

**SELF-DIRECTED DIGITAL LANGUAGE LEARNING DURING THE
COVID-19 PANDEMIC SCHOOL CLOSURES**

by

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THESIS

Presented to the Graduate Faculty of
The University of Texas at San Antonio
in Partial Fulfillment
of the Requirements
for the Degree of

MASTER OF ARTS IN TEACHING ENGLISH AS A SECOND LANGUAGE

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May 2022

ACKNOWLEDGMENTS

I would like to first recognize and express gratitude to the interview participants, whose willing and enthusiastic participation set the groundwork for this research. Special thanks goes to the Woodland Baptist Church ESL program and its director, Diana Bridges, who contributed much of her time to helping recruit participants for the study and provided continued aid and encouragement throughout the writing process. Additional recognition goes to Dr. Christiansen for her consistent and professional guidance in the direction of this study, and to Dr. Tian and Dr. Henderson for their service on the review committee. Most importantly, I would like to thank my family and friends, especially my mother, who have always believed in me and provided unconditional love and support throughout my educational endeavors. Without the combined efforts of those mentioned, completion of this thesis would not have been possible.

May 2022

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The study presented here aims to determine the ways in which adult bilingual English learners self-directed their study through use of digital language learning resources in March 2020 at the onset of the Covid-19 pandemic when educational institutions were closed and mandatory quarantine precautions were in place. During this time, people were forced to isolate to contain the spread of the virus and adult English learners were left without two vital avenues of education: formal classroom instruction and socialization within the target language community. However, digital media provided an opportunity for learners to take charge of their education through a variety of resources employing practice of language skills.

Data for this study was conducted using qualitative research methods in the form of semi-structured interviews featuring open-ended questions intended to engage participants in a discussion of their online habits conducted in English during the period of study. Following collection, data was coded into four categories based on the intersections of explicit/implicit and receptive/productive learning skills. Categories labeled ‘explicit’ were further sub-categorized to address the intention of the program in instructing English or the participant’s stated intention to use it for such. It was revealed that participants engaged in a variety of self-directed language learning activities that included programs developed for independent language instruction, activities of their own design, and implicit language practice through leisure activities conducted

in English. The study concluded with several interesting phenomena which demonstrated overlap in participants' uses of explicit and implicit learning, differentiation of output and communicative contexts, and the use of task-based input as a demonstration of successful comprehension.

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CHAPTER ONE: INTRODUCTION

Statement of the Problem

The COVID-19 pandemic has not only presented monumental public health and safety crises but posed a unique set of challenges for educational environments (United Nations, 2020). Due to the virus' tendency to spread quickly between hosts in close proximity, an immediate push for social distancing and isolation was put into place abruptly in March 2020 by local government and health organizations. This meant mass and sudden cancellation of classes at every educational level. While most institutions were able to quickly switch to online learning and resume classes in the fall 2020 semester, the sudden closures beginning in March of 2020 left many students without access to both education and face-to-face socialization for at least several months; the United States is still recorded as being only 'partially open' by the United Nations as of April 2022 (United Nations, 2021). Because of the social nature of language acquisition, this posed a unique set of challenges to students enrolled in English as a Second Language (ESL) programs who suddenly found themselves isolated from two critical aspects of their learning process: formal education and language socialization.

Adult language learners faced the additional setback of having their career and educational advancements placed on hold. For example, passage of the International English Language Testing System (IELTS) exam is mandatory for most employment and educational enrollment in English-speaking countries such as the US, UK, and Australia, and is even required for some visa considerations (Kohli, 2022). Second language instruction is often tailored to address the requirements of the test which focuses on the four major language skills, which meant an additional hurdle for students wishing to gain employment or study in English-dominant contexts. However, several factors such as the increased desire for socialization while

in quarantine combined with diminished capacity for in-person interaction influenced an increase in digital communication even before online classes became a normality (Kantar Group and Affiliates, 2020). It is plausible that this trend extended to adult multilingual learners as well, whose engagement in online activities may have led to the practice of self-directed language learning.

According to the United Nations (2021), the United States experienced widespread school closures for 71 weeks, with many institutions still only offering online classes over two years after the original shutdown. Although many institutions in the country were able to switch to digital classrooms and re-open for the Fall 2020 semester, online education presented a new set of challenges for adult multilingual learners who had to quickly adjust to learning remotely and with less direct interaction while coping with the psychological repercussions of a global pandemic (Manoharan et al., 2022). These learners were disproportionately affected by school closures when compared to students in other programs due to the unique set of challenges they face both as immigrant/refugee populations and as English learners. A survey presented to adult multilingual students investigating the most pertinent obstacles resulting from the pandemic reveals underlying social issues placing stress on their education as well (Hartshorn & McMurry, 2020, p. 148). Many international students feared losing their jobs which in turn would affect their work/school visa statuses for staying in the country. Separation from and inability to be with family in their home countries due to travel restrictions and isolation placed additional anxiety on these students as compared to their native counterparts, many of whom were able to quarantine at home with immediate family (Breiseth, 2020). These stressors were compounded by the fact that most adult learners' livelihoods and reasons for remaining in the country are contingent on their progress in language classes.

In addition to the stress of navigating a new society and receiving information about the pandemic in an unfamiliar language, distance learning proved to be especially challenging to the process of language acquisition. Participants in the Hartshorn & McMurry (2020) survey stated that technological shortcomings associated with the Zoom app through which most online classes were conducted made it difficult to properly communicate and understand input (p. 147). Most concerning were the limits placed on interaction between students, many of whom stated they were unable to speak and listen to their classmates in the same capacity they had with in-person classes. Because of the social nature of language acquisition, school closures and the subsequent switch to online classes left students without two of the primary resources of their education: adequate explicit classroom instruction and social engagement with the language. The purpose of this study is to investigate possible ways in which students supplemented this lack in formal education with online resources as a means of self-directing their learning.

Justification for Research

As the world adjusts to the ‘new normal’ by gradually resuming daily activities as they were conducted before the onset of the pandemic, the long-term social effects of the quarantine are becoming a prime area of study. Of particular interest are the methods and motivations of students who took charge of their education through novel learning routes especially while in isolation when fewer resources were available to them. The need for social interaction as a component of language acquisition combined with mandatory quarantining and social distancing created a unique context in which alternate methods of learning—both through communication and through input alone—became the primary method of education available to students.

The study presented here will contribute to an understanding of adult second language acquisition outside of the formal classroom; most importantly, it will expand the subject of self-

directed digital language learning through examination of both explicit and implicit learning activities, especially leisure activities such as use of social media, entertainment, and online hobbies. Many studies about digital learning have focused on child/adolescent learners specifically within the realm of building digital citizenship, with less study being given specifically to adults in an ESL setting. Additionally, the occurrence of widespread school closures because of the Covid-19 pandemic allows isolated study of students' independent learning patterns during the time period being studied. Exploration of the methods through which learners engaged in self-directed digital language learning when more structured education was not available can inform future research that addresses the question of how effective this informal education was in keeping students on track with the progress they would have achieved in regular classes and ultimately in achieving communicative proficiency.

Research Questions

1. Did adult multilingual students show engagement in self-directed digital learning when traditional teacher-directed learning was limited or unavailable during the pandemic?
2. Through what activities did adult learners conduct self-directed learning and what explicit/implicit and receptive/productive methods were used?

Main Definitions

- *Self-directed learning (SDL): the process through which students independently identify personal learning goals, find or develop methods of achieving these goals, and evaluate/assess progress.*
- *Extrinsic motivation: motivation to perform a behavior or engage in an activity to earn a reward or avoid repercussions (Tranquillo & Stecker, 2016).*

- *Intrinsic motivation: motivation to engage in a behavior for its own sake rather than from desire for an external reward (Lee et al., 2012).*
- *Explicit, Input Only (EI): apps, programs, and activities specifically designed/conducted for the purpose of learning English wherein the participant received input (reading/listening) exclusively.*
- *Explicit, Input + Output (EIO): apps, programs, and activities specifically designed/conducted for the purpose of learning English wherein the participant received input (reading/listening) in addition to producing output (speaking/writing).*
- *Implicit, Input Only (II): apps, programs, and activities conducted in English but designed for purposes other than language learning wherein the participant received input (reading/listening) exclusively.*
- *Implicit, Input + Output (IIO): apps, programs, and activities conducted in English but designed for purposes other than language learning wherein the participant received input (reading/listening) in addition to producing output (speaking/writing).*
- *Category I Explicit activities: activities designed for the purpose of language learning.*
- *Category II Explicit activities: activities designed for other purposes but which the participant stated were intentionally used for language learning.*

The goal of this study is to identify the digital learning activities in which adult multilingual learners engaged during the March 2020 coronavirus pandemic quarantine period when formal classes were suspended. The following sections will outline relevant literature on implicit and explicit learning, digital learning, and self-directed learning (SDL) as well as the methodology and theoretical framework of this study and their relevance to the findings. The final discussion will characterize the learning habits used by participants of the study to continue their education

when formal resources were unavailable and contextualize them within the relevant body of literature.

CHAPTER TWO: LITERATURE REVIEW

Modern technology has allowed language education to be enhanced with multimodal resources that augment traditional methods of instruction to create customizable lessons that differentiate based on learner preferences. This has also allowed learners to take their education into their own hands and self-direct their learning through more traditional computer-assisted language learning (CALL) and novel mobile-assisted language learning (MALL) methods. Globalization of the internet has resulted in increased opportunities for socialization with learners' target language cultures. The opportunities for explicit language learning as well as implicit learning, especially through leisure activities, have modernized second language learning and differentiated methods of input and output.

Explicit vs. Implicit Knowledge

The key difference that marks the rift between implicit and explicit learning is the learner's awareness of what is being learned and that the process of learning is actively taking place. Ellis (2008) defines implicit learning as "acquisition of knowledge about the underlying structure of a complex stimulus environment by a process which takes place naturally, simply, and without conscious operations." Simply put, this implies gaining understanding of one's environment through natural exposure to it and without direct attentive effort. Taken in conjunction with Reber's (1976) definition of explicit learning as conscious gathering of information about a phenomenon to make sense of it, the terms apply to language acquisition in the comparison between direct, specific instruction of language forms versus natural acquisition through engagement with the language in meaningful contexts. It is important to distinguish between implicit/explicit *learning* and implicit/explicit *knowledge*; although the terms are similar and mistakenly used interchangeably in discussions of their relationship, the former refers to the

process of acquiring knowledge, which in turn is defined as the product resulting from this process.

Krashen's (1985) learner-acquisition hypothesis characterizes the relationship between implicit and explicit learning and their efficacy in proficiency development; it states that implicit knowledge leads to full *acquisition* of language while explicit knowledge results in *learning* of linguistic rules that support implicitly acquired knowledge, but which do not themselves lead to true proficiency. In other words, implicit knowledge is the primary process through which adequate language acquisition takes place, with explicit knowledge being a separate, secondary method. They have been described as dichotomous processes in the fields of language education and cognitive neuroscience, as the brain retains each type of knowledge in separate memory spaces (Gotseva, 2016). Acquisition of a linguistic form through implicit knowledge could be demonstrated, for example, by a learner correctly using the form after being exposed to its use in natural contexts but being unable to define the rule associated with its use. Conversely, explicit knowledge could result from a learner consciously studying the form in an educational context, being both aware of grammatical rule and of their effort to acquire it. Although there is debate concerning whether any learning activity can truly take place without some level of awareness, the distinction occurs regarding awareness of the specific construct being learned. So while a learner may be aware of using their L2 and the possibility of this resulting in acquisition, the definition of implicit knowledge stipulates that significant conscious awareness is not being given to the specific forms being practiced.

While Krashen's (1985) language acquisition theory went so far as to assert that explicit learning had little direct role in language acquisition, useful only as a monitor to correct implicitly acquired knowledge, more recent research has suggested the necessity of the

interaction between the two in concretizing and expanding knowledge. Ellis (2008) suggests that Krashen's description of explicit knowledge as a monitor for reflection on implicitly acquired language can result in the learner's introduction to and subsequent implicit learning of new linguistic features. Ellis also points out the strengths of each type of learning with different language structures and proficiency levels; he cites Gass et al.'s 2003 study which found that explicit and implicit knowledge were each demonstrated to be stronger regarding complex and simple linguistic structures, respectively. Additionally, the study determined that focused instruction was more beneficial to low-proficiency learners (pg. 11-12). While explicit learning/knowledge is typically more measurable than implicit because of the level of control possible, this study will differentiate between the two based on learners' stated intentions and the purpose of the language learning activities in which they engaged.

Digital Learning

As technology advances and our world becomes more digitized, traditional teaching methods have become increasingly supplemented with technological resources. Despite the previously mentioned shortcomings of the switch to online learning that took place because of the coronavirus pandemic, digital learning--whether self-directed or not--also provided students with a myriad of benefits not possible in the traditional classroom setting which. Even before distance learning became a necessity due to quarantine conditions, technology was transforming traditional classrooms through use of multimodal learning methods. Specifically, digitalization of formal learning has introduced the novel method of *hybrid* learning, which involves a culmination of learning techniques such as visual lectures and digital lesson modules thus combining traditional and innovative learning routes. Drotner (2009) characterizes hybridization as the presentation of medias once found in separate spheres—such as television, radio, and

print—in a singularly accessible format that allows users to manipulate, create, and learn through multiple modes simultaneously (pg. 73). A hybrid class includes elements of the traditional classroom experience such as lectures and written assignments, augmented with mixed media that allows students to perform in different modalities. Digitalization of the classroom not only makes education more accessible to a wider learner audience but promotes collaboration and allows students to learn and create with more efficiency than traditional methods. The use of hybridization in the classroom before the switch to full online learning may have mitigated some of the difficulties associated with post-quarantine online learning for students and teachers who were already familiar with these methods; it also may have introduced students to some of the programs and techniques applied in self-directed learning (SDL).

