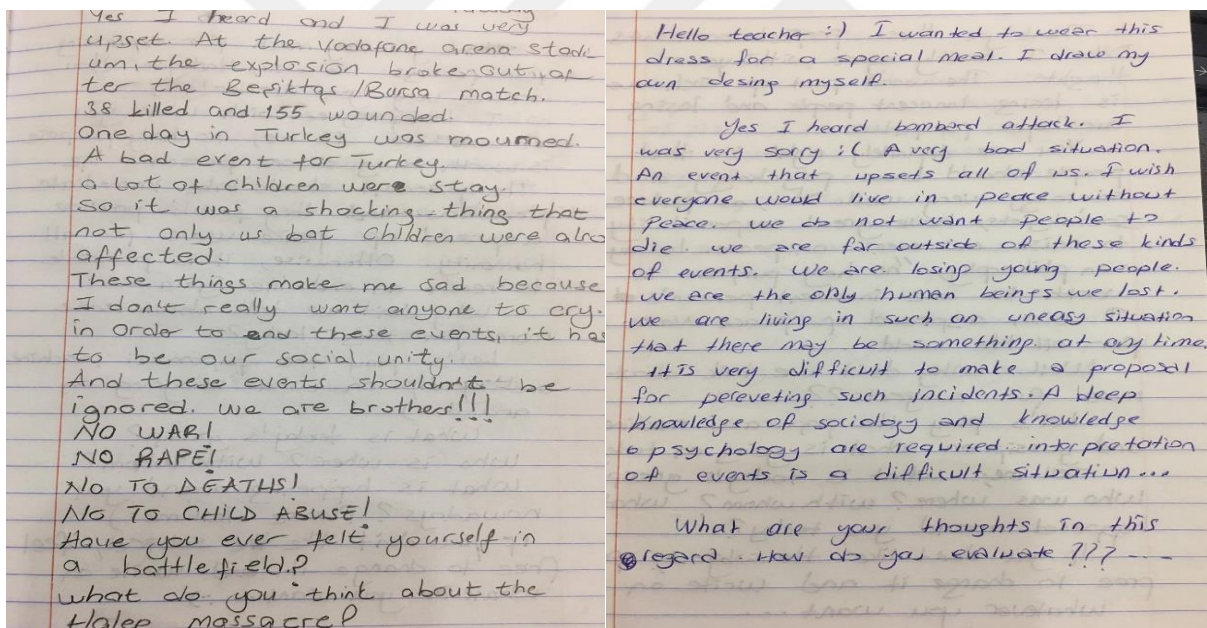


Figure 12: Pen and paper dialogue journaling samples from session 6

g) Session 7 (09.12.2016)

Fashion was the main topic in this session. Accordingly, the researcher posted the following entry: *"Shall we to talk about the fashion today? Are you interested in fashion? What did you wear today? What is your favorite dressing style? Did you like somebody's dressing*

style today? What was he/she wearing? You can post a photo that shows your favorite dressing style here and describe it. I would like to learn your favorite dressing styles.” Here are some examples from the conversations.

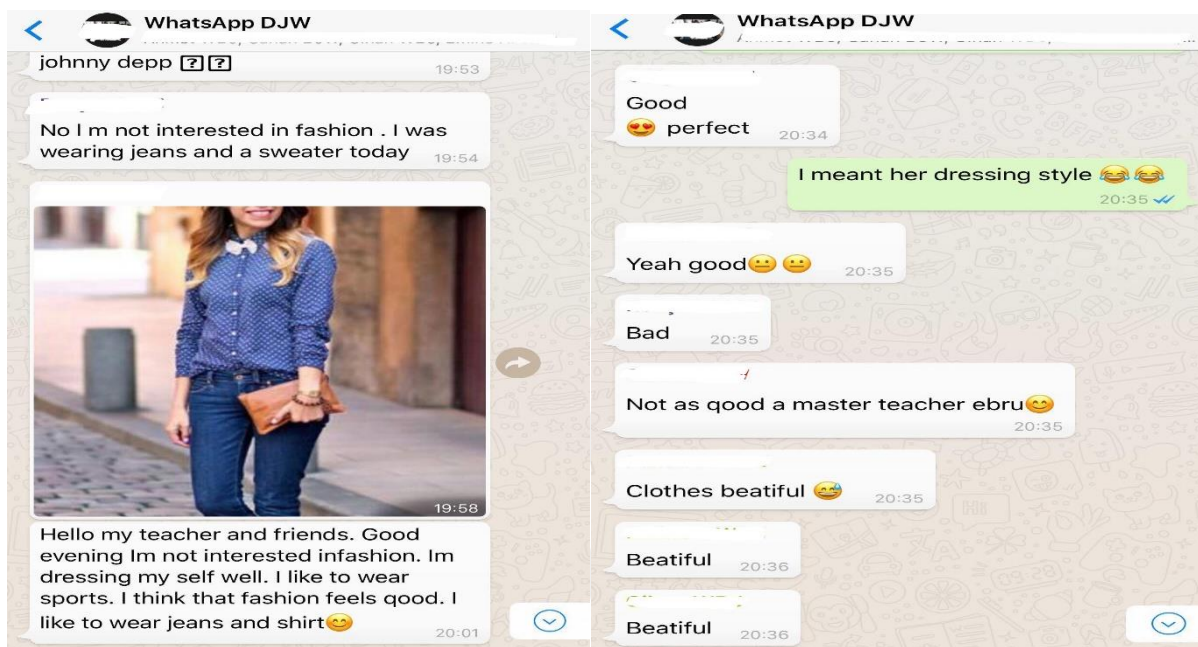


Figure 13: WhatsApp dialogue journaling samples from session 7

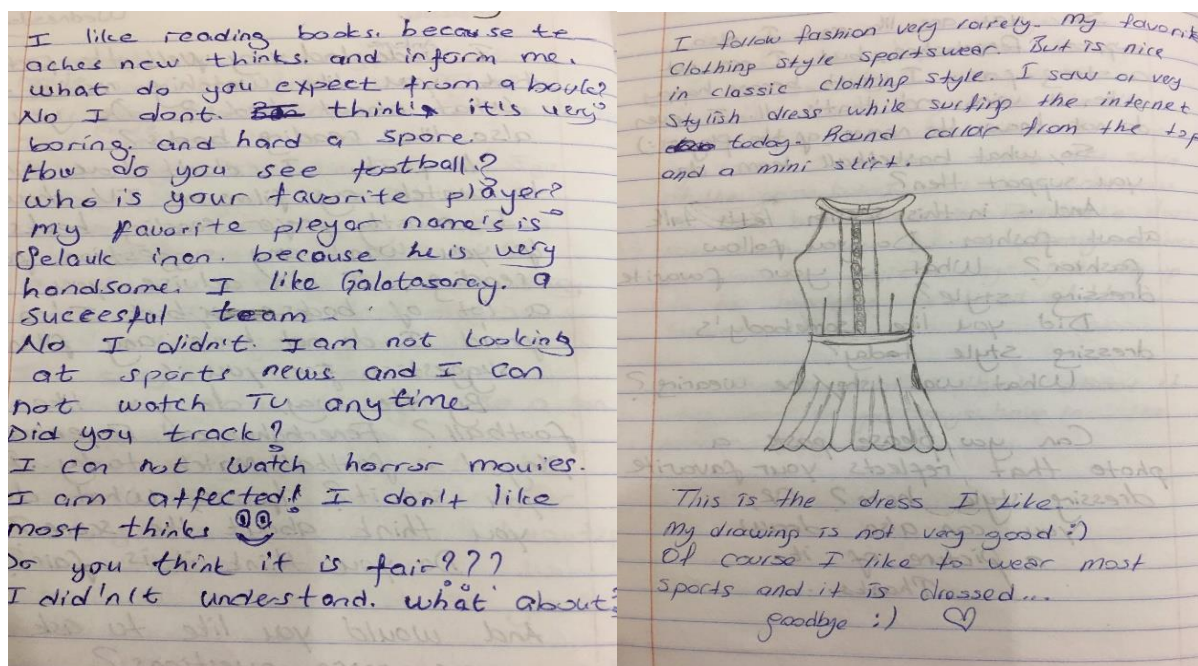


Figure 14: Pen and paper dialogue journaling samples from session 7

h) Session 8 (11.12.2016)

As the previous sessions, session 8 started at 8 pm for WhatsApp group and also the journals including the related questions were submitted to the pen and paper students on the same day. The direction for the session and questions discussed on were like following:
Researcher: *“Let's have fun by making gossips ☺ Play the Paparazzi machine and gossip on what is going on nowadays. Who was where? With whom? Depending on the questions above, examples from students' entries from both experimental groups were provided below.*

