## Coseres <br> Language Association Journal <br> New York State Association of Foreign Language Teachers, Inc.

| Vol. 68 | 2019 | No. 1 |
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# Language Association Journal 

A publication of the
New York State Association of Foreign Language Teachers
2400 Main Street Buffalo, New York 14214
716.836.3130 www.nysaflt.org

Founded 1917

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## Letter from the Editor



Dear Colleagues,
Spring is beginning to sprout, I promise! I have seen daffodils and dandelions emerging, even with the forecast for this weekend calling for potential snow in Rochester. It is a wonderful time of the year in our language learning environments, with students able to communicate and engage with language and culture in ways they never dreamed possible a few short months ago. It is also a time to think about the ways you want to engage in your own professional growth over the summer months. I encourage you to check out NYSAFLT's webinar offerings, this journal edition, and our summer institute as ways to refresh, recharge, and ignite new ideas for the coming school year!

In this edition, we focus on advocacy efforts as well as on the impact of technology on foreign language learning. We begin with an in-depth guide to strengthen foreign language advocacy efforts that gives us new interdisciplinary strategies to use in our fight for access to foreign language learning for all students. Then we explore pragmatic language instruction both online and on-ground through the lens of the NCSSFL-ACTFL Can-Do Statements for Intercultural Communication. This work offers methods to facilitate pragmatic language instruction in novice language courses and demonstrates that both online and on-ground participants can benefit from these types of activities. Our last article for this edition provides an in-depth analysis of the use of Duolingo, a Mobile-Assisted Language Learning (MALL) program, on the perceptions of language acquisition of novice language learners through a learner-centered and autonomous language experience.

Wishing you and yours a wonderful spring and restful summer,
Mary Caitlin

## Call for Papers

The Language Association Journal is the official peer-reviewed journal of the New York State Association of Foreign Language Teachers (NYSAFLT). The audience for this journal includes world language educators at all levels, teacher educators, administrators, and others who are interested in world language education. To address the diverse interests, focuses, and needs of this audience, each issue of the Language Association Journal allows for three submission types-scholarly articles, reports, and teacher-to-teacher articles-across multiple categories that are organized by key words, including, but not limited to: advocacy, assessment, culture, curriculum, FLES, instruction, issues in the profession, language development, literacy development, methods, policy, professional development, teacher preparation, technology. While previously the journal was thematic, we now welcome submissions from a range of topics for each edition. The Language Association Journal is published two times per year.

## Submission Guidelines

- Publication Status
- Your manuscript must not be previously published or under consideration for publication elsewhere.
- Language
- Write your manuscript in English.
- You may include examples written in languages other than English. Italicize these and include the English translation.
- Content
- Your manuscript may be a scholarly article, a report, or a teacher-to-teacher article.
- Graphic content such as tables, charts, and photographs, should enhance your written content.
- Key word categories: advocacy, assessment, culture, curriculum, FLES, instruction, issues in the profession, language development, literacy development, methods, policy, professional development, teacher preparation, technology.
- Present content that is appropriate for the audience of the Language Association Journal; that is accurate, timely and relevant; that extends or deepens what is currently known on the topic; that represents innovation or new ways of thinking; and that bridges theory and practice.
- Length
- Limit scholarly articles to no more than 8,000 words.
- Limit reports to no more than 5,000 words.
- Limit teacher-to-teacher articles to no more than 3,000 words.
- Writing and Style
- Write in active voice and with language that can be understood by all audiences of this journal. Define terms that may be unfamiliar to readers.
- Include only and all works cited in the reference section.
- Use style guidelines outlined in the Publication Manual of the American Psychological Association, $6^{\text {th }}$ edition (2009). See http://www.apastyle.org for style support.
- Replace all references that would reveal your identity in the manuscript with generic terms such as Author X or School X.
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- When all reviews are returned to the Editor from the Editorial Board, the Editor will make the final decision regarding the manuscript's publication and will notify you about the submission's status.
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# Foreign Language Advocacy: Empowering Foreign Language Educators 

Kathleen Stein-Smith


#### Abstract

Foreign language skills and cultural knowledge are more important than ever, both locally and globally, yet relatively few US students study another language. The opportunity to learn a foreign language has declined at all levels. Foreign language advocacy, including both the defense and promotion of foreign language learning, is needed to safeguard and to expand the opportunity for all our students to learn another language. Advocacy is a broad umbrella, with room for many voices, but it is of the utmost importance for all of us to advocate for foreign languages as individuals, and through our state, regional, and national professional associations, so that every student has access to this personally and professionally essential skill. This work seeks to empower foreign language educators with an interdisciplinary approach to foreign language advocacy.


Keywords: Advocacy, World Languages, Foreign Languages, Interdisciplinary Strategies
Within the context of a globalized world and an increasingly multilingual and multicultural US, the status of foreign language study in the US is a cause for concern, and professional associations at the national, regional, and state level, as well as dedicated individuals, are involved in advocacy efforts. However, given the challenges facing foreign language learning, it is important that we work together. Advocacy and promoting language learning in the public conversation are for all foreign language educators, supporters, and stakeholders, including parents and communities. Advocacy needs to be considered as a broad umbrella, including those participating actively in foreign language advocacy through their professional associations at all levels. However, advocacy is also personal, and those interested in a particular language, a particular level, a particular methodology, or a particular school or institution can play an important role as well.

In order to make the case for foreign languages, it is necessary to highlight the role of foreign language skills and cultural knowledge in critical thinking, problem-solving, decisionmaking, and creativity (Kharkhurin, 2012). Advocacy efforts need to be smart and strategic, using practitioner insights as well as scholarly peer-reviewed writing and research, adapting the best theories and practices used in marketing and promotion in the corporate world to promote the benefits of foreign languages and the need for foreign language skills, as well as social and online media and professional engagement. It is necessary that we look to other areas, including the business and political sectors, for strategies and tactics that would complement and strengthen those being currently used. Foreign language educators and advocates could deploy a wider range of strategies and tactics, which could have a positive impact on the success of the advocacy initiative or campaign.

Therefore, this work will outline interdisciplinary measures adopted from other fields in order to empower foreign language advocates with methods and strategies to implement. Foreign
language advocacy needs to go beyond communicating the benefits of foreign language skills to the public. It needs to confront the reasons why Americans tend to be reluctant language learners and why institutions, communities, and individuals may oppose foreign language learning and propose cutbacks to foreign language programs, and even their elimination. If foreign language educators can effectively strengthen their advocacy efforts, develop partnerships with parents and communities, and confront threats to foreign languages through effective negotiation, this will lead the way to increasing accessibility to foreign languages from the earliest grade levels, which will not only empower foreign language educators, it will, most importantly, empower students through foreign language proficiency and cultural knowledge. Gladwell (2000) coined the phrase "tipping point." I would argue that foreign language education in the US has reached a tipping point and the need for advocacy has become urgent.

## The Status of Languages in the US

In this section, we are going to look at the current state of language study in the US. While language diversity is thriving in the US, foreign language study may not be to the same extent. While over 60 million individuals in the US speak a language other than English in the home (Ryan, 2013), fewer than $20 \%$ of $\mathrm{K}-12$ students currently study a foreign language (ACIE, 2017), and only $7.5 \%$ of college and university students are enrolled in a course in a language other than English (Modern Language Association [MLA], 2018). A Gallup survey has found that only one in four Americans felt able to converse in a language other than English (McComb, 2001). Compared to Europe, where students generally learn at least one foreign language from the earliest grades (Devlin, 2015; 2018), and where over $50 \%$ of adults report the ability to converse in at least one additional language (European Commission, 2012), it is not difficult to realize that the US lags far behind. At the same time, demand for bilingual workers has doubled since 2010 (New American Economy, 2017).
...foreign language education in the US has reached a tipping point and the need for advocacy has become urgent.

The current conversation on languages and language learning in American began with the publication of the report of the President's Commission, Strength through Wisdom in 1979, followed closely by the publication of The Tongue-Tied American, by Senator Paul Simon in 1980. During the years that followed, research reports and government hearings clearly demonstrated the need for foreign language skills among Americans, and yet, foreign language requirements for graduation exist in fewer than half of the states, and these are often part of a larger general requirement or are encouraged rather than required (Education Commission of the States, 2007). Only about half (50.7\%) of colleges and universities have a foreign language requirement for graduation (MLA, 2012).

The 2007 MLA report, Foreign Languages and Higher Education: New Structures for a Changed World, described and defined the major issues facing foreign languages in higher education and provided specific pragmatic recommendations for strengthening foreign language programs in colleges and universities. While it was found to be generally known among foreign language educators by 2017, its recommendations had not been fully implemented (Redden, 2017) and additionally has been followed by a decline in foreign language programs that Johnson (2019) described as "stunning."

Questions of communication and understanding across cultures have equally been of concern beyond the community of foreign language educators. Appiah (2006) wrote that
"depending on the circumstances, conversations across boundaries can be delightful, or just vexing: what they mainly are, though, is inevitable" (p. xxi). Similarly. Stearns (2008) suggested that our "widespread hostility to seriously learning foreign languages has become legendary" (p. 8). The 2017 report America's Languages found that elementary and middle school foreign language programs continue to decline - elementary schools from $31 \%$ to $25 \%$; only $15 \%$ of public schools; and middle schools from 75\% to 58\%, from 1997-2008 (American Academy of Arts and Sciences, 2017). The MLA Enrollment Survey has found that the continued decline at the college and university level cannot be considered a "blip," but is rather part of an ongoing trend, citing a decline of $15.3 \%$ between 2009 and 2016 (MLA, 2018).

