The Effects of Using MS Teams Mobile Application on Language Learners' Motivation During and After the Covid-19 Pandemic

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Abstract

Motivation has long been recognized as a critical component of language learners' success. According to Self-Determination Theory (SDT), an autonomously motivated student is more likely to be engaged in a learning activity. As the learners' needs for autonomy, competence, and relatedness ought to be accommodated, these basic psychological needs of learners (BPNs) must be addressed to sustain autonomous motivation. Although there is a substantial number of literature that addresses the role of these three components in the context of mobile-assisted language learning (MALL) and their relationship to autonomous motivation (Kohnke, 2020; Alamer, 2021b; Kartal, 2019; Ali, 2019), the use of Microsoft Teams is almost never addressed. This study aimed to examine the relationship between the informal use of mobile apps by teachers, such as messaging applications, and their students' levels of motivation. This study involved one group of students divided into six sections with the same level of proficiency, who were enrolled in a foundation course in English at a private university in the United Arab Emirates (N = 344). The students were studied over a period of time (Phase 1 and Phase 2 groups of the same population). The analyses were carried out by the use of ANOVA with repeated measures and a t-test. Participants' autonomy and competence were found to have increased slightly as a result of the study. The study, however, failed to demonstrate any significant impacts on anxiety, self-confidence, engagement with language tasks, nor on actual achievement.

Keywords: MALL, MS Teams app, Covid-19, teaching English, language motivation, m-learning, UAE

1. Introduction

Among the many mobile learning subject areas, mobile-assisted language learning focuses on how various technologies can be used to enhance the learning process in order to motivate students (Aburezeq, 2013; Al Mansoori *et al.*, 2022). Learning theories and practices within such a pedagogical framework are also influenced by the social and psychological development of individuals. Mobile technologies and handheld devices play an important role in MALL (Kohnke, 2020). The use of mobile devices for language teaching is not a new development in the MALL field, particularly for exploring how it can increase motivation among L2 learners as Norbrook & Scott (2003) attest. Considering that this study was conducted in the United Arab Emirates, this claim may be relevant, especially since in the UAE, many English learners are insufficiently motivated to participate in language learning activities both inside and outside the classroom (Alamer, 2021b).

In this study, we examined the casual relationship that exists between the Microsoft Teams app and L2 motivation as a way to determine whether MALL would increase learners' motivation in learning a foreign language. Cross-sectional research has examined the relationship between the social context of learners and their motivation for learning a language; nevertheless, only a limited amount of empirical research has been conducted to measure the influence of MALL over time (Kartal, 2019). In order to better evaluate casual associations, a temporal perspective is crucial. In addition, it is important to understand how a specific treatment affects the motivation of students over time. By developing this perspective, researchers can gain a greater understanding of MALL's role in motivating and enhancing learning. Several key studies have been carried out to figure out the impact of Twitter, for example, on economy, such as Ryan and Deci (2020) and other studies conducted to measure the effects of WhatsApp on learning motivation (Kartal, 2019; Aburezeq, 2013; Alamer, 2021; Alshammari, 2017). This study explores how instructors can use the Microsoft Teams application to promote the psychological needs of their students, by supporting autonomy, competence, and relatedness in the language learning process. Throughout the learning process, learners are encouraged to develop a more autonomous motivation.

2. Review of the Literature

Many aspects of motivation have already been explored, but there are still a lot of unexplored ones. Knowing why each learner chooses a target language is a complex process when it comes to understanding the motivation and motivational factors for studying the language (Al-Hoorie, 2017; Gardner, 2010; Kikuchi, 2019; Alamer, 2019). When it comes to learning a language, motivation is a critical component of success, Muñoz-Restrepo et al. (2020) and Gardner and Lambert (1972) are social psychologists whose work is rooted in a research investigation into L2 motivations, they believe that motivation results from a desire to become more involved with the target community for

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learning the target language. Many studies conducted in the late 1970s and early 1980s on L2 motivation derived conclusions that the achievement of L2 and the person's ability to learn languages are correlated according to this construct, motivational intensity, and integrative orientation to learning the language. In addition, research on motivation has revealed the importance of identity and self-related factors for motivating students to learn languages (D ruyei et al. 2015; Ibarra-S áz, 2020; Kim, 2009; Miyahara, 2014; Noels, 2019; Ushioda, 2009). A great deal of research has centered around these conceptualized themes and paradigms by studying the importance of motivation as it affects language learning, with its complex constructs (Alamer, 2021b). Different instructional practices, instructional designs, and motivational strategies have emerged as a result of such trends.

Deci and Ryan's (1985) psychological perspective is drawn into the framework of SDT, although it did not focus on language learning until the early 2000s. SDT proposes that L2 learners hold a variety of orientations, according to Noels (1999), in order to (or as a result of) learning languages. In addition to illuminating why and how you should learn a second language, these orientations provide an excellent introduction to the process. The attainment of L2 learning can be enhanced by some orientations more than others, as some orientations can be more predictive than others (Alamer, 2019). Hence, one of the fundamental components of SDT is the notion that learning a second language is integral to the sense of identity of the learner. The idea of autonomous motivation contributes to this conceptualization motivating oneself autonomously reflects this idea. There are two sub-constructs in autonomous motivation: a learner's self-identity is expressed through both intrinsic orientation and identified orientation.