One study on the digitalization of classes in a university setting cites the increased opportunities for collaboration among a broader range of participants both in and outside of the classroom, as well as opportunities for the use of mixed media and adaptations to different styles of learning (such as the inclusion of a PowerPoint presentation in a lecture to supplement auditory with visual learning) (Masalimova et al., 2021, pg. 390-393). Newly created technologies designed to assist in collaborative and mixed media activities such as Zoom, ClassDojo, and Kahoot! have contributed to the effectiveness of digital learning as well. These programs are intended to better enable instructors at every level to implement effective lessons that encourage collaboration among students and utilize different learning methods and media. In tailoring lessons to address students' individual learning styles, instructors increase student focus and ability to retain material which in turn supports the process of scaffolding to more independent educational endeavors in accordance with SDL principles. The appeal of digital

instruction to learners of multiple and varied learning styles is reflected in the research presented in this study through the unique methods each participant used to self-direct their learning.

What aspects of digital learning contribute most to its effectiveness? Considering that education is not only the acquisition of knowledge but the holistic development of the learner, interaction with a computer as a “replacement” teacher is not sufficient in achieving these goals simultaneously. Verbitsky (2019) argues that digital education should not be a solitary process even when learners are physically isolated from one another. He asserts that to accomplish the ultimate socio-practical or professional goal of the content being studied, education must take place through meaningful contextualization, the main principles of which he describes as “joint activities, interpersonal interaction and dialogical communication of the subjects of the educational process - teaching and learning.” The author cites Vygotsky’s (1978) Zone of Proximal Development, a component of the sociocultural theory, as the main contributor in scaffolding students from what they currently know to the next step in knowledge which can only occur through exposure to a more proficient instructor or peer. Digital media provides ever-expanding new avenues for communication and collaborative learning with a wider range of participants. Students’ communications with speakers of various proficiency levels, first languages, and other demographics is made possible by global digitalization. This is an important consideration for analysis of the different contexts of communicative language practice participants in this study engaged in through online socialization.

Self-Directed Learning

Human beings have an innate desire to continually learn and develop our understanding of the world around us. New knowledge is required to keep us from stagnating and enable us to achieve goals in any arena of our existence, from our careers to our personal relationships to

simply satisfying our curiosities and tendency to constantly ask “why?” Knowledge can be gained in a number of ways that are concentrated in but not limited to formal classroom settings. Learning continues to take place long after the learner leaves class and can gain momentum when the learner takes autonomy over their own education. Self-directed learning (SDL) is a general term used to describe an increase in skills or knowledge initiated independently by the learner in any subject (Gibbons, 2003, pg. 1-3). It has also been defined more specifically as a combination of “(1) ability and (2) attitude of students to develop and pursue their own learning objectives and to evaluate their learning process and results,” (Tamara et al., 2021, pg. 591). The latter definition addresses the two internal characteristics of students who successfully self-direct learning: (1) cognitive/metacognitive ability and (2) affect, openness, and motivation (pg. 592). As part of SDL, the learner is responsible for determining which skills they wish to sharpen, designing or finding appropriate activities that address these needs, and then monitoring and assessing their own progress.

Although the motivations for SDL are as diverse as the learners themselves, they share a common goal of operating more effectively in their chosen area of study. A considerable level of self-regulation is exhibited by learners who choose to continue or supplement their education without an instructor, institution, or grading system as the driving force behind their learning. Even within the educational system, self-directed learners may exhibit certain characteristics that allow them to become higher achievers than peers who are more resistant to self-regulation, and children who are more prone to self-regulation share these characteristics with adults who are experts in their fields (Biemiller & Miechenbaum, 2017, pg. 246). These characteristics include task-directive self-talk (verbalizing thought processes and answering one’s own questions), self-efficacy (deciding what needs to be done and acting on it without being directly instructed) and

responding to failure or lack of understanding with motivation rather than dejection (pg. 247). Gibbons (2003) provides examples of talented, independent students meeting self-directed activities with relief as they are not left “bored” following a pre-determined structure but can flourish in exploration of their own interests and approaches to completing a task (pg. 5). Similarly, adult self-directed learners tend to seek independent education for three main reasons: achieving personal goals such as furthering knowledge in their career field, seeking knowledge for its own sake, or participating in activities which further learning for reasons other than the learning itself, such as an educational hobby (Houle, 1961, pg. 14-16). For language learners, these reasons correlate to the common goals of acquiring language skills to advance in one’s education or workplace in their target language, to sharpen language skills simply for the purpose of easier communication, and/or to passively engage in leisure activities in the target language. Although the specific motivations behind participants’ willingness to self-direct learning was not one of the key considerations of this study, it is important to note the high levels of motivation they exhibited in the formal learning program from which they were recruited—a voluntary, free program without a grading system or affiliations with any university or career assistance program—and to consider how this influenced their self-directed learning during quarantine.

The aforementioned ‘attitude’ of SDL is nurtured through the process itself as students learn to independently overcome obstacles that would typically be mitigated by instructors in a classroom setting. Of particular interest to this study (for its relevance to language learners adjusting to learning contexts brought about by the coronavirus pandemic) is a case study of attitudes developed by Filipino bilingual students involved in SDL. Agum et al. (2021) document various challenges faced by students attempting to continue their English education

independently from home, including inability to contact instructors, technological issues, and balancing home and family commitments (pg. 76-78). Their findings conclude that students overcame these challenges by becoming more strategic and organized in their learning approaches through the development of contingency plans, time management skills, and self-reliance when they were left without supportive resources (pg. 78-80). These points coincide with Gibbons' (2013) assertion that there is an underlying psychosocial educational need that assumes an equal or greater role to content instruction but that is often neglected in traditional classrooms; that is the student's personal development achieved through a sense of accomplishment, responsibility, and competence (pg. 7). Through SDL, especially when the help of an instructor is unavailable, students gain a sense of empowerment by testing their own autonomous abilities.

Self-directed learning is not always an entirely independent process but can be conducted through collaborative activities as well. According to Gibbons (2013), "Life is a social activity, successful action often involves teamwork and social savvy, individuals need interaction to learn about themselves, and group work is often the doorway to success in SDL," (pg. 8). Structuring activities in relevant and authentic learning contexts is an integral part of SDL, and social interactions in the classroom teaches collaborative skills students will need when applying knowledge gained in the classroom to real world contexts (Tamara et al., 2021, pg. 591). Additionally, students learn valuable social and group processing skills that supplement the previously mentioned psychosocial education that SDL promotes. This is especially true for language learners who require authentic communication to contextualize skills. Collaborative SDL among multilingual learners also serves as an induction of sorts into the target language culture. For adult learners, this also serves as an opportunity to transfer already established social

skills in the L1 and build confidence collaborating in a professional context. This is reflected in the study participants' engagements in various forms and contexts of communicative language learning and the different types of feedback they received in each.

Another consideration on the basics of SDL which highlights aspects of psychosocial and personal development is the acquisition of knowledge through leisure activities. Defined as “the free time to pursue activities of interest; as well as the learning activities which are personally enjoyable and beneficial,” (Roberson, 2005, pg. 207), leisure is perhaps the purest form of SDL as it allows learners to gain knowledge in an area of study completely free of the constraints of structured education and based solely on the desire to learn. Stebbens (2007) classifies leisure activities in 2 categories: casual leisure and serious leisure, the latter being a more intense pursuit that develops into a ‘career’ of systematic inquiry that can be sought either through structured classes or individual learning. Language learning through leisure activities falls under the serious leisure category (pg. 5) as participants’ motivations for learning English extend into their educational and career pursuits beyond leisure. In keeping with the themes of SDL, the benefits of serious leisure learning include self-gratification through the development of skills based on personal interests of the learner, often through collaborative engagement with other like-minded peers. In sum, serious leisure is not only something done for pleasure on the part of the learner but is the acquisition of skills that are often motivated by or can result in socioeconomic gains. The majority of implicit language learning activities used by participants in this study are conducted through leisure activities in their L2, often with the purpose of explicitly learning a skill unrelated to language which resulted in incidental L2 practice. One of the most notable findings to be discussed is the performance of tasks based on input as a demonstration of comprehension.

The essence of self-directed learning involves students taking initiative to identify their educational needs, determining a method of addressing them, and monitoring their progress without full reliance on an instructor or learning institution. Self-directed learners typically exhibit high levels of cognitive/metacognitive ability and motivations that range from personal to professional development. As described by the literature reviewed thus far, SDL takes place in many forms both as a formal and informal mode of education and is initiated by learners outside of educational contexts simply taking an interest in knowledge on a topic of interest. Additionally, the intensity of SDL varies greatly from students working through lessons at their own pace within a structured class curriculum under guidance of an instructor to hobbyists investing in serious leisure activities. For the focus of this study, SDL was employed by participants as a way of continuing language acquisition when traditional methods were postponed due to the onset of the coronavirus pandemic.

Self-Directed Digital Language Learning

The learning processes described in the previous sections culminate in the emergence of self-directed digital language learning, students' independent use of digital media in language acquisition. A wide range of activities are available for this purpose and include a combination of explicit and implicit learning, input- and output-based methods, and independent and collaborative activities. Furthermore, self-directed digital language learning presents a unique set of benefits and challenges to learners. Learners benefit from the universal accessibility of information outside of a physical classroom made possible through technology, especially mobile devices that do not rely on internet connections. Variation of activity styles meets the individual needs of the learner who can customize their learning methods to maximize comprehension. On the other hand, lack of access to digital resources, technical difficulties, and

lack of digital competency present obstacles to students' ability to use digital learning to their full advantage. Learners' differing levels of motivation and willingness to self-direct learning through digital media are influenced in part by these benefits and obstacles. These factors will be expanded upon in this section.

Regarding self-directed digital language learning, it is important to make the distinction between computer-assisted language learning (CALL) and mobile-assisted language learning (MALL). The older practice of CALL involves learning through use of internet-dependent devices and applications, while MALL, popularized since the advent of smartphones and tablets, relies on apps accessible on portable devices. In a cross-national study on Asian ESL/EFL students' perceptions of mobile language learning, Hsu (2013) first contrasts MALL and CALL, making the distinctions of time and space in relation to each form's usage; while CALL is typically limited to use inside a singular learning space, MALL has the added advantage of being accessible to students almost anywhere at almost any time (pg. 210). Additional factors in favor of MALL include the lessened need for an internet connection and the prevalence of Wifi in public spaces. These factors make MALL more accessible to users without computers.

Explicit self-directed language learning through digital media occurs through students' engagement with apps and programs specifically designed for the purpose of aiding in language acquisition and can be used as either a supplement or full replacement for classroom instruction. Comparison of two MALL-based studies indicates several trends in the types of explicit learning activities chosen by users across proficiency levels and learning goals. Zhang & Perez-Paredes (2019) found that high-proficiency English learners enrolled in postgraduate university programs in China were primarily motivated to pass exams and increase the ability to communicate in English in their lives outside of class. They speculate that this is due to the attractiveness of an

speaking English to prospective employers following graduation. Additionally, the most frequently used apps listed by participants were vocabulary-based (*Youdao Dictionary*, *Baicizhan*, and *Shanbay Words*) with significantly less attention being given to writing or grammar practice. The second study, investigating the use of mobile self-directed learning apps among older adult users of beginning/low-intermediate proficiency, also found a trend of popularity among vocabulary and listening/speaking over other language features (Wang & Christiansen, 2019). When given the choice between four apps—two consisting of grammar practice, one of vocabulary practice and one of listening/speaking practice—most participants (80-90%) chose to use the vocabulary and listening/speaking apps, while the two grammar apps saw usage rates of 51% and 29%, with one app being incompatible with Android systems. Based on these studies, it can be determined that there is somewhat of a trend in the preferred language activities practiced through explicit learning activities among learners of different educational groups and proficiency levels. These findings are further corroborated by Lai et al. (2021) who found vocabulary practice and translation to be the most popular learning activities among self-directed learners of undocumented proficiency levels. It should also be noted that the preferred explicit learning tools of these three groups were entirely comprised of input-based activities, with no mention of output produced on the part of the learner within the learning tasks other than their in-app answer selections.

These findings are further corroborated by Lai et al. (2021) who found vocabulary practice and translation to be the most popular learning activities among self-directed learners, although proficiency and education levels were not stated. Zoning in on translation as a language learning activity, van Lieshout & Cardoso (2022) identify Google Translate as a language learning tool, both in vocabulary building and pronunciation practice, and which is applicable in

both CALL and MALL. The app has the capability to translate short phrases accurately (although consideration must be given to idiomatic phrases or those not intended to be taken literally) as well as producing text-to-speech examples of translated phrases that demonstrate pronunciation. The study found that participants' use of the app resulted in vocabulary retention and pronunciation of several Dutch phrases produced intelligibly and with low accentedness (pg. 12). Unlike the previous studies on explicit self-directed digital activities, the Google Translate study demonstrates output production as a method of vocabulary retention and pronunciation practice even in the absence of a communication partner.