Clearly, the decline in FL enrollment in both P-12 and post-secondary institutions, coupled with our reduced ability to converse in multiple languages as a nation are concerning given the current trends in globalization. Considering the decline in the number of foreign language programs at the elementary and middle school level and the decline in enrollment at the college and university level, the need for foreign language advocacy is clearly critical and urgent.

## Interdisciplinary Strategies for Advocacy

An effective campaign for foreign languages needs to utilize all the methods and tools that are within the budget of the campaign and the skill set of the foreign language advocates and needs to take an interdisciplinary theoretical approach to this problem, utilizing the best in theory and practice from across the disciplines, including business and politics. These theories and their related strategies, tactics, and best practices include, but are not limited to, change management, disruptive innovation, psychology of persuasion, social marketing, blue ocean strategy, and design thinking. In addition, concepts like grassroots campaigns and lobbying can be adapted to become an integral part of the campaign for foreign languages. The good news is that online and social media campaigns can be developed and carried out with little monetary cost.

The theory of change management, as described and defined by Kotter (2008) in an 8 -step process, begins with creating "a sense of urgency." As foreign language learning is both challenged and on the decline, this sense of urgency is especially important. Thus, it is the responsibility of all of us who are foreign language advocates, supporters, and stakeholders to communicate this urgent, yet currently un-met need for foreign language skills and for the opportunity for all our students for continued foreign language study-an issue of equity.

One particular challenge associated with this idea is that it is sometimes difficult to realize that there is urgency in advocating for something that is part of our daily professional life and part of curriculum for so long. Disruptive innovation (Christensen, 1997) occurs when a new product moves from the lowest to the highest levels of a group, eventually displacing the product traditionally present at the higher levels. In terms of foreign language learning, it is possible to envision the development of proficiency and even fluency among those who begin foreign language learning at an early age, either through a traditional foreign language program or through an immersion program. This might transform college and university foreign language curriculum both through their arrival in college with relatively advanced skills, as well as by their varied interests which would drive pre-professional foreign language courses in language service areas and beyond.

The psychology of persuasion (Cialdini, 2006) includes reciprocity, commitment/consistency, social proof, authority, liking, and scarcity as six principles of persuasion. In terms of foreign language advocacy, we will focus on "liking." It is necessary to consider that potential learners and their families are most likely to be persuaded of the value of foreign language learning by people they like and who are liked themselves, highlighting the
importance of success stories from students, alumni, and parents as important, but sometimes under-utilized advocacy allies. Once a learner has opted for foreign language study, effective use of the target language, authentic resources, and technology can increase engagement, motivation, and "liking," furthering support for continued study.

Social marketing (Kotler \& Lee, 2015), refers to the use of those marketing strategies and tactics used successfully in business, for the greater good-in this case, foreign language learning. A foreign language advocate, using a social marketing approach, would think in terms of public relations and marketing, using the available tools, skills, and funding, to make known the benefits of foreign language skills, and of the particular program, through the local press or student newspaper, and through social media, reaching out to specific community or institutional groups in the terms that would be most likely to be effective with each particular group.

Blue ocean strategy (Chan Kim \& Mauborgne, 2015), uses the blue ocean metaphor to describe new markets free from competition, as contrasted with the red ocean of competition by many competitors. In the context of foreign language learning, the blue ocean would refer to students and families who have not previously considered foreign language learning as a goal, including, but not limited to, local communities in which foreign languages may not previously have been offered at the elementary level or in an immersion setting. For example, the development in NYC public schools of immersion programs, now offering a dozen languages, is an example of a successful of grassroots, community-based campaign, expanding the potential market for language learning in additional communities and languages. Other examples include the growth of

The most important aspect of advocacy is the commitment of each individual advocate or supporter. French language immersion in Louisiana and across the country.

Design thinking (Lockwood \& Papke, 2017), with its emphasis on problem-solving, could encourage foreign language educators and advocates to directly address the challenges and threats to foreign languages more systematically than often occurs in conversations about the benefits of foreign language learning and skills. An example of a challenge of threat to foreign language learning could be a single administrator or decision-maker, and a design thinking approach would encourage the development of a strategy to address complaints or opposition on an individual basis rather than merely discussing the benefits and advantages of foreign languages.

Foreign language advocacy is a broad umbrella, with room for many voices -- including disciplines, grade levels, as well as specific languages and methodologies. The success of any advocacy campaign relies on each and every individual foreign language advocate. Due to practical considerations, including the very real constraints on their time, advocates need to be empowered with effective advocacy strategies to get the best return on their time and effort. Everybody's effort, no matter how limited their time or resources, counts. For this reason, it is also important to note time is of critical importance, not only in staving off potential threats to programs, but in recognition of the fact that the foreign language advocate is typically a busy teacher with limited time and energy to be devoted to advocacy. Therefore, foreign language advocacy needs to be evidence-based and data-driven in order to achieve the maximum return on the investment of time. While this is true of educational advocacy generally, it is of critical importance in foreign language advocacy where resources and time are limited. Effective use of time and resources is essential in order to achieve the optimal result. Change management,
psychology of persuasion, social marketing, blue ocean strategy, and disruptive innovation are just a few of the techniques available. The most important aspect of advocacy is the commitment of each individual advocate or supporter.

## Beyond the Benefits of Foreign Languages:

## An Interdisciplinary Approach to Foreign Language Advocacy

Advocacy often focuses on communicating the benefits of foreign language study and skills as well as supporting programs that may be at risk. The reasons for learning another language include personal (cultural and cognitive) and professional benefits as well as the ability to effectively navigate and communicate with communities where another language is prevalent both globally and locally. Regular use of another language has also been shown to stave off the onset of dementia (Bhattacharjee, 2012), and foreign language skills are associated with reasoning, problem-solving, and creativity.

While these benefits are, indeed, an important part of advocacy, in order to effectively address the US foreign language deficit, advocates need to adopt a problem-solving approach as well, focusing on individuals choosing not to learn another language, on those suggesting alternatives to foreign language requirements, and for those proposing and implementing foreign language program cutbacks and the elimination of entire programs. These individuals might have had a less-than-successful experience learning another language. They might hold the erroneous beliefs that speaking English is always enough, that the time and cost of foreign language learning is too great, and that foreign languages area readily available to all students, so program cuts would not be a detriment overall.

It is only in determining such reason(s) for language learning reluctance that strategies can be developed to specifically address them. For example, a local administrator who had a less-thanoptimal language learning experience as a student may need to learn how today's foreign language classes are different than those she or he had experienced. Other reasons for language learning reluctance may be the time, opportunity cost, and financial cost involved, with priorities possibly elsewhere, or lack of knowledge of other cultures and languages, leading to lack of interest in learning about them.

All these reasons and many more require an interdisciplinary approach of foreign language advocacy, beyond solely a discussion of the benefits of language learning, in order to build a different belief about the importance of language learning and language skills. Often foreign language advocates do not move beyond a discussion of the benefits of foreign languages, believing this to be the most convincing argument. However, while these benefits are clear, it may not be enough to turn back a proposed elimination of a program. This is where the interdisciplinary approaches that have been discussed may broaden the scope of the discussion and elicit additional support.

It is more about the importance of employing a variety of strategies and tactics to reach the broadest possible audience than about any particular method. In addition to a blue ocean strategy (Chan Kim \& Mauborgne, 2015) mindset and working to inspire additional students to learn another language through using social marketing to publicize the benefits of foreign language skills, it is equally necessary to adopt a design thinking, problem-solving approach, which would work to effectively address and eliminate reasons for reluctance to learn a foreign language and even opposition to existing and proposed foreign language programs-a strategic thinking approach individualized to each particular individual or institution. A social marketing approach would begin by describing the advantages that foreign language skills and cultural knowledge provide to the individual, in the workplace, and to our society, followed by a plan to both raise
awareness of these benefits, and then to bring them to the largest possible number of students (Kotler \& Lee, 2015). A design thinking approach could well begin by examining why general childhood curiosity does not necessarily lead to curiosity about other languages and cultures among many US students, followed by the development of ideas as to how to reawaken curiosity and interest, and an action plan, or a pathway to bring these new ideas to students, prospective students, school administrators, and parents (Brown, 2019).

If confrontation with opponents of foreign language is inevitable, it is equally necessary that foreign language educators and advocates understand the dynamics of confrontation as well as the pathways to collaboration, a positive outcome for all, confronting present and potential threats to programs and bringing the best data-driven arguments to the negotiating table. Fisher and Ury (2011) stressed that successfully transitioning from confrontation to collaboration includes separating the people from the problem, focusing on your interests and goals, developing collaborative options, basing the discussion on facts and data, and maximizing your persuasive power through a fair, principled, and open-minded approach.

Empowerment for Learners and Educators through Advocacy
In order to be effective, foreign language advocacy must not only be strategic, foreign language advocates must be prepared to confront the reasons for reluctance and opposition towards learning another language and be able to skillfully negotiate a shared goal of sustainable collaboration. Achieving this goal requires leadership, and while many of us may hesitate to think of ourselves as leaders, the very fact that we are advocating for foreign languages - a valuable skill and benefit for our students-means that we already possess a quality that characterizes the greatest leaders, the goal of helping others to succeed. According to Grant (2017), "the most meaningful way to succeed is to help other people succeed."