There has been a great deal of attention in the motivational sciences in the recent era concerning identity and self-related issues pertaining to language learning motivation. Research on how and why motivation has used these conceptualized themes and paradigms to explain considerable amounts of research, language learning is affected by its complex structure (Alamer, 2021b). Changing trends in educational design, instructional practices, and classroom motivational techniques have given rise to the new ways of designing classes, teaching programs, and learning techniques.

As indicated by Deci and Ryan (1985) and Ryan and Deci (2020), SDT was developed as a framework as it incorporates psychological perspectives, it was not used as a language learning approach until the early 2000's. However, according to Noels (1999) SDT proposes that, as a result of the process of language acquisition, L2 learners have a variety of reasons (or orientations) that drive their use of that language. There is potential value in these orientations in that they illuminate what L2 learning is all about and what it involves. In addition to the interaction between orientation and the L2 learning process, certain orientations are more predictive than others (Alamer, 2021b). One of the fundamental concepts of SDT is that learning a second language is intrinsic to one's sense of self, and is therefore personally important. The notion of autonomous motivation is a reflection of this conceptualization. The concept of autonomous motivation is essentially divided into two subcomponents: intrinsic motivation and identified motivation, the active participates in the learner's own development since both of them point to a central role for the active to play. In particular, intrinsic orientation can be defined as feelings of pleasure and vitality that are experienced while engaging in an activity. If language learning is regarded as a pleasant experience in its own right, then the experience is considered intrinsically pleasurable.

The Individuated orientation can be defined as the importance and value a specific activity carries for an individual. Even though learners may find learning a L2 less enjoyable than learning a L1, they can see the value in it for themselves and how it benefits them as individuals. A large number of studies indicate that students who are autonomously motivated are more likely to engage in language learning as time passes (Noels et al., 1999; Noels et al., 2019; Oga-Baldwin, 2017), a greater capacity for engagement with target language communities (Mceown *et al.*, 2014). In order to earn a higher accreditation, students need to be able to read, write, speak, and comprehend the language, as well as know more vocabulary (Alamer, 2021b). Students who learned the materials required for their subjects utilizing mobile apps, according to research outside of the language learning domain, (when compared with the textbook method), these younger adults were perceived to be more autonomous, more competent, and to be more motivated by themselves (D cryei *et al.*, 2015). The literature on the use of MALL in the L2 domain however lacks adequate reporting of whether it has an impact on students' autonomous motivation. There is still a question as to whether or not MALL stimulates learners' independent motivation.

Based on this, the basic psychological needs (BPNs) represent three core concepts within the SDT. Initially, autonomy refers to circumstances that (e.g. instructors, course content, or the learners' group) allow learners to choose which options are most appealing to them in accordance with their personal preferences. Secondly, *competence* may be interpreted as the ability of a participant to perform a specific task. A third benefit of experiencing relatedness is that learners tend to feel comfortable, safe, and connected to each other.

Self-determination, competence, and relatedness have all been identified as necessary for further strengthening the organizational capacity. In this study, SDT will be used to understand the relationship between pedagogical approaches used in mobile learning in general, and mobile-assisted language learning in particular, and the motivation of L2 learners in practical settings. The study conducted by Jeno et al. (2019) included an examination of an m-learning application's influence on students' achievement and well-being. Based on the findings of the study, the three BPN were important in terms of facilitating learners' autonomous motivation and accomplishments. According to Jeno et al. (2019), using m-learning tools is mainly related to students' autonomy and motivating themselves, compared to the traditional way of learning in a classroom, these e-learning tools are perceived to be more engaging. Therefore, in order to understand the motivational profiles of learners using MS Teams app with their instructors in this study, we employed SDT as a method to examine the way in which they use the application.

2.1 Learning Languages Using Mobile Devices

Globally, MALL research has received a great deal of attention, according to Burston (2014), a wide range of mobile-related technologies is available across 37 different areas within the L2 learning and teaching process, which can be used for creating more interactive teaching and learning methods. The use of mobile learning allows for the expansion of learning environments in addition to facilitating the collaboration between course material and members of the class, according to Jeno et al. (2019). Even though the first smartphone, the Simon Personal Communicator, was released in 1994, it was far too expensive to be used for MALL applications. It was not until 2007 that the iPhone appeared, and it was not until 2008 that the HTC G1 was introduced as the first Android smartphone. The integration of smartphones into MALL implementations did not begin until much more affordable Android phones became available (Zainuddin, 2018). While this has resulted in greater rewards, a variety of challenges have been presented to motivation for learning (Oriji, 2020). MALL has shown great potential to enhance learners' engagement and learning performance in L2 learning according to an examination of its effects (Elola, 2017).

The problem of low student motivation to learn English in a stimulating environment in many non-native English-speaking countries presents a serious issue in research (Elaish et al., 2019). It is through the use of these mobile technologies that L2 learners and teachers can embrace a wealth of ideas and strategies (Zou el at., 2020). A study of learners' attitudes towards using mobile devices, both inside and outside of the classroom, was considered to be one of the most important studies in the context of using mobile technologies to motivate learners (Hao et al., 2019). Although students' motivation, and, more specifically, their BPN, can make a big difference in learning, it has received little attention in the MALL environment.