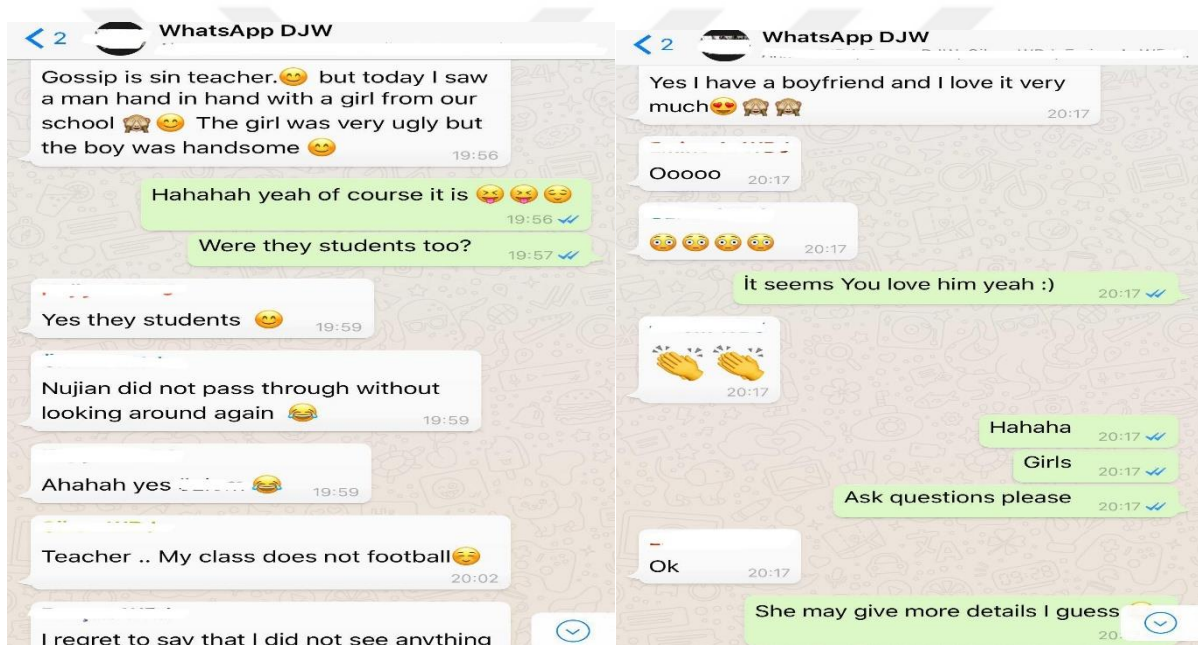


Figure 15: WhatsApp dialogue journaling samples from session 8

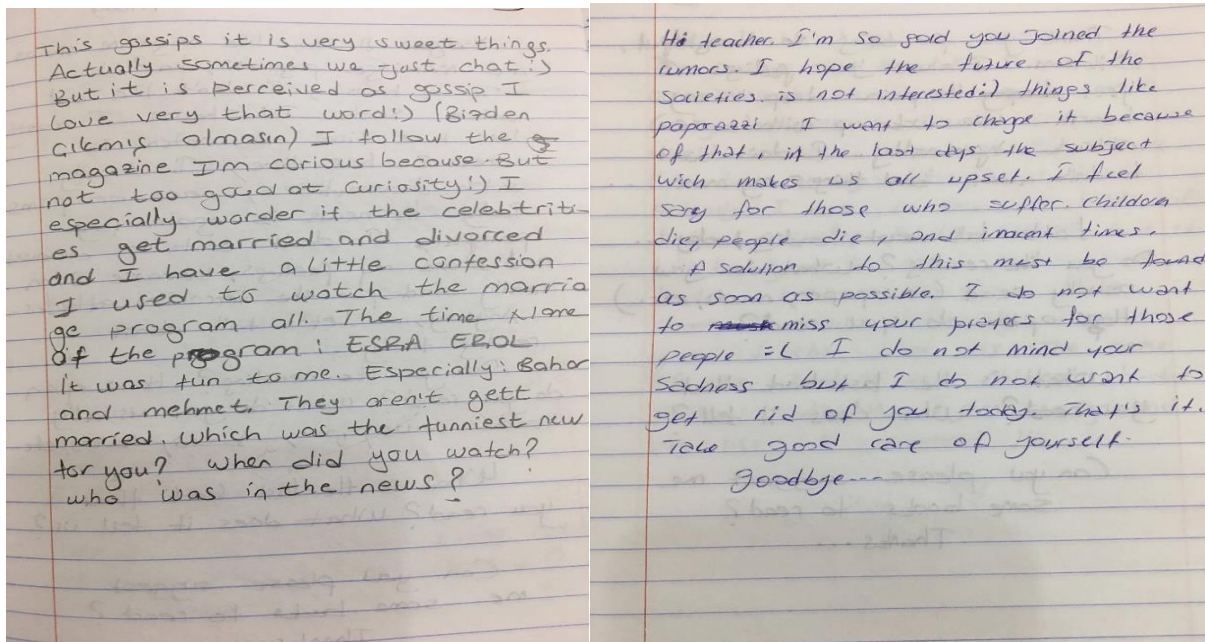


Figure 16: Pen and paper dialogue journaling samples from session 8

i) Treatment Session 9 (13.12.206)

The day for the session 9 was accepted as a confession day for all both groups. Based on this idea, the initiating topic and questions by the researcher were as following:

Researcher: *"What about making a confession today? I am sure it will be very enjoyable as well. Did you do anything you kept as a secret? Would you like to share a secret with us?"*

Don't worry! Your secret is ours ☺

Figure 17 and 18 include two sampling screenshots of the conversations of the both group.



Figure 17: WhatsApp dialogue journaling samples from session 9

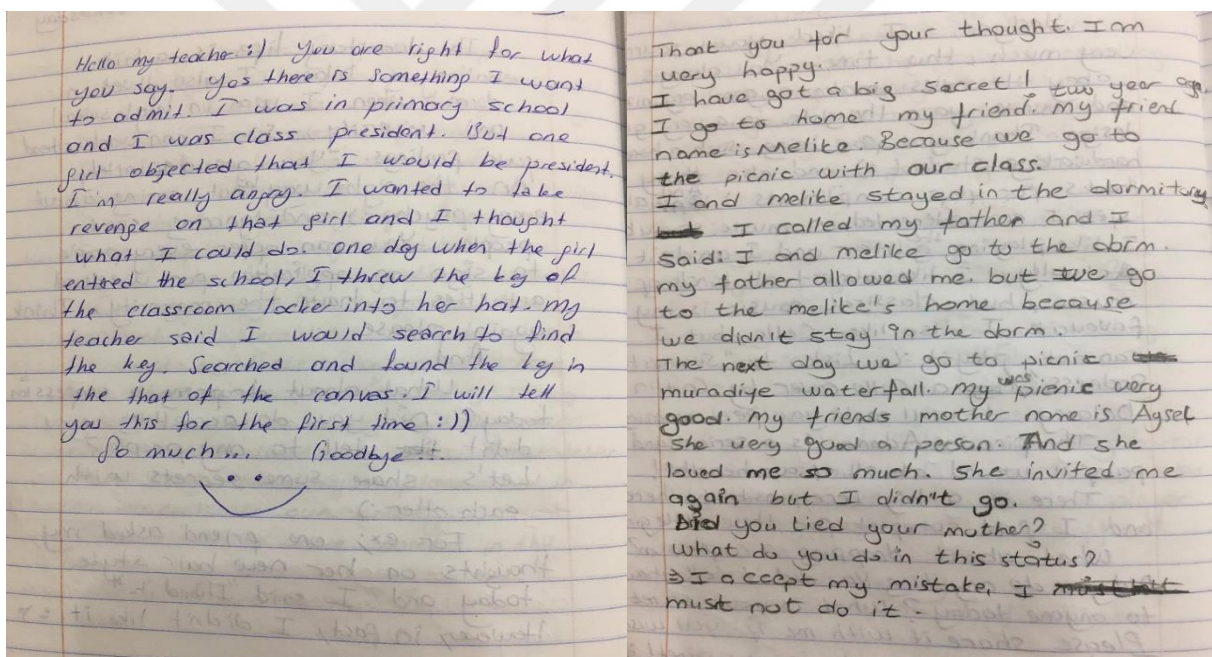


Figure 18: Pen and paper dialogue journaling samples from session 9

j) Session 10 (15.12.2016)

A discussion on a movie, a documentary, a talk show or any other TV programs that the researcher and the students watched that day or on the last weekend was carried out in both groups. The researcher required students to write entries including what they watched was

about, who the actors or presenters were, where did they see it, whether they liked it or not and finally whether they were worth to recommend. The session lasted nearly three hours for WhatsApp group while the students in pen and paper group had the whole day to give a response as in the other sessions. Two examples from each group's conversation were provided below.



