

Autonomous Online English Language Learning in Indonesian Higher Education Contexts¹

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Abstract

This study aims to address the limited research on informal online language learning with an initial focus on regional Indonesian contexts but viewed and discussed using a global language education framework. To be more detailed, the present study analyzes the types of technology and the language learning activities that learners use and do in autonomous online and informal learning settings. A cross-sectional survey supported by interviews involving English language students in the regional Indonesian university context was conducted. The findings suggest that learners had sufficient hardware technology to conduct autonomous online and informal language learning, but that their choices for the software/website platforms used varied. As for the activities, general preference towards receptive skill-based activities was found, but increased balance in receptive-productive skills was noted in reading and writing. The implications of the study are further elaborated in the paper and recommendations for language teachers, institutions, and further research on a global perspective are offered.

Resumen

Este estudio aborda la investigación limitada sobre el aprendizaje informal de idiomas en línea con un enfoque inicial en los contextos regionales de Indonesia, pero visto y discutido utilizando un marco global de educación de idiomas. Para ser más detallado, el presente estudio analiza los tipos de tecnología y las actividades de aprendizaje de idiomas que los estudiantes usan y realizan en entornos de aprendizaje autónomo en línea e informal. Se realizó una encuesta transversal respaldada por entrevistas con estudiantes de inglés en el contexto universitario regional de Indonesia. Los hallazgos sugieren que los estudiantes tenían suficiente tecnología de hardware para llevar a cabo un aprendizaje de idiomas autónomo en línea e informal, pero que sus opciones para las plataformas de software / sitio web utilizadas variaban. En cuanto a las actividades, se encontró preferencia general hacia las actividades basadas en habilidades receptivas, pero se observó un mayor equilibrio en las habilidades receptivas-productivas en lectura y escritura. Las implicaciones del estudio se desarrollan con más detalle en el documento y se ofrecen recomendaciones para profesores de idiomas, instituciones y más investigaciones sobre una perspectiva global.

Introduction

Learning a foreign language can be a daunting process. One of the essential keys in learning an additional language is exposure as it plays a key role in the development of learners' language acquisition. Exposure comes in the form of rich comprehensive input (Krashen, 1982), as well as comprehensive output (Swain, 2008). In Indonesian contexts, where English is a foreign language (EFL), such extensive input and output of the language are challenging to find since not many people speak English. In other words, learners mostly learn and use English in classroom contexts, while outside they rarely use the language for real communication. This situation is certainly counterproductive to the principle of language learning. One way to enrich the exposure in language learning is through autonomous learning.

Autonomous Language Learning

Autonomous learning allows learners to study on their own accord without depending on the presence of teachers, classrooms, and even curriculum. This type of learning is essential to be instilled among language learners due to the nature of the subject which requires rich exposure to the language. Inayati (2015b) defines it as an approach in additional language learning that complements classroom-based language learning because students do additional language learning activities outside the class. The outside language learning activities should be meaningful and relevant to the learners so that they do them without feeling pressured. Autonomy in language learning has been actively discussed among applied linguists for decades. The idea came as a response to the perceived need for adult language learners to develop responsibility and capacity to be more independent and proactive in their learning (Lou et al., 2018). Autonomy is argued to be an acquired ability that can be encouraged and supported in both natural and formal educational settings (Benson, 2006).

Autonomy in language learning has greatly influenced the creation of Self-Access Centers (SAC) that were prolific among language teaching and learning institutions during the 1990s-2000s (Benson, 2006). Generally advocated by the books and research by Gardner and Miller (1999; 2011), many language teaching institutions around the world embraced the notion and established SACs, bringing autonomy into the formal curriculum of English Language teaching and learning. In addition to being translated into SACs,

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Benson also noted that various forms of autonomous learning have occurred over the years, such as tandem learning, autonomy in computer-assisted language learning, independent language learning, and out-of-class language learning. Out-of-class learning embodies the notion of autonomy in language learning which is conducted by learners outside the classrooms as well as the so-called SAC, this is the concept used in the current study.

Out-of-class learning suits language institutions that do not have a SAC, and, although less structured, it covers a wider form of independent learning which can be done by learners. Several studies about this type of autonomous language learning have been noted, such as those conducted by Hyland (2004), Luk (2012), and Inayati (2015b).

Observing forms of out-of-class learning conducted by students in Hong Kong university contexts, Hyland (2004) found that high recognition of language exposure for autonomous language learning was noted, but the choices of activities were influenced by complex individual and social/political factors such as identities and social judgement.

