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ABSTRACT

Language-learning apps are becoming prominent tools for self-learners. This article investigates whether librarians and employees of academic libraries have used them and whether the content of these language-learning apps supports foreign language knowledge needed to fulfill library-related tasks. The research is based on a survey sent to librarians and employees of the University Libraries of the University of Colorado Boulder (UCB), two professional library organizations, and randomly selected employees of 74 university libraries around the United States. The results reveal that librarians and employees of academic libraries have used language-learning apps. However, there is an unmet need for language-learning apps that cover broader content including reading comprehension and other foreign language skills suitable for academic library work.

INTRODUCTION

The age of social media and the advances in mobile technologies have changed the manner in which we connect, socialize, and learn. As humans are curious and adaptive beings, the moment mobile technologies provided apps to learn a foreign language, it was natural that self-regulated learners would immerse themselves in them. Language-learning apps' practical nature, as an informal educational tool, may attract self-learners such as librarians and employees of academic libraries to utilize this technology to advance foreign language knowledge usable in the workplace.

The academic library employs a wide spectrum of specialists, from employees offering research consultations, reference help, and instruction, to others specialized in cataloging, archival, acquisition, and user experience, among others. Regardless of the library work, employees utilizing a foreign language possess an appealing skill, as knowing a foreign language heightens the desirability of employees and strengthens their job performance. In many instances, librarians and employees of academic libraries may be required to have reading knowledge of a foreign language. Therefore, for these employees, acquiring knowledge of a foreign language might be paramount to deliver optimal job performance.

This study aims to answer the following questions: 1) Are librarians and employees of academic libraries using language-learning apps to support foreign language needs in their workplace? and 2) Are language-learning apps addressing the needs of librarians and employees of academic libraries?

For purposes of this article, mobile language apps are those accessed through a website, and apps downloaded onto portable smartphones, tablets, desktops, and laptops.

Kathia Ibacache (kathia.ibacache@colorado.edu) is the Romance Languages Librarian at the University of Colorado Boulder.

BACKGROUND

Mobile-assisted language learning (MALL) has a user-centered essence that resonates with users in the age of social media. Librarians and employees of academic libraries needing a foreign language to fulfill work responsibilities are a target group that can benefit from using language-learning apps. These apps provide a multifaceted capability that offers time and space flexibility and adaptability that facilitates the changeable environment favored by self-learners. Kukulska-Hulme states that it is customary to have access to learning resources through mobile devices.[1] In the case of those individuals working in academic libraries, language-learning apps may present an opportunity to pursue a foreign language accommodating their self-learning style, time availability, space, and choice of device.

Considering the features of language-learning apps, some have a more personal quality where the device interacts with one user while other apps emulate social media characteristics connecting a wide array of users. For instance, users learning a language through the Hello Talk app can communicate with native speakers all around the world. Through this app, language learners can send voice notes, corrections to faulty grammar, and use the built-in translator feature. Therefore, language-learning apps may not only provide self-learners a vehicle to communicate remotely, but also to interact using basic conversational skills in a given language. In the case of those working in academic libraries, this human connectedness among users may not be as relevant as the interactive nature of the device, its mobility, the convenience of the virtual learning, and the flexibility of the mobile technology. Kukulska-Hulme notes that the ubiquity of mobile learning is affecting the manner in which one learns.[2]

Although there is abundant literature referring to mobile language technologies and their usefulness in students' language learning in different school levels including higher education, scholarship regarding the use of language-learning apps by professionals is scarce.[3] Broadbent refers to self-regulated learners as those who plan their learning through goals and activities.[4] The author concurs that to engage in organized language learning through a language-learning app, one should have some level of organizational learning or as a minimum enough motivation to engage in self-learning.

In this context, some scholars believe that the level of self-management of learning will determine the level of learning success.[5] Moreover, learners who possess significant personal learning initiative (PLI) have the foundation to accomplish learning outcomes and overcome difficulties.[6] PLI may be one factor affecting learners' motivation to learn a language in a virtual environment and away from the formal classroom setting. This learning initiative may play a significant role in the learning process, as it may influence the level of engagement and positive learning outcome.