2.2 Why Microsoft Teams App?

Many researchers have examined MALL tools that could improve students' performance in a target language. Most of those researchers have utilized WhatsApp as a tool, probably due to its popularity and widespread use around the world. To our knowledge, no one has previously used Microsoft Teams application to measure the effectiveness of the application in this context. Therefore, the reasons we choose Microsoft Teams over other popular MALL tools are mainly related to the fact that this app is essential to every student at the investigated university where results were collected and this study was conducted. As Microsoft Teams software is used to deliver online lectures, it is particularly important during the Covid-19 pandemic, where all lectures to be delivered online only, students must have it on their smart phones in order to remain on top of all assignments and tasks required of them for any enrolled course. Since it constitutes the main means of communication between students, their colleagues, and the teacher in the context of university courses.

Convenience is another factor for choosing MS Teams app. The participants are always in possession of their mobile phones as they use them for social media activities, as well as communications with friends and relatives. The participants, therefore, have access to the MS Teams app at any time and can learn at their own pace.

3. Research Questions and Study Purpose

Even though language learners tend to be enthusiastic about using mobile phones for learning their target languages, such devices have not yet been fully studied in the context of L2 settings on a systematic basis as to whether or not they may provide a meaningful influence on motivation (Alamer and Al Khateeb, 2021). The L2 learning context and motivation to learn the language has been found to be strongly influenced by the L2 learning context. According to Dörnyei et al. (2015), in order to boost student motivation, it is vital to understand how MALL works. This study uses the path analysis technique to measure student motivation in MALL over time based on self-determination theory (SDT). We formulated the following two research questions:

Q1 To what extent can the MS Teams app as a means of teaching language enhance students' BPNs as opposed to conventional methods?

Q2: Could the use of the MS Teams app as a means of language teaching enhance students' BPNs, as opposed to conventional methods?

4. Methods

The present study was conducted on the same set of students using a quasi-experimental design, divided as Phase 1 group and Phase 2 group over a period of 26 weeks (one foundation year), using MS Teams app in language learning to understand how it impacts the motivation of learners over a period of two time points. In this study, we aim to determine whether learners, when using a tool such as this, perceive it as promoting their own BPN. Instructors in the Phase 1 group used to begin each lesson by sharing the link of a video via MS Teams with the activities, as shown in Appendix 1, at the beginning of each week (usually Monday) and once a week only. Upon completion of the video and activity, the instructors invite students to share their answers and begin a discussion. It occurred 12 times over a period of 12 weeks. Students were allowed to rewatch the video as often as they wished. Prior to the semester final exam and after the 12 week period, a questionnaire was given to each student to express themselves regarding their motivation, see Appendix 2.

During the next semester, that took place in late January and the first week of February, 12 weeks in length, all students were required to return to university and attend classes on campus as the precautionary procedures relating to Covid-19 were loosened. The same English learning website with different videos were played using the classroom projector (no mobile phones were used in this process). After watching a video (as many times as they liked) at the beginning of each week (typically on Monday as well), the instructors ask the students to complete the activities associated with the video and then discuss them together in class with their instructors and their classmates too. The same questionnaire was given to each student to express themselves regarding their motivation.

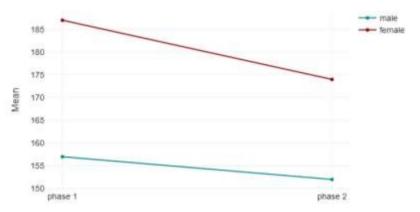
4.1 Participants

The participants were 344 undergraduate students enrolled in six different sections of the same English foundation course at a private university in Abu Dhabi, United Arab Emirates. They all speak Arabic natively and are in their first year. The students were generally aged between 18 and 20 years of age, and all of them had quite similar levels of English proficiency. It is due to the fact that students were required to take a placement test, and only those who failed (Those who obtained less than 29, which is equivalent to an IELTS academic overall score of 4) that test were permitted to enroll in the designated foundation course. Students of these ages in the United Arab Emirates tend to stay connected to their smart phones at all times, which means that the app is easily accessed any time by the participants, in addition to their need for such an app in order to attend their classes in the university. The Phase 1 group consisted of 344 participants, whereas the Phase 2 group included 326 participants. The number of male and female is mentioned in chart 1. Also, see table 1 for the two-factor analysis of variance with repeated measures. It is important to note that 18 participants did not continue with the study, either because they changed universities or for other reasons unknown to the researchers.

Table 1. Study participants (Phase 1& 2, the two-factor analysis of variance with repeated measures).

	phase 1	phase 2	Total
male	157	152	154,5
female	187	174	180,5
Total	172	163	167,5

Chart 1. Male, female distribution



4.2 Instruments

In order to obtain information about students' baseline beliefs about their abilities, motivation, and autonomy, this study used two instruments prepared by the researchers. In both groups, BPN was measured by the Likert-type scale. In addition, three other constructs make up this scale: autonomy, competence, and relatedness. The second instrument consists of eight items in the scale to measure the motivation by autonomy, see appendix 2. In total, there are 20 items on the scale that are rated five points on a Likert-type scale varying between strongly agree to strongly disagree. Students' intrinsic and identified orientation are assessed with the help of the final eight items scale.