Digital self-directed language learning through implicit approaches exhibits a broader range of possible activities as it is not dependent on the intended practice associated with a specific app or program and is more adaptable to individuals' learning preferences especially as it pertains to leisure activities. Wang (2012) describes the use of American sit-coms such as *Friends* as a preferred learning tool for English learners in China. Although their viewership is being explicitly targeted at acquiring language for the purposes of the study, it will be explored as an implicit activity as learners are not giving attention to particular linguistic structures and the rules governing them but are immersing themselves in genuine English contexts to develop naturalistic language skills. Additionally, the activity itself is not designed for language learning and does not contain the same level of structure as explicit activities, therefore relying at least in part on implicit learning. Participants in the study base their preference for this style of learning on the perceived authenticity of the interactions they view, as opposed to the artificial nature of English conversation taught in second language classrooms. This is corroborated by Drotner's (2009) findings on knowledge societies and technology increasing access to them (pg. 13-14). Through globalization of information, learners are provided a portal into a reality they are

physically isolated from, such as the Chinese participants in Wang's (2012) study who might otherwise find it difficult to engage with English in authentic social contexts.

Language learning through social media presents another example of the increased diversity of activities for implicit learning. Zorou (2012) describes the benefits of engagement with social media on language practice; these include the hybridization of multiple modes of language manipulation (corroborating Drotner's (2009) definition as the incorporation of multimodality into a single task), the creative freedom given to learners which further boosts voluntary engagement and motivation, and the ease with which users can communicate and collaborate in informal contexts. The aspects of multimodality and creative freedom allow for integrated practice of a broader range of language skills; for example, watching and commenting on a video might involve listening, reading, and writing skills in a single activity. Ease of collaboration encourages meaningful interaction that mirrors realistic contexts as described by Drotner's (2009) findings on knowledge societies. When engaging with personal social media even for leisure, whether through input-based activities such as browsing content or output-based activities such as direct messaging and commenting, any activity conducted in English can be considered implicit language practice on the part of the learner. So while studies on self-directed digital language learning activities have demonstrated a preference of learners for input-based activities as well as a focus on certain language skills, implicit activities provide more diverse opportunities for communicative output and practice in a broader variety of language skills.

For self-directed learners in isolation during the pandemic, opportunities for collaboration through traditional methods were limited. Classrooms were not the only social learning spaces affected by social distancing; leisure learning spaces such as clubs, community gardens, and public classes were temporarily closed as well, and some of these spaces were not transferable to

online formats. However, the effectiveness of Masalimova's (2021) findings in informal digital learning as well as Verbitsky's (2019) emphasis on socialization are corroborated by another study on the implementation of new media outside of the classroom. Although the study revolves around adolescent learners, many of the ideas presented are applicable to adult language learners as well, especially those less familiar with the vocabulary and nuances of digital English media. Specifically, it describes the process of initiating self-directed, peer-based learning through information seeking and socialization on the internet. Independent digital learning allows participants to tailor their education to subjects that will keep them engaged, especially through interest-driven communication which enables learners "to connect to peers who share specialized and niche interests of various kinds, whether that is online gaming, creative writing, video editing, or other artistic endeavors," (Ito et al., 2008, pg. 1). Self-directed language learning through interest-driven online communications allows students to optimize their learning at the crux of digitalization and socialization; they experience novel methods of information access made possible through technology.

In reference to adult language learners specifically, recent research on the motivations of adult learners to study through mobile language learning apps such as Duolingo suggests that adult learners are highly motivated to expand their English knowledge for a number of reasons even when not physically immersed in the language culture (as this study was conducted among adult learners in China) (Wang & Christiansen, 2019). This motivation is compounded by the learners' abilities to adjust their learning to meet individual schedules, preferences, and learning styles (pg. 65). In addition to the individual use of these apps, participants in the study were encouraged to form learning communities with one another (achieved primarily through chat apps such as WeChat) to track progress and engage in a digital classroom of sorts. This coincides

with the fundamental principle of self-directed learning stating the need for metacognitive methods of assessment/progress tracking. This study provides precursory evidence to suggest that adults given these conditions have the means and motivation necessary to conduct independent learning through communities both inside and outside of the apps. The findings are corroborated by Hsu's (2013) study which found that although results varied depending on the region of study, there was an overall positive attitude from students regarding their desire to use MALL (pg. 207). Of particular interest to this body of research are the findings of these studies stating that MALL is more effective in informal SDL settings when compared to formal teacher-directed learning settings (Hsu, 2013; Lai & Admiraal, 2022).

However, the usefulness of these unique benefits of digital language learning and their efficacy in achieving acquisition on the part of the learner is dependent on the learner's willingness to engage with the technology, especially when learning is self-directed and not facilitated by an instructor. Motivation and attitude toward MALL and CALL are all impacting factors in students' choice to self-direct their learning through these resources. A learner's motivation to self-direct learning can be either extrinsic—drawn from external factors such as grades—or intrinsic—driven by personal goals or interests in learning. Extrinsic motivations such as passing exams to gain better employment or being able to communicate more effectively in English contexts was more common among explicit learners but is generally found to be less effective in retaining motivation for long-term study (Lai et al., 2021; Zhang & Perez-Paredes, 2019). On the other hand, intrinsically motivated learners (guided by the desire to travel and communicate with loved ones) not only described themselves with high levels of motivation but maintained steady levels of motivation over a long period of time (Wang & Christiansen, 2019). Attitudes toward self-directing digital learning and preconceived notions of MALL further

impact learner engagement, as do students' abilities to self-direct learning through MALL. Lai et al. (2021) claim that attitude toward mobile technology was the most significant predictor of users' likelihood to self-direct learning, with many participants reporting never having used self-directive MALL because they perceive it as an ineffective tool. This may be influenced by cultural attitudes toward mobile technology. For example, a group of Japanese students in one study were reported least likely to engage in MALL because of their society's attitudes toward smartphones as tools for entertainment, not education (Hsu, 2012). Other disrupting factors include students' inability to self-direct learning (Lai et al., 2021), lack of digital awareness or technical issues, and inability to devote time to learning due to external distractions (Agum et al., 2021).

The current research contrasting explicit and implicit language learning is dominated by examples gathered from classroom practice; additionally, discussions on digital language learning primarily focus on explicit language learning apps and communities of practice constructed through social media. Little attention has been given to contrasting the uses of explicit and implicit language learning through online activities conducted in English, especially regarding informal and leisure learning. This gap may be explained by the considerably more difficult nature of conducting research on implicit learning as it requires participants to lack awareness of the occurrence of their learning. This challenge can be overcome by surveying learners' implicit online learning activities after they occur. During the period of study that my research examines during which schools were closed and online classes were not yet in effect, multilingual learners had few if any options for teacher-directed instruction, and those who wished to continue improving English skills were left with few options other than self-directed learning. Additionally, the mandatory quarantine period in March 2020 due to the coronavirus

presents a unique context characterized by a series of factors that impacted second language learners' educational opportunities: cancellation of formal ESL classes, lack of opportunity to socialize in realistic in-person contexts outside of class, and a considerable amount of free time that resulted for many in an increase in computer/mobile device usage. The purpose of this study is to examine the roles that explicit and implicit learning played in self-directed digital learning among multilingual students during the onset of the coronavirus pandemic in March 2020. In doing so, two research questions will be addressed:

3. Did adult multilingual students show engagement in self-directed digital learning when traditional teacher-directed learning was limited or unavailable during the pandemic?
4. Through what activities did adult learners conduct self-directed learning and what explicit/implicit and receptive/productive methods were used?

Theoretical Framework

Data analysis was conducted through a theoretical framework based on Stephen Krashen's Input and Acquisition-Learning hypotheses with emphasis on how they define implicit and explicit learning. These hypotheses are situated within a larger 5-part framework developed by Krashen as the foundation of his theories on second language acquisition. Although not directly applicable to this study, the other three parts—The Natural Order hypothesis, the Monitor hypothesis, and the Affective Filter hypothesis—are integral supports for the entire theory and contribute to an understanding of the theoretical framework of this study. The Natural Order hypothesis states that learners acquire language rules in a pre-determined order with certain rules being established earlier in the learner's education than others. The natural order is not dependent on when each rule is taught in a class or encountered in social context, nor is its sequence determined by the simplicity or difficulty of the forms being acquired. This hypothesis

explains the importance of variation in the types of comprehensible input the learner is exposed to as the sequence of acquisition typically does not deviate from this order. Therefore, if input only features forms in a higher level of the order, it remains incomprehensible until lower-level forms are acquired. The Monitor hypothesis provides an explanation of explicit language *learning* as an inferior but vital component of adult second language acquisition due to its role as a ‘monitor’ in correcting implicitly *acquired* knowledge. The inferiority of explicitly learned knowledge stems from its hinderance to seamless and authentic communication; when students are consciously aware of applying explicit knowledge to productive language, production occurs at a slower rate and is thus less ‘natural.’ Native and fluent speakers of a language tend to give less conscious attention to use of the monitor as implicit knowledge grows and becomes the active focus. According to the Affective Filter hypothesis, however, comprehensible input, whether implicit or explicit, cannot contribute to acquisition if the learner’s affective filter is present due to feelings of inadequacy or anxiety in the learning setting. Krashen succinctly summarizes the main idea of his theory of second language acquisition with a single phrase: “people acquire second languages only if they obtain comprehensible input and if their affective filters are low enough to allow the input ‘in.’”

For the purposes of this study, the Input and Acquisition-Learning hypotheses are the most relevant points of Krashen’s theory as they characterize the relationship between implicit and explicit learning in acquiring language skills. The Input hypothesis stipulates the necessity for comprehensible input to induce acquisition. Krashen provides two corollaries for this hypothesis, the second of which states,

If input is understood, and there is enough of it, the necessary grammar is automatically provided. The language teacher need not attempt deliberately to teach the next structure

along the natural order—it will be provided in just the right quantities and automatically reviewed if the student receives a sufficient amount of comprehensible input (pg. 2).

Likewise, Ellis (2008) defines implicit learning as “acquisition of knowledge about the underlying structure of a complex stimulus environment by a process which takes place naturally, simply, and without conscious operations.” Simply put, this implies receiving input from one’s environment through natural exposure to it and without direct attentive effort. Taken in conjunction with Reber’s (1976) definition of explicit learning as conscious gathering of information about a phenomenon to make sense of it, the terms apply to language acquisition in the comparison between direct, specific instruction of language forms versus natural acquisition through engagement with the language in meaningful contexts. Written in tandem with the Input hypothesis is the Acquisition-Learning hypothesis, which highlights the difference between subconscious *acquisition* of language mirroring the experience of children learning a first language, and conscious *learning* of language through attention to specific forms (pg. 1). As previously stated, he labels the latter an inferior process that best serves as a monitor for correcting language only after it has been encountered naturally. In conjunction with one another, these hypotheses define the key differences between explicit learning and implicit acquisition of a language.

In keeping with Krashen’s discussion of their differing roles across age groups, implicit and explicit language learning is often discussed in comparisons of child/adolescent and adult learners. The process of implicit learning is often characterized as the fundamental style of learning through which one’s L1 is acquired in childhood. Children learning their L1 or more than one language simultaneously acquire most of their language through implicit knowledge gained through exposure in their linguistic environment. They acquire grammar consistent with

specific rules of their language but are often unable to define them on their own without explicit instruction, which typically takes place in first language classrooms. However, for the purpose of adult second language acquisition, implicit knowledge accounts for some acquisition of the L2 while the rest must be acquired in conjunction with explicit instruction. Implicit and explicit learning present a unique phenomenon as they pose both as opposite and parallel constructs in relation to one another; while they are two separate forms of learning that result in differing levels of performance on the part of the learner, they are both necessary for full and accurate second language development in adult learners. As with child L1 learners, multilingual adults acquire much of their L2 through implicit learning taking place within a social context of their target language culture. Explicit learning then serves as a secondary guide to sharpen understanding of implicit knowledge.

Sources of implicit language knowledge differ based on age groups as well, as children receive most of their comprehensible input from adult ‘caretakers:’ family members (especially parents) and eventually, schoolteachers and other adults responsible for upbringing. While children have more constant and consistent exposure, Krashen (1891) hypothesizes that adults acquire language more quickly, at least during the early stages of language acquisition, as they have the added benefit of control over the comprehensible input they receive. Adult learners have the agency to place themselves in settings where they receive more desirable and varied types of input, can more adequately express lack of understanding and ask for help, and are better at initiating and managing conversation (pg. 12-13). Additionally, adult learners have L1 knowledge and general experience of the world to aid in making meaning of the input they receive. Krashen goes on to predict a negative correlation between the efficacy of post-secondary ESL instruction and students’ gains in proficiency as they become increasingly enabled to

independently seek comprehensible input from more realistic social situations and specific content settings (pg. 14). This point is of particular importance to this study as use of digital technology has given language learners ever-increasing new avenues for language socialization than would be possible within the physical realm alone.