In terms of learning outcomes, language software developers may also play a role by adapting and broadening content based on learning styles and considering the elements that would provide a meaningful user experience. In this sense, Bachore conveys that there is a need to address language-learning styles when using mobile devices.[7] Bachore also notes that as interest in mobile language learning increases, so does the different manners in which mobile devices are used to implement language learning and instruction.[8]

Similarly, Louhab refers to context dimensions as the parameters in mobile learning that consider learners' individuality in terms of where the learning takes place, individual personal qualities and

learning needs, and the features of their mobile device.[9] Bradley also suggests that learning is part of a dialogue between the learners and their devices as part of a sociocultural context where thinking and learning occur.[10] In addition. Bradley infers that users are considered when creating learning activities and when improving them.[11]

For these reasons, some researchers address the need to focus on accessibility and developing content designed for different types of users, including differently abled learners.[12] Furthermore, adaptation, according to the learner's style, may be considered as a pivotal quality of language-learning apps as software developers try to break the gap between formal instruction and a learner-oriented mobile learning platform. Undoubtedly, the technological gap, which includes the cost of the device, interactivity, screen size, and input capabilities, among others, matter when centering on implementing language learning supported by mobile technologies.

However, learning style is only one aspect in the equation. A learner's need is another. For example: the needs of a learner who seeks to acquire familiarity with a foreign language because of an upcoming vacation may be substantially distinct from the needs of professionals such as academic librarians, who may need reading, writing, or even speaking proficiency in a given language. A user-centered approach in language-learning software design may advance the adequacy of these apps connecting them with a much wider set of learning needs. When referring to mobile apps for language learning, Godwin-Jones asserts that while the capability of devices is relevant, software development is paramount to the educational process.[13]

Therefore, language-learning software developers may consider creating learning activities that target basic foreign language-learning needs and more tailored ones suitable for people who require different content. Kukulska-Hulme refers to "design for learning" as creating structured activities for language learning.[14] Although language-learning apps appear to rely on learning activities built on basic foreign language learning needs, these apps should desire to rely more on learners' evaluative insights to advance software development that meets the specific needs of learners. Although mobile technologies as a general concept will continue to evolve, its mobile nature will likely continue focusing on user experience satisfying those who prefer the freedom of informal learning.

METHODOLOGY

Instrument
The author used a 26-question Qualtrics survey approved by the Institutional Review Board at the University of Colorado Boulder (UCB). The survey was open for eight weeks and received 199 total responses. However, the number of responses to each question varied depending on the question. The data collected was both quantitative and qualitative in nature, seeking to capture respondents' perspectives and measurable data that could be used for statistics. The survey consisted of twelve general questions for all respondents that reported working in an academic library, then branched into either nine questions for respondents who had used a language-learning app, and five questions for those who had not. The respondents answered via text fields, standard single and multiple-choice questions, and a single answer Likert matrix table. Qualtrics provided a statistical report, which the author used to analyze the data and create the figures.

Participants

The survey was distributed through an email to librarians and employees of UCB's University Libraries. The author also identified 74 university libraries in the United States from a list of members of the Association of Research Libraries, and distributed the survey via email to ten randomly selected library employees from each of these libraries.[15] The recipients included catalogers, subject specialists, archivists, and others working in metadata, acquisition, reference, and circulation. In addition, the survey was also distributed to the listserv of two library organizations: The Seminar on the Acquisition of Latin American Library Materials (SALALM) and Reforma, the National Association to Promote Library and Information Services to Latinos and the Spanish Speaking. These organizations were chosen due to their connection with foreign languages.

RESULTS

Use of Foreign Language at Work

Of the respondents, 172 identified as employees of academic libraries (66 percent). Of these, a significant percentage reported using a foreign language in their library work. The respondents belonged to different generational groups. However, most of the respondents were in the age groups of 30-39 and 40-49 years old. The respondents performed a variety of duties within the categories presented.