4.3 Experimental Treatment

In the Phase 1 group, the participants were primarily responsible for responding to the instructors' content. The instructors' most important task, therefore, was not to give the projects to students, rather instruct them on how to do them and encourage them to finish them before the deadline. The participants were presented with the "netiquette rules" before instructors shared the links of the tasks with them. In this context, this category relates to issues relating to how to conduct yourself when you are communicating online, as there are some rules regarding internet behavior that are similar to those that occur in real life, thus, it is imperative to follow the same principles as in real life while online and to respect others' time. Consequently, the participants were asked to complete twelve tasks over 12 weeks. Videos from an English language-teaching website were to be watched and keywords from those videos were to be filled in. As the following goals were the aim to achieve, that particular English learning website was selected (Englishcentral.com) as it has attractive and interactive English teaching videos from real life: (1) Learners are able to listen and watch extensively (2) Improve their ability to comprehend speech and complete the video exercises. We identified the gist from a variety of post-question types, an understanding of in-depth details, and specific information. This task included listening for information, and entertainment as well as vocabulary for orientation, information, and enjoyment.

The entire task was on pre-intermediate level (as stated in the website) which matches the level of the participants, this study utilized MALL solely for the purpose of developing listening and vocabulary skills as a means of ensuring participants' engagement. In order to promote interactivity and engagement, five minutes from each instructor's first class were allocated for students-student discussion within the quarter hour period. Students were sent links to assignments via MS Teams app in the public discussion section available in the app under the tab name 'post'. Participants were also encouraged to communicate within their classmates via the app and to provide each other with feedback. Each task was linked to a reminder, as well as a link for each task, and sent via MS Teams app to participants. See Appendix 1. Students and instructors used the MS Teams app to promote knowledge exchange, extend learning time, and enhance cooperation. Upon having the MS Teams application installed on every participant device, the teachers were able to use it to exchange material outside of class, promoting informal student-student/student-instructor interaction via screenshots and e-mail forwards as a great way to share messages. This tool enables students to build their own sense of space and build confidence (Alamer and Al Khateeb, 2021).

Participants were required to begin watching instructional material video before moving to fill in the blank tasks from the same videos watched every week (for the entire 12 weeks); at the end of every week, for the participants to have an adequate amount of time to revise the shared videos, every participant will provide a brief update about the tasks. Additionally, the instructor's rule stipulated that they would supervise the MALL process and keep a close eye on peer communication.

5. Data Collection and Analysis

The data collection process for this study was divided into two phases, 1 & 2. Phase 1 occurs during the first semester when all participants were studying online via distance learning using MS Teams software, there was 2 weeks difference in time between Phase 1 and Phase 2 (semester 1 of the academic year). Phase 2 took place 2 weeks after Phase 1 (semester 2) in the same academic year. The length of each semester is about 12 weeks. Participants in both groups were instructed on how to complete the language learning motivation questionnaire during phase 1, as participants were encouraged to participate, but not required to do so. To this end, the language learning motivation questionnaire was subsequently sent electronically to all participants, this process took about 5 minutes. The path analysis (with a repeated measure ANOVA) was selected for this study because it allows for the examination of various structural relationships. In paired t-test calculator, the sum of two measurements is compared to each other, when measured values are found to be close in pairwise comparison. The actual values of dependent samples are available in pairs, where the pairs result from repeated measurements, parallelization or matching. This can be the case, for example, in longitudinal studies with several measurement points (time series analyses) or in intervention studies with experimental designs (before- after measurement). Therefore, the researchers used t-test dependent samples calculator as both groups are from the same population. In order to investigate the correlation, Pearson's correlation coefficient is used both for measuring the strength and for determining the direction of a relationship between two variables.

5.1 Reliability and Validity

5.1.1 Pearson Correlation Analysis

A Pearson correlation was performed to test whether there was association between Autonomy, Competence, Relatedness, Intrinsic orientation, and Identified orientation in both Phase 1 and Phase 2. As a result of the Pearson correlation, the Autonomy Phase 1 and Autonomy Phase 2 demonstrated a significant association, r(3) = 0.99, p = <.001. See tables 2 & 3.

Table 2. Pearson Correlation Analysis

	r	p (2-tailed)
Autonomy Phase 1 and Autonomy Phase 2	0,99	,001
	r	p (2-tailed)
Competence Phase 1 and Competence Phase 2	0,98	,003
	r	p (2-tailed)
Relatedness Phase 1 and Relatedness Phase 2	0,99	<.001
	r	p (2-tailed)
Intrinsic orientation Phase 1 and intrinsic orientation Phase 2	1	<.001
	r	p (2-tailed)
Identified orientation Phase 1 and Identified orientation Phase 2	1	<.001

Table 3. Strength of correlation

Amount of r	Strength of the correlation
0,0 < 0,1	no correlation
0,1 < 0,3	low correlation
0,3 < 0,5	medium correlation
0,5 < 0,7	high correlation
0,7 < 1	very high correlation

5.1.2 t-test Dependent Samples

To determine if statistically significant differences exist between two related groups, the dependent t-test compares their means. We analyzed the data using this method and found the following results. The Autonomy Phase 1 group had higher values (M = 165, SD = 100204,93) than the Autonomy Phase 2 group (M = 144.8, SD = 155.54). A t-test for dependent samples showed that this difference was not statistically significant, t(4) = 0.8, p = .468, 95% Confidence interval [-49,76, 90,16]. This results in a p-value of, 468, which is above the specified significance level of 0.05. The results here clearly showed that the groups come from the same population, as this is to test whether there was any difference in their response or not. In the Competence section, Phase 1 group had also higher values (M =151.4, SD = 168.64) than the Competence Phase 2 group (M = 144.8, SD = 133.91). A t-test for dependent samples showed that this difference was not statistically significant, t(4) = 0.33, p = .761, 95% Confidence interval [-49,55, 62,75].