CHAPTER THREE: METHODOLOGY

This study employed qualitative methods of data collection aimed at gaining an understanding of what digital activities, if any, language learners used while in isolation that may have resulted in acquisition either intentionally or incidentally. Participants were recruited from the Woodland Baptist Church ESL program, a free and voluntary program in which students need neither apply for acceptance, pay tuition, or earn grades or scores of any sort. The program consists of 12 adult classes ranging from beginner (level 1) to high intermediate (level 6). An average of 65-70 students are enrolled per semester since the beginning of the pandemic, with pre-pandemic enrollment being 100-130 students. Students take a placement test the week before classes begin and are given a recommended level to join but have the option of setting their own pace by joining a higher or lower level. Instructors are employed on a voluntary basis and have varied levels of experience from student teachers to retired professional language instructors. The program is based on the Ventures instruction system and provides a textbook and workbook for each student. These feature reading, writing, speaking, listening, and grammar activities with opportunities for individual, partner, and group work. Content is focused on information applicable to adult learners such as enrolling in a university, applying for jobs, etc. Instructors are given the freedom to augment their class with additional lessons and any resources they deem appropriate, and emphasis is put on working at a pace that allows all students to grasp the concepts of a lesson before moving on to the next; thus, student success within each module is given priority over covering a certain amount of material within a given timeframe. The program is located on the northwest side of a large metropolitan city in the southern United States. According to the United States Census Bureau (2020), the city holds a population of 1.55 million as of 2020 with a majority Hispanic/Latinx population (64.7%). Additionally, 14% of the

population identify as ‘foreign born persons’ and 41.8% of persons ages 5 and above speak a language other than English at home.

Criteria for the study required participants who were enrolled in the Woodand Baptist Church ESL program in March 2020 during which time classes were suspended for approximately 3 weeks while instructors prepared to switch to online classes because of government-mandated quarantine due to the coronavirus pandemic. Permission for recruitment was gained from the director of the program who sent information about the study to several students enrolled during the quarantine period. Six students responded with their contact information (either email or phone numbers), whom I then contacted and recruited via a recruitment script according to IRB protocol. Consent forms were administered stating the purpose of the study, the participant’s role, and their rights to have their information and identities protected. Each participant was given the option of participating in the interview in person or through Zoom, and all chose Zoom. Participants were all adult women over the age of 40 who came from a variety of sociolinguistic backgrounds. Their proficiency levels varied but all had adequate language skills to read and understand the consent form and participate in the interview in English. Table 1 displays their demographics including ages, countries of origin, primary languages, and occupations before quarantine. Aside from those who listed themselves as homemakers, none of the participants were actively employed during the period of study, either because they had retired or were unable to attend work during quarantine.

Table 1***Participant Demographics***

	Level in the Program	Country of Origin	Primary L1	Age	Occupation
“Michelle”	6	South Korea	Korean	40	Homemaker/part-time restaurant hostess
“Holly”	4	South Korea	Korean	46	Homemaker
“Hannah”	4	China	Mandarin	60-70	Retired teacher
“Zoey”	4	Iran	Persian (Farsi)	64	Unemployed
“Gloria”	4	China	Mandarin	41	Cancer researcher
“Klara”	6	Belarus	Russian	71	Retired psychiatrist

Interviews were conducted in a semi-structured format according to Smith’s (2005) principles, meaning that although there was an area of interest upon which interview questions were based, questions were designed to be open-ended to encourage discussion on the part of the participant, with follow-up questions being based on novel ideas introduced by the respondent (pg. 12). Initial discussion questions and recommended follow-up questions are displayed in Appendix 1. The goal was to engage participants in discourse about their online habits conducted in English during the period of study, whether these activities were purposely conducted with the intention of learning English or for another purpose, and whether input alone or a combination of input and output were employed. For example, if a participant answered question 1 (“During the pandemic, how did you spend your time while quarantined?”) by stating that they often used YouTube during their time in quarantine, follow-up questions might pertain to whether they watched or created videos, what the topics of the videos were, and if they ever left comments on videos or engaged in conversation with other viewers through comments. Questions were worded with the intention of soliciting descriptive responses from participants rather than a simple list of the programs and activities they used.

The main goal of data collection was to record the ways in which English learners, left without the resources of formal ESL classes or other social activities in which they would practice language skills, engaged in English language use through digital media with or without the goal of learning. ‘Digital media’ refers to any websites, apps, or programs participants engaged with through use of a computer, laptop, cell phone, or other electronic device. Interviews were conducted through the Zoom online conferencing app on a laptop computer. The meetings were recorded visually and audibly using the app’s recording feature and were transcribed using the app’s auto-transcription feature. A secondary recording device was also used and consolidated with the auto-transcription to produce full transcripts of the interviews, with revisions made by the interviewer for accuracy based on both recordings. Zoom recordings, secondary recordings, and transcripts were all saved on password-protected devices accessible only to the primary and co-investigators.

During transcription, a pattern was noticed concerning the types of activities participants pursued and the level of awareness with which they engaged in these activities. Although all answers concerned activities conducted in English, some were employed intentionally for explicit language practice and others for leisure or with another goal unrelated to language learning, but in which incidental (implicit) language learning potentially occurred through exposure to comprehensible input. Data corresponding to each group was also coded based on the use of input only or a combination of input and output. The collected data was analyzed visually and coded based on two criteria:

- (1) whether the activity involved implicit or explicit language practice, and;
- (2) whether the participant received input and produced output or solely received input

A total of four categories were created based on where data intersected between these two criteria; implicit practice which involved input only, implicit practice which involved input and output, explicit practice which involved input only, and explicit practice which involved input and output. They are defined as follows:

1. Explicit, Input Only (EI): apps, programs, and activities specifically designed/conducted for the purpose of learning English wherein the participant received input (reading/listening) exclusively.
2. Explicit, Input + Output (EIO): apps, programs, and activities specifically designed/conducted for the purpose of learning English wherein the participant received input (reading/listening) in addition to producing output (speaking/writing).
3. Implicit, Input Only (II): apps, programs, and activities conducted in English but designed for purposes other than language learning wherein the participant received input (reading/listening) exclusively.
4. Implicit, Input + Output (IIO): apps, programs, and activities conducted in English but designed for purposes other than language learning wherein the participant received input (reading/listening) in addition to producing output (speaking/writing).

It was also noted that explicit activities could be further sub-divided as:

- Category I Explicit activities: activities designed for the purpose of language learning.
- Category II Explicit activities: activities designed for other purposes but which the participant stated were intentionally used for language learning.

Thus, 6 total data categories emerged:

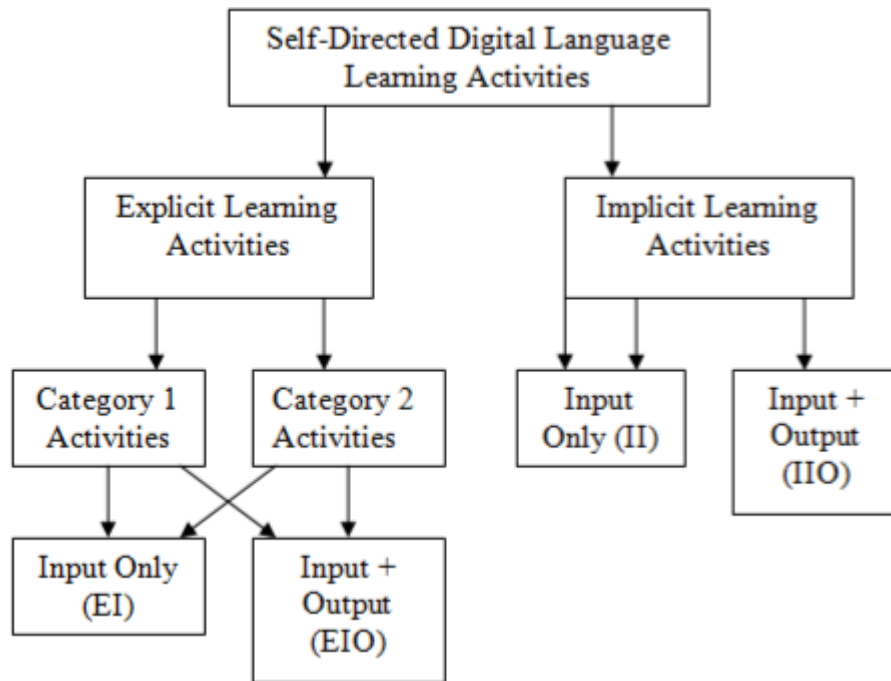
- Category I explicit, input only (Category I EI),
- Category I explicit, input + output (Category I EIO),

- Category II explicit, input only (Category II EI),
- Category II explicit, input + output (Category II EIO),
- Implicit, input only (II),
- Implicit, input + output (IIO).

Figure 1: Sequence of Activity Categorization depicts a more concise representation of how these categories will be defined and discussed in the following section.

Figure 1

Sequence of Activity Categorization



An example of an excerpt coded under Category I EI can be seen in Michelle’s mention of listening to English learning podcasts. The program is intended for language instruction and the participant is aware of this, making it an explicit activity in Category I. Because she is only practicing listening, it is an input-only activity; however, her use of Cambly would be a Category I EIO activity as it includes speaking (output) on the part of the learner. Category II EI is

exemplified in Zoey stating that she watches Netflix every night to learn English. Although Netflix is not a program directly intended for English instruction, the participant intentionally uses it for the purpose of practicing listening skills. Category II EIO included examples of participants watching Youtube videos related to the topic of English learning and leaving comments, thereby practicing productive language skills. II was characterized by excerpts of participants stating they enjoyed watching English TV and videos for leisure only, and IIO included casual conversations with friends in English on topics of personal interest not related to language practice. Examples for the four main groups were color-coded in the transcripts and then consolidated in a separate word document for ease of access, with Category I and II activities grouped together under sub-tabs in the explicit section. Each subsection of the Findings section will conclude with a table displaying the apps/programs mentioned by each user and their stated purpose for it.

CHAPTER FOUR: FINDINGS

Data analysis resulted in the emergence of four categories at the intersection of the two criteria used for analysis: the type of language learning taking place in each activity (implicit versus explicit) and the use of receptive skills exclusively (input only) versus use of both receptive and productive skills (input + output). The four categories are labeled and defined as follows:

5. Explicit, Input Only (EI): apps, programs, and activities specifically designed/conducted for the purpose of learning English wherein the participant received input (reading/listening) exclusively.
6. Explicit, Input + Output (EIO): apps, programs, and activities specifically designed/conducted for the purpose of learning English wherein the participant received input (reading/listening) in addition to producing output (speaking/writing).
7. Implicit, Input Only (II): apps, programs, and activities conducted in English but designed for purposes other than language learning wherein the participant received input (reading/listening) exclusively.
8. Implicit, Input + Output (IIO): apps, programs, and activities conducted in English but designed for purposes other than language learning wherein the participant received input (reading/listening) in addition to producing output (speaking/writing).

To avoid assuming learner's intentions, explicit instruction can be further sub-categorized to include two types of programs based either on their intended purpose for language learning or participants' statement that they intentionally used them for such:

- Category I Explicit activities: activities designed for the purpose of language learning.

- Category II Explicit activities: activities designed for other purposes but which the participant stated were intentionally used for language learning.

Figure 2: *Venn Diagram of Activities by Code* visually depicts the coding patterns used during analysis and displays an icon for each of the apps/programs mentioned by participants on a grid according to the categories each belonged to. The categories of the diagram are color coded to match the color system used during data coding and analysis. Note that several apps/programs fall within overlap of two or more categories, indicating that participants sometimes used the same app/program for various types of learning activities.

Figure 2

Venn Diagram of Activities by Code



Participants in the interviews reported a variety of applications and programs used across the four categories for various purposes such as improving language skills, keeping in contact with friends and family, receiving updates about the pandemic both in the United States and in their home countries, ordering food or supplies, or simply for leisure to pass the time spent in quarantine. These activities are displayed in Figure 3: *Chart of Activities According to Participant* under each respective user. Indicators are colored according to each activity’s appropriate coding category correspondent to the key at the bottom of the figure.

Figure 3

Chart of Activities According to Participant

		Michelle	Holly	Gloria	Zoey	Hannah	Klara
Language Learning Programs	Culips	X					
	Cambly	X					
	Naver		X				
Social Media	Instagram	X	X		X X X		
	Facebook	X					
	Tik-Tok		X				
Video/Music sites	Youtube	X	X X	X X		X	X X
	Netflix	X		X	X		
E-reading	Libby	X					
	Audible	X					
	SAPL	X					
	Other/unspecified					X X	X
Video chat programs	Zoom	X				X	
	Skype						X
	Facetime					X	
	WeChat	X					
	Viber						X
	WhatsApp			X			
Dictionaries/ Vocab builders	Google Translate	X					
	Kindle Vocab		X				
	Other		X				
Phone calls/texts					X X	X	
Online shopping (retail)					X		
Online shopping (food/restaurants)					X		

Key: X -Explicit, input only; X -Explicit, input + output; X -Implicit, input only; X -Implicit, input + output

Each of the six main sections are summarized with a table displaying the applications or programs used, a description of that activity's purpose according to participant use, and the name of each participant who cited it. Following these sections exploring the coded data, three additional phenomena noticed during analysis will be discussed: these are the overlap of implicit and explicit learning, differentiation of output, and the use of task-based input as a demonstration of comprehension.

Category I Explicit, Input Only

Regarding the first category, participants discussed several English-instructing apps and English-centered pages on popular social media apps. Michelle provided the example of an English-learning podcast that she would listen to as a method of explicit self-directed learning. She states,

“There's a podcast it's called, it's very good, a podcast for English learners and it's called...Culips...The host is I think he's a professor in South Korea and he's from Canada I think, I believe he's from Canada and he's working for the university in South Korea now and...he made Culips to teach some English with some story tellings and so she provide some study guides but study guides is paid program but you can listen to podcast for free....He talk about...everything in your life around your life, environment, cultures, they usually compare some cultures between Korea and some America or British, England, or Canada. They talk about everything.” (Michelle)

Here Michelle demonstrates awareness of her self-directed learning in two ways: first by recognizing that the app is a paid program but choosing to utilize only the free podcast, thereby directing the type of input she will receive; and second by choosing input based on topics that she finds interesting and relatable. The general theme of the podcasts allows for comprehensible

input that is not only applicable to realistic communicative contexts but which the learner is already familiar with to some degree, and the comparisons between native and target cultures create connections between knowledge gained in her L1 and new L2 concepts.