Following up on Hyland (2004), Luk (2012) found that Japanese university students also conducted various forms of independent English language learning outside the class without the teacher's instruction to improve their general English skills. He also found that they expected the formal language classes to equip them with strategies to learn the language outside the class so they could do that more effectively.

In response to Luk (2012), Inayati (2015b, 2016) conducted two research projects involving strategies to conduct independent studies in EFL. In her first study, she found that students perceived the teaching of independent language strategies to be positive and expected. In the second study, she found that in addition to having a positive attitude towards independent study, the students conducted all forms of independent study using some form of technology, especially online.

Technology in English Language Teaching and Learning

Technology has greatly influenced the education sector. The current teaching and learning process has been highly embedded with technology so knowledge about how to integrate technology in teaching and learning becomes essential for both teachers and learners, including those of the English language. Teachers are now required to understand the concept of Technological Pedagogical Content Knowledge (TPCK) which was introduced by Mishra and Koehler (2006). In English language teaching, such concept means that in addition to the knowledge and skill related to the English language (content knowledge), and the theories and practices of teaching English (pedagogical knowledge), teachers need to be well-equipped with the knowledge about using technology relevant to the teaching and learning of English. EFL teachers have incorporated various forms of technology in their teaching and learning contexts in order to help improve students' learning experience and outcomes (Inayati, 2015a).

Personal computers and the Internet have exerted significant influence on language education that created a new area of research and practice called Computer Assisted Language Learning (CALL). Some of the current forms of technology that have been attracting language teachers and researchers are, for example, social media, mobile technology, and online informal forms of autonomous language learning.

Research into the use of social media in and learning has been found ever since social media technology surfaced and its use became prolific among people in general, including teachers and learners of the language. Going broader into the general education area, social media has been attributed to providing aid in improving educational practices (Davis et al., 2012), in facilitating professional development and widening institution reach, as well as in positively changing the way students communicate, collaborate, and learn (Tess, 2013). A systematic literature review on the use of social media in English Language teaching by Inayati (2014) has revealed that social media offers various affordances in language teaching such as through its interactive and popular features, and its potential to create collaborative and supportive learning environments. However, some limitations of social media use in learning were also noted in the review. Some of the most notable ones that teachers need to consider when incorporating social media in their instruction are its susceptibility to technical problems, distraction, superficiality, and plagiarism.

Another area that has currently been widely reported in the literature is the research on the use of mobile technology in language learning. Mobile technology represents cheaper, more portable, and more widely owned digital devices which increases the possibility for language learning in multiple contexts (Demouy et al., 2015). Its capability to provide access to a wide array of digital resources made it possible for language

learners to enjoy vast exposure to the language being learned. In addition to exposure, they also found variety in activities and enjoyability also became an additional appeal to the learners to use mobile phones. Another study by Kukulska-Hulme and Viberg (2017) suggested that mobile language learning allowed the promotion of social constructivism through the game-based, task-based, and seamless learning of language. In addition, they also found that, albeit some potential risks were noted, mobile language learning was proven to greatly benefit collaborative language learning. In terms of autonomy in language learning conducted with mobile gadgets, research on the *Duolingo* mobile application conducted by Loewen et al. (2019) demonstrated that improvement in language proficiency was noted at the end of the study. It also showed a positive and moderate correlation between the time spent on the application and learning gains.

The autonomous nature of learners' language learning when conducting various online activities is the focus of what Sockett (2014) calls Online Informal Learning of English (OILE). Considering the ever-increasing popularity of various online-based activities—such as social media, games, and entertainment-based platforms—when the language used is English, they could serve as some form of natural and authentic language exposure to learners which is highly valuable for their acquisition of the language. OILE is defined as a process whose main intention is communication, and language learning is the by-product of the activities (Toffoli & Sockett, 2015). For example, learners may watch *YouTube* videos mainly for entertainment purposes, but they may pick up some new vocabulary or other linguistic aspects along the way. As such, OILE is the umbrella term used in this paper to include various activities involving online technology use and English language use outside the classroom context.