Figure 19: WhatsApp dialogue journaling samples from session 10

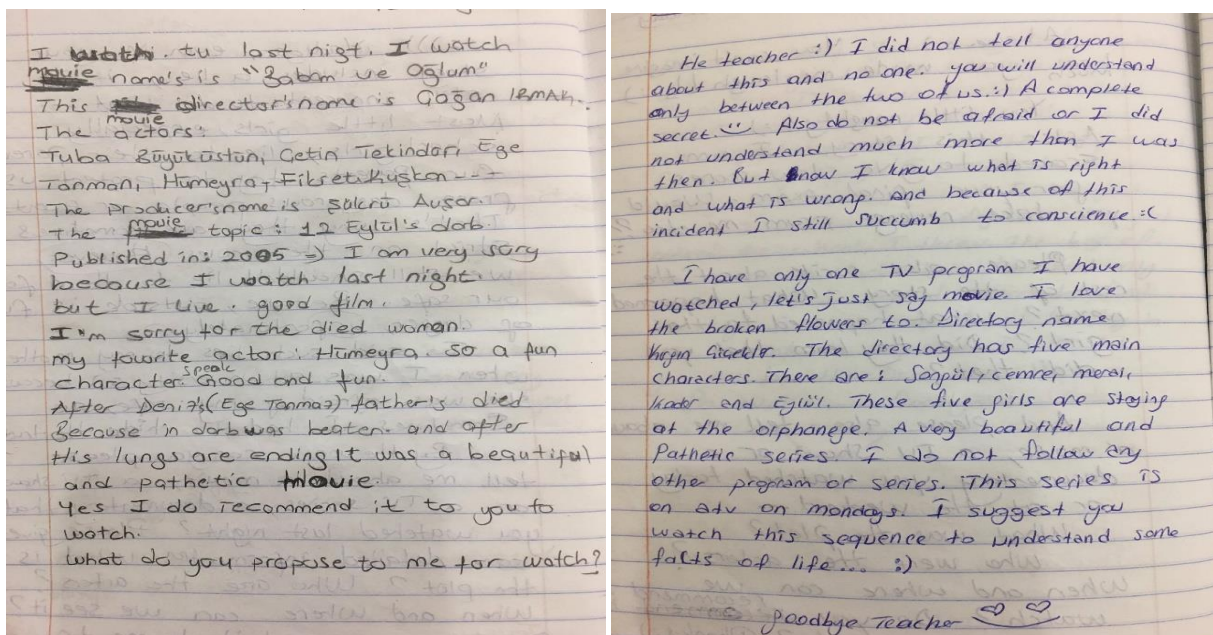


Figure 20: Pen and paper dialogue journaling samples from session 10

k) Session 11 (17.12.2016)

The 11th session was held two days after the previous one as usual. The issue to discuss on and questions to answer were as following:

Researcher: *"Today is the reading day! Do you like reading? What do you usually read (newspaper, magazines, novels, articles, etc.)? How often do you read? What is the last book you read? Who were the protagonists? What happened in the book? What was the main idea? Shall we read it as well? and Can you suggest us/me some books to read?"*

Both groups were provided these questions to begin the dialogued conversation. Examples from these conversations are presented separately for each group in Figure 21 and 22.

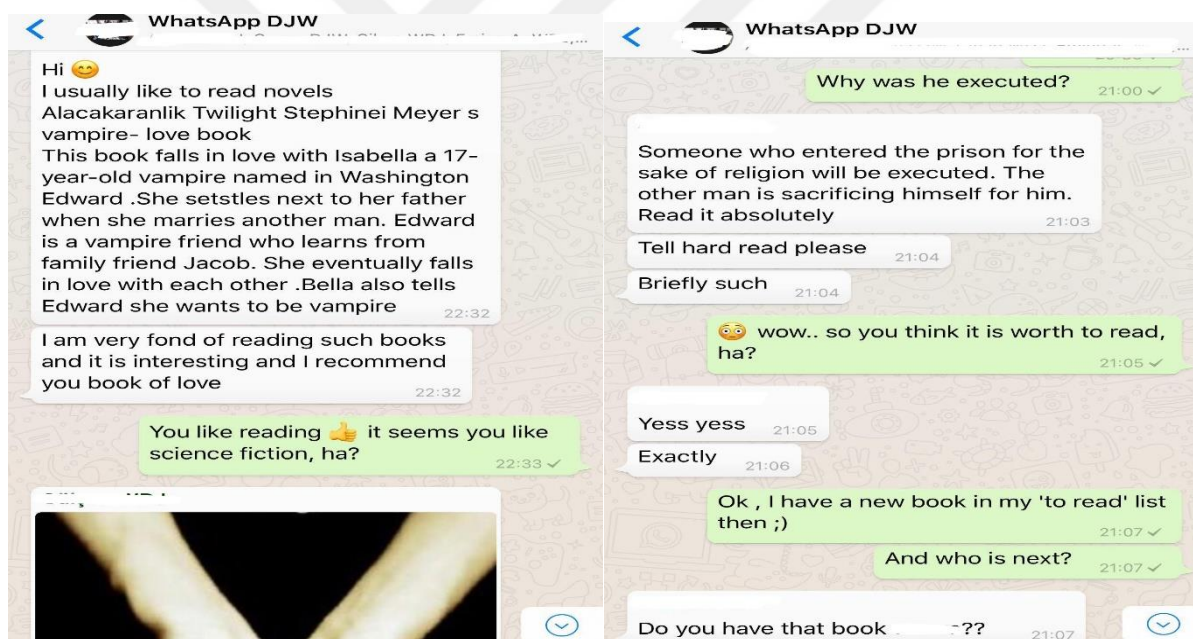


Figure 21: WhatsApp dialogue journaling samples from session 11

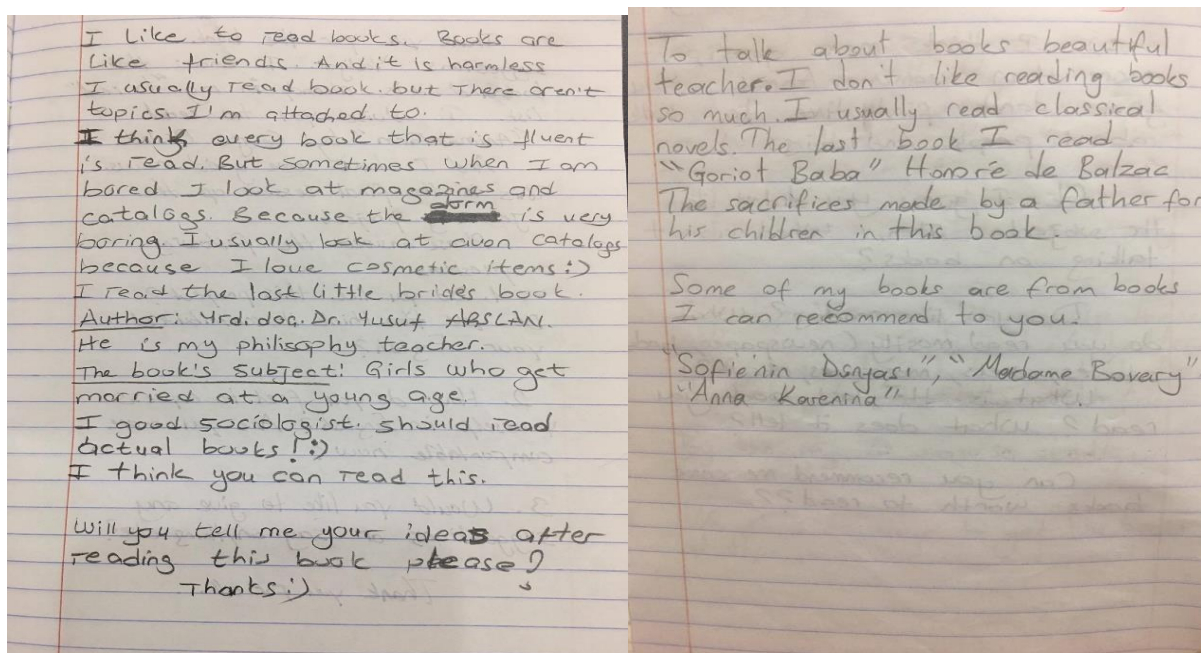


Figure 22: Pen and paper dialogue journaling samples from session 11

12) Session 12 (20.12.2016)

This session was slightly different from the others in that being the final session, it served as an attitude questionnaire administered to the students in both groups through the target dialogue journaling technique. Following questions were asked by the researcher.

Researcher: *"Hi everyone! This is the final session and I would like to learn about your ideas of the dialogue journaling instrument that we have used so far. Please comment on the followings;*

1. *Did you like writing dialogued journals through WhatsApp / pen and paper as a requirement of our English course?*
2. *Do you think these writing practices contributed to your English? If yes, how?*
3. *How do you feel while expressing yourself in English now? Do you feel more comfortable?*
4. *Do you have any suggestions or anything to add?*

Figure 23 and 24 are provided to present some example responses from students in both groups.