Culips is easily accessed by users through their website or social media pages, and features hundreds of podcasts on a variety of topics including comparisons between viewers' native and target cultures. As stated by Michelle, they provide free audio lessons which can be supplemented with study guides for an additional fee. The program prides itself on attention to teaching "natural English" with a goal of teaching students to "speak English like native speakers," with special attention given to idioms and slang practice in addition to basic grammar and vocabulary. They claim to only teach what is necessary to enable speakers to communicate in realistic contexts and maximize their ability to speak naturally, avoiding teaching "useless expressions from out of date textbooks." Lessons are provided by trained language instructors and include a variety of features such as Chatterbox—interesting stories told in conversation format—and Catch Word which teaches idioms commonly used in American English.

English instructional YouTube channels were also a common source of explicit input-only content. Although YouTube itself is not an English learning program, the examples discussed in this section are included in Category I because the individual video producers have designed their videos for the purpose of language instruction, in contrast to YouTube videos not focused on English learning which are discussed under the Implicit section. Gloria reported using English instructional videos on the platform to practice listening skills, "...just listening like children put in a new country don't speak language." She was unable to provide specific examples as she did not remember names of channels and did not have access to her tablet at the time of her interview. Holly, however, reported watching pronunciation practice YouTube videos

that specifically targeted pronunciation of English forms for L1 Korean speakers. She gave the example of Teacher Oliver, a Youtuber from Dallas, Texas who releases monthly videos each featuring four common English expressions with explanations and example sentences. When questioned about the methods of instruction used throughout Oliver Teacher's videos, Holly again drew focus to the use of expressions and idiomatic vocabulary taught through scripted conversations set in what she described as "action life, real life," referring to the video log or video diary format of the videos. She stated that he occasionally includes Korean translations to scaffold comprehension from learners' L1.

In keeping with the theme of idioms, Zoey also expressed an interest in studying idioms through self-directed explicit learning using an Instagram page intended for the instruction of English phrases. She stated, "Instagram I have...app for English and for idiom or expression." The page she described is run by a teacher she studied with in Iran who goes by the name of Kamran but whose channel title is written in Farsi script. Like Holly's Korean-English instructional videos with Teacher Oliver, Zoey's activities offer language support through transfer of vocabulary and conversational features from the learner's L1 to L2 with the help of translation. Like Holly, Zoey demonstrated in this example that her preferred method of EIO instruction has a focus on expressions and idioms commonly used by American English speakers in casual conversation. Additionally, the format of these YouTube videos and the Culips podcast demonstrate use of expressions taught through meaningful contexts such as the conversation format described in Culips and the 'real life' situations Michelle stated are demonstrated in the YouTube videos. The idioms and expressions are not simply isolated and explained but presented within authentic contexts to better explain their expressionistic meanings and avoid a literal interpretation.

Online dictionaries and electronic vocabulary building tools were also a source of Category I EI instruction. Michelle described her use of dictionaries found through Google as a way of building meaning in her L2 without relying on translation or prior L1 knowledge. Holly also used English dictionaries found on the Korean web portal Naver (described in more detail in following subsections) for the same purpose. Although much of the site is presented in Korean and translation options are available, there are sections dedicated exclusively to English language learning. Although Michelle’s use of Kindle will be discussed as an implicit learning activity as she mentioned using it for leisure, she used the app’s vocabulary builder as an explicit learning tool to define and record new vocabulary she came across in her reading. Kindle automatically compiles the defined words in a separate list for future study that can be organized either as a complete list or categorized by the book in which each word appeared. It also includes a flashcard feature as an additional study tool.

Table 2: *Category I Explicit, Input Only Activities* provides a visual summary of the activities mentioned in this subsection.

Table 2

Category I Explicit, Input Only Activities

App/Program	Description of Activity	Users
Culips	English learning podcast with focus on idioms/expressions and ‘natural’ speech.	Michelle
YouTube	Videos aimed at teaching idioms/expressions through realistic contexts with L2 support.	Holly-Teacher Oliver Gloria-unspecified
Instagram	Instructor-run page that provides idiom/expression instruction with L2 support.	Zoey-”Kamran”
Online dictionaries	Programs used to quickly define incomprehensible words or phrases.	Michelle-Google Holly-Naver
Kindle vocabulary builder	Part of the Kindle reading device that allows users to define and build lists of new terms found in books.	Michelle

Category I Explicit, Input + Output

While the above examples demonstrate explicit input-only instruction using programs developed specifically to teach English language skills, other instructional applications were used with a combination of input and output on the part of the learner (EIO). A strong example described in the interviews is Cambly, a flexible 24-hour online tutoring website for English instruction that teaches speaking skills by engaging students in conversation with a volunteer tutor. Michelle described her experience talking to multiple tutors before becoming a regular student of some so that she did not have to introduce herself and get to know a new conversation partner each time. Choosing a preferred tutor allows learners to become comfortable with the same conversation partners over time without having to adjust to different audiences, and also prevents repetition in conversation—in her own words, “you don’t want to say greeting every time,”—so that discussion can expand to new topics. She stated that conversations typically revolved around personal interests and small talk about their daily lives including updates since the last meeting. Other activities such as the popular descriptive game Taboo and vocabulary crossword puzzles are offered on the app and would be played by Michelle and her tutors during their sessions. Michelle stated that she used Cambly as a replacement for the authentic English conversation practice that she previously received at school or in the larger community which was no longer accessible in quarantine. It’s interesting to note that the Cambly app provides tutors from a variety of English-speaking countries so that input can be differentiated to match the learner’s target language culture or to gain a global English vocabulary. Like Culips and some of the YouTube videos described previously, this enables students to learn relevant English dialects that support meaningful interaction and increase comprehension inside and outside of the learning environment.

Another example of EIO found in instruction-specific programs is Naver. Developed by the Naver Corporation, Naver is a South Korean search engine with a number of additional features such as Naver Café which allow users to create online communities based around almost any subject. The Cafe features many English-learning communities in which users communicate through chatrooms to practice conversation skills and share/discuss other programs for English learning. Holly stated that the chat room she frequented would be updated daily with new English conversations in text and audio which she would read or listen to, and then sometimes practice writing and speaking by herself. She claims that she did not participate in communication on the app or post in the chat rooms herself to speak to other users, but simply viewed the chat and recorded notes or produced speech for solitary practice.

The concepts of EI and EIO were not always mutually exclusive but overlapped in certain activities. The mainly IO nature of instruction through YouTube videos was augmented by some participants with both communicative and non-communicative output. Looking back at Holly's experience with idiom and expression instructional videos, she stated that although she mainly viewed videos, output was sometimes produced via note taking or commenting (although it is unclear whether notes were taken digitally or by hand). Holly described copying example sentences given in the videos to record them for future memorization practice. Additionally, she engaged in communicative output with the video creators and other viewers by leaving feedback on the instruction and asking for clarification, which creators or other viewers would occasionally respond to and engage with her in a short conversation. In addition to the examples presented by Holly on YouTube and her notetaking on Naver, Zoey described a similar process in her use of English Instagram pages, stating "I just learn and write some sentences that improve my English." These examples provide evidence of the overlap between EI and EIO activities;

although these activities were input-heavy, they were occasionally supplemented with non-communicative writing and speaking practice or writing comments asking for help which engaged the learner in communication resulting in feedback. Furthermore, although notetaking was not authentic production practice—as sentences were simply copied—and provided no direct feedback, evidenced suggests a correlation between notetaking and retention of material (Beeson, 1996). By taking notes, participants were not only practicing handwriting and collecting information for future personal review but were improving their cognitive retention of what was being written.

These findings are evidence of participants’ use of digital English instructional resources to continue their language learning when formal in-person language learning programs were suspended. The apps and YouTube videos cited here were specifically designed by English language instructors and other learners to promote acquisition of language skills which is characteristic of Category I explicit instruction. Learners essentially used these programs and activities as a replacement for formal English classes that were canceled due to the pandemic and would not resume digitally for several weeks. During the 3-week period that Woodland ESL classes were suspended as instructors made the switch from in-person to Zoom classes, the students interviewed here continued their formal education by independently seeking out instruction from multiple sources. The activities in Category I explicit learning (specifically intended for English language instruction) feature characteristics of formal classroom instruction through the inclusion of an instructor or English speaker of a higher proficiency level and structured activities.

Table 3: *Category I Explicit, Input + Output Activities* provides a visual summary of the activities mentioned in this subsection.

Table 3*Category I Explicit, Input + Output Activities*

App/Program	Description of Activity	Users
Cambly	Tutoring platform for English conversation practice.	Michelle
Naver & Naver Café	Korean web portal featuring English learning communities.	Holly
YouTube, with note-taking and commenting	Videos aimed at teaching idioms/expressions through realistic contexts with L2 support, supplemented with note-taking and discussions in comments.	Holly
Instagram, with note-taking	Instructor-run page that provides idiom/expression instruction with L2 support, supplemented with note-taking.	Zoey

Category II Explicit, Input Only

Participants exemplify Category II explicit instruction (use of programs not directly intended for language learning but which participants explicitly stated were used for language learning) by self-directing learning without the support of instructors or structured activities. Hannah mentioned her use of L1 and L2 translations of an e-book/audiobook as a method of SDL in stating, “So I just listen English book also Chinese book. For example, Elon Musk this lady book...have Chinese reading so I read Chinese book then I read English book then Chinese book, I translate, I study.” Based on what she stated previously in the interview, Hannah is referring to a book written by Elon Musk’s mother, Maye Musk, titled *A Woman Makes a Plan: Advice for a Lifetime of Adventure, Beauty, and Success*. Many of the themes of the book relate to Hannah’s personal interests such as dietetics and mental wellness, and she described in this quote repeatedly reading the book in both her L1 and L2 and comparing the translations to transfer understanding between the languages. Zoey discussed a similar approach in watching English movies by specifically stating that she watched Netflix for 1-2 hours per night for the purpose of improving her English, combining entertainment and acquisition through explicit

attention to new forms. Gloria reported listening to children’s stories narrated on YouTube for language practice, playing aloud excerpts from “The Little Princess,” another form of entertainment which featured easily comprehensible input through slow, clear speech. Although reading/listening to audiobooks and watching Netflix could qualify as implicit leisure activities, the participants state their intentions to study language, thereby engaging in explicit learning without use of an activity directly intended for such.

Table 4: *Category II Explicit, Input Only Activities* provides a visual summary of the activities mentioned in this subsection.

Table 4

Category II Explicit, Input Only Activities

App/Program	Description of Activity	Users
Audiobook/e-book	L1 and L2 translations of a book read/listened to and compared for comprehension.	Hannah
Netflix	Online movie/tv-show streaming platform used for listening practice.	Zoey
YouTube	Videos featuring read-aloud children’s stories.	Gloria

Category II Explicit, Input + Output

There were two examples present in the data of learners constructing independent communities of practice explicitly intended for English communicative skills through video chatting programs. Hannah mentioned her efforts to keep in contact with a Chinese woman she met in the Woodland program through phone calls and text messages. Although they usually communicated through their L1, she stated that “sometimes I send her message in English so we can practice.” Additionally, Klara mentioned using Skype and Viber to communicate with her granddaughter in Belarus who was also studying English. These examples demonstrate participants engaging in intentional practice of communicative skills with other learners, and

because both pairs share the same L1, they can resort to L1 support as a way of negotiating meaning when English communication is incomprehensible. This form of EIO activity is important to note as it results in feedback depending on their conversation partner's ability to understand and respond to the input they received which then determines the participant's next response.

Table 5: *Category II Explicit, Input + Output Activities* provides a visual summary of the activities mentioned in this subsection.

Table 5

Category II Explicit, Input + Output Activities

App/Program	Description of Activity	Users
Phone calls/texts	Communication with former classmate for English conversation practice.	Hannah
Skype/Viber	Video chats with granddaughter for English conversation practice.	Klara

Instances of Category II explicit learning, with or without production of output, demonstrate participants' willingness to take self-directed learning to a new level of independence. Rather than substituting their formal education with resources tailored to language instruction as demonstrated in Category I, they chose instead to learn through methods of their own choosing and guide their language acquisition using activities not exclusively intended for that purpose. The use of translation incorporated into either explicit or implicit activities further demonstrates students' willingness to self-direct learning simply for the purpose of increasing their own understanding when grades and other extrinsic motivating factors are not present.

Implicit, Input Only

For the purposes of this study, implicit learning activities are defined as any program/activity conducted in English but designed for purposes other than language acquisition,

occurring either through the learner receiving input exclusively (II) or through a combination of receiving input and producing output (IIO). Implicit learning is an important feature of language acquisition as it involves learners practicing language skills passively, without specific attention being given to the forms or features of language being learned. Implicit learning can occur through a wide variety of activities and is typically conducted in less structured contexts than explicit learning. Because of this, learners' affective filters and anxieties associated with learning may be lowered as there is less pressure to perform and learners have more autonomy in the type of activity in which they engage. Data analysis revealed a trend of II mainly taking place through leisure activities that were conducted for the purposes of entertainment, non-language related learning activities, and shopping either for necessities or for pleasure.