More studies on OILE are needed, especially those conducted in the Indonesian context. Trinder (2017) observed OILE activities among Austrian learners and found that online dictionaries and web browsing were some of the most popular activities, as well as emailing and social networking. He also noted that the Internet has allowed learners to use the language that led to language development as a welcome and expected by-product. Another study by Chik and Ho (2017) revealed that the life stages—during the years of study into professional life—greatly influence the patterns of autonomous out-of-class language learning practices such as those done in OILE. Analyzing the journals of language learners when they were college students and five years later when they were working professionals, Chik and Ho (2017) found different patterns of OILE activities; while the former was more casual and entertainment-related, the latter was more structured (using free online language courses). Lamb and Arisandy (2019) examined cosmopolitan Indonesian learners' practices of OILE and its correlation to language learning motivation. They found that English use and learning were high, especially those aimed for entertainment and self-instruction and that it was closely associated with a positive attitude towards classroom language learning.

The current study aims to fill the gap in the literature regarding the use of technology for autonomous informal language learning, especially in Indonesian regional higher education contexts. To be more specific, the current study explores the types of technologies that students use for autonomous informal language learning purposes, as well as their learning activities when using those technologies. This study may be limited in terms of the scale, but the insights gained could help to provide an overview for English teachers and institutions to learn more about how to integrate technology in the instruction process. This can improve teaching and learning processes and potentially lead to a better language learning outcome.

Method

This case study was part of a comprehensive research studying learners' autonomous online language learning. For a more focused and in-depth discussion of the findings, the current paper focuses on the types of technologies that students use for autonomous informal English Language learning and to understand how they utilize those technologies for their language learning. A cross-sectional survey was the main research instrument of this study, meaning that it was conducted at one point in time to measure the current practices and attitudes of the targeted population (Creswell, 2012), which is one of the main objectives of the current study. Then, an online survey was chosen for practical reasons as it helped gather data from many populations with wide geographical locations in a time-effective manner (Fink, 2013). Next, to add validity to the collected data, an interview was used to clarify and gain a deeper understanding of the answers that students had given in the survey. The semi-structured interview was chosen due to the flexible nature of the format.

Defined as the subject/people from which a researcher wishes to learn about certain issues (Ary et al., 2010), the population of this study were the active undergraduates of the department of English Language

Education at a respected private university in East Java, Indonesia. The online survey was distributed to 668 students who were contacted by the leaders of each group to help share the survey invitation and link. The respondents' profile was considered representative of the whole population as it covered 11% of first-year students, 27% of second-year students, 29% of third-year students, and 33% of fourth year and older students. Then, for the interview, cluster sampling was employed in order to further clarify and explore richer data from the survey respondents. Ten students from the different academic years were approached for an interview and at the end of the data collection process, seven students from the four different academic years were interviewed. Before each interview, the student interviewees were informed about the nature of the study and their participation in it, and consents were requested and obtained.

Two instruments were used in this study: a survey and an interview guide. First, the survey was developed based on the specific objectives of the study, which were about the types of technology used for autonomous language learning and the types of activities that students do for autonomous language learning. Initially, the survey draft was sent to an expert in English Language teaching and learning for content validity who reported general approval of the wording and layout and suggested minor revisions such as spelling and numbering issues. Then the survey was piloted with 20 students and the analysis of reliability was conducted using Cronbach Alpha for the items with continuous data (the types of activity), and the obtained coefficient was 0.814. Following the rule of thumb proposed by George and Mallery (2003), that coefficient was classified as a sign of good reliability for the social science.

The final version of the survey consisted of three sections; personal details, the kinds of technology used for autonomous language learning, and the types of language learning activities that students do for autonomous language learning. The personal details section consisted of only three items: students' gender, academic year, and self-assessed English Language proficiency. The second section about the types of technology used covered two subsections; the types of hardware/gadgets used (7 items) and the types of software (websites and applications) used (11 items). For the last section of the survey, five sub-sections related to various activities that students do for each language skill were included: reading (7 items), writing (6 items), listening (12 items), and speaking (7 items), and one last item asking about the average of total time spent for conducting autonomous language learning on a day-to-day basis. A five-point Likert Scale was employed in this section, allowing respondents to indicate their level of frequency in conducting the activities mentioned in the items. In addition, the last item of activities in each skill was left open-ended in order to give opportunities for respondents to provide more responses aside from those provided in the list (Reja et al., 2003).

As for the interview guide, it was developed after the survey data were obtained and analyzed as the interview was meant to complement and clarify the information gained from the survey. There were mainly three questions used, all of which were related to the types of technology used, the types of activities used with those technologies, and the criteria. During the interview, these questions were then cross-checked with the general findings of the survey and the students' individual answers to stimulate discussion over the topics, and thus a better understanding of the data was achieved.