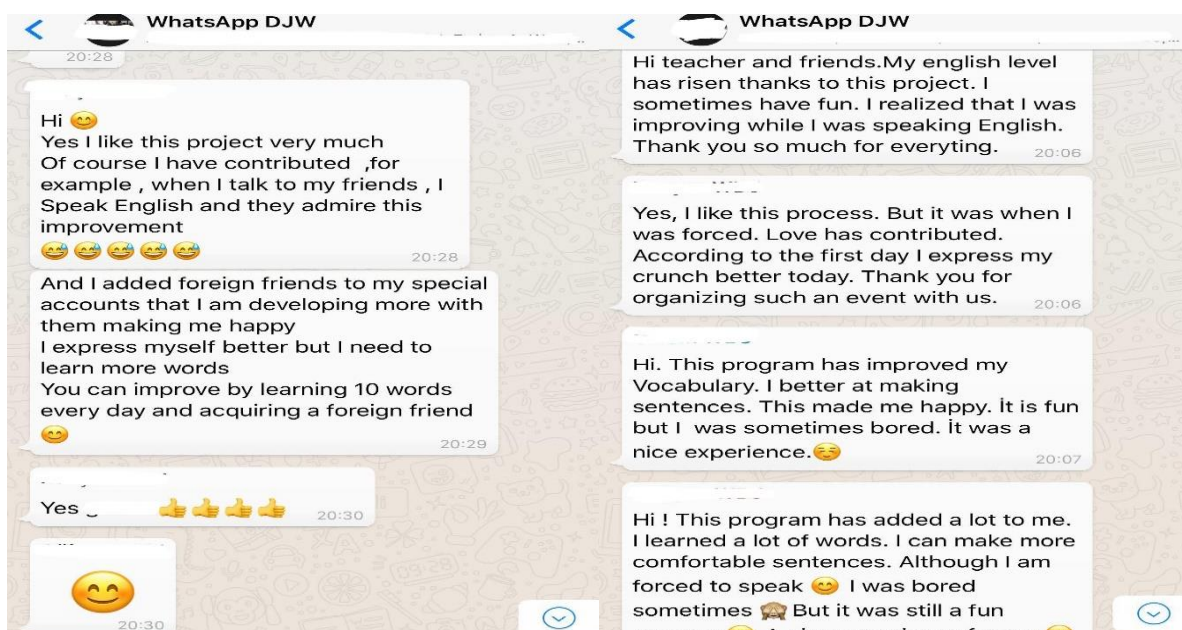


Figure 23: WhatsApp dialogue journaling samples from session 12

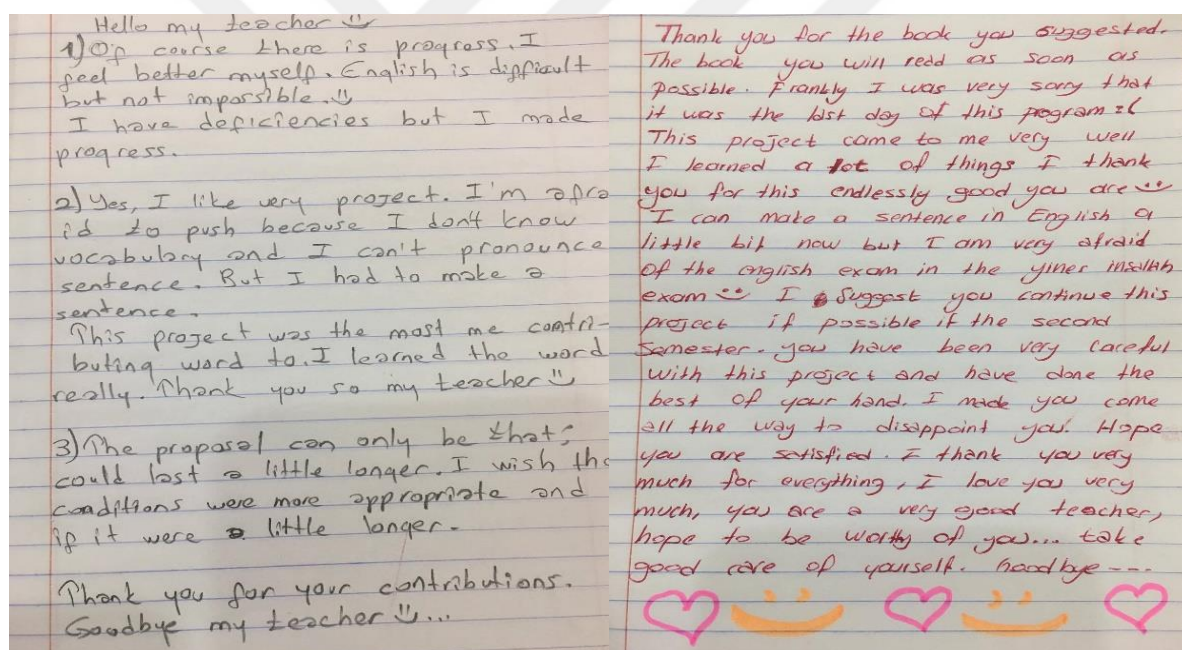


Figure 24: Pen and Paper dialogue journaling samples from session 12

3.4.2. Procedure for the Control group

The other fifteen students participated in this study to be the control group. They were selected from those who were reluctant to participate in any treatment sessions or who had no access to a smartphone or Internet access but still accepted to take a part in the project. They

all were administered both the pre and posttest as the experiment groups as well, yet no treatment session was applied for these students during the four-week treatment time. These participants were just expected to follow the prescribed class works based on the course book.

Each week the class had three-hour English course during the fall semester. The course related subjects taught within the four-week time were explained separately in the table below.

Table 1: Course schedule within 4-week treatment time

	Grammar	Vocabulary	Reading	Writing
Week 1 (28.11.2016)	-Simple past tense -Conjunctions (and, but, so because)	-Weekend activities - Past time expressions -Events and celebrations	-Read a text about a special person	-link sentences with and, but, because and so -Write a blog about your weekend
Week 2 (05.12.2016)	- Simple Past Tense	-TV & News -Sports & Games	-Read an article about extreme sports	- Write a review of an event - write a story about an exciting/ frightening experience
Week 3 (12.12.2016)	- Talking about favorite things and hobbies - Possessive case	-Clothes and personal items - Free time& leisure activities	-Texts about the travelers' items	-Write an e-mail about your favorite sports and hobbies - Write a blog about fashionable clothes
Week 4 (19.12.2016)	-Making suggestions/Giving advice -Telling stories: sequencing words	-Prepositions of time (in, on, at) - Body parts & illnesses	-Read an article about things to do with friends	- A short paragraph about your last holiday - Write an advising paragraph to your friend's problem.

3.5. Data analysis

The writing prompts in the pre and post tests were assessed by three different English teachers to ensure inter-rater reliability with the help of a writing rubric, a modified version of Cohen's (1994) and Jacobs, Zinkgraf, Wormuth, Hartfiel, and Hughey's (1981) scale (Hemmati & Soltanpour, 2012) (See Appendix E). The rubric consisted of five features namely content, organization, grammar, word choice and mechanics each of which was given a score from 1 to 5 depending on performance. The current study adapted this rubric because it was assured that analytic rubrics possessing separate scores enable more diagnostic and accurate information about writing ability and hence they improve the scoring reliability (Becker, 2011). The pre- and post-test results were analyzed through SPSS 21 (Statistical Package of Social Sciences) employing the Paired-Samples T-test and ANOVA.

3.6. Summary

This chapter clarified the design of research, data collection instruments, settings and participants, procedure and data analyses. In this mixed method study, investigating the effects of dialogue journal writing on university students' writing performance and comparing two techniques of dialogue journaling, namely WhatsApp and traditional pen and paper, in terms of their effects on English writing skill were aimed.

To answer the research questions, forty-five university students in Sociology department of Batman University participated voluntarily in this study in the fall term of 2016-2017 academic year. After presenting the information about the characteristics of setting and participants, this chapter explained the data collection instruments and then the procedure of the study in detail. Following the description of instruments and procedure in which the treatment sessions and subjects taught within the study time were presented clearly, this chapter concluded with the procedure of data analyses the results of which will be discussed in the next chapter.

CHAPTER IV: RESULTS

This chapter presents the results of the analyses relating to the three research questions posted in this study. To be able to answer the first and second research questions, which asked whether WhatsApp and pen and paper way of dialogue journaling have a significant effect on writing performance or whether WhatsApp is outperforming other groups regarding the same skill, the data collected by the pre and posttest were analyzed through SPSS. On the other hand, those obtained from the questionnaire of attitudes were administered a content analysis to answer the third research question investigating the beliefs and attitudes.

4.1. Findings related to Research Question 1

The first question of this research was asked to explore whether there is any difference between the pre and posttest mean scores of pen and paper, WhatsApp and control groups in terms of overall performance and five components (content, organization, grammar, vocabulary and mechanics) in English writing skill. Paired-Samples tests were employed to find out the differences of pre and post mean scores of all groups separately through SPSS, the software analyzing program. The group based statistics are presented and interpreted separately below.

4.1.1. Results related to WhatsApp Dialogue Journaling group

This part will provide tables showing the paired-samples T-test results based on the pre-and post-test scores of students in WhatsApp group with the purpose of demonstrating its efficacy on the overall writing performance and five writing components.

4.1.1.1 Overall writing success

The overall writing achievement between the pre- and post-test scores in WhatsApp group was explored. Table 2 shows the results of Paired Samples T-test employed to explore any significance in the overall performance.

Table 2: Paired Samples t-Test results relating to the overall writing success in WhatsApp group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreTestOverallScore - PostTestOverallScore	-8,46	9,42	2,43	-13,68	-3,24	3,47	14	,004

As it is seen in the table above, there is a significant difference ($p = 0,004 < 0,05$) between the pre and post writing test scores of WhatsApp group which clearly shows that students made a progress in writing after the dialogue journal writing practice through WhatsApp.

4.1.1.2. Success in writing components

Considering the achievement of WhatsApp group students in writing components, below, Table 3 shows the Paired Samples T-Test results in respect of the difference between the pre- and post-test scores.

Table 3: Paired Samples T-Test results relating to the success of WhatsApp group students in writing components

		Paired Differences					t	df	Sig. (2-tailed)
		Mea n	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreTestContent - PostTestContent	-1,93	2,52	,65	-3,32	-,53	-2,97	14	,010
Pair 2	PreTestOrganization - PostTestOrganization	-1,40	2,16	,55	-2,59	-,20	-2,50	14	,025
Pair 3	PreTestVocabulary - PostTestVocabulary	-,93	2,86	,73	-2,52	,65	-1,26	14	,228
Pair 4	PreTestGrammar - PostTestGrammar	-1,80	2,39	,61	-3,12	-,47	-2,90	14	,011
Pair 5	PreTestMechanics - PostTestMechanics	-2,40	2,52	,65	-3,80	-,99	-3,67	14	,003

As this table shows, based on the difference between students' pre and posttests regarding the five components of writing skill, statistics indicated that WhatsApp dialogue journaling technique also has a positive effect on students' content ($p=0,010$), grammar ($p=0,011$), organization ($p=0,025$) and mechanics ($p=0,003$) performance. However, no significant effect on vocabulary skills ($p=0,228>0,05$) was found.