Although foreign language education faces challenges, it is also a time for optimism. The current ACTFL campaign, "Lead with Languages," is one that fuels engagement and motivation towards language learning, while supplying advocacy initiatives. Foreign languages and foreign language learning are part of the public conversation in the US and many campaigns have been successful, including New York City's "bilingual revolution," the development of French immersion programs in Louisiana, and many advocacy initiatives listed on the national, regional, and state foreign language education association web pages.

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Kathleen Stein-Smith, PhD, Chevalier dans l'Ordre des Palmes académiques, is a dedicated foreign language educator and advocate. She is Chair of the AATF (American Association of Teachers of French) Commission on Advocacy and a member of the ATA Education and Pedagogy Committee. She is also active in foreign language education associations, including the NECTFL Advisory Council, CSCTFL Advisory Council, and as a SCOLT sponsor. She has presented at numerous professional conferences at the state, regional, and national level, is the author of four books and numerous articles about the foreign language deficit, has given a TEDx talk on The U.S. foreign language deficit, has been interviewed by press and radio, and maintains a blog, "Language Matters."

# Intercultural Communication in the Online Spanish Classroom: A Study on Invitations 

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#### Abstract

The NCSSFL-ACTFL Can-Do Statements for Intercultural Communication (2017) task educators with helping students better recognize "obviously inappropriate behaviors in familiar everyday situations" (p.15), yet today's L2 classroom rarely includes pragmatic speech acts in curriculum, especially with regard to online language learning. To this end, in the fall 2018 semester at two community colleges, intercultural/pragmatic lessons on invitation sequences were implemented in both online and on-ground Spanish One classes involving both written and spoken conversations with native speakers as to determine if pragmatics can be acquired online. Control groups were also established. Preliminary data suggest that online students can acquire pragmatic competence thanks to online interventions; however, more complex intercultural strategies may require more exposure to the language or on-ground components. Methodology, lessons, and pedagogical implications are included.


Keywords: Culture, Intercultural Communication, Pragmatic Instruction, Technology, Online Learning, World Languages

With the recent inclusion of intercultural communication in the NCSSFL-ACTFL (2017) "Can-Do Statements," foreign language educators are finally starting to look beyond grammar and vocabulary instruction in the classroom and are beginning to analyze the ways in which they teach culture (Bachelor \& Barros García, 2019). These new statements not only support the inclusion of the "3 Ps" of culture (products, practices, and perspectives), but they also emphasize culturally appropriate behavior in target language interactions. According to these "Can-Do" statements, students must be able to "avoid major social blunders" and "transition smoothly from formal to informal styles of behavior" (p. 15-16), among others, which is where intercultural pragmatic instruction comes into play. Unfortunately, foreign language teachers fear that they are not prepared to teach pragmatics or interculturality to their students (Vellenga, 2011). This puts their students at a disadvantage because research suggests that intercultural and pragmatic errors are viewed as more severe by native speakers than grammar errors (Wolfe, Shanmugaraj, \& Sipe, 2016).

Addressing this challenge becomes even more complicated for the online teacher. The changing role of technology in higher education has been the source of much discussion and debate, particularly with regard to online learning (Orosz, 2016). Nationwide in the United States, the last decade has seen a steady increase in the number of colleges offering online courses. In recent years, while higher education has experienced a general decline in enrollment, enrollment in virtual courses has continued to grow (Allen \& Seaman, 2016). As a result, more courses are being considered for potential online delivery. This includes foreign language courses. As such, teachers must find a way to meet all national and local standards, including the NCSSFL-ACTFL "Can-Do Statements" on intercultural communication, in the online classroom.

In an attempt to help students "avoid major social blunders," the teacher must equip them with strategies for employing some of the most commonly used speech acts. For this current study, invitations were chosen, as they are among the most widely used speech acts in Spanish (Langer, 2011). Additionally, lessons on invitations in the Spanish classroom support many "Can-Do Statements" on intercultural communication being established by high schools across the country, such as "I can usually accept and refuse invitations in a culturally appropriate way" (Bellevue School District, 2015, p. 4).

While research exists on teaching and learning pragmatic speech acts in the traditional onground classroom, investigations in the online classroom are scarce (Chun, 2011). For these reasons, the present study sought to analyze pragmatic competency in relation to invitation sequences of novice level Spanish students in an online setting by designing virtual pragmatic interventions on invitations and comparing pragmatic performance between control and experimental groups of both online and on-ground students. The results from this analysis will provide teachers with the evidence that they need to support online language learning with regard to intercultural and pragmatic competencies.

## Literature Review

Pragmatics, speech acts, and invitations in English and Spanish
Until recently, foreign language teachers have mostly ignored pragmatic and intercultural outcomes in their classes (Bachelor, 2015). However, with the arrival of the NCSSFL-ACTFL "Can-Do Statements" on intercultural communication, educators are discovering that there is much more to the language classroom than vocabulary and grammar lessons (Bachelor, 2016; Bachelor \& Barnard Bachelor, 2016). According to Ishihara (2010), "pragmatics deals with meaning in context that is the meaning conveyed often indirectly beyond what is literally communicated" (p.938). Oftentimes, pragmatic instruction in the classroom has sought to prepare students to engage in speech acts (Langer, 2011).

According to Langer (2011), a speech act is a statement or utterance that plays a role in communication such as compliments, requests, or invitations. Invitations ask for something from the listener, typically the privilege of the other person's company. Langer explained that when someone is invited to do something, the listener is expected to accept or decline the invitation. Depending on the relationship between the speaker and the listener, there are many ways to invite someone, and this can be direct or indirect, individual, or collective/suggestive (Table 1). Therefore, as with other speech acts, a specific culture may require different formulations of an invite.

There is some overlap in the use of invitations in both English and Spanish (FélixBrasdefer, 2018). In both languages, the formulation of an invitation depends, ultimately, on the listener's own needs or wishes. In other words, the speaker asks what $\mathrm{s} / \mathrm{he}$ thinks the listener wants. However, Langer (2011) explains that in Spanish the most common forms of inviting tend to be more direct than in English. This type of invitation is initiated individually by the speaker (te invito a tomar un café [I'm inviting you for a coffee]). Since in Spanish, invitar [to invite] also implies that the inviter is paying, this individual and direct form of inviting makes it less likely that the listener will deny the invitation, because the speaker is showing his/her generosity through the invitation. If the speaker is not comfortable using a direct invitation, the next most common invitation strategy is to use a suggestive form (¿tomamos un café? [shall we have a coffee?]). In García's (2008) study on invitations in Spanish, she found that beyond the initial invite itself, a full invitation sequence consists of the following: invitation-response, insistence-response, and wrap-up. During the initial invitation, García discovered that Spanish speakers often reject an
invitation or hesitate to accept, which leads to the insistence phase in which the invitee seeks to determine how sincere the invitation is, based on how much the inviter insists. To demonstrate sincerity in the invite, the inviter often dismisses the excuse, subjects the invitee to an emotional appeal, or expresses sorrow before extending the invitation again (Félix-Brasdefer, 2018).

Table 1
The most commonly used invitation strategies in Spanish (Langer, 2011, p. 92)

| Form | Expression | English translation |
| :--- | :--- | :--- |
| Individual | . |  |
| Suggestive | Te invito a tomar un café | I am inviting you for a coffee |
|  | ¿Tomamos un café? |  |
|  | ¿Vamos a tomar un café? | Lhall we have a coffee? |
|  | ¿Tomemos un café? | Let's drink a coffee? |
|  | ¿Qué tal si tomamos un café? | How about if we go drink a coffee? |
|  | ¿Por qué no tomamos un café? | Why don't we go drink a coffee? |
| ¿Qué te parece si tomamos un café? | What do you think about getting a coffee? |  |

## Teaching pragmatic speech acts

It is becoming more accepted that pragmatics can be taught and learned in the language classroom (Vellenga, 2011). According to Kasper and Rose (2002), "there is considerable evidence indicating that a range of features of second language pragmatics are teachable ... Second, it appears that learners who receive instruction fare better than those who do not" (p. 269). However, much debate exists as to the best way in which pragmatics should be taught.

One of the main areas of study has been the hypothesis of the acquisition and function of input in instructional pragmatics (Bardovi-Härlig \& Griffin, 2005). There has been some debate as to whether students should learn pragmatics via implicit or explicit lessons (Alcón Soler, 2005; Krashen, 1994). Researchers are divided between those who believe that there is an "interface" between implicit and explicit processes (DeKeyser, 1995), and those who believe that there is none at all (Ellis, 1994; Krashen, 1982; 1985). In the context of learning Spanish, Mir (2001) explained that although it is likely that implicit instruction of pragmatics works, the student would have to be in constant contact with a community of Spanish speakers or spend hours in the classroom to develop a high level of pragmatics implicitly. The author proposed the implementation of a more active and explicit pragmatic instruction so that students can internalize rules and actively incorporate them into their use of the language. Langer (2011) agreed on the importance of explicit pragmatic instruction in the language classroom, since the pragmatic competence of his students improved significantly in all areas after his explicit interventions.