Once the data from both the survey and interview were obtained, they were analyzed using descriptive statistics and thematic analysis, respectively. Descriptive statistics helped in providing a general summary of the characteristics of the population as well as both the general and specific responses to the questions displayed in the questionnaire (Fink, 2013). The types of descriptive statistics used in this study were frequency, and measures of central tendency. Information about the types of technology used was measured using frequency, while information about the types of activities done was measured using measures of central tendency in the form of weighted mean. Finally, the interview transcripts were analyzed using thematic analysis which was done by carefully reading, identifying, and classifying the recurring themes and concepts related to the aims of the study found in the participants' responses.

Results

Technology for autonomous online language learning

For the types of technology used in autonomous online language learning, this study focused on the hardware and software. First, for the type of hardware/gadgets used, the survey included a laptop, smartphone, television (either used for TV programs or gaming purposes), desktop computer, tablet, and smart TV. Those gadgets were chosen due to their popularity and relatively high potential of English exposure and were thus perceived to have great value in autonomous language learning. Analysis of the

survey data about the hardware/gadgets used by students to do autonomous language learning showed that laptops and smartphones were the most used. Figure 1 illustrates the choice of gadgets reported to be in use by the respondents. Almost all respondents used laptops (99.5%), and the majority of them also used smartphones (89.7%) for learning. It can be inferred from the data that the majority of the respondents used both laptops and smartphones for their language learning. It is also worth noting that with the vast popularity of both gadgets, a few respondents seemed to think that suitable gadgets for learning are laptops, not phones.

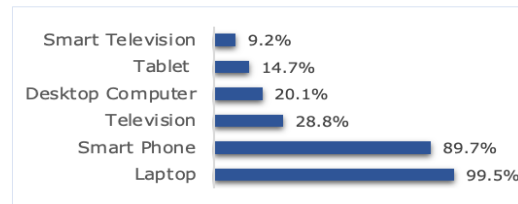


Figure 1: Hardware/gadgets used in autonomous language learning

Moving on to the types of software used, the survey included ten options of software types with high potential of exposure to English language learning. They were video sharing platforms such as *YouTube*, social networking platforms such as *Instagram*, online dictionaries/translators such as *Google Translate*, general search engines such as *Google*, messaging platforms such as *WhatsApp*, audio sharing platforms such as *Podcast*, longer written text sharing platforms such as blogs, specific websites/applications for language learning, and websites/applications for general education contents. Analysis of the survey results showed that the students' preferences were video-sharing platforms (94.6%), social networking platforms (82.1%), and online dictionaries/ translators (82.1%). Further, it is interesting to note that specific websites or applications that were designed for educational and language learning purposes were less chosen by the respondents, 27.7% and 33.2% respectively. See Figure 2 for details of the respondents' choice of the software used for autonomous language learning.

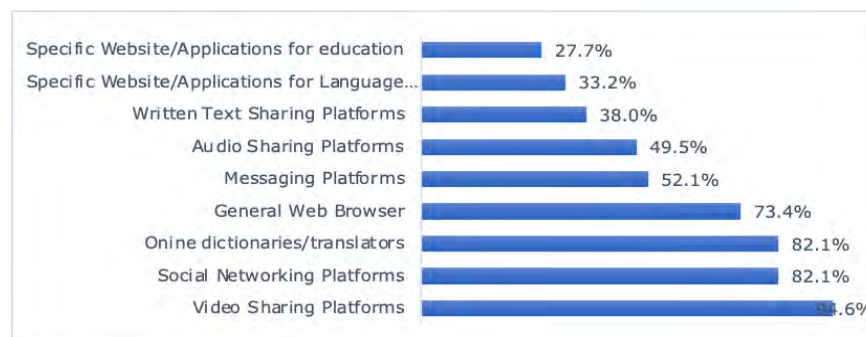


Figure 2: Software used in autonomous language learning

Further investigation on the matter to find out the reasons was done during the interview. Various reasons were expressed, but the recurring themes found were enjoyment/interest and whether they were free or not. Other reasons mentioned were the high variety of topics discussed in a platform as well as whether they were easily accessible or not. As for the reasons why specific educational or language learning websites/applications were not chosen despite providing a more well designed and well-structured content for language learning, participants stated (see excerpts below) many of them were not free and because they were too specific and thus seemed too serious, which lessened the enjoyment value of the platform. In addition, technical problems were also expressed, in this case, insufficient phone memory to install those applications.