Due to incomplete survey results, varying numbers of responses were collected for each question. Therefore, of 110 respondents, 82 identified their gender as female. In addition, of 105 respondents, 62 percent reported being subject specialists, 56 worked in reference, 54 percent identified as instruction librarians, 30 percent worked in cataloging and metadata, 30 percent worked in acquisition, 10 percent worked in circulation, 2 percent worked in archiving, and 23 percent reported doing "other" types of library work.
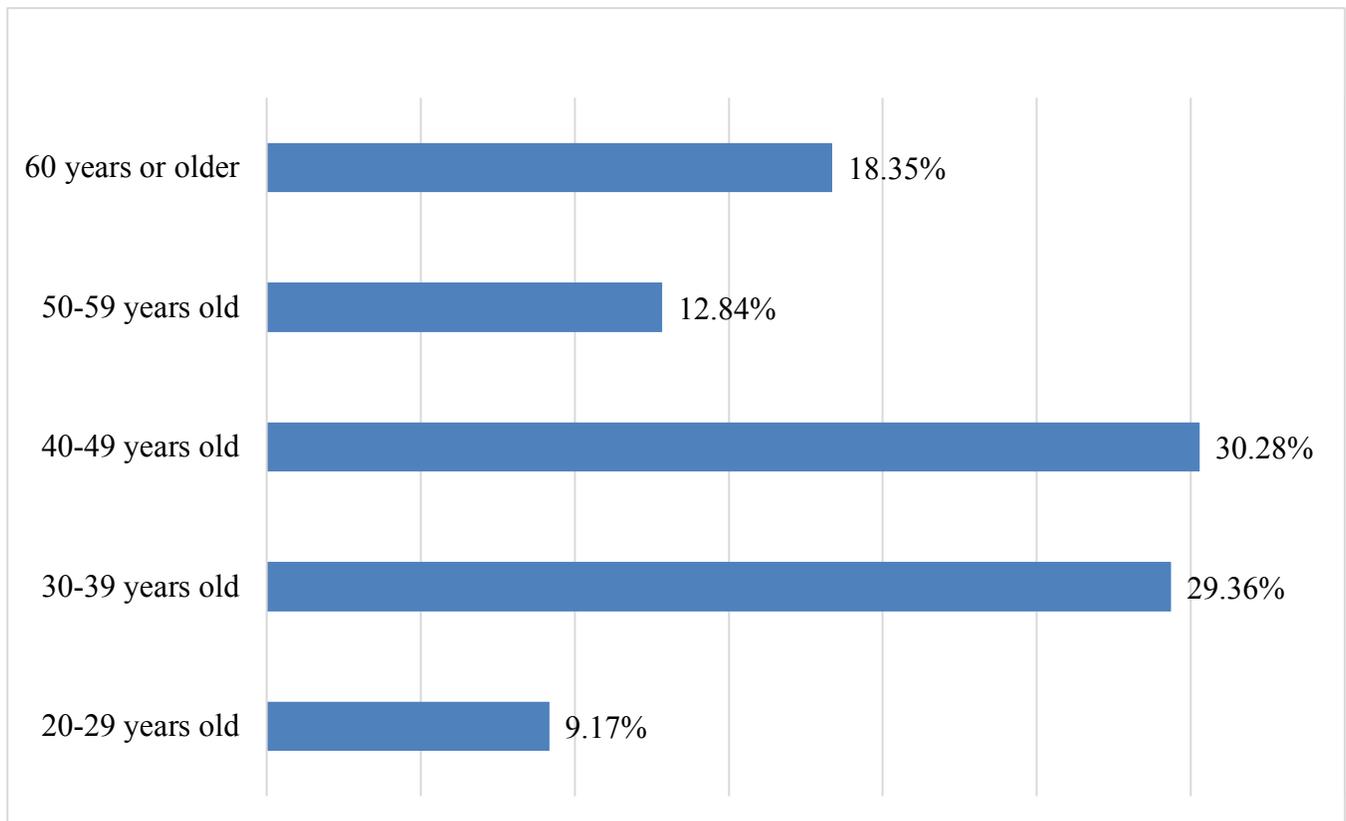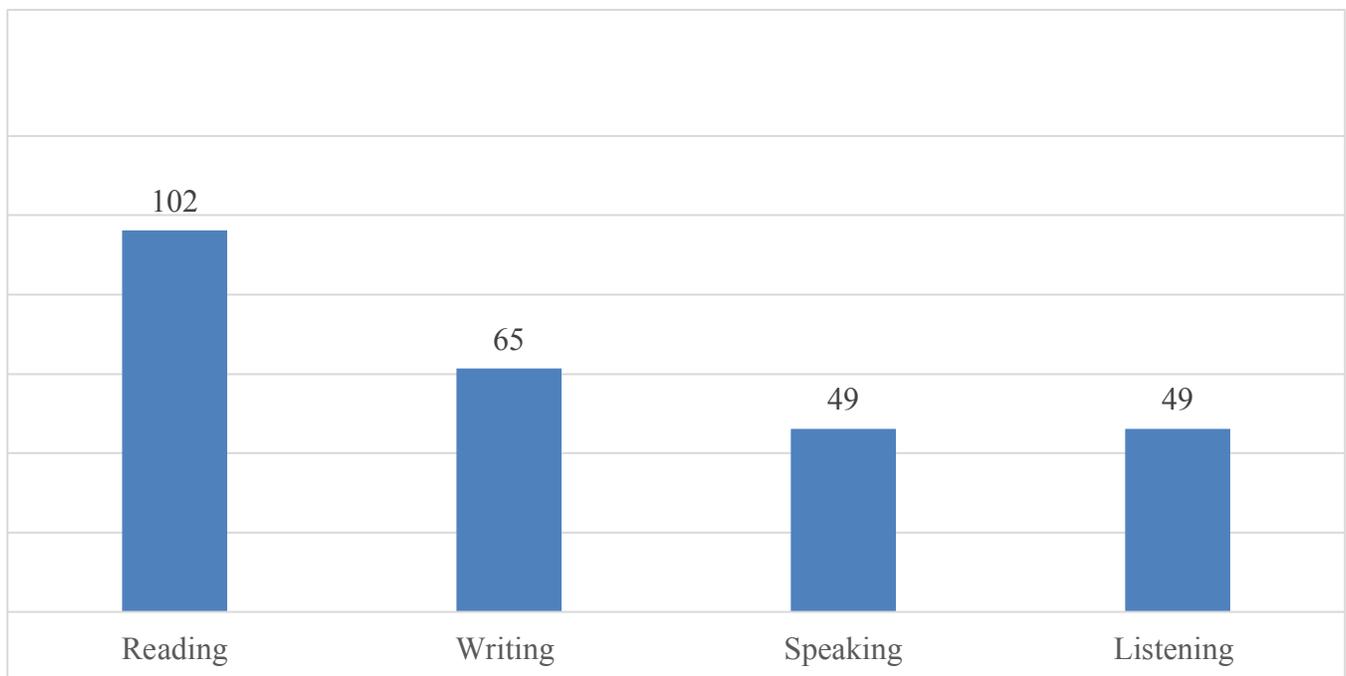
Figure 1. Age of respondents (n=109).