The majority of II learning took place through leisure activities conducted in English as a way of passing the time spent in quarantine, as only participants who described themselves as homemakers would be considered actively employed during the period of study and all reported spending most of their time at home. Leisure activities are characterized by participants' engagement for no purpose other than enjoyment or personal fulfillment rather than monetary or academic gain. Participants' discussions of their online leisure activities provide a glimpse into their individual interests which varied greatly between them, and which were the primary motivations for their engagements in implicit language learning activities. Online leisure activities involving implicit English language learning fell into five main categories: viewing videos/television, reading e-books/listening to audiobooks, listening to music, engaging in social media, and online shopping. The latter category will be reserved for a later discussion of task-based input.

Regarding videos and television, YouTube was a favorite amongst participants. Excluding the previously discussed English instructional videos, participants frequently watched videos pertaining to their individual interests; because they were viewed in English, these videos also served as exposure to American sociopolitical and popular culture not accessible through community engagement due to quarantine conditions. From a sociolinguistic perspective, they contextualized some of participants' previously discussed lessons on idioms, expressions, and slang through their examples of authentic communication in contrast to the artificially constructed contexts of some explicit learning activities. Michelle reported enjoying clips of night shows such as Jimmy Kimmel and Inside Edition; she and also read the top comments to gain perspective on the videos, thus combining reading and listening comprehension into one activity. She and Gloria also reported watching shows on Netflix for entertainment, but unlike the earlier example given by Zoey in which she stated that she watched Netflix for 1-2 hours nightly specifically for English practice, they made no mention of direct attention given to gaining language skills. Various news channels on YouTube were also of particular interest, especially as they pertained to information regarding the status of the pandemic, with participants sometimes connecting their choices in news sources with personal political interests. Michelle claimed that she enjoyed viewing left-wing news channels such as CNN and NPR because of their focus on the status of covid vaccine development, which she stated she did not hear about from more conservative channels. On the other side of the political spectrum, Hannah reported interest in FOX news as well as neutral local news stations. Klara reported an interest in former Republican presidential candidate Ben Carson and economist/social theorist Thomas Sowell. Video choices also catered to participants' other self-directed learning efforts. Hannah enjoyed watching piano instruction and cooking videos. In addition to political programs, Klara, a retired

psychiatrist, enjoyed watching and listening to programs by Jordan Peterson, a Canadian clinical psychologist, and Kinsey Owens, a licensed clinical social worker/therapist. These examples characterize participants' use of online video resources not only for entertainment, but also for self-directed learning of subjects unrelated to language acquisition while simultaneously receiving implicit English language practice.

Acquisition of implicit English knowledge through explicit self-directed study of other subjects of interest to participants occurred through use of e-books, audiobooks, and other online print sources as well. Michelle discussed her frequent use of the San Antonio Public Library's online rental options, the library app Libby, and the audiobook app Audible. Her reading/listening choices included Bible study books, social commentaries, and classic literature such as *Great Expectations* and *Wuthering Heights*. Hannah, a retired teacher, stated early in her interview her thoughts on the impact of physical and emotional health on students' ability to learn, as well as the toll that the pandemic and isolation took on many individuals' mental health. She later mentioned purchasing e-books and magazines on psychology, health, and personal well-being through Kindle. In addition to her previously mentioned viewing of FOX news, she also read news on the BBC website and Newsbreak news app. Similar to her viewing of psychology videos on YouTube, Klara also reported reading audiobooks on similar topics.

YouTube was also used by participants for leisurely music listening. This is included in a separate category from other videos both in the discussion and in the summary table as listening to music in a learner's L2 provides slightly different benefits for comprehension. The slow, drawn-out lyrics characteristic of certain genres demonstrate clear pronunciation, and songs that feature a refrain provide repetitive input for increased comprehension. When asked if she used music as a learning activity, Gloria stated that it helps her relax, making other more explicit

learning activities easier. Throughout her interview she played excerpts from some of her favorite songs, usually romantic songs in which words were distinctly pronounced and sung slowly. In describing her musical tastes, Klara cited Frank Sinatra, stating, “it’s so clear English, you can understand all, it’s wonderful.” Although neither participant described listening to music as a learning activity, their statements identify their song choices being based at least in part on how intelligible the lyrics are and the effect it had on states of mind, both of which provide conditions for language comprehension and acquisition.

Social media was referenced by most of the participants, but involvement was mainly peripheral; aside from the use of language learning pages discussed under the explicit learning categories, most other social media activity conducted in English consisted of viewing updates from friends and family with little participation on the part of the viewer. Some of the participants expressed a distaste for social media: Michelle and Holly reported using Facebook (Michelle) and Instagram (both) because they are interested in the lives of others, either people they know personally or not, but stated that they were reluctant to post pictures or information about themselves. Holly also stated that her daughter frequents Tik-Tok and would occasionally share videos with her, but she was disinterested in viewing the app on her own. In addition to her use of Instagram for explicit learning, Zoey also briefly mentioned browsing Instagram for fun, but most of her discussion of social media revolved around language learning pages. Gloria specifically expressed concern about the safety of the internet as the main reason for her reluctance to use social media. Klara stated that she does not like social media and only used Twitter in Russian. Overall, there was a reluctance to participate in mainstream social media for a number of reasons including distrust of the apps’ safety and general disinterest. The use of social media for personal use unrelated to language learning was minimal among participants.

Table 6: *Implicit, Input Only Activities* provides a visual summary of the activities mentioned in this subsection.

Table 6

Implicit, Input Only Activities

App/Program	Description of Activity	Users
YouTube (videos)	Videos on topics of personal interest to participants such as news/politics, instructional videos, and general entertainment.	Michelle Hannah Klara
Netflix	Online movie/tv-show streaming platform used for entertainment.	Michelle Gloria
Libby, Audible, Kindle, library apps, online reading, etc.	Books, magazines, and articles written in English and read online for entertainment.	Michelle Hannah Gloria
YouTube (music)	Music videos and recordings in English as entertainment, chosen for their slow rates of speech.	Gloria Klara
Social media: Facebook, Instagram, Tik-Tok	Social networking sites used to view updates on the lives of friends and family.	Michelle Holly Zoey

Implicit, Input + Output

Regarding output, participants seemed more motivated to engage in communication through implicit rather than explicit activities. In fact, the majority of output produced in implicit activities was communicative in nature. One such example could be found in participants' mentions of leaving comments and reviews. In the previous discussion on explicit output, only two examples were presented concerning participants leaving comments on YouTube or Instagram instructional pages to ask for further support or to provide minimal feedback. However, participants demonstrated more willingness to produce output regarding subjects of personal interest to them, especially when it concerned sharing an opinion. Klara stated that she left her opinion on the psychology videos she viewed on YouTube, and although she did not engage in communication with other viewers, this method allowed her to produce English output based on professional knowledge previously gained in her L1. Hannah mentioned writing

product reviews when she enjoyed a product and sometimes receiving feedback thanking her for her review or asking her to specify what she liked about the product. It is interesting to note that this feedback impacted language practice as it validated comprehension of the participants' output or encouraged them to provide further detail and clarify their ideas.

More direct communicative output occurred through participants' socializations with peers, including both L1 and L2 English speakers. Regarding L1 speakers, communication typically centered around study of a subject of personal interest to the participant. Michelle recalled having Bible study meetings through Zoom with L1 speakers. Hannah mentioned Zoom and Facetime lessons with an American piano teacher in California. She also stated that she exchanged text messages and phone calls with an American neighbor who she would previously visit for coffee before the lockdown occurred. She expressed to this neighbor some of her anxieties concerning differing American and Chinese social norms and the possibility of saying something rude, and the neighbor provided reassurance that she was aware of these differences without judgment. Participants also engaged in conversations with peers who were studying English, most of whom were met in ESL programs. Michelle used WeChat for video calls with a peer she had met in the United States but who had since moved back to China. Gloria mentioned another woman either from Mexico or Brazil (she could not remember which) with whom she shared common interests of clothing design and gardening. The women would share pictures of their designs and gardens as well as general updates about their lives through the messaging app WhatsApp. Similarly, Klara recounted exchanging texts and phone calls with a Spanish-speaking classmate who would ask for Russian language instruction as well as exchanging small talk. Just as participants demonstrated engagement in communities of practice for explicit language learning, they engaged more frequently in communities of practice for implicit learning through

conversations on a broader array of topics based on personal interests. These examples document learners using implicit language practice to exchange ideas and receive and provide feedback on their use of language and intelligibility. All instances of communities of practice for implicit learning occurred among learners of different L1 backgrounds.

Table 7: *Implicit, Input + Output Activities* provides a visual summary of the activities mentioned in this subsection.

Table 7

Implicit, Input + Output Activities

App/Program	Description of Activity	Users
YouTube	Leaving comments on videos to converse with other viewers on topics of interest.	Klara
Online shopping reviews	Leaving reviews about quality of purchased products and provide feedback to shop owners.	Hannah
Zoom/FaceTime	Video chatting platforms used to attend classes related to personal interests.	Michelle Hannah
WeChat/WhatsApp	Online text/phone call platforms used to converse with peers.	Michelle Gloria
Phone calls/texts	Communication with native and non-native speakers with feedback provided.	Hannah Klara

Where Explicit and Implicit Learning Overlap

Implicit and explicit learning activities do not exist exclusively as isolated categories; rather, they present on a spectrum of sorts as participants demonstrated differing levels of awareness and intention across activities. Translation is mentioned several times in the previous sections and was noticed continuously throughout the data, characterizing it as the main phenomenon through which learners bridged the gap between implicit and explicit activities. Translation occurred both as a central learning method in already explicit activities and as a tool to transform otherwise implicit leisure activities—such as reading books or watching videos purely for entertainment—into explicit activities through students’ demonstrated efforts to

construct meaning of new, incomprehensible terms. Several different methods of translation were mentioned by participants either as a primary facilitator of learning or to provide L1 vocabulary support.

A common example of translation as the primary method of learning was seen in Holly's, Michelle's, and Hannah's uses of subtitles in either the L1, L2, or both simultaneously. When asked about how she spent her time during the quarantine, Holly stated that she enjoyed watching Korean variety shows featuring English subtitles to achieve language exposure during an L1 leisure activity with translation making input more comprehensible. Michelle used the reverse strategy of watching English programs accompanied by both Korean and English subtitles through an app downloaded from Google (as YouTube only displays subtitles in one language at a time). These examples demonstrate otherwise implicit activities supplemented with explicit learning through translation, as participants stated that they watched these programs for leisure but included subtitles to simultaneously activate language acquisition. Michelle also reported using a Korean grocery store website that featured product names in both English and Korean, presenting a translation-labeled picture vocabulary list of sorts so that English input occurred during a necessary activity: shopping for food. As previously mentioned under Category II EI activities, Hannah used repeated readings of Mandarin and English translations of a novel as a method of language practice through translation. Thus, participants demonstrate incorporating explicit English learning through translation into implicit leisure activities conducted in both their L1 or L2. By doing so, they were able to directly compare the syntax and vocabulary differences between the two languages. Holly and Hannah had the added benefits of concurrent practice of reading and listening skills in addition to access to instant translation of

incomprehensible L2 terms through simultaneous input in the form of subtitles in both L1 and L2.

When translation was not the primary method of learning, it was used as a supplemental tool to enhance comprehension of input by highlighting and defining specific terms at the user's discretion. The most common method of supplemental translation involved use of Google Translate to target unknown vocabulary—rather than the entirety of the input as was the purpose of subtitles—encountered during either explicit or implicit language activities. Michelle, Holly, and Hannah all provided examples of their use of Google's search engine or its Translate feature to translate new vocabulary to or from their L1. When asked how she created meaning from incomprehensible input, Michelle stated, "I just Google some, for example, [translation] meanings, I just type '[translation] meaning' and they show, it's not specific website." Here she refers to her use of the general search engine function of Google which compiles a number of results from different translation websites so that the user can view multiple sources at once, usually with the more frequented results (such as Google Translate) featured at the top of the list. Holly responded to the same question by stating, "Sometimes I really want to understand how to say if they are saying...stop and then and subtitles I write on my paper and I use Google Translate...When I find new words I use Google Translate and Korean web portal dictionary." Referring to her reading of FOX and BBC news, Hannah stated, "This good for me, sometime have many English word I didn't understand so I use Google Translate...I copy then use Google Translate...I first read this news, then I find some word I don't understand so I copy all the thing then Google then I translating, I understand some word." As opposed to the previously mentioned practice of translating an entire text or audio sequence for direct comparison between languages, participants in these examples described receiving the majority of input in their L2,

using translation only for support by highlighting incomprehensible terms and then translating.

Aside from Google Translate, participants used translation features from other programs to achieve the same form of L1-assisted learning. Holly mentioned her use of Naver's English dictionary feature as well as the translation option on Voice of America's website, a news source that she frequently used for English practice by listening to audio readings while following along with visual text. Zoey also stated that the Instagram pages and YouTube videos that she viewed sometimes featured translations from Farsi to English as a method of teaching common expressions or enhancing comprehension. These examples demonstrate participants using translations from alternative programs (as opposed to the more popular Google and Google Translate) in their L1 to explicitly build vocabulary.