...it's because they [video-sharing and social networking platform] offer rich content, such as news and viral videos. So, they are more interesting, not boring. While the specific platforms/websites are usually very specific, for example, news platforms would contain only news. (I2-PR)

Because they are easy to access and free. As for specific applications, they usually have fixed schedules, which make them less flexible. So, they feel too serious. (I1-OL)

Specific applications usually offer free learning only for basic levels, after that mostly we need to pay. (I1-IS)

Technology-Facilitated Autonomous Language Learning Activities

For the autonomous learning activities that are facilitated by technology, analysis of the survey data showed a general tendency towards receptive activities (listening and reading) as opposed to productive ones (writing and speaking). Using a five-point Likert Scale of frequency, the respondents indicated which frequency best represented their routine in doing the activities mentioned in the questionnaire. To avoid ambiguity, the detail was given: *always* means every day, *often* means once to several times a week, *sometimes* means once to three times in a month, and *seldom* means less than once in a month. To assist with the analysis, this frequency was assigned numbers: *always* was 5, *often* was 4, *sometimes* was 3, *seldom* was 2, and *never* was 1. As shown in Figure 3, the highest mean was for listening activities ($m=3.86$), followed by reading activities ($m=3.76$), both means lean closer to *often*, meaning that respondents generally did various listening and reading activities several times in a week. Then, in a substantial gap, the mean for writing activities was 3.10, which leans closer to *sometimes*. Finally, speaking activities were the least chosen in autonomous language learning, with only 2.54 mean, leaning closer to *seldom*.



Figure 3: Skill-based activities in autonomous language learning

When asked about this issue during the interview, several reasons why they preferred listening and reading compared to writing and speaking were discovered. One interviewee mentioned avoidance of extra pressure created by the necessity to produce language and another interviewee noted the nature of writing and speaking that she labeled “less fun than the other two”.

Because in reading and listening I can do them in passive, no need to think extra like in writing and speaking. (I2-PR)

I think listening or watching is more fun than writing or speaking. I prefer doing the latter in classes where there's a push to do that. (I3-SA)

Regarding the total time in conducting those activities, the respondents were asked to indicate the average total time that they spent to expose themselves to an English environment as part of autonomous language learning. As noted in Figure 4, more than half of the students spent about 1-4 hours every day, and only a fourth of them spent less than an hour a day. Some 19% of students noted that they spent more than 4 hours a day and showed a high interest in English exposure in their daily life.

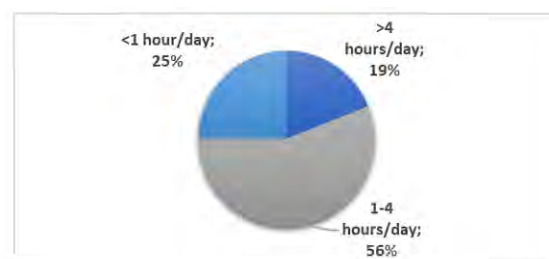


Figure 4: Total time spent for autonomous language learning

The following subsections will detail the chosen activities that the student respondents do for autonomous language learning based on the analysis of survey data, as well as some reasons for choosing and not choosing certain activities based on the analysis of interview data. Before proceeding to the specific analysis of the skill-based autonomous learning activities, it is important to note that the detailed activities and materials mentioned in the questionnaire were based on an extensive literature review and complemented by the input obtained from students involved in the piloting of the questionnaire. The presentation is ordered from the most popular ones to the least.

Listening

The listening activities mentioned in the survey covered both audio and audiovisual materials presented in English. There were eleven items related to audio and audiovisual activities mentioned in the survey, all of which were abundantly available in English and considered relatively easy for students to access. Students had to indicate the frequency of audio and audiovisual activities they did in English using the resources mentioned in the survey. As can be seen in Figure 5, the two most popular activities for autonomous language learning were listening to English songs ($m= 4.74$) and watching movies ($m= 4.42$). It is important to note that during the interview, students reported that the movies they watched were those originally spoken in English, or non-English speaking movies but with English subtitles.