## Teaching pragmatic speech acts online

A number of studies support the idea of teaching a foreign language online (Moneypenny \& Aldrich, 2016; Jabeen \& Thomas, 2015; Herrera Díaz \& González Miy, 2017). Technology now allows a teacher to provide instruction online through recorded lectures, e-texts with embedded audio and videos, online workbooks, and live chats through video and audio-conferencing software (Bachelor, 2017). These technologies have only rarely been used to aid in the development of students' pragmatic competence (Yang, 2017; Taguchi \& Sykes, 2013), with some exceptions.

For instance, Waugh (2013) had her online English Language Learners listen to and read transcripts of native speakers' interactions; they were then asked to explain in discussion forums the language forms used by these speakers to perform the studied speech act. Her results suggested that this strategy worked well with her students. Others (Takamiya \& Ishihara, 2013) had their students engage in online blogging with each other and with native Japanese speakers to improve their pragmatic abilities. While successful in enhancing pragmatic competence, it is important to note that these studies, along with others (Gonzales, 2013; Sykes, 2005; Tudini, 2007), have taken place with intermediate high and advanced language students rather than with students in their initial phases of language learning.

While these studies may support the learning of pragmatics using online tools, there is not a consensus on how to best teach pragmatics in an online environment, and we have no evidence as to their effectiveness with novice students. It also appears that authentic data collection has been an issue with these studies, as role plays and naturalistic conversations tend to be more appropriate ways to assess pragmatic competence (Ishihara \& Cohen, 2010); however, the abovementioned studies mostly analyzed student written responses.

As previously mentioned, it is extremely important to find an effective way to increase students' pragmatic competence in the online classroom for a number of reasons, but namely to avoid offending the hearer, as pragmatic errors are often perceived as more severe than other mistakes (Bardovi-Harlig \& Dörnyei, 1998; Schauer, 2006). To this end, lessons were developed for online Spanish classes on invitation sequences for novice students, as outlined in the forthcoming sections.

## Methodology

## Population and sample

The present study took place at two community colleges across four sections of Spanish One, a course that assumes no prior knowledge of Spanish. The same curriculum is covered at both sites, as they administer the same final exam, and both community colleges are within driving distance of each other and share very similar student demographics. For comparative purposes, control and experimental groups were created, along with on-ground traditional groups as to determine if the interventions worked better online or in-person.

According to U.S. News \& World Report (2014), Site A is a community college whose ethnicity is primarily White, at approximately $75 \%$ of students, followed by Black students who encompass $10 \%$ of the total population. The average student age is 24 , of whom $54 \%$ are female and $46 \%$ are male. Site B is also a community college with the following demographic information: $76 \%$ White, $11 \%$ Black, with the average student age being 23, of whom $57.5 \%$ are female and $42.4 \%$ are male. The location of both Site A and Site B is metropolitan, located approximately 130-160 miles from two megacities in the Midwestern section of the United States. The student sampling for this study is representative of both Sites' demographics.

The classroom teachers taught a total of four sections of Spanish One in the fall 2018 semester, two online and two on-ground. On the onset of the study and prior to having enrollment and demographic information, the researcher created four student groups, one for each section: Group 1 (online experimental), Group 2 (online control), Group 3 (on-ground experimental), and Group 4 (on-ground control). A total of 59 students across all groups chose to participate: 14 students from Group 1; 16 students from Group 2; 15 students from Group 3; 14 students from Group 4.

## Design

Permission was granted by both Institutional Review Boards and consent was obtained from all parties involved before the study began. This is primarily a quantitative study, as the qualitative student conversations were assigned numerical data. Spanish One is a typical first semester college-level course intended for those with little or no knowledge of the language and covers all forms of the present tense through the present progressive. Both course teachers adhere to the communicative language teaching approach and integrate relevant culture and vocabulary.

Three pragmatic interventions took place during the semester in Groups 1 and 3. The first intervention consisted of a YouTube video link (https://youtu.be/XIZtiHmbXcE) posted to the discussion forum of Group 1 and played in class for Group 3. In this video, students are presented with a text messaging conversation between Pablo and Elena in which Pablo repeatedly invites Elena to multiple events and locations only to be turned down. After much insistence, Elena is the one who finally invites Pablo to her family dinner and the invitation is accepted. For Group 1, students were asked to share their thoughts in the discussion forum. Specifically, students were asked to think about factors that played a role in how Pablo invited Elena, such as age or relationship. Comprehension questions included, "Did Elena initially accept the invite or did she turn it down? How did she turn down the initial invite? Did Pablo insist a lot? Did they eventually reach an agreement?" Such questions, along with a question on social factors attempted to heighten student awareness of invitation sequences in informal Spanish among young people without explicitly teaching formulas or cultural practices. For Group 3, such questions were posed to the entire class in person. The teacher did not participate in either discussion.

Intervention two consisted of an explicit lesson on invitations in Spanish. A document was linked to the learning management system (LMS) for Group 1, and students were given a printed copy in class for Group 3. The document was a modified version of the lesson by Aventa Learning (2005) that tasked students to learn that the verb invitar [to invite] implies that the person inviting is paying. They were then exposed to conditional conjugations with gustar, followed by sample invites in Spanish using gustaría [would like], puedes [can you], and quieres [do you want], accompanied by acceptances such as iclaro que sí! [of course so!]. The worksheet proceeded to explain that when declining an invite, Spanish speakers often provide an excuse or postpone the invite, and saw several examples, such as Tal vez otro día. Tengo que visitar a mis abuelos [Maybe another day. I have to visit my grandparents]. Finally, students were presented with eight invitations and had to respond in writing, accepting four and rejecting four, using strategies presented in the lesson. For Group 1, students had to submit the completed document as an assignment via the LMS and received all points for completion, regardless of the answers provided, whereas Group 3 students completed it in class, but did not turn it in.

The final intervention consisted of a 10-minute one-on-one video chat with a native speaker of Spanish via TalkAbroad. Group 1 students completed the live chat at their own convenience during a specific window of time. Group 3 students went to the computer lab at the end of class toward the end of the semester and spoke with the native speakers. During this conversation, both participants were instructed to pretend to invite the other to an event. As such, the students in Groups 1 and 3 were able to put the information from interventions one and two into practice and implicitly learn from the native speaker based on how s/he chose to formulate the invitation and how s/he responded to the invitation.

The excerpt below (1) provides an example of an excuse provided by one of the native speakers in response to a student invitation from Group 3. As such, this particular student was exposed to one of the more common refusal strategies in Spanish.
(1) Native speaker (NS) and Student (S)

1. S: ¿Te gustaría salir a comer después del partido? [Would you like to go out to eat after the game?]
2. NS: Eh, no, creo que no puedo ir a comer; tengo que volver a mi casa temprano [Um, no, I think I can't go out to eat; I have to return home early]
Overall, the three interventions were designed for a beginner Spanish student. As such, the focus was on the formulas required for inviting in Spanish rather than on some of the more complex strategies that are sometimes employed by Spanish-speakers.

A week after the final intervention concluded in the experimental groups, students in all four groups had to perform a role-play in pairs as part of their final oral exam that lasted approximately five minutes. While the role-play was somewhat open ended, students were instructed that at some point in the conversation, both students had to invite the other student to go somewhere. One of the invitations had to be accepted, and the other had to be declined. Groups 1 and 2 performed the role-play using video chat software via MySpanishLab so that the course teacher could review the clips, and Groups 3 and 4 performed them in front of the teacher as they were tape recorded.

## Research questions and data analysis procedures

The study was designed in an attempt to answer the following research questions:

1. What effect, if any, do pragmatic lessons regarding invitation sequences have on L2 Spanish students' ability to invite/respond appropriately (according to accepted pragmatic norms)?
2. In what ways, if any, does the effect of pragmatic lessons regarding invitation sequences in Spanish differ between online or on-ground students?
In order to respond to these questions, certain analytical procedures were put into place. Before answering the research questions, the data from the final oral exam role-plays were analyzed using criteria based off of investigations by Langer (2011), Félix-Brasdefer (2018), and García (2008) as to determine what was considered a pragmatically appropriate invitation and response for informal situations in standard Spanish ${ }^{1}$. Drawing on insights from these studies, the researcher looked for one or more of the following strategies when extending an invitation:

- Direct invitation
- Suggestive invitation
- Collective invitation
- The speaker asks what the hearer wants
- Downplaying inconvenience
- Insistence (after initial rejection)

The researchers also looked to assess the rejection portion of the response based on the following criteria informed by the same studies:

- Indirect (followed by one or more of the below strategies)
- Excuse or explanation provided
- Promise to make plans in the future
- Statement of regret (accompanied with one or more of the above strategies)

Other characteristics, such as grammar, pronunciation, or vocabulary mistakes that did not hinder comprehension were not taken into account when analyzing the conversations. The

[^0]researchers listened to each 5-minute conversation from all groups involved, transcribed the invitation sequences, and marked them as either "adheres" or "does not adhere" to pragmatic norms based on the previously mentioned criteria. Answers were then given 100 points for an answer that "adhered," and 0 points for an answer that did "not adhere," as to assign quantitative value to the data.

To answer the research questions, unpaired $t$ tests along with effect sizes were employed to determine if statistically significant difference existed among the various groups on their roleplay assessments. Finally, the researchers were able to qualitatively discuss why some answers were marked "not adhere."

## Results

As mentioned in the prior section, unpaired $t$ test and effect size calculations were used to determine the impact the invitation and invitation response lessons had on each group by comparing the results from the role-play pragmatic analysis between the control and experimental groups.