Table 4. Autonomy & Competence groups statistics

	Type III Sum of Squares	df	Mean Squares	F	p
Model	1.360,2	3	453,4	0,33	,803
Within	17.787,5	15	1.185,83		
Error	16.427,3	12	1.368,94		

As far as relatedness is concerned, it was apparent that participants did not feel a sense of closeness when dealing with the teacher as a human, as their interpersonal skills were not exemplary when using the mobile application. As part of Phase 2, learners are able to speak face-to-face with their instructors and discuss matters on a more personal level than during Phase 1. The Relatedness Phase 1 group had lower values (M = 137.4, SD = 149.68) than the Relatedness Phase 2 group (M = 144.8, SD = 131.97). A t-test for dependent samples showed that this difference was not statistically significant, t(4) = -0.72, p = .51, 95% Confidence interval [35,8, 21]. Table 5 & chart 2 both illustrate the difference.

Table 5. Relatedness in both groups statistics

	N	Mean	Std. Deviation	Std. Error Mean
Relatedness Phase 1	5	137,4	149,68	66,94
Relatedness Phase 2	5	144,8	131,97	59,02

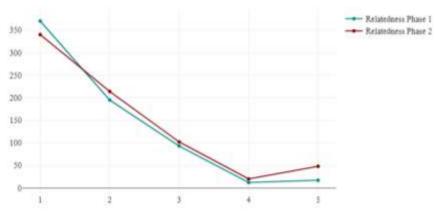


Chart 2. Relatedness Phases 1& 2

In terms of motivation by autonomy, the results show no significant differences, as the learners' motivation did not change much throughout the study period. Additionally, the results from using a MALL tool or working in a class were almost identical. The Intrinsic orientation Phase 1 group had lower values (M = 130.4, SD = 166.32) than the intrinsic orientation Phase 2 group (M = 144.8, SD = 190.86). A t-test for dependent samples showed that this difference was not statistically significant, t(4) = -1.26, p = .275, 95% Confidence interval [-46.03, 17.23]. The Identified orientation Phase 1 group had lower values (M = 130.4, SD = 147.07) than the Identified orientation Phase 2 group (M = 144.8, SD = 166.06). A t-test for dependent samples showed that this difference was not statistically significant, t(4) = -1.58, p = .189, 95% Confidence interval [-39.7, 10.9] as illustrated in table 6. The motive about why they study English and what the purpose of it is, did not change between phases 1 & 2. Moreover, the participants are aware of the language's importance for their professional careers.

Table 6. Motivation by autonomy statistics

	Type III Sum of Squares	df	Mean Squares	F	p
Model	1.036,8	3	345,6	0,42	,739
Within	10.806	15	720,4		
Error	9.769,2	12	814,1		

6. Discussion & Recommendation

This study is designed to assess the extent to which alternative methods of mobile messaging (such as MS Teams app) can be beneficial in helping to understand student motivation to learn languages, and to identify effective methods of reaching this goal. The researchers examined the relationship between autonomous motivation and learner's performance and their BPN over time (autonomy, competence, and relatedness). In this study, we compared the effects of implementing efficient methods in Phase 1 group against the effects of Phase 2 group, in order to determine whether the implementation of such methods directly contributed to the increase in BPN of the students. Phase 1 group showed a slight rise in autonomy, competence, however, it showed that relatedness did not increase when using MS Teams app in the first phase. The reason for this might be due to the fact that students have direct contact with their instructors during the second phase when they are in the classroom with the teacher. This leads to the conclusion that use of MS Teams app in the Phase 1 group increases the level of BPN of the learners in two sets out of three. In the later stages of our experiment, our study suggests that BPN and its components influence autonomy motivation, it may not be very strong, but there was some positive impact on autonomy motivation. Additionally, in a repeated measures analysis of ANOVA, we found that the autonomous and competence of the Phase 1 group was higher than in Phase 2, when students received the treatment online through the MS Teams app, rather than in class. According to Ryan and Deci (2020), it is crucial to foster learners' autonomous motivation through the use of the whole set of BPN. The mobile app appears to be limited to allowing students' autonomy only when combined with MS Teams app and perhaps other MALL-related tools to increase autonomous motivation by playing a positive role. As a consequence of its role as a language learning medium, the user of MS Teams app may demonstrate a higher acceptance of autonomous motivation. The use of the app by teachers seems to positively impact students' perception of enjoyment and the perception of significance linked with language learning. In their study on students' participation in learning the L2 with WhatsApp, Ali and Bin-Hady (2019) found that independent motivation for teaching the L2 increase when students use MALL. Another study found the same results, which was conducted by Alamer & Al Khateeb (2021) on WhatsApp use as a motivational tool for language learners.