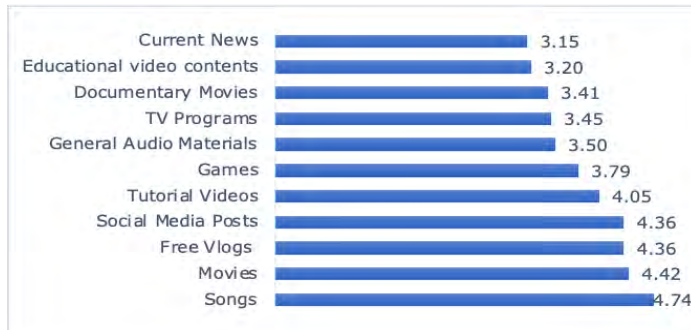


Figure 5: Listening activities in autonomous language learning

As for the least chosen visual and audiovisual activities, they were activities related to current news ($m= 3.15$) and educational video contents ($m= 3.20$). It is worth noting that both materials were mentioned in the interview and described by students as “too serious” and “boring”. These two qualities were less appreciated by students in autonomous learning contexts where enjoyment seems to highly matter. However, the means of both activities still fall under the frequency of *sometimes*, which indicates that students still do the activities with medium frequency, about once to three times a month.

Reading

For the reading activities, the survey mentioned six items of reading materials that were also considered abundantly available in English and were relatively easy for students to access and considered as potential resources for autonomous reading activities. They were fiction texts such as short stories and novels, non-fiction texts such as blogs, graphic texts such as comics and memes, social media posts including comments and stories, current news articles, and personal correspondence such as emails and messages. It is important to note that although those reading texts may be available in any language, the survey specifically asked students to indicate the frequency by which they read English materials in those forms as part of increasing exposure to English and thus supporting their autonomous language learning.

Figure 6 illustrates the reading activities for autonomous language learning based on the popularity among students. The three highest reading texts that students liked were social media posts ($m=4.49$), graphic texts ($m=4.26$), and personal correspondence ($m=3.73$), all of which generally fall into the frequency category of *often*. In other words, student respondents generally read those three types of texts in English quite frequently, about once to several times a week. While the types of reading materials that were the less popular were current news articles ($m=3.06$), fiction texts ($m=3.18$), and longer non-fiction texts ($m=3.26$). Although the data shows less favoritism of those types of texts by students, generally those means still fall under the category of *sometimes*, which shows that students still like to read the three types of texts but in lower frequency, about one to three times in a month.

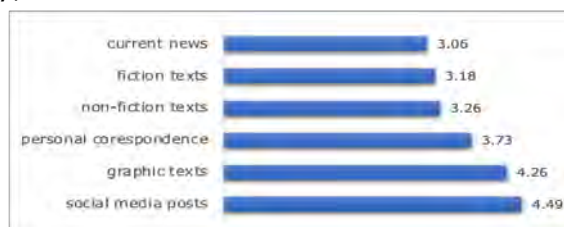


Figure 6: Reading activities in autonomous language learning

Looking at the patterns of the most popular and least popular reading texts students chose, there seems to be a tendency that shorter texts, and those accompanied by pictures, more varied, and personally relevant

are preferred for autonomous language learning. While longer texts such as blogs, books, and novels did not seem to be highly attractive for out-of-class reading activities, as well as those with a more serious tone such as current news articles. This supports the notion of enjoyment and relevance which seems to underpin the choice of activities and materials in autonomous language learning.

Writing

The writing activities mentioned in the survey were five items (see Figure 7). They were potential writing activities and considered close to students' daily lives and practical for writing practices in English. The questionnaire specifically asked the students to indicate the frequency of writing those texts in English, and those done using technology (e.g., in phones or laptops). This was a part of the students' general practice to improve their language skills and autonomous language learning. Figure 7 illustrates the types of written texts that students used for autonomous language learning and their general mean of frequency.