Figure 2. Foreign language skills respondents used at work (multiple responses allowed, n-106).

As shown in figure 2, respondents used different foreign language skills at work. However, reading was used with significantly more frequency. When asked, "How often do you use a foreign language at work?" 38 respondents out of 105 used it daily, 29 used it weekly, and 21 used it monthly. In addition, table 1 shows that a large percentage of respondents noted that knowing a foreign language helped them with collection development tasks and reference services. However, the respondents who chose "other" stated in a text field that knowing a foreign language helped them with translation tasks, building management, creating a welcoming environment, attending foreign guests, communicating with vendors, researching, processing, and having a broader perspective of the world emphasizing empathy. These respondents also expressed that knowing a foreign language helped them to work with materials in other languages, digital humanities projects, and to offer library tours and outreach to the community.

Type of Librarian Work	Expressed benefit (%)
Collection development	61.5
Reference	57.6
Communication	56.7
Instruction	41.3
Cataloging and metadata	41.3
Acquisition	40.3
Other	19.2

Table 1. Types of librarian work benefiting from knowledge of a foreign language (multiple responses allowed, n=104).
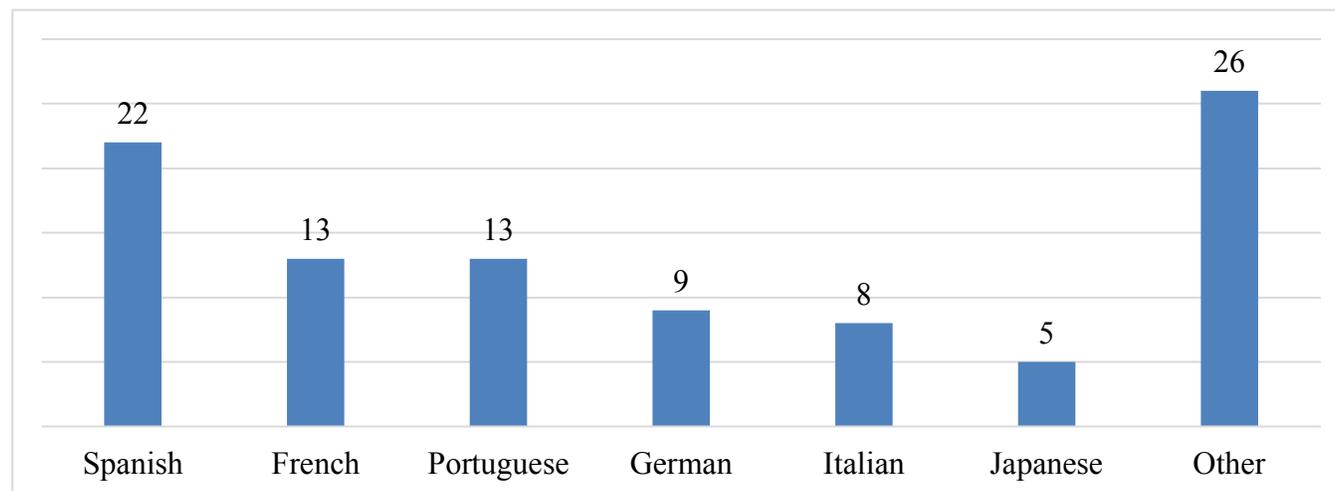

Figure 3. Languages respondents studied using an app (multiple responses allowed, n=51).