The results from Groups 1 and 2 (online) were processed first. With regard to the extension of an invitation, the unpaired $t$ test demonstrated that there was an insignificant statistical difference between invitation extension scores from the online control group ( $\mathrm{M}=12.5, \mathrm{SD}=35.36$ ) and the online experimental group ( $\mathrm{M}=50, \mathrm{SD}=54.77$ ); $t(12)=1.5, p=0.14$. However, according to Coe (2002), calculating the effect size is a much more meaningful method of quantifying the size of the difference between two groups. As such, a Cohen's $d$ effect size calculation resulted in $d=(50-12.5) / 46.09=0.81$. Such effect size is considered to be a "large effect" and indicates that $79 \%$ of students in the control group would perform below the average student in the experimental group in a hypothetical matchup when extending an invitation (Coe, 2002).

Similar calculations were then performed between Groups 1 and 2 (online) with regard to the rejection sequence, and an insignificant difference was found between the online control group $(\mathrm{M}=100, \mathrm{SD}=0)$ and the online experimental group ( $\mathrm{M}=66.67, \mathrm{SD}=51.64$ ); $t(12)=1.85, p=0.08$. An effect size was not calculated since the control group performed better ( $M=100$ ) than the experimental group ( $\mathrm{M}=66.67$ ) when extending an invitation.

In terms of the on-ground students, unpaired $t$ test calculations between invitation extension scores from Group 4 (control) ( $\mathrm{M}=0, \mathrm{SD}=0$ ) and Group 3 (experimental) ( $\mathrm{M}=62.50, \mathrm{SD}=51.75$ ); $t(12)=2.9, p=0.01$ indicated a statistically significant difference. Likewise, Cohen's effect size resulted in $d=(62.5-0) / 36.59=1.7$, which is a "very large" effect, indicating that $95 \%$ of the control group students would perform worse than students in the experimental group when extending an invitation.

An unpaired $t$ test was also calculated between Groups $4(\mathrm{M}=60, \mathrm{SD}=54.77)$ and $3(\mathrm{M}=100$, $\mathrm{SD}=0) ; t(10)=1.9, p=0.07$ with regard to the invitation rejection, which is considered "not quite" statistically significant when considering the "sliding scale" of statistical significance (Heavey, 2018, p. 104). As for the effect size, the calculation resulted in Cohen's $d=(100-60) / 38.72=1.03$, which is a "large" effect, suggesting that $84 \%$ of control group participants would perform worse than experimental group participants when rejecting an invitation.

Finally, unpaired $t$ tests were also calculated between the two experimental groups (online versus on-ground) to determine which group was more impacted by the intervention. Those results indicate insignificant differences between Group 1 (online experimental) ( $\mathrm{M}=50, \mathrm{SD}=54.77$ ) and Group 3 (on-ground experimental) ( $\mathrm{M}=62.50, \mathrm{SD}=51.75$ ); $t(12)=0.43, p=0.67$ for the extension of an invitation. However, the effect size found that $58 \%$ of students in the online experimental group would perform worse than participants in the on-ground experimental group when extending an
invitation, which is considered a "small" effect size. With regard to the rejection sequence scores, Group 1 (online experimental) ( $\mathrm{M}=66.67, \mathrm{SD}=51.64$ ) and Group 3 (on-ground experimental) $(\mathrm{M}=100, \mathrm{SD}=0) ; t(11)=1.7, p=0.11$ unpaired $t$ test results suggested an insignificant difference. Nevertheless, the effect size calculation suggests that $82 \%$ of the online experimental group participants would score below the average participant in the on-ground experimental group, which is considered a "large" effect: Cohen's $d=(66.67-100) / 36.51=0.91$.

In sum, statistical data report that students in the experimental groups (Groups 1 and 3) performed better than control group students when extending an invitation; however, when comparing the experimental groups, the on-ground students (Group 3) outperformed the online students (Group 1).

## Discussion, Implications, and Limitations

In response to research question 1 , which sought to quantify the effect of pragmatic lessons regarding invitation sequences on L2 Spanish students' ability to invite/respond appropriately in both online and on-ground environments, the effect size calculations indicate that the interventions were effective, especially with regard to the participants' ability to extend an invitation. As indicated in the results, the lessons had a "large effect" on the online experimental students, and a "very large effect" on the on-ground experimental students. When responding to the invitation, the lessons had no effect on the online students; however, the on-ground students experienced a "large effect" in this regard. As such, the lesson interventions had a positive impact on the students, especially on the on-ground group.

In terms of research question
2, which asks if pragmatic interventions have a greater impact on online or on on-ground students, the results from the unpaired $t$ test indicate that there was no statistical difference between Groups 1 (online experimental) and 3 (onground experimental) with regard to
...the "large effect" that the lessons had on the online student's ability to extend an invitation is rather noteworthy, as it does demonstrate that pragmatic ideals can be taught online, even at the most elementary of levels in language acquisition. both the invitation extension and the response. Effect sizes indicate little to no difference when extending an invitation; however, there was a "large" effect found in favor of the on-ground group when responding to an invitation. Hence, while the pragmatic interventions equally impacted both groups for extending an invitation, the on-ground students outperformed the online students when responding to an invite.

These results demonstrate that pragmatic lessons do work in both online and on-ground settings; however, on-ground students may benefit more from this type of intervention. As noted in the results, both the online and on-ground students outperformed their control group counterparts when extending an invitation. But when it came to responding to the invite, the online students performed similarly to the control group. This may be attributable to the fact that extending an invitation in Spanish is less complex than effectively responding to one (Barros García, 2011), which may indicate that pragmatic lessons dealing with more multifaceted issues, such as the negotiation and insistence that are sometimes involved in an invitation sequence, are better suited for the on-ground environment. Similarly, such responses may require linguistic proficiency that is beyond that of a novice student. This is not to say that more effective lessons for online students could not be developed to work specifically on invitation responses or other complex pragmatic issues.

Regardless, the "large effect" that the lessons had on the online student's ability to extend an invitation is rather noteworthy, as it does demonstrate that pragmatic ideals can be taught online, even at the most elementary of levels in language acquisition. As indicated earlier, past research with online language students (Gonzales, 2013; Sykes, 2005; Tudini, 2007) has involved intermediate high and advanced language students rather than students in their initial phases of language learning. These results will hopefully encourage additional studies into the online acquisition of pragmatic competence in first year language students in high schools, community colleges, and year one university students.

As with any study, certain limitations exist. In terms of the interventions, some of the native speakers on the TalkAbroad activity did not fully follow instructions or, according to the researchers' opinion, did not follow pragmatic norms perhaps due to the students' level of Spanish or the nature of an online conversation, such as quickly accepting a refusal and moving on with the conversation. Additionally, there were conversations in all groups in which one or more student simply did not refuse the invite, perhaps due to not understanding it or perhaps due to a decision not to. The latter would be considered a pragmatic "error;" however, the former would not. Regardless, these instances impacted the outcome of the data analysis process. Additional limitations include the length of the study (one semester) and the nature of role plays, which allow for rehearsal and assess pragmatic performance over pragmatic proficiency.

Additionally, the grading criteria for the conversations (see Methodology) and the concept of a "correct" pragmatic response rely on the idea of a "standard Spanish." While there is no consensus regarding what is considered pragmatically appropriate or standard, the researchers relied on the studies by Langer (2011), Félix-Brasdefer (2018), and García (2008) to reach conclusions on what constituted a "correct" response. Future investigations that address these limitations should most definitely be carried out in the near future.

Finally, it is also not the expectation by ACTFL that novice level students be able to produce appropriate pragmatic/intercultural behaviors, but rather "recognize" these behaviors as appropriate or not (2017). As such, future studies assessing the online student's ability to recognize pragmatically appropriate behaviors may be better suited for language beginners.

As stated by Van Houten and Shelton (2018) the journey to Intercultural Communicative Competence is:
a personal one, with many steps, both backward and forward, and a growing awareness of self and other. Just as the use of the language Can-Do Statements has had a positive impact on learning and teaching, the NCSSFL-ACTFL Can-Do Statements for Intercultural Communication are expected to make both learner and educator more mindful of the importance of culture in communication. (p. 38)
These intercultural components are not exclusive to the on-ground student, and teachers should seek to include them in the online classroom as well.

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# Motivation and Mobile-Assisted Language Learning: Utilizing Duolingo in the L2 Classroom 

Chesla Ann Lenkaitis


#### Abstract

The Modern Language Association's (MLA) comprehensive analysis (Goldberg, Looney, \& Lusin, 2015) indicated that many language programs have recently seen an enrollment decline. Therefore, motivating students to register for language courses beyond a university requirement or whether or not to become language majors and/or minors is crucial for language instructors. This study explores how mobile-assisted language learning can motivate second language (L2) learners. Over the course of 4 weeks, 188 participants were given optional weekly Duolingo assignments to complete. Likert-scale and open-ended questions from pre-, post- and weekly surveys were analyzed. Although participants noted that they completed assignments for extra credit, they also indicated that they enjoyed these activities and preferred them to other required assignments since they were able to learn "on the go" while having fun. In addition, participants mentioned that the Duolingo assignments provided extra practice and allowed them to develop their language skills. Not only does this study explore the ways in which technology can enhance L2 learning and teaching, but it also shows how instructors can utilize online pedagogical approaches with the Duolingo tool to create a learner-centered and autonomous experience.