Types of Output

It is important to make a distinction between the types of output produced in both explicit and implicit activities. Not all instances of output occurred in a social setting where the participant was speaking or writing to another person or community and therefore did not result in the learner receiving feedback or engaging in a conversation. Some output, such as YouTube or social media comments, did occur in social contexts but were solitary productions of language on the part of the participant that did not receive any additional interaction from other users and were therefore not considered interactive. Additionally, students would sometimes practice speaking aloud to themselves or writing notes for memorization. While this was a form of practice in handwriting and pronunciation if nothing else, it did not result in feedback of any sort; so, while the student was practicing language production to some extent, there was no direct feedback on the accuracy of their production except through consultation of the instructional material. However, communicative output resulted in varying degrees of feedback, either

minimally—through brief acknowledgement of/engagement with comments and reviews—or through lengthier conversations in which the other speaker’s next message was directly dependent on their comprehension of the participant’s production, which in turn was based on their comprehension of the message they had previously received from the other speaker. Additionally, types and degrees of feedback could be varied based on the L1 of the other speaker; L1 English conversational partners could provide feedback by modeling fluent speech, while conversation with L2 speakers provided practice with different accents (Zoey stated that she had a difficult time understanding some of her peers of Spanish or Asian language backgrounds). Conversation with L2 English speakers also provided language practice without a common L1 to use for clarification when L2 conversation was incomprehensible.

Task-Based Input

An interesting phenomenon was noticed at the crux of implicit input only and implicit input + output activities in which communicative output was not produced but learner comprehension of input was still demonstrated through performance of a task based on input. This will be referred to as task-based input, and occurred in two types of examples, the first of which is participants’ online shopping activities. There was noticed a trend of online shopping by participants either for necessities such as food and groceries that could not be bought in-person while in quarantine or for novelties such as clothing and home décor. This occurred through store pages either translated from the participants’ L1 or including both L1 and English labeling (Michelle and Holly described Asian grocery markets such as Saywee which featured familiar Korean products), or through shops labeled entirely in English such as local grocery stores and American clothing stores. Online purchases include Doordash and other restaurant delivery sites which were mentioned in interviews. The significance of participants’ online shopping habits is

due the necessity of accuracy in achieving a goal; ordering the correct products and ensuring payment and delivery required accurate comprehension of input.

The second and more significant set of examples of task-based input can be seen in participants' physical performance of a task based on instructions. There were a number of detailed examples provided by participants in this category, many of which were related to hobbies they participated in while in quarantine. Holly mentioned instructional painting videos that taught techniques and color mixing. Hannah discussed watching cooking instructional videos. Hannah and Klara both mentioned piano lessons viewed on YouTube, and Klara also recounted videos demonstrating home exercises and yoga routines. In each of these examples, participants explained that they would perform the action step-by-step along with the video, meaning that a certain level of accuracy in comprehension had to be maintained to achieve the desired outcome. Unlike the example provided by Hannah of teacher-directed piano lessons through Zoom, video tutorials such as these did not provide the option of immediate differentiated feedback based on the learner's performance. Visual demonstrations aided in the acquisition of new or incomprehensible input in the videos, as did the act of performing a Total Physical Response based on the actions being taught. This is yet another example of learners simultaneously acquiring language while gaining knowledge in an unrelated study of personal interest.

In addition to the four types of language activities through which data was coded (EI, EIO, II, and IIO), three other trends were recognized through analysis of participants' digital language learning activities conducted during the initial lockdown of the pandemic in March 2020. These include the use of translation as a bridge between implicit and explicit learning, different types of output and their impact on acquisition, and task-based input as a method of

measuring comprehension. The following discussion section will contextualize this data within the theoretical framework and relevant literature.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

This study set out to determine the types of self-directed digital language learning activities that multilingual learners engaged in during the coronavirus quarantine period of March 2020 and how they relate to implicit and explicit learning. Additionally, it hoped to categorize these activities based on their use of input and output and discover trends in the types of language learning tasks accomplished. The basis of SDL is the learner's responsibility to determine the skills they wish to sharpen, design or find appropriate activities that address these needs, and then monitor and assess their own progress. Participants not only demonstrated a willingness to self-direct learning through digital language learning apps and internet tutorials but took the task a step further by constructing their own activities based on personal interests, many of which involved implicit language practice through leisure learning activities conducted in English. Although participants were not questioned on their motivations for learning English and the period of study was too short to determine the longevity of their willingness to self-direct learning (as outlined by Lai et al., 2021; Zhang & Perez-Paredes, 2019), the voluntary nature of the program from which participants were recruited (with no grades or other incentives for attending) implies strong motivation on the part of the learners in both formal and informal educational pursuits.

One of the most interesting of these trends was seen in participants' use of translation as both an explicit learning activity and a supplement to implicit activities. Discussion of translation identifies relationships between the data and theoretical framework of this study and characterizes implicit and explicit learning as occurring on a spectrum rather than a dichotomy as it was characterized by Gotseva (2016). Analysis of language learners' use of Google Translate has characterized it—and translation apps in general—as successful language learning tools

when applied to vocabulary building, short phrase instruction, and pronunciation practice (van Lieshout & Cardoso, 2022). Although participants in this study did not utilize the app for the latter two purposes, there were several examples in the data of it and other translation apps' use to relate incomprehensible L2 input to L1 knowledge; several other studies have been published on the effectiveness of Google Translate and similar translation machines in enabling beginner learners to write in their L2 based on scaffolding from L1 through vocabulary building and editing and its use as a supplementary tool in more explicit formal instruction (Garcia & Pena, 2011; Bahri & Sepora, 2016). Situated within the framework of Krashen's (1985) second language acquisition theory, these findings corroborate the Input and Acquisition-Learning hypotheses through participants' use of translation as a vocabulary building tool. Structures at the next stage of learning ($i + 1$) were made comprehensible through use of translation, allowing students to progress through the natural order of learned forms. Translation was used as both an explicit vocabulary building activity—as seen in Hannah's use of comparing Mandarin and English translations of a book--and as a supplement to implicit activities when a learner encountered a new term; during implicit *acquisition* of language through exposure in meaningful contexts (leisure activities conducted in English), certain items were explicitly *learned* to support acquisition by making input more comprehensible; this is similar to Bahri & Sepora's (2016) documentation of translation tools increasing reading comprehension. The latter method also corroborates the Monitor hypothesis in that awareness and analysis of specific forms was used as a monitor for implicitly acquired knowledge. Although Gotseva (2016) characterized the relationship between implicit and explicit learning/knowledge as dichotomous—taking place and being stored under separate neurocognitive structures—evidence provided in this study situates

these two types of learning as a spectrum, with varying amounts of either explicit or implicit learning presenting in different learning activities.

Although each participant demonstrated some type of self-directed learning through explicit activities-- either through reliance on pre-structured activities or construction of their own learning activities—the majority of the data collected in this study was coded under the ‘implicit, input only’ section, which saw the largest number of activities and featured examples from all six participants. These activities mainly focused on participants’ engagement in leisure activities that involved viewing content specific to their personal interests and hobbies, and while input was in English, little to no attention was given to specific forms or the process of acquiring language. Implicit learning occurring through leisure activities also saw the greatest occurrence of output involving feedback. While only two examples are present of learners constructing genuine independent communities of practice without guidance in explicit, input + output activities of either Category I or II, eight examples are present in implicit, input + output activities in which participants engaged with both L1 and L2 English speakers. This distinction likely occurs because of the freedom participants felt in choosing the context and type of output being produced; much of the conversation focused on areas of expertise or personal interest, in which participants would likely have the highest levels of comprehension in L2 and background knowledge in L1. Indeed, one of the general motivating strategies for production of speech is the presence of contexts that are “stimulating, enjoyable, and relevant” to learners and in which they feel most confident communicating even with limited L2 knowledge (Guilloteaux & Dornyei, 2008, pg. 58). Similarly, Lao (2020) bases a language learner’s willingness to communicate on their level of self-confidence and comfortability in the communicative context (pg. 39-40). Thus, participants’ increased rates of communication through implicit, leisure-based activities were

precipitated by their levels of confidence in the subject at hand due to its importance to the individual.

The lack of guidance present in output produced in implicit activities compared to output produced in explicit learning activities and the higher-level nature of some of the input received (note Klara's discussions of psychiatry in English) in addition to the higher frequency of output occurring through implicit learning activities further supports the notion that implicit communicative activities resulted in higher comprehension. This is corroborated by Krashen's (1985) Affective Filter hypothesis, which asserts a negative correlation between rates of comprehension and levels of learners' inhibitions due to either the learning situation/context or heightened risk of failure. As opposed to classroom contexts in which learners assert little control over *who* they are speaking to and *what* they are speaking about and increased pressure is put on performance whether for grades or advancement, engagement in digital leisure activities allowed participants to choose their conversation partners and the context in which their communications took place. Learners can choose to associate with the target community in which they feel most comfortable (Krashen, 1985, pg. 4) and are provided more agency in choosing the setting and context of communication (pg. 12-13).

The third point of the definition of self-directed learning requires monitoring and assessment of the learner's progress, and while the data collected in this study reveals little or no metacognitive practice of assessment by participants, progress was demonstrated through one of the most notable phenomena present in the data; task performance based on comprehension of input. Although no communicative output was produced by the learner during this type of activity, their completion of the task and the quality of the resulting product or action depended heavily on accurate comprehension of input. Klara's successful performance of home exercises

for maximal effect and minimal injury depended on her understanding of the instructions provided in the videos she watched, as did Hannah's cooking and Holly's painting techniques. Visuals presented by the videos aided in comprehension and may have contributed to acquisition where new or incomprehensible terms appeared, making task-based input activities both a measure of comprehension and a learning tool (as outlined by Drotner's (2009) descriptions of meaning-making technology and the use of multiple modalities to compound understanding (pg. 16-17).

The findings of this study present several pedagogical implications despite their taking place outside of the realm of formal instruction; the most notable of these is the importance of implementing self-directed learning even within instructor-centered contexts. The study presented here suggests that adult learners are willing to learn without the presence of a structured curriculum or grading/objective system and even during a time when methods of learning were limited. However, it is clear from the data that learners displayed preferences for certain learning methods and aversions to others (recall participants' reluctance to communicate on social media but willingness to do so through private messaging/video platforms). Participants addressed these preferences through their variation of activities that catered to their individual learning styles. Thus, incorporating multiple learning methods or allowing students to participate through a preferred modality of learning may increase student engagement. This also demonstrates the importance of allowing students to choose from a variety of learning topics, including those with which they have personal and/or L1 experience. As demonstrated by the comparison between explicit and implicit communicative performance, students are willing to learn and perform more when given agency over the context of their learning and their target communities of practice. Participants demonstrated a broader range of activities in subjects of

personal interest to them, and this implies a lowered affective filter when given the opportunity to communicate on topics that were familiar with in either the L1 or L2. The increasing use of digital and mobile learning activities both inside and outside of the classroom makes it easier for instructors to incorporate individual choices concerning context and modality among a single class. This makes the instructor's role one of guidance rather than direction as they lead students to success through their individual strengths and interests rather than implementing a singular mode of learning through which all students are pressed.

Participants' use of task-based input supports claims on the efficacy of task-based language teaching (TBLT) involving students' completion of language performance tasks relevant to their daily lives, which participants demonstrated capability in. One of the primary purposes of TBLT is to "provide a context for *negotiating* and *comprehending* the meaning of language provided in task input, or used by a partner performing the same task," (Robinson, 2011). In the absence of a physical partner, participants in this study augmented their task-based activities with technology as a source of input and instruction. Technology-enhanced TBLT is an important consideration for classroom practice as more opportunities are presented for students to differentiate activity based on contexts that are meaningful to the individual (Thomas & Reinders, 2012). Additionally, technology can act as both a guide and a tool in instructing learners on the task at hand and providing scaffolding to expand language comprehension as demonstrated by participants' engagements with task-based instruction.

Further pedagogical implications address use of translation in classroom practice. The use of translation as a bridge between L1 and L2 and a monitor of implicitly acquired knowledge contradicts traditional monolingual teaching ideologies that prohibit the use of L1 and translation in the classroom. Cummins (2010) outlines three of the assumptions surrounding this ideology—

that instruction should be entirely in the L2, that translation has no place in the classroom, and that languages should be held as completely separate constructs—and negates them based on the lack of evidence supporting their instructional efficacy. Concerning the second point, Cummins cites a study by Manyak (2004) in which he observed the use of translation in a grade school classroom with speakers of varying skill sets. Based on his observations, Manyak (2004) concludes that use of translation as a learning technique promotes acquisition, biliteracy, and identities of competence (pg. 14-15). The findings of this study corroborate Manyak's claims on the use of translation in the classroom by characterizing it as a successful scaffolding technique that promotes L2 acquisition based on previous L1 knowledge while simultaneously encouraging continued practice of the L1 (recall Hannah's translation and comparison of a novel in Mandarin and English, and Holly's use of subtitles in Korean and English).