Based on Kartal's (2019) empirical findings, apparently there is a difference between the models of the two groups in terms of how they are executed. The mentioned scholars assured that using MALL to foster the development of learners' autonomy has been found to be effective in language learning settings, the improvement of the participants' language skills and the reduction of their anxiety are the results of their studies. In this application, students engage in extra language tasks without being graded, which appears to be an autonomous teaching method that supports student autonomy. According to Alshammari et al. (2017), Since MALL is predominantly used in informal settings by students (rather than formal classroom settings), it has greatly helped to shift the flow of learning from the teacher to the student. MALL may be considered to be a device that allows one to explore more language-related material without being exclusively limited to a set of textbooks or materials. The analysis also found only minor variations in psychological needs for competence between the two groups, as in the second phase, we measured the relation between the two cohorts in terms of autonomous motivation. There appears to have been an insufficient challenge in the materials presented to enable the participants to maximize their abilities. Teachers did not provide written feedback on the learners' responses to the assignments on MS Teams app, so they may not have been able to respond appropriately to the tasks. This finding opposes Karapanos et al. (2016), one of the most prominent studies on the effect of using WhatsApp, which claims that both competence and relatedness are significant needs. As social practices can demonstrate this, relatedness motivation was found to be higher in the second group, which occurred in the classroom. Possibly the reason can be attributed to the direct and physical contact that students have with each other and with their instructors. It is clear that instructors should enhance interaction between participants and their instructors when delivering tasks via MS Teams app, which is an important aspect of promoting relatedness. Consequently, for successful interaction, the application of support for engagement among teammates and instructors is imperative in order to achieve relatedness (Zainuddin, 2018). The recommendations emphasize the importance of the use of a MALL tool in order to achieve long-term impactful motivation from all perspectives, not just the use of a tool to measure motivation, more specifically, it is the manner and timing in which such tools are implemented in conjunction with adequate training of instructors. Moreover, as Ryan and Deci (2020) pointed out, each teacher has their own set of BPN that must be met in order to facilitate the development of students. Once their needs are met, they will be more likely to nurture and promote the learning of students as well. Our study extensively involved the use of MS Teams app by language teachers, who were asked to incorporate it into their teaching practice solely as part of the experiment, in addition to its availability in the participants' devices as mentioned earlier. Our research revealed that students' autonomous motivation did not significantly change when they were using MS Teams, which may be due to the fact that students' motivation to learn English is primarily influenced by their future and their career opportunities (at least according to what they perceive to be the case). However, autonomy and competence were found to have slightly increased when using the Microsoft Teams application because it may have opened up a new window in which to enjoy the language lessons that traditional teaching could not achieve (Aburezeq, 2013). Studies like these are needed today (particularly during/post pandemics like COVID-19), due to the usage of various instant messaging tools, most institutes are now providing distance learning and blended language learning. The results of these studies therefore can provide valuable insight to institutes of higher learning for such reasons, as there are currently courses/programs that are being planned, delivered, evaluated, or improved online. More importantly, the results of this study also give a practical perspective on the relationship between the BPN and autonomous motivation in a MALL setting, providing more insight into both concepts. With the goal of reducing the instructor's independence on traditional textbooks, instructors should make use of MS Teams app to facilitate personalized learning. It is also important that teachers choose tasks that reinforce a sense of belonging and connectedness among students as well as reinforce learners' positive feelings following successful achievement of challenges.

7. Limitation of the Study

It is important to note that despite the study's contributions, there are some limitations. To begin with, it is possible that the results of the study may be influenced by extraneous factors. The increase in competence may be explained by receiving help from other family or friend members in exercises or by repeated practice in Phase 1 group without taking MS Teams app into account. It is also possible to use other technologies, or even to use the traditional face-to-face homework process to achieve similar results. In order to assess the effectiveness of the MS Teams application, external influences will have to be considered. The analytical findings also revealed some validity issues (Where these issues are not addressed in this article) pertaining to the predicting power of the study treatment, based on differences between the two groups at the start of the study. In addition to this, the groups were split into six, each of whom were enrolled in a foundation course in the English language, among the reasons for these differences may be the teacher's teaching style, the way the content is delivered, and the previous experiences they have had with the teacher. A MALL application, however, would not have any discernible effect on other psychological or linguistic outcomes, as our study fails to demonstrate, such as anxiety, self-confidence and engagement with language tasks, as well as actual achievement. According to Karapanos et al. (0216), the findings show that messaging tools such as WhatsApp is a technological tool that can be implemented thoughtfully and assessed comprehensively to provide more effective communication. MS Teams app is expected to enhance the motivation of language learners once these requirements are met. Taking a nutshell view, it could be argued that the use of the Microsoft Teams app in conjunction with institutionally organized teaching (formal) does not exacerbate BPN, but rather when teaching reinforces all needs it enhances it. Additionally, the MS Teams application has the potential to directly increase students' motivation in the absence of basic needs reinforcements from teachers.