4.1.2. Results related to Pen and Paper group

This part will provide the Paired Samples T-Test results in respect to the performance in writing components and overall writing achievement in pen and paper group.

4.1.2.1. Overall writing success

Table 4 is provided below to explain the results of Paired Samples T-Test carried out to investigate any significant effect of pen and paper DJW technique on success in writing skills.

Table 4: Paired Samples T-Test results relating to the overall writing success in pen and paper group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreTestOverallScore - PostTestOverallScore	12,13	13,20	3,40	-19,44	-4,82	3,56	14	,003

It is clearly understood from the table above that pen and paper dialogue journal writing technique has a significant effect on students' overall writing success ($p=0.003 < 0,05$).

4.1.2.2. Success in writing components

The results of the analyses through the employed test in measuring the effectiveness of this technique over writing components were demonstrated as in the Table 5.

Table 5: Paired Samples t-Test results relating to the success of pen and paper group in writing components

Paired Differences							t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreTestContent - PostTestContent	-3,06	4,00	1,03	-5,28	-,84	-2,96	14	,010
Pair 2	PreTestOrganization - PostTestOrganization	-1,66	2,84	,73	-3,24	-,09	-2,26	14	,040
Pair 3	PreTestVocabulary – PostTestVocabulary	-1,86	2,77	,71	-3,40	-,33	-2,60	14	,021
Pair 4	PreTestGrammar – PostTestGrammar	-2,20	3,54	,91	-4,16	-,23	-2,40	14	,031
Pair 5	PreTestMechanics - PostTestMechanics	-3,33	4,62	1,19	-5,89	-,77	-2,79	14	,014

According to the results, students in the pen and paper group significantly became more successful in the post test regarding the targeted writing components as it is seen in the table above (content=0,010<0,05; organization=0,40< 0,05; vocabulary=0,021< 0,05; grammar=0.031< 0,05; mechanics=0,014< 0,05).

4.1.3. Results related to the Control group

To analyze the difference between the pre and posttest scores of the control group, the same test was employed as for the experiment groups. Results of the analyses were presented under two different related categories with separate tables below.

4.1.3.1. Overall writing success

The results relating to the overall writing performance of the control group were demonstrated in the following table.

Table 6: Paired Samples T-Test results relating to the overall writing success in the control group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreTestOverallScore - PostTestOverallScore	-7,20	7,58	1,95	-11,39	-3,00	3,67	14	,002

As clearly seen, the results of the analysis, comparing of the control group students' writing performance on the posttest with the pretest, concluded that students in this group also showed a significant success as the other groups ($p=0,002 < 0,05$).

4.1.3.2. Success in writing components

Regarding the control group students' success in writing components, Table 7 presents the Paired Samples t-Test results explaining whether there are any significant differences between the pre and posttest scores.

Table 7: Paired Samples t-Test results relating to success of the control group in writing components

		Paired Differences					t	df	Sig. (2-tailed)
		Mea n	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lowe r	Upper			
Pair 1	PreTestContent - PostTestContent	1,60	2,55	,66	-3,01	-,18	-2,42	14	,030
Pair 2	PreTestOrganization - PostTestOrganization	-,33	1,39	,36	-1,10	,44	-,92	14	,371
Pair 3	PreTestVocabulary - PostTestVocabulary	1,33	1,75	,45	-2,30	-,35	-2,93	14	,011
Pair 4	PreTestGrammar - PostTestGrammar	1,40	1,91	,49	-2,46	-,33	-2,82	14	,014
Pair 5	PreTestMechanics - PostTestMechanics	2,53	3,27	,84	-4,34	-,72	-3,00	14	,010

These statistics presented above shows that there is a significant difference on the post tests in terms of students' knowledge of content ($p=0,030 < 0,05$), vocabulary ($p=0,011 < 0,05$), grammar ($p= (0,014 < 0,05)$) and mechanics ($p=0,010 < 0,05$). However, students in this group were seen to have no significant success in the organization skills ($p=0,371 > 0,05$).

4.2. Findings related to Research Question 2

To answer the second question of this research asking whether there is any significant difference between the mean scores of pen and paper, WhatsApp and control group relating to the overall writing achievement and five writing components on the posttests, the groups' post

test scores were compared. To identify any significant differences among these groups, one-way analysis of variables (ANOVA) was administered to the post tests. The findings obtained from the analysis were presented in the following parts.

4.2.1. Findings related to overall writing success of all groups

To explore any significant difference among all groups in respect of overall achievement in writing on the posttest, ANOVA was employed. Table 8 shows the results depending ANOVA

Table 8: ANOVA results regarding all groups in terms of overall writing success on the post tests

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	124,57	2	62,28	,39	,677
Within Groups	6642,40	42	158,15		
Total	6766,97	44			

Comparing the posttest mean scores of the target groups to point out any significance, the ANOVA results concluded that there is no significant difference among the groups in terms of overall writing performance ($p=0,677>0,05$) which means none of these groups outperformed each other in terms of writing overall performance.

4.2.2. Findings regarding the performance of all groups in writing components

The results obtained from ANOVA in relation with the success in writing components are as in Table 9.

Table 9: ANOVA results regarding all groups in terms of the achievement in writing components in the post-tests

		Sum of Squares	df	Mean Square	F	Sig.
Content	Between Groups	8,57	2	4,28	,39	,677
	Within Groups	457,20	42	10,88		
	Total	465,77	44			
Organization	Between Groups	19,73	2	9,86	2,36	,107
	Within Groups	175,46	42	4,17		
	Total	195,20	44			
Vocabulary	Between Groups	11,20	2	5,60	,69	,504
	Within Groups	338,00	42	8,04		
	Total	349,20	44			
Grammar	Between Groups	2,80	2	1,40	,18	,836
	Within Groups	326,40	42	7,77		
	Total	329,20	44			
Mechanics	Between Groups	4,44	2	2,22	,19	,827
	Within Groups	488,80	42	11,63		
	Total	493,24	44			

As it is seen in the table above, the results relating the writing components in the post tests of all three groups demonstrated that none of these groups is significantly superior to the others in the knowledge of content ($p=0,677>0,05$), organization ($p=0,107>0,05$), grammar ($p=0,504>0,05$), vocabulary ($p=0,836>0,05$) and mechanics ($p=0,827>0,05$).

4.3. Findings related to Research Question 3

The third research question was asked to explore about students' attitudes towards using WhatsApp and pen and paper dialogue journaling techniques in English writing classes. Thus, no attitude questionnaire was administered to the control group. A content analysis was employed for the data relating to the attitudes of WhatsApp and pen and paper groups which were obtained from the last treatment session. The questions in this session were as following:

1. Did you like writing dialogue journals through WhatsApp / pen and paper as a requirement of our English course?
2. Do you think these writing practices contributed to your English? If yes, how?
3. How do you feel while expressing yourself in English now? Do you feel more comfortable?
4. Do you have any suggestions or anything to add?

Students were free to answer these questions separately or to provide an overall answer in one entry. The following parts will attempt to present the results of the content analysis of attitudes from each group and exemplify the most frequent student answers.

4.3.1. Attitudes of WhatsApp DJW group students

All students preferred to include the answers in just one entry, but some of them provided no answer to one or more questions. Answers from a few students are as in the following figure.