As shown in figure 3, Spanish was the most prominent language studied. Thirteen out of 51 respondents studied French and Portuguese. Additionally, respondents stated in the text field "other" that they have also used these apps to study English, Mandarin, Arabic, Malay, Hebrew, Swahili, Korean, Navajo, Turkish, Russian, Greek, Polish, Welsh, Indonesian, Thai, and Tamil. Regardless, apps were not the sole means for language acquisition. Some respondents specified using books, news articles, Pimsleur CDs, television shows, internet radio, conversations with family members and native speakers, formal instruction, websites, dictionaries, online tutorials, audio tapes, online laboratories, flashcards, podcasts, movies, and YouTube videos.

Over a third of 49 respondents used a language-learning app for 30 hours or more, and less than a quarter used it between 11-30 hours. Concerning the device preferred to access the apps, most of the respondents utilized a smartphone (63.27 percent), followed by a laptop (16.33 percent), and a tablet (14.29 percent). Table 2 shows the elements of language-leaning apps that 48 respondents found more satisfactory. They selected "learning in own time and space" as the most desired element followed by "vocabulary" and "translation exercises." Participants were less captivated by "pronunciation capability" (29.1 percent) and "dictionary function" (16.6 percent).

Element of a Language-learning App	Percentage finding Satisfactory (%)
Learning in own time and space	64.5
Vocabulary	56.2
Translation exercises	56.2
Making mistakes without feeling embarrassed	54.1
Responsive touch screen	52
Self-testing	52
Reading and writing exercises	43.7
Game-like features	37.5
Voice recognition capability	37.5
Comfortable text entry	37.5
Grammar and verb conjugation exercises	35.4
Pronunciation capability	29.1
Dictionary function	16.6

Table 2. Most satisfactory aspects with language-learning apps (multiple responses allowed, n=48).
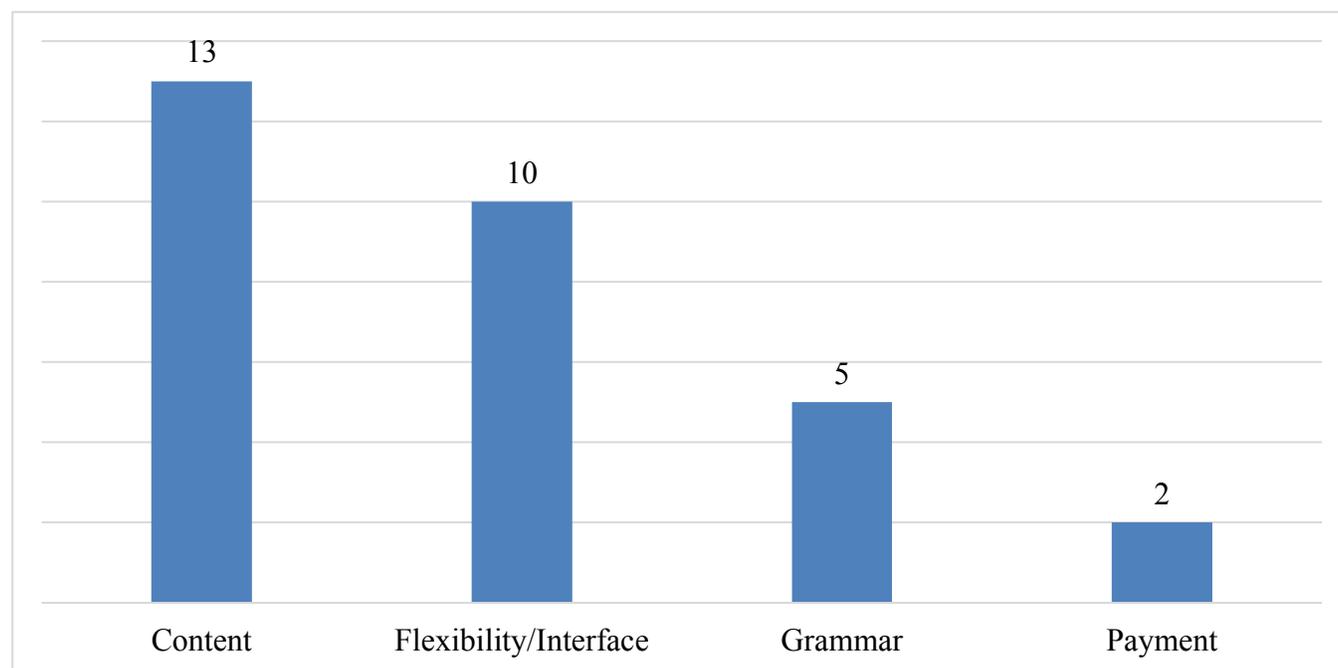