References

- Aburezeq, I., & Ishtaiwa, F. (2013). The impact of WhatsApp on interaction in anArabic language teaching course. *International Journal of Arts & Sciences*, 6(3), 165.
- Al Mansoori, A., Taani, O., Al Aghar, T., & McMinn, M. (2022). Faculty Perceptions of Blackboard Learn as the Main Platform for Teaching and Learning. 2022 International Arab Conference on Information Technology (ACIT), Abu Dhabi, United Arab Emirates, 2022, pp. 1-7. https://doi.org/10.1109/ACIT57182.2022.9994211
- Alamer, A., & Lee, J. A. (2019). Motivational process model explaining L2 Saudi students' achievement of English. System, 87, 102133.
- Alamer, A., & Al Khateeb, A. (2021). Effects of using the WhatsApp application on language learners motivation: a controlled investigation using structural equation modelling. *Computer Assisted Language Learning*.
- Alamer, A. (2021b). Grit and language learning: Construct validation of grit and its relation to later vocabulary knowledge. *Educational Psychology*.
- Alamer, A., & Al language anxiety andself-determined motivation: A mixed methods approach. Frontiers in Education.
- Al-Hoorie, A. (2017). Sixty years of language motivation research: Looking back and looking forward. SAGE Open, 7(1), 215824401770197.
- Ali, J., & Bin-Hady, W. A (2019). study of EFL students' attitudes, motivation and anxiety towards WhatsApp as a language learning tool. Arab World English Journal (AWEJ) Special Issue on CALL, 5, 289-298.
- Alshammari, R., Parkes, M., & Adlington, R. (2017). Using WhatsApp in EFL instruction with Saudi Arabian university students. *Arab World English Journal*, 8(4), 68-84.
- Burston, J. (2014). The reality of MALL: Still on the fringes. CALICO Journal, 31(1), 103-125.
- Deci, E., & Ryan, R. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.

- Dörnyei, Z., MacIntyre, P. D., & Henry, A. (Eds.). (2015). Motivational dynamics in language learning. Bristol: Multilingual Matters.
- Dörnyei, Z. (2014). The psychology of the language learner: Individual differences in second language acquisition. New York: Routledge.
- Dörnyei & R. Schmidt (Eds.), Motivation and second language acquisition (pp.43-68). HI: University of Hawii.
- Elola, I., & Oskoz, A. (2017). Writing with 21st century social tools in the L2 class-room: New literacies, genres, and writing practices. *Journal of Second Language Writing*, 36, 52-60.
- Elaish, M., Shuib, L., Ghani, N., & Yadegaridehkordi, E. (2019). Mobile English language learning (MELL): A literature review. *Educational Review*, 71(2), 257-276.
- Gardner, R., & Lambert, W. (1972). Attitudes and motivation in second-language learn- ing. Massachusetts: Newbury House Publisher.
- Gardner, R. (2010). Motivation and second language acquisition: The socio-educational model. New York, NY: Peter Lang.
- Hao, Y., Lee, K., Chen, S., & Sim, S. (2019). An evaluative study of a mobile application for middle school students struggling with English vocabulary learning. *Computers in Human Behavior*, 95, 208-216.
- Ibarra-S áz, M., Rodr guez-Gómez, G., & Boud, D. (2020). Developing student com-petence through peer assessment: The role of feedback, self-regulation and evaluative judgement. *Higher Education*, 80(1), 137-156.
- Jeno, L., Raaheim, A., Kristensen, S., Kristensen, K., Hole, T., Haugland, M., & Maeland, S. (2017). The relative effect of team-based learning on motivation and learning: A self-determination theory perspective. *CBE Life Sciences Education*, 16, 1-12.
- Jeno, L., Adachi, P., Grytnes, J., Vandvik, V., & Deci, E. (2019). The effects of m-learning on motivation, achievement and well-being: A self-determination theory approach. *British Journal of Educational Technology*, 50(2), 669-683.
- Kartal, G. (2019). What's up with WhatsApp? A critical analysis of mobile instant messaging research in language learning. *International Journal of Contemporary Educational Research*, 6(2), 352-365.
- Karapanos, E., Teixeira, P., & Gouveia, R. (2016). Need fulfillment and experiences on social media: A case on Facebook and WhatsApp. *Computers in Human Behavior*, 55, 888-897.
- Kim, T. (2009). The sociocultural interface between ideal self and ought-to self: A casestudy of two Korean students' ESL motivation. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 274-294). Bristol: Multilingual Matters.
- Kohnke, L. (2020). Exploring learner perception, experience and motivation of using a mobile app in L2 vocabulary acquisition. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 10(1), 15-26.
- Kikuchi, K. (2019). Motivation and demotivation over two years: A case study of English language learners in Japan. *Studies in Second Language Learning and Teaching*, 9(1), 157-175.
- Loewen, S., Crowther, D., Isbell, D., Kim, K., Maloney, J., Miller, Z., & Rawal, H. (2019). Mobile-assisted language learning: A Duolingo case study. *ReCALL*, 31(3),293-311.
- Mceown, M., Noels, K., & Saumure, K. (2014). Students' self-determined and integra-tive orientations and teachers' motivational support in a Japanese as a foreign lan-guage context. *System*, 45, 227-241.
- Muñoz-Restrepo, A., Ramirez, M., & Gaviria, S. (2020). Strategies to enhance or main-tain motivation in learning a foreign language. *Profile: Issues in Teachers' Professional Development*, 22(1), 175-188.
- Miyahara, M. (2014). Emerging self-identities of second language learners: Emotions and the experiential profile of identity construction. In K. Csizér & M. Magid (Eds.), *The impact of self-concept on language learning* (pp. 206-231). Bristol: Multilingual Matters.
- Noels, K., Lascano, D., & Saumure, K. (2019). The development of self-determination across the language course: Trajectories of motivational change and the dynamic interplay of psychological needs, orientations, and engagement. Studies in Second Language Acquisition, 41(4), 821-851.
- Noels, K. (2001). New orientations in language learning motivation: Towards a model of intrinsic, extrinsic, and integrative orientations and motivation.
- Noels, K. A., Clement, R., & Pelletier, L. G. (1999). Perceptions of teachers' communicative style and students' intrinsic and extrinsic motivation. *The Modern Language Journal*, 83(1), 23-34.
- Norbrook, H., & Scott, P. (2003). Motivation in mobile modern foreign language learning. In MLEARN (pp. 50-51).
- Oga-Baldwin, W. Q., & Nakata, Y. (2017). Engagement, gender, and motivation: A predictive model for Japanese young language learners. System, 65, 151-163.
- Oriji, A., & Torunarigha, Y. (2020). Digitized education: Examining the challenges of digital immigrant educators in the face of net generation learners. *KIU Journal of Social Sciences*, 5(4), 337-347.
- Ryan, R., & Deci, E. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860.