Keywords: Motivation, Mobile-assisted language learning, Duolingo, Second Language (L2) Teaching, L2 Learning, World Languages

As many language programs have recently seen an enrollment decline as indicated Modern Language Association's (MLA) comprehensive analysis (Goldberg, Looney, \& Lusin, 2015), the topic of motivation (Dörnyei, 2001) is an important one as it can impact students' decisions to register for language courses beyond a university requirement or whether or not to become language majors and/or minors. As departments are experiencing these changes, it is important that they reexamine ways in which to reach out to and motivate $21^{\text {st }}$ century second language (L2) learners. One such way to connect with these L2 learners is through technology as many students are digital natives (Prensky, 2001). In the 1990s, technology was "vastly underutilized as a topic and medium of instruction" (Grosse, 1993, p. 310). However, teachers in the $21^{\text {st }}$ century are making a conscious effort to implement various methods of technology in the classroom (Guichon \& Hauck, 2011) to engage learners in the L2 learning process (Lenkaitis, 2019). With the majority of people owning personal and portable devices such as cell phones and laptops (Kukulska-Hulme \& Shield, 2006), mobile assisted language learning (MALL) is becoming more prevalent. This study examines the use of Duolingo (https://www.duolingo.com/), an online language learning platform that can be accessed through a mobile phone or other personal device, and how it can help not only motivate (Dörynei, 2001) students, but also support both L2 learning and teaching (Blake, 2013, 2016; Stanley, 2013).

## Literature Review

## Motivation

Motivation has been at the forefront of L2 acquisition and classroom research in the last several decades (Csizér \& Dörnyei, 2005; Dörnyei, 1994, 1994b; Sakui \& Cowie, 2012; Tremblay \& Gardner, 1995). Motivation is an individual difference that can differ and vary by degree from person to person (Dörnyei, 2009). Dörnyei (2001) framed motivational strategies as those that affect goal-related behavior, one that can only be brought on by the students themselves (Deniz, 2010). Campbell and Storch (2011) found that in some cases an initial goal can provide sustained motivation. According to the basic socio-educational model of L2 acquisition (Gardner, 2006), the attitudes toward the learning situation affect learner motivation, which in turn affects language achievement. It is the goal of language instructors to provide learning situations that can motivate students and in turn support their attitude toward language learning and achievement.

Mobile-Assisted Language Learning (MALL).
Ownership of personal devices allows learners to connect with the numerous resources on the Internet by the click of a button (Bohinski ${ }^{2}$, 2014) and learn "anywhere, anytime" (Geddes, 2004, p.1). Stemming from e-learning (Ramírez-Montoya, 2009), "learning supported by electronic tools and resources" (Munday, 2016, p. 84), MALL can happen by means of a mobile device and can motivate learners (Fageeh, 2013; Huynh, Zuo, \& Iida, 2016).

Furthermore, because of these mobile devices, learners are increasingly mobile (KukulskaHulme, Traxler \& Pettit, 2007; Pettit \& Kukulska-Hulme, 2007) and are "in a position to take the lead and engage in activities motivated by their personal needs and circumstances of use" (Kukulska-Hulme \& Shield, 2008., p. 272). MALL provides L2 learners with opportunities to learn autonomously (Lyddon, 2016; Rosell-Aguilar, 2018; Sato, Murase, \& Burden, 2015). In other words, learners can take responsibility for and take charge of their learning (Holec, 1981). With increased responsibility, learners become more engaged in the learning process. Therefore, L2 instructors can encourage their learners to accept responsibility and become "agents" (Lantolf \& Pavlenko, 2000, p.162) of their learning by encouraging the use of MALL to supplement course content (Munday, 2016).

## Duolingo

Duolingo (https://www.duolingo.com/) is an online language learning platform where users enroll in courses to learn L2s. Student and instructor accounts can be linked through Duolingo schools. In doing so, the instructor receives a weekly report of students' activity and can track their learning on the platform. For English speaking users, there are over 30 language courses including, but not limited to, Dutch, Polish, Spanish, and Vietnamese. After taking a placement test in the language to be learned, Duolingo provides a variety of activities where learners can practice listening, reading, speaking, and writing. So that learners stay motivated to learn, Duolingo users can "earn points for correct answers, race against the clock, and level up" (Duolingo, 2018). Figure 1 shows some of the languages the Duolingo offers on its platform.

In addition to research funded by Duolingo, Inc. (Vesselinov \& Grego, 2012), other studies have discussed the effectiveness of utilizing this learning platform (Aksenova, Shepetovsky, Mironova, Stepura, \& Pichugova, 2015; Crowther, Kim, \& Loewen, 2017; Krashen, 2014; Munday, 2016). Although Vesselinov and Grego (2012) independently conducted research on the learning platform, funding was provided by Duolingo. Nonetheless, after having examined participants' use of Duolingo for Spanish for the eight week treatment and comparing results of a college placement Spanish exam before and after the study, results revealed that "a person with no

[^1]knowledge of Spanish would need between 26 and 49 hours (or 34 hours on average) to cover the material for the first college semester of Spanish" (Vesselinov \& Grego, 2012, p. 1).


Figure 1. Screenshot from https://www.duolingo.com
However, Krashen (2014) questioned, in response to Vesselinov and Grego's (2012) report as whether Duolingo could replace a university course and if participants became competent in the language. He also pointed out that the participants were highly motivated to take part in the study, which is not always the case of those taking university courses. Similarly, after analyzing 34 hours of usage data from three participants, Crowther et al. (2017) found that Duolingo should be used as a supplemental tool to support language learning. Utilizing Duolingo as a supplemental tool, Munday (2016) explored using Duolingo in Spanish classrooms by making it $10 \%$ of students' overall grades. She found that students enjoying using Duolingo and it helped to reinforce concepts that they were learning in class. In another study (Aksenova et al., 2015), results showed that although Duolingo's initial novelty wore off, it provided educational support for highly-motivated individuals.

## Research Questions

Based on the capabilities of MALL and the results that past Duolingo studies have shown, this study will consider the ways in which Duolingo can be used in the L2 classroom to engage and motivate students in L2 learning. In order to explore the motivation of L2 learners, this study is conducted through a "snapshot perspective" aiming to create a seamless panoramic view of the field of motivation in the L2 classroom, conveying its dynamism (Schumann, 1998). Therefore, this study will answer the following research questions (RQs):

RQ1: When given the opportunity to complete optional Duolingo activities, how many and to what degree do L2 learners complete them?
RQ2: In what ways, if any, do L2 learners report that Duolingo motivates them and creates opportunities for autonomous learning?
RQ3: What are the L2 learners' perceived advantages and/or disadvantages of utilizing Duolingo?

## Methodology

While completing coursework for their introductory and intermediate French, Italian, and Spanish courses, participants were also given the opportunity to complete optional assignments on Duolingo for four consecutive weeks. Prior to doing any work on this learning platform, participants completed practice activities with Duolingo to ensure that they had an account and were able to navigate the platform.

In addition to completing these optional assignments, participants were asked to complete a weekly survey regarding their experience with Duolingo. The researcher used a mixed method design since both qualitative and quantitative analyses were completed. Descriptive statistics and t-tests were run using IBM SPSS Statistics 25.0. Likert-scale questions were also analyzed using IBM SPSS Statistics 25.0 while NVivo 12 for Windows was used on open-ended responses.

## Participants

A total of 188 participants were included in this study because they completed the four weekly surveys regarding Duolingo. They were registered for an introductory or intermediate French, Italian, or Spanish course at a public university in the United States. The average age of the 188 participants was 18.93 years old $(\mathrm{SD}=1.86)$ and 43 were L2 French learners, 45 were L2 Italian learners, and 100 were L2 Spanish learners.

## Pre and Post-surveys

All participants completed a pre- and post-survey before and after the 4 -week study. Besides gathering background information on the pre-survey, students answered the following question regarding the Duolingo technology on the pre- and post-surveys: Using the scale below, how satisfied are you regarding the Duolingo technology? To answer this Likert-scale questions, participants used these five levels to indicate the level of satisfaction: 1 - Very dissatisfied; 2 Somewhat dissatisfied; 3 - Neither dissatisfied nor satisfied; 4 - Somewhat satisfied; 5 - Very satisfied.

## Weekly procedures

Participants were given the opportunity to complete optional Duolingo activities for four consecutive weeks. In line with Munday (2016), Duolingo assignments were part of overall grades and participants were offered extra credit, up to $2 \%$ on their overall grade, for these activities. Besides achieving their weekly goal (Campbell \& Storch, 2011; Deniz 2010; Dörnyei, 2001), one that participants setup when creating their Duolingo account, they also could also choose to complete additional Duolingo activities. Participants were also asked to complete a weekly survey to indicate to what extent they completed Duolingo activities and to reflect on why they completed Duolingo activities. Weekly survey questions included:

1) If you chose to complete activities on Duolingo, how many times did you complete them this week?
2) If you chose to complete activities on Duolingo, please explain in detail why you completed them.
3) If you chose to complete activities on Duolingo, using the scale below, how satisfied are you regarding the Duolingo technology? 1 - Very dissatisfied; 2 - Somewhat dissatisfied; 3 - Neither dissatisfied nor satisfied; 4 - Somewhat satisfied; 5 - Very satisfied.
4) If you chose to complete activities on Duolingo, please explain in detail your satisfaction rating with Duolingo.