Figure 4. Most unsatisfactory elements of language-learning apps (n=30).

Conversely, 30 respondents described unsatisfactory elements on the survey. These elements were grouped into the categories shown in figure 4. The elements were: payment restrictions, lack of grammatical explanations, monocentric content focused on travel, vocabulary-centric content

(although opinions were varied on this issue), and poor interface. Respondents also mentioned a lack of flexibility that inhibited learners from reviewing earlier lessons or moving forward as desired, unfriendly interfaces, and limited scope. Other respondents alluded to technical issues with keyword diacritical, non-intuitive software and repetitive exercises. While these elements relate to the language apps themselves, one respondent mentioned missing human interaction and another reported the lack of a system to prompt learners to be accountable for their own learning process.
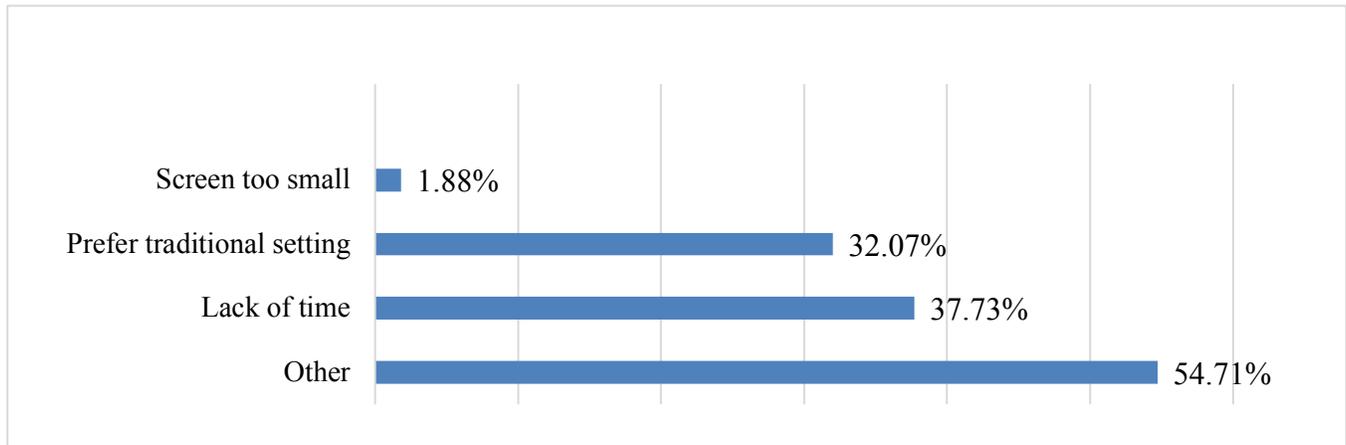

Figure 5. Reasons participants had not used a language-learning app (multiple responses allowed, n=53).

Figure 5 shows that time restriction (i.e., availability of time to use the app) was the most prevalent reason why respondents had not used a language-learning app. However, a larger percentage of respondents answered "other" to expand on the reason they had not tried this technology. The explanations provided included: missing competent content for work; already having sufficient proficiency; preferring books, dictionaries, google translate, and podcasts; lacking interest; and having different priorities. Similarly, when asked whether they would use a language-learning app if given an opportunity, a large percentage of 52 respondents answered "maybe" (65.38 percent). However, when 51 respondents answered the question: "What elements facilitated your language learning?," 66.6 percent responded they preferred having an instructor, 54.9 percent liked being part of a classroom, and 41.1 percent liked language activities with classmates.