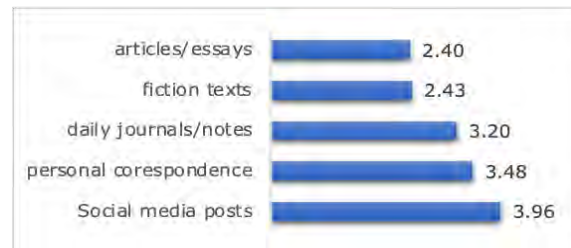


Figure 7. Writing activities in autonomous language learning

As noted in Figure 7, the highest mean belongs to writing social media posts in English ($m=3.96$), which comprises the main posts, stories, and comments on various social networking platforms. This finding closely reflected the details found in the reading section in which reading English social media posts was also the most preferred for autonomous language learning. The second and third choices for writing activities were personal correspondence ($m=3.48$) and daily journal/notes ($m=3.20$), meaning that both activities were generally done about once to three times a month. The personal correspondence writing included, among others, personal chats and emails that students wrote in English, while the daily journal/note included writing a diary or meeting/lecture notes that were done in English or mixed between English and Indonesian. Finally, writing articles and fiction stories in English were found to be *seldom* as indicated by the means of 2.40 and 2.43 respectively. In addition, a few students have done another genre of writing which was not mentioned in the survey like writing poetry and writing prompts/chats during game playing. The data seem to suggest that when it comes to writing, the length of texts, the personal nature of the texts, as well as the tone of the texts are qualities that students take into account when choosing a certain text to be used for writing practice. To be more detailed, the more popular ones were those texts which are relatively shorter, more personal, and less serious in tone.

Speaking

For the speaking section, there were six items included in the questionnaire (see Figure 8). These items included options of potential speaking partners that students can practice English with as part of their autonomous language learning. The most preferred one was speaking English with other fellow students ($m=3.30$, meaning that about one to three times a month). Interestingly, the second highest mean was speaking English with intelligent assistants such as Siri or Google Assistant ($m=2.74$). The interviews showed that students did it mainly for enjoyment purposes because they found the responses were mostly humorous. The least preferred partners were family members ($m=1.99$). As shown in the analysis of the interview that was because most family members of the student respondents did not speak English in order to avoid being judged as "showing off."

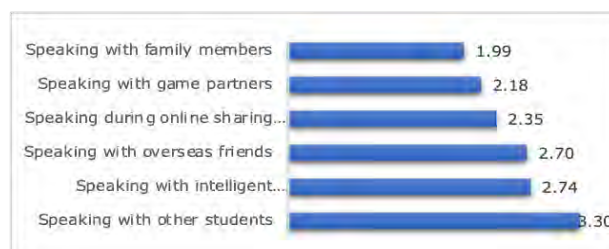


Figure 8. Writing activities in autonomous language learning

As previously noted, speaking activities were the least preferred among the other skills for online autonomous language learning. When asked about this during the interview, the most reported reasons were lack of motivation, no partner to speak English with, or practice speaking alone without using technology.

I think I'm lacking in speaking practice, I do that sometimes but only by myself, speaking in front of the mirror. (I1-IS)

I feel lacking in motivation when it comes to practicing speaking. I have no one to speak English within my family, so when I do, they think I'm showing off because they don't understand. They usually only say "just what are you talking about?" (I3-HO)

Discussion

The current study has revealed some notable insights about how Indonesian regional undergraduate learners of English informally use online technology to support their autonomous language learning. First, about the software technology used, the findings suggested that social media platforms were the most preferred by students when conducting online informal language learning. This finding is justifiable as Indonesian netizens are among the highest users of social media globally (Lamb & Arisandy, 2019) and are considered to be the fastest-growing number of internet users (Balea, 2016). This phenomenon is facilitated by the large availability of relatively low-priced gadgets and rapid expansion of phone and internet networks in the country.

Indeed, social media has been largely acknowledged by educators to facilitate autonomy and self-directedness in language learning, as found in the review of studies on social media use in language learning conducted by Reinhardt (2019). This finding also lends support to the changing trend in language learning as noted by Godwin-Jones (2018), who suggested that most learners, especially the young ones, show an increasing tendency to shift their language learning outside the formal education setting into informal online media.

Second, the current study found the same tendency that learners generally prefer receptive activities when conducting autonomous language learning activities as Pickard (1996) and Hyland (2004). The advancement of technology may have offered a higher variety in online language resources and facilitated better access to those resources, but in terms of choice of activities, reading, listening, and watching are still dominating the autonomous and informal language learning activities. This conclusion is also supported by Jurkovič, (2019), which found that Slovenian students who informally learned English Language using smartphones generally showed a better preference to receptive activities compared to the productive ones. One of the frequently stated reasons for this preference was to avoid extra pressure from having to produce language and as such, maintaining the level of "fun" and enjoyment in learning. As far as enjoyment in learning is concerned, this study found a difference from Lai (2013) who found that Hong Kong students generally considered learning as a serious endeavor that was separate from enjoyment activities.