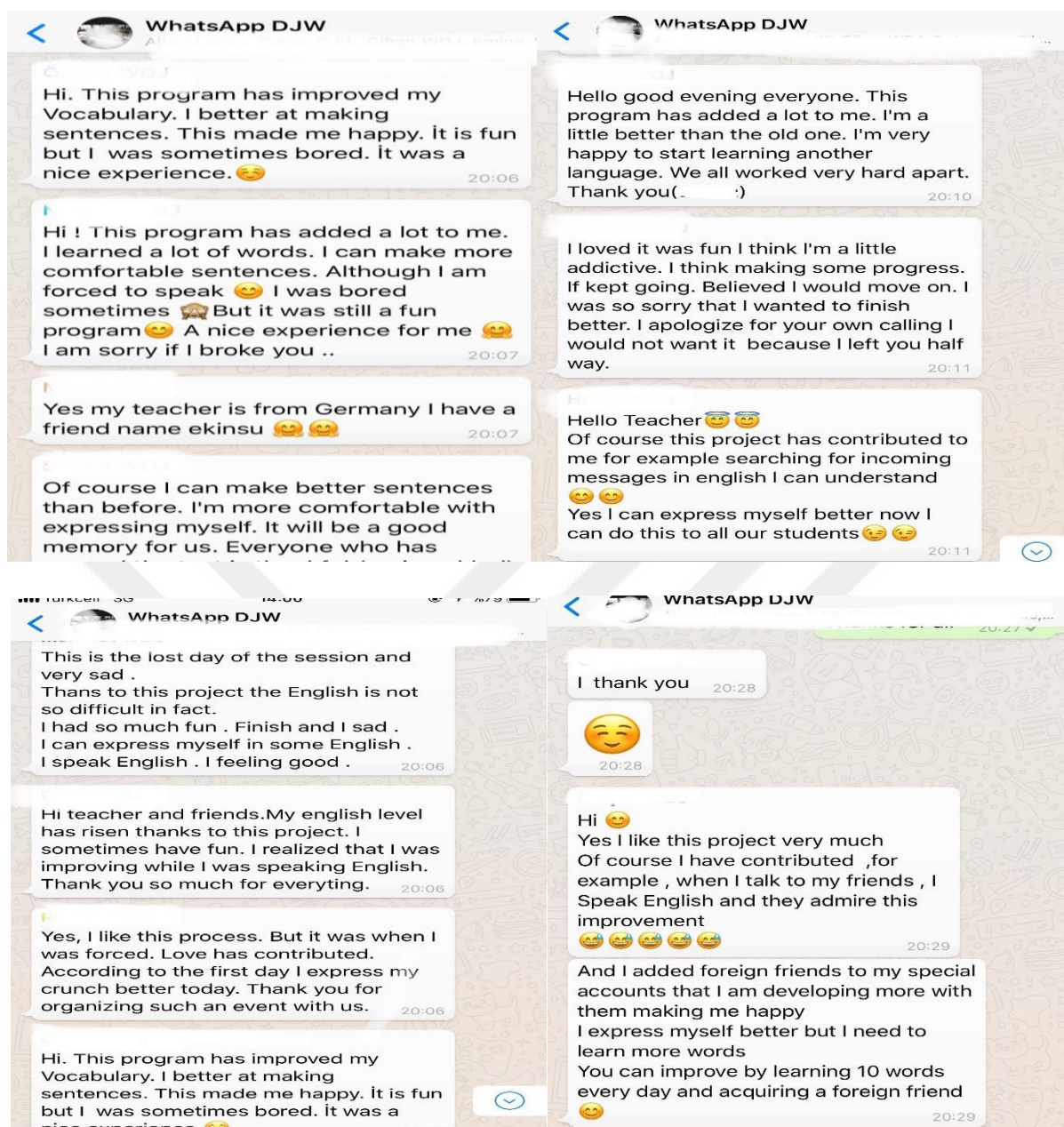


Figure 25 Sample answers relating to the attitudes from WhatsApp group

Figure 25 shows students' answers related to the questions on attitudes towards using WhatsApp as a dialogue writing technique to support the class work. As it can be seen in the entries above, students expressed their satisfaction with this practice. It is obvious that they liked it so much and had fun during the time they were journaling. Also, most students claimed that the treatment was academically contributive and they feel more comfortable to express themselves in English. However, although most students were found to have a desire

for continuation of the study, results also showed that there are still a few students who sometimes found the treatment sessions a bit boring. All in all, most students were found to have positive attitudes towards WhatsApp integration into English learning process.

4.3.2. Attitudes of Pen and Paper DJW group students

Upon examining the figure below, students in pen and paper group can be said to enjoy this kind of dialogue journal writing technique.

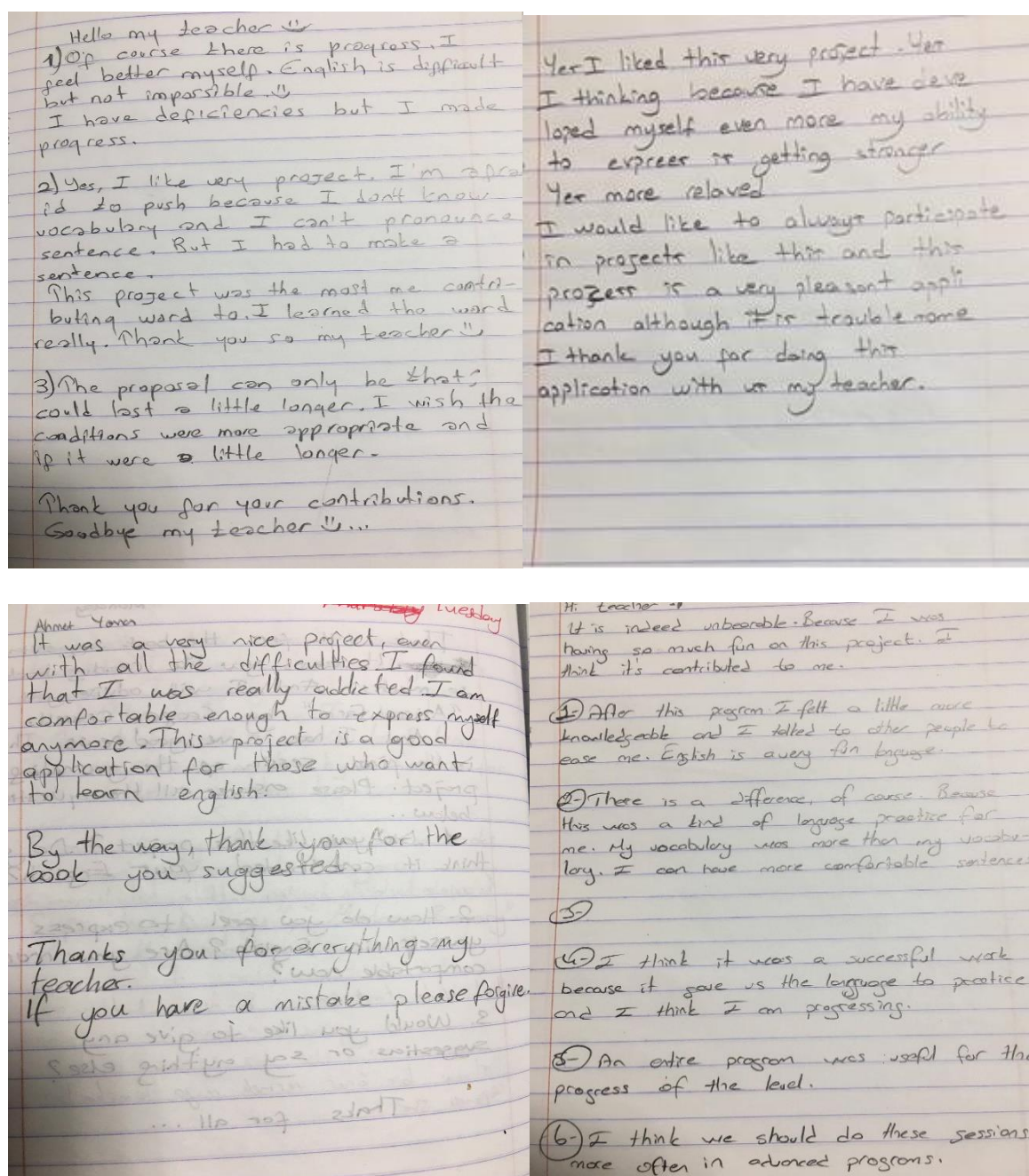


Figure 26 Sample answers relating to the attitudes from Pen and Paper group

These results also show that they find the pen and paper journaling useful for achievement in English. It can be clearly seen that they believe they improved their English thanks to this practice. Moreover, students were found to ask for the continuation of practicing these kind of activities in the future as well. Finally, students' appreciation for such a beneficial practice can be concluded from these results.

4.4. Summary

This chapter has attempted to explain and exemplify the results of the SPSS analyses conducted on the pre and post test scores of all groups and the attitude questionnaire. The findings related to the research questions can be summarized briefly as following;

- 1) The findings indicated that all groups showed a significant progress during the one-month treatment in terms of overall writing performance. However, considering the writing components separately, while a significant difference for all five components were found in pen and paper group, WhatsApp group concluded to have no progress in vocabulary as it does in the other writing components contrary to the idea that previously hypothesized. Additionally, control group students were found to have no progress in the knowledge of organization while they became successful in the other components.
- 2) As opposed to the idea that hypothesized before, there was found no significant difference among the post tests of all three groups in terms of any criteria which concluded WhatsApp not to be superior to the others in neither overall writing performance nor five writing components.
- 3) Students in both WhatsApp and pen and paper groups were found to enjoy the writing practice and believe that it contributed to their English to some extent. They also claimed to feel more comfortable while communicating in English. Most of the students demanded to continue integrating these techniques into class work and expressed their appreciation to the researcher.

CHAPTER V: DISCUSSION AND CONCLUSION

The fundamental purpose of this study was to investigate the effects of WhatsApp and Pen and Paper dialogue journal writing techniques on university students' writing performance and to find out whether WhatsApp DJW is superior in writing achievement to the other. Additionally, the current study aimed to explore students' perceptions towards the incorporation of these techniques with language learning process. The subjects in experiment groups were exposed to twelve treatment sessions while the control group was just required to have 4-week class schedule after the pre writing test was applied to all, then they were given the post test. Besides these tests, background and attitude questionnaires were also administered to support the results of this study.

Through taking the literature into consideration, this chapter will discuss the findings reported in the fourth chapter. After that, implications, limitations and directions for the future research relating to this study will be presented. Finally, a conclusion part will be provided to serve as a summary for the current study.