DISCUSSION

Library Employee Use of Language-learning Apps
The data revealed that a large number of respondents used a foreign language in their library work, reporting that reading and writing were the most needed skills. However, only about half of the respondents had used a language-learning app. Therefore, there appears to be interest in language-learning apps, but use is not widespread at this time. Overall, respondents felt language-learning apps did not offer a curriculum that supported foreign language enhancement for the workplace, especially the academic library one. This factor may be one reason why respondents stopped using the apps and why this technology was not utilized more extensively.

Interestingly, the majority of the respondents were in their thirties and forties. One may surmise that young Millennials in their twenties would be more inclined to use language-learning apps. However, the data showed a slight lead by respondents in their forties. This information may corroborate the author's inference that generational distinctions among employees of academic libraries do not limit the ability to seek and even prefer learning another language through apps. Moreover, a Pew Research Center study showed that older generations than Millennials have welcomed technology and even Gen Xers had a 10 percent lead on the ownership of tablets over Millennials.[16]

Referring to the device used to interact with the language app, most respondents preferred a smartphone. Only a smaller fraction of respondents preferred a tablet, laptop, or desktop. This data may attest to the movability feature of language-learning apps preferred by self-learners and the notion that language learning may happen outside the classroom setting. However, while smartphones provide ubiquity and a sense of independence, so can tablets. Therefore, what is it about smartphones that ignites preference from a user experience perspective? Is it their ability to make calls, portability, fast processors, Wi-Fi signal, or cellular connectivity that makes a difference? Since tablets can also be considered portable, and their larger screen and web surfing capabilities are desirable assets, is it the "when and where" that determines the device?

While not all respondents reported using an app to learn a language, those who did expressed satisfaction with learning in their own space and time and with translation exercises. Nevertheless, it is captivating that few respondents deemed important the ability of the software to help learners with the phonetic aspect of the language. This diminished interest in pronunciation may be connected with the type of language learning needed in the academic library profession. As respondents indicated, language-learning apps tend to focus on conversational skills rather than reading and text comprehension. In addition to those respondents who used an app to learn a new language, one respondent reported reinforcing skills in a language already acquired.

A compelling matter to consider is the frequency with which respondents utilize a foreign language in their work. About a third of the respondents used a foreign language at work on a daily basis, and approximately a quarter used it weekly. This finding reveals that foreign language plays a significant role in academic library work. Since the respondents fulfilled different responsibilities at their library work, one may deduce that foreign language is utilized in a variety of settings other than strictly desk tasks. In fact, as stated before, respondents reported using foreign language for multiple tasks including communicating with vendors and foreign guests as well as providing a welcoming environment, among others.

Even though 59 respondents stated that knowing a foreign language helped them with communication, respondents appeared to be more concerned with reading comprehension and vocabulary. It is likely reading comprehension was ranked high in the level of importance since library jobs that require foreign language knowledge tend to utilize reading comprehension skills widely. Nonetheless, the author wonders whether subject specialists utilize more skills related to listening and communication in a foreign language, especially those librarians who provide instruction. Therefore, it is curious that they did not prioritize these skills. Perhaps this topic could be the subject for future research. Notwithstanding these results, language-learning apps appear to center on content that improves listening and basic communication instead of reading

comprehension. Therefore, the question remains as to whether mobile language apps have enough capabilities to provide a relevant learning experience to librarians and staff working in academic libraries.

Are Language-Learning Apps Responding to the Language Needs of Employees Working in Academic Libraries?

The survey results indicate that language-learning apps are not sufficiently meeting respondents' foreign language needs. Qualitative data showed that there may be several elements affecting the compatibility of language-learning apps with the needs of employees working in academic libraries. However, the findings were not conclusive due to the limited number of responses. When respondents were asked to identify the unsatisfactory elements in these apps, 65.9 percent of 47 respondents found an issue with language-learning apps, but 23 percent of those respondents answered "none."

According to respondents, the main problems with apps were the lack of content and scope that was suitable for employees of academic libraries, flexibility, and grammar. Perhaps mobile language-app developers speculate that some learners still use a formal classroom setting for foreign language acquisition, and therefore leave more advanced curriculum for that setting. It is also possible that developers deem more dominant a market that centers on travel and basic conversation; this may explain why these apps do not address foreign language needs at the professional level. Finally, these academic library employees appear to perceive that there is a need for these apps to explore and offer a curriculum and learning activities that benefit those seeking deeper knowledge of a language.