- Ryan, R., & Deci, E. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. New York, NY: The Guilford Press.
- Shadiev, R., Liu, T., & Hwang, W. Y. (2020). Review of research on mobile-assisted language learning in familiar, authentic environments. *British Journal of Educational Technology*, 51(3), 709-720.
- Ushioda, E. (2009). A person-in-context relational view of emergent motivation, self and identity. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity andthe L2 self* (pp. 215-228). Bristol: Multilingual Matter.
- Zainuddin, Z. (2018). Students' learning performance and perceived motivation in gamified flipped-class instruction. *Computers & Education*, 126, 75-88.
- Zou, B., Yan, X., & Li, H. (2020). Students' perspectives on using online sources and apps for EFL learning in the mobile-assisted language learning context. In B. Zou, X. Yan, & H. Li (Eds.), Language learning and literacy: Breakthroughs in research and practice (pp. 515-531). Hershey: IGI Global.

Appendix 1

Students were asked to complete tasks using the Microsoft Teams application

- Task 1: Listen and watch: A Day at the Beach. A supportive dad helps his daughter overcome her fear of water.
- Task 2: Listen and watch: Wonderful North Sumatra. In North Sumatra, both locals and visitors are amazed with such wonder.
- Task 3: Listen and watch: Listen to the Water. Penelope Cruz gives water a voice and reveals why humans shouldn't take water for granted.
- Task 4: Listen and watch: All My Life. A couple's relationship faces challenges as one of them battles against cancer.
- Task 5: Listen and watch: he Century for Women. A former CEO explains why he believes empowering women can increase productivity.
- Task 6: Listen and watch: In the Airport. Here are some words used when traveling.
- Task 7: Listen and watch: Describing People. Learn these words to describe a person's looks and what they like to do.
- Task 8: Listen and watch: Final Fantasy VII. Crisis Core. Cinematic ending
- Task 9: Listen and watch: Move Fast or Fail in Business. Learn why it is important to move forward in business.
- Task 10: Listen and watch: We Take Privacy Seriously. Steve Jobs explains the iPhone's old-fashioned approach to privacy.
- Task 11: Listen and watch: When Is Your Job Interview? Business Career
- Task 12: Listen and watch: Escape From the Office. Business Management

Appendix 2

Questionnaire assessing psychological needs and motivational autonomy.

Item

Autonomy

We were allowed to discuss the questions and answers as groups.

I was given the opportunity to practice my English.

I was able to discuss any question regarding English with my teacher and classmates freely & at any time.

Any question that I did not understand was answered by referring to the appropriate sources.

Competence

I have made big progress in improving my English.

Since beginning the course, I have developed the ability to answer questions in general that I could not answer previously.

In completing the tasks and challenges associated with learning English, I feel a sense of accomplishment.

Relatedness

I enjoy the relationship I have with my English teacher.

My English teacher empathizes with students' concerns and places himself in their shoes.

While I am learning the English language, I have noticed that my classmates are willing to assist me.

I am receiving personal attention from my teacher.

Motivation by autonomy

Intrinsic orientation

English is a requirement for my job.

Learning the language allows me to communicate effectively with individuals from a wide range of backgrounds.

I learn English so I can understand the words as well as the meaning when watching movies and series online.

I learn English Because I wish to be as good as my friends and the other people I am surrounded by.

Identified orientation

My personal growth depends on my ability to speak English.

I consider learning English an important aspect of my personal growth, opening the door to new possibilities.

My desire to learn English is in keeping with my goal of pursuing a higher education in both the present and the future.

I gain valuable personal growth information by reading and listening to materials written in English that I am familiar with

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