5.1. Discussion

Based on the aim of this research, the first research question was asked in an attempt to explore whether the students show any significant progress in English writing overall and component performance through using WhatsApp and Pen and Paper dialogue journal writing techniques or just being exposed to the class work without any treatment like the control group did within this study. Considering the first experiment group, the analyses related to this question confirmed the efficacy of WhatsApp on students' overall writing performance ($p=0,004<0,005$) as in some other related studies in the literature (Alsaleem, 2013; Lee&Kim, 2013; Fattah, 2015). Likewise, when considering WhatsApp being a mobile learning tool which provides instant communication, the analyses also showed parallel results with the study by Al-Emran, Elsherif & Shaalan (2016) who claim M-learning to facilitate students' learning

and develop learning outcomes. In a similar vein, as a social media platform like Facebook and Twitter, WhatsApp concluded similar findings with some studies suggesting that social media platforms bring improvement in writing skills (Cheng, 2012; Buga, et al., 2014) and accelerate learning process in EFL context (Mompéan & Fouz-Gonzalez, 2016; Reames, et al. 2016; Winet, 2016; Rezaei and Meshkatian, 2017). As Amry (2014) and Barhoumi (2015) suggested as well, the results showed that academically WhatsApp is an effective and facilitating tool for learning practices. However, when the competence of writing components in WhatsApp group were taken into account, while significant differences between the pre and posttests in terms of the content ($p=0,010<0,05$), organization ($p=0,025<0,05$), grammar ($p=0,011<0,05$) and mechanics ($p=0,003<0,05$) competence were concluded, no significant difference was found relating the vocabulary competence ($p=0,228>0,05$) in writing. These results are controversial when compared to the other studies in the literature. For example; this study concluded with no significant effect of WhatsApp as a mobile learning tool on vocabulary while Agca and Ozdemir (2013) claimed mobile assisted learning environment increase the vocabulary competence. Additionally, they are inconsistent with the results of the studies which reported WhatsApp as a great tool for acquisition of collocations (Ashiyan&Salehi, 2016), effective word choice (Alsaleem, 2013; Hani, 2014 Fattah, 2015; Adujar 2016; Jafari&Chalak, 2016) and teaching idioms (Basal, Yılmaz, Tanrıverdi & Sari, 2016). This inconsistency may be caused because of the fact that the students in WhatsApp group in this study were free to participate in the conversation or follow it regularly. Also, the time allocated for the treatment sessions was limited to two or three hours for each of the twelve sessions. Moreover, students are predicted to use Google translation whenever they need so this may also have prevented them to attempt to search for new vocabulary. Finally, the irrelevant messages and frequent attempts to speak in L1 may have also affected the vocabulary improvement of this group. On the other hand, considering the improvement in the mechanics of writing, the results supported

Shih, Lee & Cheng (2014) who reported assistance of mobile learning as contributive to the spelling capabilities in addition to some others (Fattah, 2015; Adujar, 2016) suggesting WhatsApp to develop the ability of mechanics and punctuation in English writing while they opposed to Yeboah and Ewar (2014) disagreed with its efficacy on spelling. Likewise, regarding the content knowledge, the results are consistent to Fattah (2015) who claimed WhatsApp to be effective in generating ideas, yet grammatical competence in writing turned to have controversial results. For example, this study verified Fattah (2015) and Adujar (2016) in that their findings showed efficacy of WhatsApp in creating good sentence structures in contrast to Yeboah and Ewar (2014) pointing out that it ruins the sentence structure and Adujar (2016) reporting no effect of WhatsApp on sentence diversity and syntactic complexity.

Similar to the WhatsApp group, the results in respect with the pen and paper group found significant differences between the pre and posttests revealing the effectiveness of this technique on overall writing ($p = 0,003 < 0,05$) and all writing components (content=0,010 < 0,05; organization=0,040 < 0,05; vocabulary=0,021 < 0,05; grammar=0,031<0,05; mechanics= 0,014 <0,05). As can be seen, the study concluded parallel results with Song (1996) claiming dialogue journaling to be improving the quality of writing in English. In contrast, the results opposed to Richards (1995) and Yoshihara (2008) in that they concluded this technique having no significant effect on EFL writing.

No matter how these results revealed the progress in writing overall competence and some components differently in the target groups, in consideration with the second research question of this study aiming to explore the superior technique over the others, ANOVA results showed no significance among all groups in respect to none of the variables (overall performance=0,677>0,05; content=0,010<0,05; organization=0,040 < 0,05; vocabulary=0,021 < 0,05; grammar=0,031<0,05; mechanics= 0,014 <0,05) which means no group was found to be more effective than the others in any way. While these results supported Foroutan, Noordin

and bin Hamzah (2012) who also concluded with no significant difference between the experiment and control groups regarding the writing word choice, content, mechanics and organization skills similar to the present study, they still contradict with several studies in the literature. For example, in a study conducted by Basal, Yilmaz, Tanrıverdi and Sari (2016), the experiment group which was taught English idioms through the target mobile application outperformed the control group which was just exposed to the traditional class activities. However, the present study showed no outperforming effect of WhatsApp mobile learning application over the other experiment or control group. Similar contradiction regarding the superiority of the experiment group which was exposed to mobile learning over the control group was also found in terms of the vocabulary success by Agca&Ozdemir (2013). Moreover, upon considering WhatsApp dialogue journal writing as a kind of electronic journaling like e-mail, the findings of the current study are also in contradiction with some of the related studies suggesting the dialogue journaling through an electronic tool is more effective when compared to the traditional pen and paper way on writing achievement (Wang, 1996, El-Koumy, 2008; Foroutan, 2012; Naba'h, 2012). The reason for these contradictions may be that the way of electronic journaling is different in these studies most of which used e-mail while the present study used WhatsApp, an mobile tool providing instant communication, for dialogue journaling activity. Moreover, the time allocated for the current study which is just 4 weeks may not have been sufficient for providing similar results as the compared studies in which the treatment sessions obviously lasted longer.

Regarding the final research question of this study which attempted to explore students' attitudes towards utilizing the two dialogue journal writing techniques in class work, both groups reported similar positive feelings, believes and attitudes. They were found to have enjoyed the practices and seemed so satisfied with being a participant that they even demanded to continue the treatment sessions. Students in both group were also found to believe that the

treatment sessions were contributive to their English and they feel more comfortable in expressing themselves in English. In consideration with the related literature, these results supported a lot of researchers having reported high satisfaction and motivation towards utilizing the mobile learning assistance and desire for engagement with mobile technology in education (Thornton&Houser, 2005; Van De Bogart, 2011; Plana, et al., 2013, Amry, 2014; Trenkov, 2014; Shih, Lee & Cheng, 2014; Barhoumi, 2015; Nitza&Roman, 2016; So, 2016; Winet, 2016). Similarly, they were consistent with the findings of some studies in which students found WhatsApp practice educationally useful (Bansal and Joshi, 2014; Mistar and Embi, 2016) and demanded to continue integrating it into class work as a supporting learning tool just like in the present study (Fattah, 2015; Mistar and Embi, 2016). Moreover, the results also turned out to be consistent with some others relating to the dialogue journal writing in which it received positive comments from participants (Wang, 1996; Run&Beach, 2005; Yoshihara, 2008, Thorson,2011) and students were claimed to feel free while expressing themselves in English (Kim, 2005).

On the other hand, students' attitudes in WhatsApp group showed a few differences with some studies reporting that married students find WhatsApp disruptive (Bansal&Joshi (2014) and students find it as disadvantageous because of technical or connection problems and the problems of possessing a smartphone, irrelevant messaging and thus being a preventing tool for learning (Bouhnik and Deshen (2014). The problem of these difference may be caused by the fact that there were no married participants in the current study and students were selected from those who already possessed a smartphone and a full time access to the internet through WI-FI. Finally, because the treatment sessions were continuously under the researcher's control, she could sometimes find an opportunity to warn the irrelevant message senders.

All in all, this section presented and discussed some consistent results as well as contradicted ones with the studies in the related literature. It also provided the participants'

views on utilizing the target way to support writing skill in English as well as offering some possible reasons for the inconsistencies. Next part will present the implications for this study.

5.2. Implications

This study provides some educational implications for the use of technological devices, mobile learning and social media as well as communicative dialogues in EFL writing classes for teachers and learners of English or material and curriculum designers.

First of all, seeing that students find technology engagement via social media apps or mobile learning techniques into class work quite satisfying and enjoyable, the teachers might create new course plans involving the use of a mobile device or social media platform to attract more interest from their students. Moreover, in consideration with students' great desire against the continuation of the two types of dialogue journaling practice in this study, teachers or other course designers might intend to apply more for such activities in their term plan. Similarly, this study gives teachers the idea to use these techniques into class work with the aim of seeing students' mistakes and progress within the learning process and redesign the course accordingly.

Secondly, considering the contradictions in results with some studies suggesting a significance in vocabulary achievement of WhatsApp group and each group's writing performance unlike the present study, it will be reasonable for future researchers to take the limitations of this study into account which might lead to different results.

5.3. Limitations and directions for future research

One of the fundamental limitations of this study is the number of population which is only forty-five in total and fifteen in groups. Despite including a limited number of students, the class studied with in this study was chosen as it was the most appropriate of all in number during the Fall term. However, being able to generalize the findings, this study is essential to be conducted with a bigger population included in each group.

Another important limitation is related to the writing scale used to score the WhatsApp group's pre and posttests. As the intervention sessions of this group were based on texting not on paragraph or essay writing, a possible improvement or success failure in some components, particularly the organization in writing, might not depend on this tool. Improving a texting rubric through which the tests of WhatsApp group are scored might give better and more reliable results.