CONCLUSION

Mobile language learning has changed the approach to language acquisition. Its mobility, portability, and ubiquity have established a manner of instruction that provides a sense of freedom and self-management that suits self-learners. Moreover, as app technology has progressed, features have been added to devices that facilitate a more meaningful user experience with language-learning apps. Employees of academic libraries that have used foreign language-learning apps are cognizant of language-learning activities that support their foreign language needs for work such as reading comprehension and vocabulary. However, language-learning apps appear to market conversational needs, providing exercises that focus on travel more than lessons that center on reading comprehension and deeper areas of language knowledge. This indicates a lack of language-learning content that would be more appropriate for those working in academic libraries.

Finally, academic library employees who require a foreign language in their work are a target group that may benefit from mobile language learning. Presently, this target group feels language-learning apps are too basic to cover professional, broader needs. Therefore, as language-learning app developers consider service to wider groups of people, it would be beneficial for these apps to expand their lesson structure and content to address the needs of academic library professionals.

ENDNOTES

[1] Agnes Kukulska-Hulme, "Will Mobile Learning Change Language Learning?" *Recall* 21, no. 2 (2009): 157, https://doi.org/10.1017/S0958344009000202.

[2] Ibid, 158.

[3] See Florence Martin and Jeffrey Ertzberger, "Here and Now Mobile Learning: An experimental Study on the use of Mobile Technology," *Computers & Education* 68, (2013): 76-85, https://doi.org/10.1016/j.compedu.2013.04.021; Houston Heflin, Jennifer Shewmaker, and Jessica Nguyen, "Impact of Mobile Technology on Student Attitudes, Engagement, and Learning," *Computers & Education* 107, (2017): 91-99, https://doi.org/10.1016/j.compedu.2017.01.006; Yoon Jung Kim, "The Effects of Mobile-Assisted Language Learning (MALL) on Korean College Students' English-Listening Performance and English-Listening Anxiety," *Studies in Linguistics*, no. 48 (2018): 277-98, https://doi.org/10.15242/HEAIG.H1217424; Jack Burston, "The Reality of Mall: Still on the Fringes," *CALICO Journal* 31, no. 1 (2014): 103-25, https://www.jstor.org/stable/calicojournal.31.1.103.

[4] Jaclyn Broadbent, "Comparing Online and Blended Learner's Self-Regulated Learning Strategies and Academic Performance," *Internet and Higher Education* 33 (2017): 24, https://doi.org/10.1016/j.iheduc.2017.01.004.

[5] Rui-Ting Huang and Chung-Long Yu, "Exploring the Impact of Self-Management of Learning and Personal Learning Initiative on Mobile Language Learning: A Moderated Mediation Model," *Australian Journal of Education Technology* 35, no. 3 (2019): 118, https://doi.org/10.14742/ajet.4188.

[6] Ibid, 121.

[7] Mebratu Mulato Bachore, "Language through Mobile Technologies: An Opportunity for Language Learners and Teachers," *Journal of Education and Practice* 6, no. 31 (2015): 51, https://files.eric.ed.gov/fulltext/EJ1083417.pdf.

[8] Ibid, 50.

[9] Fatima Ezzahraa Louhab, Ayoub Bahnasse, and Mohamed Talea, "Considering Mobile Device Constraints and Context-Awareness in Adaptive Mobile Learning for Flipped Classroom," *Education and Information Technologies* 23, no. 6 (2018): 2608, https://doi.org/10.1007/s10639-018-9733-3.

[10] Linda Bradley, "The Mobile Language Learner: Use of Technology in Language Learning," *Journal of Universal Computer Science* 21, no. 10 (2015): 1270, http://jucs.org/jucs_21_10/the_mobile_language_learner/jucs_21_10_1269_1282_bradley.pdf.

[11] Ibid.

[12] Tanya Elias, "Universal Instructional Design Principles for Mobile Learning," *The International Review of Research in Open and Distance Learning* 12, no. 2 (2011): 149, https://doi.org/10.19173/irrodl.v12i2.965.

[13] Robert Godwin-Jones, "Emerging Technologies: Mobile Apps for Language Learning," *Language Learning & Technology* 15, no. 2 (2011): 3, http://dx.doi.org/10125/44244.

[14] Kukulska, 158.

[15] "Membership: List of ARL Members," *Association of Research Libraries*, accessed April 5, 2019, https://www.arl.org/membership/list-of-arl-members.

[16] Jingjing Jiang, "Millenials Stand Out for their Technology Use," *Pew Research Center* (2018), https://www.pewresearch.org/fact-tank/2018/05/02/millennials-stand-out-for-their-technology-use-but-older-generations-also-embrace-digital-life/.