Next, in terms of the most popular activities, this study found that social media-related activities are increasingly gaining more popularity for autonomous informal language learning. Consistent with various studies (Hyland, 2004; Lamb and Arisandy, 2019; Toffoli and Sockett, 2013), this study showed that English songs and movies still reigned as the most favorite autonomous informal activities to increase language exposure. However, the findings of this study contradict the previous studies and noted general awareness of the potential and increasing use of social media-related activities for reading and writing, as well as some audio and audiovisual activities for autonomous informal language learning purposes. Learners in this study reported social media formed a big part of their daily activities. They also reported that social media posts that were in English, including the threaded comments, became a source of exposure in their informal language learning environment. Further, learners in this study generally acknowledged and appreciated the authentic communication opportunities available in social media which allow them to practice English skills, especially reading, listening, and writing skills.

It is important to note that learners in this study reported a very high frequency in informal reading and writing activities in social media platforms and an interesting and relative balance of receptive and productive use of English in their autonomous and informal language learning activities. This finding supports Hamat and Hassan's (2019) research which revealed that Malaysian university learners considered social media use to be highly useful to facilitate language learning in both reading and writing skills, in addition to general vocabulary acquisition and communication. In this case, social media platforms are shown to allow

learners to perform authentic communication that is personally relevant, thus enhancing the meaningfulness of and enriching their linguistic experience. Though described as relatively “high-risk” due to the two-way nature of social media communication (Lamb & Arisandy, 2019), the affordances and promises of real communication with a wide variety of global and local (glocal) people in social media cannot be overlooked in foreign language learning contexts. Indeed, the potential of social media platforms for supporting language learning has been proven in a number of studies, as highlighted among others by Wil et al. (2019), Ismail et al. (2018), and Handayani et al. (2018).

This study also found that speaking was the least preferred activity during autonomous informal language learning conducted by learners. Considering the largely positive influence that autonomous informal online language learning had on learners’ general language skills, speaking seems to be one of the areas that still require the most intervention. Some of the reasons for the low level of speaking practices that learners did was due to what Lamb and Arisandy (2019) referred to as the high-risk communication experiment, in which learners did not speak English online in order to avoid negative judgment. As such, further studies focusing on increasing learners’ skills and confidence to overcome negative social judgment are needed to support a more balanced receptive-productive autonomous informal learning activity.

It is worth highlighting that autonomy in this era means that learners are digitally literate and well equipped in locating, using, acknowledging, and creating online learning resources and opportunities (Chik and Ho, 2017). As such, the current study has revealed two major areas that require teacher and institutional interventions. First, the fact that social media was found to play a big role in learners’ life and were well appreciated personally and academically by learners, beside the fact that social media are also proven to have great potential for learning, should be taken better into account when designing language instruction. Language programs and instruction that could effectively integrate social media would likely be more facilitating and inspiring for learners’ autonomous informal learning activities. Second, striving for a better balance between receptive-productive language practices during autonomous informal language learning is another area that could be better supported by teachers and institutions. In this case, more inspiring activities related to online writing and speaking could be tailored into language programs and instruction to encourage learners to try them in their autonomous informal learning activities.

Conclusion

The current study aimed to find the types of technology that learners of regional higher education used to conduct autonomous informal language learning, and how they used those technologies as well as their reasons for doing so. Involving university students in one of the Indonesian regions, analysis of the data revealed that learners had the necessary hardware/ gadgets to conduct online learning. As for the software, learners showed a high preference towards social media-based platforms such as video-sharing platforms and social networking platforms, while specific educational and language learning platforms were generally less preferred for autonomous informal language learning activities. Different from the previous research findings, Indonesian learners seem to consider enjoyment as the priority in informal learning, labeling educational and language learning platforms as “too serious” and “too classroom-like.” Regarding the types of activities that learners did for online autonomous informal language learning, the study discovered that learners still showed a strong tendency for receptive activities characterized by various listening/watching activities followed by reading activities. However, further analysis of the data also showed that the popularity of social media has afforded learners a relatively increased balance especially in reading and writing skill practice. Overall, the data provided evidence that intervention is still necessary especially in the area of speaking practice during autonomous informal language learning.

The current study is relatively small in range, but it still provides valuable insights into how university students in the Indonesian regional areas conduct their autonomous informal language learning. Further studies could be conducted to explore wider geographical areas. In addition, further studies could also be directed to provide better intervention for increasing the balance between receptive and productive skills in online autonomous informal language learning.

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