Moreover, this study is limited to the elementary level university students and, for WhatsApp group, to those who owned a smartphone with constant internet connection. With a different group of subjects, the study may produce different results. Therefore, more research should be conducted with participants in different qualifications to explore whether or not the results resemble each other.

An additional limitation is about the time allocated for the intervention sessions. There were only 12 intervention sessions for both experiment groups to practice dialogue journaling activity on account of the course schedule and university principles for the start and finish dates of each academic term. However, it is definitely necessary to conduct a longitudinal research investigating the effects of target dialogue writing techniques on English writing skills which is likely to yield interesting results. Finally, the time allocated for WhatsApp group's intervention, which is only around three hours a day while a whole day was given for pen and paper group, might be extended for each session to provide more equal intervention time for both experimental groups.

5.4. Conclusion

In summary, this study aimed at finding whether WhatsApp is an effective mobile and social media tool as a dialogue journal writing technique in EFL writing classes and whether it is superior to pen and paper way of dialogue journaling and the control group who was traditionally taught and not exposed to any treatment. The study also aimed to investigate

students' attitudes about utilizing such dialogue journal writing techniques as a supporting tool for improving writing skill in English.

Upon administering the intervention sessions to the target groups, with the help of the instrumentations including pre-post tests and questionnaires, the analyses demonstrated that while pen and paper group showed a progress in the post tests regarding both the overall performance and five writing components, WhatsApp group failed to reveal improvement in vocabulary competence as it did in the other components. On the other hand, the control group also reported a progress in overall and all writing components except organization competence. However, there was found no significant difference when all these three groups were compared in the post tests regarding any of the target variables, which is consistent with a few studies while not with some others.

Although the study found some contradictory results with the literature, it is still in consistence with the Frame Model (Koole, 2009) on which theoretically this study based and the Collaborative Learning Theory by Vygotsky (1934) in that this study confirmed the positive effect of social interaction and collaboration and utilizing mobile technological devices into teaching and learning process.

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APPENDICES

APPENDIX A: WRITING TEST (PRE-POST TEST)

There are two different topics below. Please choose only ONE of them and write your ideas using at least 150 words. (Use the back side of the page.)

1. Describe your favorite sport. Answer the following questions.
 - a. *How is it played?*
 - b. *How many players are needed?*
 - c. *What is the best place and condition to do that sport?*
 - d. *What is the equipment needed? etc.*
2. Describe the problems of university students in Batman. Answer the following questions.
 - a. *What kind of problems do they have?*
 - b. *What should be done to solve these problems?*
 - c. *What do the students need to have a better education at Batman university?*
 - d. *What would you like to have in the campus? etc.*

APPENDIX B: BACKGROUND QUESTIONNAIRE

Name/ Surname:

Age:

Phone number/E-mail:

Gender: Female ☐ Male ☐

Department/University:

Please answer the following questions. Put a cross (X) when it is necessary.

1. Do you use a smartphone? YES ☐ NO ☐

2. Do you always have internet connection? YES ☐ NO ☐

3. Do you use WhatsApp application in your smartphone? YES ☐ NO ☐

4. How often do you use WhatsApp to communicate with others?

I NEVER use WhatsApp to communicate. ☐

Once a day ☐

More than 3 times a day ☐

Once a week ☐

I ALWAYS use WhatsApp to communicate. ☐

5. What purpose do you use WhatsApp for?

6. Would you like to participate in the one month “Dialogue Journal Writing” program? If yes, which one do you prefer? Please put a cross. (X)

WhatsApp DJW ☐

Pen and Paper DJW ☐

7. Write a paragraph describing yourself and your family. Describe each person’s age, job, hometown, physical appearance, hobbies and interests. (Write at least ten sentences.)

APPENDIX C: QUESTIONNAIRE OF ATTITUDES

1. Did you like writing dialogue journals through WhatsApp / Pen and paper as a requirement of the course?
2. Do you think this project has contributed much to your English? How?
3. How do you feel while expressing yourself in English now? Do you feel more comfortable?
4. Do you have any suggestions or anything to add?



APPENDIX D: DISCUSSION TOPICS IN INTERVENTION SESSIONS

Session 1: Describe your school day/day today. You can inform us about (1) what time you got up, (2) what time and how you went to school, (3) how many classes you had, (4) what classes they were, (5) what you did after school and finally (6) whether it was a good day for you. Write at least ten sentences to describe your day please.

Session 2: Today's topic is the teachers' day. You know that it was a special day for teachers yesterday. Did you celebrate the teachers' day? Do you have any interesting memories from the past with any teacher? Who is your favorite teacher? Why do you like him/her? Do you think this day should be celebrated in our country? Are teachers important people for a country's future? Why/why not? Write your ideas and experiences of this special day including the answers of the questions.

Session 3: I am sure that you did lots of interesting things during the weekend, however I guess you may also have had some bad things. Are you ready to discuss about the worst part of your weekend? What was bad about these 3-day holiday? Why do you think that it is bad? What are the effects of it on you or your friends/family? Please tell us what you didn't like at this weekend.

Session 4: Let's discuss the current news. What happened in Turkey today? What is on news? How do you feel? How did they affect people? Give some details.

Session 5: Yesterday Fenerbahce and Feyenoord played a football match. Did you see it? If so, what do you think about the score? Do you think it was fair? If you didn't see the match, you can inform me/us about something you liked doing today.

Session 6: Let's talk about the living bomb attack in Besiktas. I guess you feel very sad but we need to brainstorm and suggest some possible solutions to protect ourselves and our country from these evil events. You are the country's hope for its future. Therefore, why don't

we exchange ideas on what to be done to prevent such bad actions? What can we do as citizens? I will be glad if you share all your feelings and ideas with us/me.

Session 7: Shall we to talk about the fashion today? Are you interested in fashion? What did you wear today? What is your favorite dressing style? Did you like somebody's dressing style today? What was he/she wearing? You can post a photo that shows your favorite dressing style here and describe it. I would like to learn your favorite dressing styles.

Session 8: Let's have fun by making some gossips ☺ Play the Paparazzi machine and gossip on what is going on nowadays. Who was where? With whom? If you didn't like the subject, feel free to change it and discuss on whatever you want. PS: Please be kind while gossiping! This is just for fun.

Session 9: What about making a confession today? I am sure it will be very enjoyable as well. Did you do anything you kept as a secret? Would you like to share a secret with us? Don't worry! Your secret is ours.

Session 10: Why don't we discuss about a movie, a documentary, a talk show or any other TV programs that you watched today or on the last weekend? Inform me/us about what it was about, who the actors or presenters were, where you saw it, whether you liked it or not and whether it is recommendable to watch.

Session 11: Today is the reading day! Do you like reading? What do you usually read (newspaper, magazines, novels, articles, etc.)? How often do you read? What is the last book you read? Who were the protagonists? What happened in the book? What was the main idea? Shall we read it as well? Can you suggest us/me some books to read?

Session 12: This is the final session and I would like to learn about your ideas of the dialogue journaling instrument that we have used so far. Please answer and comment on the following questions;

1. Did you like writing dialogue journals through WhatsApp / pen and paper as a requirement of the English course?
2. Do you think these writing practices contributed to your English? If yes, how?
3. How do you feel while expressing yourself in English now? Do you feel more comfortable?
4. Do you have any suggestions or anything to add?



APPENDIX E: ANALYTIC SCORING SCALE FOR WRITING EXAMS

A Modified Version of Cohen's (1994) and Jacobs, Zinkgraf, Wormuth, Hartfiel, and Hughey's (1981)

	5	4	3	2	1
Level / Criteria	Advanced-High	Advanced-Low	Intermediate-High	Intermediate-Low	Novice
Content	Effectively	Addresses the	Addresses the	Limited	Questionable
* Logical	addresses the	topic and task	topic	development in	responsiveness
Development of	topic and task,	with using	and task using	response to the	to the topic and
ideas	using clearly	appropriate	somewhat	topic and task	task with using
* Main ideas,	appropriate	explanations,	developed	using inappropriate	no detail or
supporting ideas,	explanations,	examples, and	explanations and	explanations,	irrelevant
and examples	examples, and details	details	details	examples and details	explanations
Organization	Well organized	Fairly well	Loosely organized	Ideas are	No organization
* The sequence of	and cohesive	organized and	and incomplete	disconnected and	and no use of
introduction, body,	devices	cohesive devices	sequencing;	lack of logical	cohesive
and conclusion	effectively used	adequately used	cohesive devices	sequencing;	devices
*Use of cohesive			may be absent or	inadequate order of	
devices			misused.	ideas	
Language in use	Appropriate	Relatively	Adequate choice	Limited range of	Very limited
* choice of	choice of words	appropriate	of	vocabulary,	vocabulary,
vocabulary	and use of idioms	choice of words	words but some	confused use of	very poor
*Register		and use of idioms	misuse of	words and idioms	knowledge of
			vocabulary or		idioms
			idioms		
Grammar	No errors, full	Almost no errors,	Some errors, fair	Many errors, poor	Severe and
*Sentence-level	control of	good control of	control of	control of syntactic	persistent errors,
structure	syntactic variety	syntactic variety	syntactic	variety	no control of
			variety		syntactic variety
Mechanics	Mastery of	Few errors in	Fair number of	Frequent errors in	No control over
*Punctuation	spelling and	spelling and	spelling and	spelling and	spelling and
*Spelling	punctuation	punctuation	punctuation errors	punctuation	punctuation
*Capitalization					