## Results

## Participant completion of Duolingo activities

Regarding Duolingo, $50 \%$ of participants completed this individual work when given the option to do so. By the end of the study, $85 \%$ of participants who completed Duolingo activities were visiting the site more than once a week. Participants self-reported how much they were using Duolingo, which was confirmed by the researcher reviewing the participants' activity via Duolingo weekly reports. Table 1 shows the completion rate for the optional Duolingo activities while Table 2 shows to what degree participants completed them.

Table 1
Completion of optional Duolingo activities*

| Week | Number of participants who <br> DID complete activity | Number of participants who <br> DID NOT complete activity |
| :--- | :--- | :--- |
| 1 | 127 <br> $(68 \%)$ | 61 <br> $(32 \%)$ |
| 2 | 106 <br> $(56 \%)$ | 82 <br> $(44 \%)$ |
| 3 | 102 <br> $(54 \%)$ | 86 <br> $(46 \%)$ |
| 4 | 102 <br> $(54 \%)$ | 86 <br> $(46 \%)$ |

*Percentages were rounded up at 0.5 . Therefore, some percentages are the identical for two different numbers.

Table 2
Breakdown of participants' completion of optional Duolingo work*

| Week | Once a week** | More than once a week, <br> but less than daily | Daily |
| :---: | :--- | :--- | :--- |
| 1 | 79 <br> $(62 \%)$ | 41 <br> $(32 \%)$ | 7 <br> $(6 \%)$ |
| 2 | 75 <br> $(71 \%)$ | 23 <br> $(22 \%)$ | 8 <br> $(8 \%)$ |
| 3 | 17 <br> $(17 \%)$ | 87 <br> $(74 \%)$ | 10 <br> $(10 \%)$ |
| 4 | 8 <br> $(8 \%)$ | 7 <br> $(7 \%)$ |  |

*Percentages were calculated from total number of participants who completed weekly assignment. **Percentages were rounded up at 0.5 . Due to rounding, some totals may not equal $100 \%$.

## Quantitative results

When comparing participant pre- and post-surveys on the Likert-scale question regarding Duolingo technology, results from repeated-measures $t$-tests revealed significant differences for Duolingo: $t(101)=2.46, \mathrm{p}<0.05$. The researcher also calculated effect size using Cohen's $\mathrm{d}(\mathrm{d}=$ 0.27 for Duolingo), which showed a small practical significance. Table 3 lists the means for the Likert-scale question on the pre- and post-surveys.

Table 3
Means and standard deviations for Duolingo satisfaction pre- and post-survey question

|  | Mean |  | Std. Deviation |  |
| :--- | :--- | :--- | :--- | :---: |
|  | Pre | Post | Pre | Post |
|  | 4.42 | 4.19 | 0.87 | 0.83 |

In addition to asking this satisfaction question on the pre- and post-surveys, participants also answered it in each weekly survey for the duration of the study. Unlike the pre- and postsurveys that had the same number of respondents, only those participants who completed weekly Duolingo activities answered this question. Therefore, instead of indicating means, Table 4 details the percentages of responses for each rating scale over the 4 -week duration. During each week of the study, participants' satisfaction was favorable, with $75 \%$ of those completing activities rating Duolingo either Somewhat satisfied or Very satisfied.

Table 4
Breakdown for Duolingo satisfaction weekly question*

| Using the scale below, how satisfied are you regarding the Duolingo technology? | Week 1 | Week 2 | Week 3 | Week 4 |
| :---: | :---: | :---: | :---: | :---: |
| $1-$ Very dissatisfied | $\begin{aligned} & \hline 4 \\ & (3 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 3 \\ (3 \%) \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 1 \\ (1 \%) \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 0 \\ (0 \%) \\ \hline \end{array}$ |
| 2 - Somewhat dissatisfied | $\begin{aligned} & \hline 3 \\ & (2 \%) \end{aligned}$ | $\begin{array}{\|l\|} \hline 2 \\ (2 \%) \end{array}$ | $\begin{aligned} & \hline 2 \\ & (2 \%) \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & (1 \%) \end{aligned}$ |
| 3 - Neither dissatisfied nor satisfied | $\begin{aligned} & 16 \\ & (13 \%) \end{aligned}$ | $\begin{aligned} & \hline 19 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & \hline 24 \\ & (24 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 23 \\ & (23 \%) \end{aligned}$ |
| 4 - Somewhat satisfied | $\begin{aligned} & 48 \\ & (38 \%) \end{aligned}$ | $\begin{array}{\|l\|} \hline 42 \\ (40 \%) \end{array}$ | $\begin{aligned} & 40 \\ & (39 \%) \end{aligned}$ | $\begin{aligned} & 32 \\ & (31 \%) \end{aligned}$ |
| 5 - Very satisfied | $\begin{aligned} & 56 \\ & (44 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 40 \\ (38 \%) \end{array}$ | $\begin{array}{\|l} \hline 35 \\ (34 \%) \\ \hline \end{array}$ | $\begin{aligned} & 46 \\ & (45 \%) \\ & \hline \end{aligned}$ |

**Percentages were rounded up at 0.5 and calculated by the total number of participants that responded to each question per week. Due to rounding, some totals may not equal $100 \%$.

## Qualitative results

The researcher completed qualitative analyses on the weekly survey open-ended questions by utilizing NVivo 12 for Windows. Word frequencies informed the researcher-created coding categories for the following questions: 1) If you chose to complete activities on Duolingo, please
explain in detail why you completed them? and 2) If you chose to complete activities on Duolingo, please explain in detail your satisfaction rating with Duolingo.

Two coders worked independently to code the data and reached a $97.2 \%$ agreement (Kappa $=0.71$ ) on the first question and a $96.5 \%$ agreement (Kappa $=0.76$ ) on the second question. To reconcile differences, both coders worked together to reach a $100 \%$ agreement. Tables 5 and 6 details the six researcher-created coding categories, their definitions, coding breakdown, and examples of coded instances for the first question while Tables 7 and 8 illustrate the second question.

Table 5
Researcher-created coding categories, definitions, and breakdown for Duolingo completion open-ended question*
If you chose to complete activities on Duolingo, please explain in detail why you completed them?

| Coding <br> categories | Week** $\rightarrow$ <br> Definitions of coding categories $\downarrow$ | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Extra <br> credit | Instance of when a participant noted that <br> he/she was completing Duolingo activities for <br> extra credit | 53 <br> $(42 \%)$ | 37 <br> $(35 \%)$ | 52 <br> $(51 \%)$ | 45 <br> $(44 \%)$ |
| Fun and <br> enjoyable | Instance of when a participant mentioned <br> completing Duolingo for a reason including: <br> fun, enjoyableness, and interactivity | 19 <br> $(15 \%)$ | 18 <br> $(17 \%)$ | 11 <br> $(11 \%)$ | 8 <br> $(8 \%)$ |
| Good use <br> of time | Instance of when a participant specified that <br> Duolingo activities were able to be completed <br> in a short amount of time | 3 <br> $(2 \%)$ | 6 <br> $(6 \%)$ | 2 <br> $(2 \%)$ | 5 <br> $(5 \%)$ |
| Goal <br> motivation | Instance of when a participant discussed the <br> motivating factor of reaching his/her daily <br> goal or continuing a goal that he/she set | 5 <br> $(4 \%)$ | 3 <br> $(3 \%)$ | 4 <br> $(4 \%)$ | 5 <br> $(5 \%)$ |
| No reason <br> for choice | Instance of when a participant did not indicate <br> why he/she completed Duolingo | 25 <br> $(20 \%)$ | 23 <br> $(22 \%)$ | 20 <br> $(20 \%)$ | 18 <br> $(18 \%)$ |
| Practice | Instance of when a participant wrote about <br> completing Duolingo because activities <br> helped practice and improve language skills | 22 <br> $(17 \%)$ | 19 <br> $(18 \%)$ | 13 <br> $(13 \%)$ | 21 <br> $(21 \%)$ |

*All totals are not identical since percentages were calculated from the total number of participants who completed the weekly assignment.
**Percentages were rounded up at 0.5 and calculated by the total number of participants that responded to each question per week. Due to rounding, some totals may not equal $100 \%$.