Discussion of incorporating L1 knowledge in the classroom and basing curriculum on students' person strengths and interests leads to further discussion on the need for culturally responsive rhetoric and instruction. Recall that the Cambly app's website prides itself on its focus on 'natural' native-like speech and van Lieshout & Cardoso's (2022) description of their Google Translate study's effectiveness in producing speech with low accentedness. Lack of accent and native-like speech have traditionally and problematically been heralded as indicators of proficiency, with speakers across all backgrounds being held to the standard of a single linguistic/ethnic group. However, this proposed hierarchy of production brings into question what it means exactly to be a 'native speaker.' Faez (2011) discusses the *native speaker fallacy* and problematizes the use of the native/non-native dichotomy in instruction as it unfairly stereotypes L1 English speakers as experts and English learners as inherently deficient with little consideration for their actual proficiencies. Furthermore, this dichotomy perpetuates linguistic

imperialism by setting the dialects of ‘inner-circle’ English speaking countries as the standard and leaving little room for the many other forms that have emerged due to globalism. This also limits the identities of multilingual speakers who integrate their languages into a singular repertoire and personhood rather than viewing them as separate constructs. English does not belong to a singular ethnic or linguistic group, and its global varieties are all legitimate forms of communication with none being more or less valid than any other. Faez (2011) proposes a series of six definitions used to more accurately categorize English speakers that take into account their specific global forms and other languages without promoting a deficit viewpoint (such as *second-generation speaker*, *English- or L1-dominant*, and *English-variety speaker*).

There are several instances presented in the study of participants articulating the problematic rhetoric of the native/non-native dichotomy and accent discrimination in their responses. For example, Zoey mentioned her reluctance to communicate with peers of certain linguistic backgrounds because their accents present difficulty in comprehension. Gloria also mentioned apprehensions to communicating with American neighbors for fear of committing a social faux pas that could be perceived as rudeness. These examples are likely reproductions of the stereotypes prevalent in our society and in language classrooms concerning accentedness and cultural hierarchies. The pressure to reduce foreign accents in English production, specifically in the United States, sends a message to students that their way of speaking is ‘wrong’ or something to be ashamed of, and reinforces racial inequalities and stereotypes (Ramjattan, 2019). This further highlights the responsibility of language instructors to battle these ideologies by incorporating culturally relevant material into the classroom and encouraging communication among students of different linguistic backgrounds. As language classrooms become increasingly diverse, it benefits students to learn English through its multiple varieties rather than

attempting to assimilate innumerable varieties into a singular dialect or accent. This can be achieved by incorporating culturally relevant material into diverse language classrooms to expose students to different beliefs and familiarize them with accents they will likely encounter outside of the classroom while also validating their own identities. Culturally relevant material also increases students' engagement and comprehension, as demonstrated by Holly's and Zoey's preferences for L2 lessons presented through comparisons to their own cultures and L1. This further increases students' cultural competence and ability to communicate and in turn be understood in a diverse society. Thus, culturally responsive material in the classroom serves the dual purpose of increasing engagement among the students whose cultures it represents, while familiarizing students of other backgrounds with the linguistic /cultural norms of that group.

This study documents and analyzes the self-directed learning habits of adult language learners through implicit and explicit modes of digital learning during the onset of the coronavirus pandemic in 2020 when schools were temporarily closed and mandatory quarantines were in place in the United States. Further research to add to these findings may focus on examination of attitudes towards digital learning and the individual extrinsic and intrinsic motivations of language learners to self-direct learning. The effects of online learning compared to in-person classes and the long-term effects of the pandemic on learner motivation and language acquisition are also possible topics to be examined in longitudinal studies.

APPENDIX

Interview Questions/Prompts:

1. During the pandemic, how did you spend your time while quarantined?
2. How did you keep in touch with friends/family/others during quarantine?
3. Tell me about the types of things you like to do online.
4. Tell me about the people you communicated with online.
5. Tell me about the topics and activities you spent most of your time online discussing/doing.
6. Describe how you continued your English learning during the pandemic.
7. Why did you choose to participate in these activities?

Suggested follow-up questions:

1. What online activities did you participate in?
2. What websites/apps/programs do you use to communicate?
3. Did you communicate mostly in English or your native language?
4. Did you communicate with L1 English speakers or other L2 English speakers? If other L2 English speakers, what were their proficiency levels?
5. What was the purpose of your communication?
6. What language skills did you practice? (reading, writing, speaking, listening)

REFERENCES

- Agum, A. N. C., Naidas, M. S., Dorado, L. B., Bhattraï, J. L. T., Lagajino, E. L. V., & Mergal, V. C. (2021). Filipino college students' perspectives on the challenges, coping strategies, and benefits of self-directed language learning in the new normal. *Human Behavior, Development and Society*, 22(2), 72-83.
- Bahri, H. & Sepora, T. (2016). Google Translate as a supplementary tool for learning Malay: A case study at Universiti Sains Malaysia. *Advances in Language and Literary Studies*, 7. 10.7575/aiac.all.v.7n.3p.161
- Beeson, S. A. (1996). The effect of writing after reading on college nursing students' factual knowledge and synthesis of knowledge. *Journal of Nursing Education*, 35(6), 258-63.
- Biemiller, A., & Meichenbaum, D. (2017). The nature and nurture of the self-directed learner. *The Evolution of Cognitive Behavior Therapy*, 89-98.
- Breiseth, L. (2021). How COVID-19 Is impacting ELL and immigrant families. *Colorín Colorado*. <https://www.colorincolorado.org/covid-ell>
- Cummins, J. (2007). Rethinking monolingual instructional strategies in multilingual classrooms. *Canadian Journal of Applied Linguistics*, 10(2), 221-240. <https://journals.lib.unb.ca/index.php/CJAL/article/view/19743>
- Drotner, K., Jensen, H. S., & Schrøder, K. (2009). *Informal learning and digital media*. Cambridge Scholars Publishing.
- Ellis, R., Loewen, S., Elder, C., Reinders, H., Erlam, R., & Philp, J. (2009). *Implicit and explicit knowledge in second language learning, testing and teaching*. Bristol, Blue Ridge Summit: Multilingual Matters. <https://doi.org/10.21832/9781847691767>
- Faez, Farahnaz. (2011). Are you a native speaker of English? Moving beyond a simplistic dichotomy. *Critical Inquiry in Language Studies*, 8, 378-99. 10.1080/15427587.2011.615708
- Garcia, I., & Pena, M. I. (2011). Machine translation-assisted language learning: Writing for beginners. *Computer Assisted Language Learning*, 24(5), 471-87. <http://dx.doi.org/10.1080/09588221.2011.582687>
- Gibbons, M. (2003). *The self-directed learning handbook: Challenging adolescent students to excel*. John Wiley & Sons.
- Gotseva, M. (2016). The dichotomy implicit/explicit learning and knowledge in the context of second language learning. *Orbis Linguarum*, 14(1).
- Guilloteaux, M. J., & Dörnyei, Z. (2008). Motivating language learners: A classroom-oriented

- investigation of the effects of motivational strategies on student motivation. *TESOL Quarterly*, 42(1), 55–77. <https://doi.org/10.2307/40264425>
- Hartshorn, K. J., & McMurry, B.L. (2020). The effects of the COVID-19 pandemic on ESL learners and TESOL practitioners in the United States. *International Journal of TESOL Studies*, 2(2), 140-56.
link.gale.com/apps/doc/A633468249/AONE?u=anon~dda784a8&sid=googleScholar&xid=90aaf4a6
- Houle, C. O. (1961). *The inquiring mind*. Madison: University of Wisconsin Press.
- Hsu, L. (2012). English as a foreign language learners' perception of mobile assisted language learning: A cross-national study. *Computer Assisted Language Learning*, 26(3), 197–213. <https://doi.org/10.1080/09588221.2011.649485>
- Ito, M., Horst, H., Bittanti, M., Boyd, D., Herr-Stephenson, B., Lange, P. G., Pascoe, C. J., & Robinson, L. (2008). *Living and learning with new media: Summary of findings from the digital youth project*. MacArthur Foundation.
<https://files.eric.ed.gov/fulltext/ED536072.pdf>
- Kantar Group and Affiliates. (2020). *Covid-19 barometer: Consumer attitudes, media habits and expectations*. Kantar. <https://www.kantar.com/inspiration/coronavirus/covid-19-barometer-consumer-attitudes-media-habits-and-expectations>
- Krashen, S. (1985). *The input hypothesis: Issues and implications*. New York: Longman.
- Kohli, P. (2022). IELTS 2022 (academic & general test): Exam dates, registration, fees, eligibility, syllabus, preparation tips, results. *Shiksha Study Abroad*.
<https://studyabroad.shiksha.com/exams/ielts#:~:text=IELTS%20is%20an%20English%20language,Zealand%2C%20USA%2C%20and%20Canada>
- Lai, Y., Saab, N., & Admiraal, W. (2022). University students' use of mobile technology in self-directed language learning: Using the integrative model of behavior prediction. *Computers and Education*, 179. 104413–<https://doi.org/10.1016/j.compedu.2021.104413>
- Lao, T. L. (2020). The relationship between ESL learners' motivation, willingness to communicate, perceived competence, and frequency of L2 use. *Studies in Applied Linguistics and TESOL*.
<https://journals.library.columbia.edu/index.php/SALT/article/view/7475>
- Lee, W., Reeve, J., Xue, Y., & Xiong, J. (2012). Neural differences between intrinsic reasons for doing versus extrinsic reasons for doing: An fMRI study. *Neuroscience research*, 73(1), 68–72. <https://doi.org/10.1016/j.neures.2012.02.010>
- Manoharan, S. R., Hua, T. K., & Sultan, F. M. (2022). A comparison of online learning challenges between young learners and adult learners in ESL classes during the COVID-19

- pandemic: A critical review. *Theory and Practice in Language Studies*, 12(1), 28–35.
<https://doi.org/10.17507/tpls.1201.04>
- Manyak, P.C. (2004). “What did she say?” Translation in a primary-grade English immersion class. *Multicultural Perspectives*, 6, 12–18.
- Masalimova, A., Ryazanova, E., Tararina, L., Sokolova, E., Ikrennikova, Y., Efimushkina, S., & Shulga, T. (2021). Distance learning hybrid format for university students in post-pandemic perspective: Collaborative technologies aspect. *Cypriot Journal of Educational Sciences*, 16, 389-95. 10.18844/cjes.v16i1.5536
- Ramjattan, V. (2019). Racializing the problem of and solution to foreign accent in business. *Applied Linguistics Review*. <https://doi.org/10.1515/applirev-2019-0058>
- Reber, A.S. (1976). Implicit learning of synthetic languages: The role of instructional set. *Journal of Experimental Psychology: Human Learning and Memory*, 2, 88–94.
- Roberson, D. (2005). Leisure and learning: An investigation of older adults and self-learning. *Leisure/Loisir*, 29, 203-37. 10.1080/14927713.2005.9651330
- Robinson, P. (2011). Task-based language learning: A review of Issues. *Academia*, 61, 1–36.
<https://doi.org/10.1111/j.1467-9922.2011.00641.x>
- Smith, J. A. (2005). Semi-structured interviewing and qualitative analysis. In J. A. Smith, Harré Rom, & L. van Langenhove (Eds.), *Rethinking methods in psychology*, 9–26.
- Stebbins, R.A. (2007). *Serious leisure: A perspective of our time*. New Brunswick, NJ: Transaction Publishers.
- van Woezik, T. E. T., Koksma, J. J-J., Reuzel, R. P. B., Jaarsma, D. C., & van der Wilt, G. J. (2021). There is more than 'I' in self-directed learning: An exploration of self-directed learning in teams of undergraduate students. *Medical Teacher*, 1-10. <https://doi.org/10.1080/0142159X.2021.1885637>
- Timothy, T., Seng Chee, T., Chwee Beng, L., Ching Sing, C., Joyce Hwee Ling, K., Wen Li, C., & Horn Mun, C. (2010). The self-directed learning with technology scale (SDLTS) for young students: An initial development and validation. *Computers & Education*, 55(4), 1764–71. <https://doi.org/10.1016/j.compedu.2010.08.001>
- Tranquillo, J., & Stecker, M. (2016). Using intrinsic and extrinsic motivation in continuing professional education. *Surgical Neurology International*. <https://pubmed.ncbi.nlm.nih.gov/27114856/>
- United Nations. (2020). Adverse consequences of school closures. *Unesco*. <https://en.unesco.org/covid19/educationresponse/consequences/>

- United Nations. (2021). Education: From disruption to recovery. *Unesco*.
<https://en.unesco.org/covid19/educationresponse#durationschoolclosures>
- U.S. Census Bureau. (2020). San Antonio city, Texas. *Quickfacts*.
<https://www.census.gov/quickfacts/fact/table/sanantoniocitytexas/POP060210>
- van Lieshout, C., & Cardoso, W. (2022). Google Translate as a tool for self-directed language learning. *Language Learning & Technology*, 26(1), 1–19.
<http://hdl.handle.net/10125/73460>
- Verbitsky, A. A. (2019). Digital learning: Challenges, risks, and prospects. *Homo Cyberus*, 1(6). http://journal.homocyberus.ru/Verbitskiy_AA_1_2019
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.). Cambridge, MA: Harvard University Press.
- Wang, D. (2012). Self-directed English language learning through watching English television drama in China. *Changing English*, 19, 339-48.
 10.1080/1358684X.2012.704584
- Wang, Y., & Christiansen, M. S. (2019). An investigation of Chinese older adults' self-directed English learning experience using mobile apps. *International Journal of Computer-Assisted Language Learning and Teaching*, 9. 10.4018/IJCALLT.2019100104
- Zhang, D., & Pérez-Paredes, P. (2019). Chinese postgraduate EFL learners' self-directed use of mobile English learning resources. *Computer Assisted Language Learning*.
 10.1080/09588221.2019.1662455
- Zouro, K. (2012). On the attractiveness of social media for language learning: a look at the state of the art. *Alsic*. 10.4000/alsic.2436

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