Table 6
Examples of coded responses from Duolingo completion open-ended question

| Coding categories | Example |
| :--- | :--- |
| Extra credit | I completed activities on Duolingo in order to gain the extra points that <br> were being offered for this assignment (Participant 184). |
| Fun and enjoyable | Duolingo is a fun activity for me (Participant 157). |
| Good use of time | It's not difficult and it's easy to do on the go (Participant 10). |
| Goal motivation | i [sic] full filled [sic] my daily goal (Participant 104). |
| No reason for choice | I don't know (Participant 47). |
| Practice | I completed activities because it is a good website to reinforce simple <br> vocabulary and grammar (Participant 143). |

Table 7
Researcher-created coding categories, definitions, and breakdown for Duolingo satisfaction open-ended question*
If you chose to complete activities on Duolingo, please explain in detail your satisfaction rating with Duolingo.

| Coding <br> categories | Week** $\rightarrow$ <br> Definitions of coding categories $\downarrow$ | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Easy | Instance of when a participant noted that <br> Duolingo was easy to use and/or user-friendly | 28 <br> $(22 \%)$ | 25 <br> $(24 \%)$ | 26 <br> $(25 \%)$ | 21 <br> $(21 \%)$ |
| Fun and <br> enjoyable | Instance of when a participant mentioned that <br> Duolingo was fun, enjoyable, and/or <br> interactive. | 22 <br> $(17 \%)$ | 20 <br> $(19 \%)$ | 17 <br> $(17 \%)$ | 25 <br> $(25 \%)$ |
| Not helpful | Instance of when a participant discussed that <br> Duolingo was not helpful | 7 <br> $(6 \%)$ | 5 <br> $(5 \%)$ | 9 <br> $(9 \%)$ | 4 <br> $(4 \%)$ |
| No reason <br> for <br> satisfaction | Instance of when a participant did not indicate <br> why he/she completed Duolingo. Response <br> was non-applicable | 15 <br> $(12 \%)$ | 18 <br> $(17 \%)$ | 20 <br> $(20 \%)$ | 18 <br> $(18 \%)$ |


| Practice | Instance of when a participant wrote that <br> Duolingo helped practice and improve <br> language skills | 55 <br> $(43 \%)$ | 38 <br> $(36 \%)$ | 30 <br> $(29 \%)$ | 34 <br> $(33 \%)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

*All participants did not indicate their explanations on the weekly surveys. Therefore, all totals are not identical.
**Percentages were rounded up at 0.5 and calculated by the total number of participants that responded to each question per week. Due to rounding, some totals may not equal $100 \%$.

Table 8
Examples of coded responses from Duolingo satisfaction open-ended question

| Coding categories | Example |
| :--- | :--- |
| Easy | Duolingo is very easy to use, and requires very little time to complete <br> (Participant 23). |
| Fun and enjoyable | The program is always fun to use (Participant 175). |
| Not helpful | It has too many repeated questions which I think may not very good for <br> practicing (Participant 72). |
| No reason for <br> satisfaction | I am indifferent concerning the satisfaction of the website (Participant <br> $160)$. |
| Practice | It helps me reinforce and learn more about Spanish (Participant 87). |

## Duolingo completion of activities

L2 learners enjoyed utilizing Duolingo. As more and more participants completed activities beyond the optional ones for extra credit, the results from this study aligned with Dörnyei (2009) in that some students may have been motivated to earn extra credit. Regardless of the extra credit, the results suggested that participants made a conscious decision to complete additional activities to get more practice with the L2 they were learning. Even though the Duolingo activities were optional, the overall completion rates showed that the majority of participants were still choosing to complete optional assignments by Week 4 as $54 \%$ of all participants were completing Duolingo activities, $85 \%$ of which chose to complete Duolingo more than once a week. Therefore, as was mentioned by Campbell and Storch (2011), this initial goal of earning extra credit sustained participants' motivation as many participants noted that Duolingo was "fun and . . . motivating" (Participant 40). Participants even commented that "I would do it regularly even if it wasn't in my assignment" (Participant 94).

The overall participation decrease in Duolingo from Week 1 to 4 ( $68 \%$ to $54 \%$ ) appeared to coincide with the satisfaction of Duolingo from the start to the end of the project ( $82 \%$ to $76 \%$ combining Somewhat and Very satisfied). Although many participants were still completing the activities and having positive experiences, the data may suggest that they were not as satisfied with the Duolingo technology. As they continued to use it, participants could have wanted Duolingo to have additional features to help them with their L2 language skills. For example, Participant 43
noted that "the questions are a bit simple" while Participant 91 mentioned that Duolingo "can sometimes be tedious and repetitive."

## Motivation toward and autonomous learning opportunities in Duolingo.

Duolingo motivated L2 learners and created opportunities for autonomous learning. Through their experience with this MALL tool, participants became "agents" (Lantolf \& Pavlenko, 2000, p. 162) of their learning. The "on the go" (Participant 164) feature, as noted by Bohinski (2014) and Geddes (2004), of MALL motivated some L2 learners. Participants wanted to complete the activities because they were able to do it on their "own time" (Participants 121 and 143) as seen by Participant 157's following comment: "It's fun to do! And usually done in less than 5 minutes. So whenever I'm waiting for class to start or on the bus, it's a good time to get some practice in." In addition, the Duolingo application gave reminders "to do it every day" (Participant 181), which allowed for even greater engagement with the increasing $21^{\text {st }}$ century mobile learner population.

Duolingo also allowed L2 learners to be goal-driven. Participants were able to set a daily goal through the tool, which allowed them to be affected by goalrelated behaviors (Deniz, 2010). For example, Participant 14 in one of his/her weekly surveys noted that "I love Duolingo. I use it even day. I have almost a 40 day $s t[r] e a k . "$ It was quite clear that this internal motivation was and continued to be the impetus for completing the activities as Participant 14 noted in a following week's survey: "I have a 45-day streak on Duolingo and I'm not going to stop now. I want to be at $100 \%$ completion ...the results suggested that participants made a conscious decision to complete additional activities to get more practice with the L2 they were learning. Even though the Duolingo activities were optional, the overall completion rates showed that the majority of participants were still choosing to complete optional assignments by Week 4... by the end of winter break if I can."

Other motivating factors of Duolingo was that it was "very interactive, and easy to learn" (Participant 159) and "feels like a game" (Participant 59). Because of these gamification aspects (Huynh et al., 2016), learners' positive attitudes toward Duolingo may have affected their motivation (Gardner, 2006). For instance, Participant 29 noted that "Duolingo was . . . always fun to use and when it was assigned I got excited." For this L2 learner, Duolingo was engaging and made this participant want more. However, for another learner, the motivation was quite the opposite as he/she wrote that "It was annoying that sometimes a typo would make a totally incorrect answer" (Participant 183). At first, this comment seems that the participant found the tool to be unappealing. However, it may also suggest that he/she still enjoyed completing the work even though it was bothersome. Regardless of how Duolingo motivated L2 learners, it was apparent that the dynamic nature of motivation as discussed by Dörnyei (2009) emerged throughout participants' open-ended responses.

## Self-perceived advantages and disadvantages of Duolingo

Participants noted advantages and disadvantages of Duolingo. For example, Participant 179's statement of "DUOLINGO IS AWESOME" was just as compelling as Participant 7's comment of "Duolingo is easy to use and provides practice of all facets of language learning. It also keeps track of your individual progress and steers future progression." Nonetheless, the
disadvantages such as being "busy work" (Participant 132) and "frustratingly repetitive" (Participant 66) were also valid.

However, despite the twenty-five coded responses for negative aspects, all of the motivating factors noted by participants, which totaled 341 coded responses, far outweighed them. The data indicated that the majority of participants had a very positive experience with the platform. Duolingo was "a helpful tool to learn more about the L2" (Participant 73) and L2 learners noted that they were learning and improving their "knowledge of [S]panish" (Participant 59), "reading, speaking, and writing in the language" (Participant 83) and "listening skills through online technology" (Participant 105). Therefore, this study showed that utilizing a MALL tool such as Duolingo, one that was "easy to do on your phone" (Participant 124), should be used as a tool in L2 classrooms. Not only did this technology motivate L2 students and create an autonomous learning experience where, according to Holec (1981), they were able to take charge of their learning, but also one that developed their L2 skills.

## Conclusions

Participants found value in completing Duolingo for a variety of reasons. Motivating students with extra credit allowed participants to learn more about this tool. Once they started using it, participants then completed the optional assignments for other reasons apart from extra credit, albeit small percentages. For this reason, there is a definite need for further research utilizing Duolingo in the L2 classroom. Exploring the use of MALL, through Duolingo, for a longer duration would be helpful to analyze participant engagement. In order to interpret the reasons for completing or not completing optional Duolingo activities, asking all participants to explain their decisions would be helpful to understand the motivation or lack thereof for these L2 learners. Furthermore, integrating required Duolingo assignments versus optional ones would also provide data to discern L2 learners' motivations.

Despite these limitations, this study showed that utilizing MALL in an L2 classroom as a supplemental tool benefited participants. By completing Duolingo activities, participants took responsibility for their learning and were able "[t]o work on my fundamentals" (Participant 166), "sentence structure" (Participant 66), and "more vocabulary" (Participant 83). Not only were participants motivated by these advantages, but also that the technology allowed them "to learn another language efficiently" (Participant 143).

Therefore, MALL, via Duolingo, is a value-add for the L2 classroom. For this reason, L2 instructors should utilize pedagogical approaches that utilize technology tools in order to create an autonomous, motivating experience for $21^{\text {st }}$ century L2 learners. With a supplemental tool such as Duolingo, L2 learners will become more engaged with the L2 learning process. In turn, this motivation will lead to further study of the L2 and consequently provide a way to combat the enrollment decline in language programs as indicated in the MLA's comprehensive analysis (Goldberg, Looney, \& Lusin, 2015). It is the hope that this motivation will not only positively impact students' decisions to take language courses, but also to become language majors and/or minors.

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## Acknowledgements

In carrying out this study, the author received assistance from the following colleagues and research assistants, who deserve her thanks: Mei-Hsiu Chen, Adam Dabrowski, and Kathleen Moskowitz.
Disclosure statement
No potential conflicts of interest were reported by the author.


[^0]:    ${ }^{1}$ Limitations regarding these criteria and what Langer (2011), Félix-Brasdefer (2018), and García (2008) constitute "standard Spanish" are later discussed (see Discussion, Implications, and Limitations).

[^1]:    ${ }^{2}$ Prior to a name change due to marriage, the author used her maiden name, Bohinski, for publications

