Foreign Language Faculty Research-Related Beliefs, Perceptions, and Research Motivation at Three Mexican Universities

Motivación, creencias y percepciones hacia la investigación de profesores de lenguas extranjeras en tres universidades mexicanas

María del Rosario Reyes-Cruz* Griselda Murrieta-Loyo** Moisés Damián Perales-Escudero*** Universidad de Quintana Roo, Chetumal, Mexico

This paper examines the research self-efficacy beliefs, research motivation, and perceptions of research importance and research obstacles of 100 professors and lecturers of foreign languages at three Mexican universities. Survey results show that faculty hold moderate to high research self-efficacy beliefs, are highly motivated to conduct research, think research in the area is very important, and perceive that lack of time is the main obstacle to conducting research. The lack of fit between most participants' relatively high self-efficacy and limited research engagement suggests the possibility that faculty overestimate their research abilities. The implications of these findings are also discussed.

Key words: Foreign language faculty, research conditions, research motivation, research self-efficacy.

Este artículo examina las creencias de autoeficacia para la investigación, la motivación, las percepciones sobre la importancia de esta actividad y los obstáculos que enfrentan 100 profesores de lenguas extranjeras de tres universidades mexicanas para realizarla. Los resultados de una encuesta mostraron que los profesores albergan creencias sobre su eficacia en investigación que van de moderadas a altas. Igualmente, éstos se dicen muy motivados para realizar investigación y la consideran una actividad importante para el área. El obstáculo más recurrentemente mencionado fue la falta de tiempo. La poca consistencia entre el sentido alto de autoeficacia de la mayoría de los participantes y su limitado compromiso para la investigación sugieren la posibilidad de que los profesores hayan sobrevalorado sus habilidades investigativas. Finalmente, se discuten las implicaciones de estos hallazgos.

Palabras clave: condiciones para la investigación, creencias de autoeficacia para la investigación, motivación para investigar, profesores de lenguas extranjeras.

*** E-mail: mdperales@uqroo.edu.mx

This article was received on June 30, 2017 and accepted on February 1, 2018.

This is an Open Access article distributed under the terms of the Creative Commons license Attribution-NonCommercial-NoDerivatives 4.0 International License. Consultation is possible at https://creativecommons.org/licenses/by-nc-nd/4.0/.

^{*} E-mail: rosreyes@uqroo.edu.mx

^{**} E-mail: grises@uqroo.edu.mx

How to cite this article (APA, 6th ed.): Reyes-Cruz, M. R., Murrieta-Loyo, G., & Perales-Escudero, M. D. (2018). Foreign language faculty research-related beliefs, perceptions, and research motivation at three Mexican universities. Profile: Issues in Teachers' Professional Development, 20(2), 35-49. https://doi.org/10.15446/profile.v2on2.66008.

Introduction

In many contexts, foreign-language (FL) education as a field has traditionally been construed exclusively in teaching-oriented terms by both university authorities and faculty¹ (Borg, 2013). In some periphery countries, like Mexico, it is only in the past two decades that serious policy efforts to professionalize FL teachers (primarily university teachers but also others) have been undertaken. These efforts have involved opening undergraduate and graduate programs in English as a foreign language (EFL) (Lengeling, 2010), and, to a lesser extent, French and other European languages.

These FL-focused initiatives have coincided with nation-wide policies aimed at improving the research abilities and productivity of all university professors. Mexican educational policies explicitly pursue the goal of turning university professors into internationally competitive researchers who are part of solid research groups and develop national and international collaboration networks. The implementation of these policies has involved massive training and credentialization programs because, at the turn of the century, most university professors in most disciplines did not hold doctorates (Secretaría de Educación Pública, 2006). The latter is especially true for FL faculty (Reyes-Cruz & Perales-Escudero, 2016). As a result, FL faculty members in Mexico face new and incremental pressures to become researchers despite their often insufficient training in research methods. Therefore, the process of adaptation to this new demand to conduct research has been challenging and slow (Ramírez, Gilbón, & Moreno, 2010).

Several dimensions of FL university faculty research have been investigated, such as their general perspectives about research (Allison & Carey, 2007), engagement in and with research and research motivation (Borg & Liu, 2013), identity processes (Xu, 2013), and research self-efficacy (Wyatt & Dikilitaş, 2016). A common theme emerging from this literature is the perception of research as a difficult endeavor due to insufficient training and lack of confidence, expertise, and motivation. These findings suggest that the construct of self-efficacy may provide a fruitful theoretical framework to shed further light on the development of FL teachers' research abilities.

Self-efficacy is a central construct in social cognitive theory (SCT). Bandura (1997) defines self-efficacy as "the belief in one's ability to organize and execute the actions needed to achieve one's desired goals" (p. 3). Beliefs about self-efficacy are thought to be the foremost mediators of behavior and behavioral change. For the last 25 years, Bandura (1995, 1997) has developed and supported the idea that beliefs about one's abilities affect one's behavior, motivation, success, and failure.

Self-efficacy beliefs can be good predictors of behavior (Bandura, 1997; Kim & Cho, 2014; Vasil, 1992; Wyatt & Dikilitaş, 2016). Educational research has found positive correlations between self-efficacy, academic performance, and self-regulated learning (Hackett, 1995; Pajares, 1996; Schunk, 1982; Zimmerman, 1995). For the purposes of this study, research self-efficacy is defined as a personal estimate of how good one can be at executing research-related tasks (Hemmings & Kay, 2010, p. 563).

From an SCT perspective, self-efficacy beliefs and motivation are related, and motivation tends to be understood and investigated in terms of goals, goalsetting, and willingness to perform tasks. According to Bandura (1997), goal-assessment is one way that self-efficacy influences motivation. If goals are perceived to be too simple or too difficult for one's self-efficacy, those perceptions may dampen motivation. Similarly, achievable, short-term gradual goals may contribute to the development of self-efficacy in ways that ambitious, long-term goals may not. Bandura (1997) also suggests that intrinsic motivation is likely to correlate with a high

^{1 &}quot;Faculty" is used to refer to both full-time professors at all rank levels and hourly lecturers. The sample for this study includes both types of faculty, with a large majority of them being full-time professors. All the participants, including the professors, are active classroom teachers of foreign languages, chiefly English but also French in some cases.

sense of self-efficacy, while extrinsic motivation may exert a more mixed influence on self-efficacy.

From an extensive review of the literature, Wyatt and Dikilitaş (2016) conclude that teachers' research self-efficacy is likely to be low in many countries due to poor training, teachers' non-functional attitudes or perceptions of research, and unsupportive environments. Yet, as stated above, educational policy in some contexts is such that university teachers have little choice but to turn themselves into researchers, with varying levels of training and support. It seems, then, that identifying faculty research-related beliefs, including self-efficacy beliefs, and research motivation is a necessary step in facilitating their development as researchers and in finding ways to improve the quality and quantity of FL teacher research.

We focus on foreign language faculty (university professors who teach in foreign language departments) in Mexico because they offer the interesting case of a group of faculty and a profession that were not required or trained to conduct research until recently in this specific country. Our study also has the potential to add insights to the existing literature because it includes two distinct groups of FL faculty: well-trained, experienced researchers with strong publication records, and less experienced researchers with less-than-optimal training and minimal publication records. What these two groups have in common is that they are all classroom FL teachers, and they are all subject to the same institutional policy pressures to publish and engage in research.

The results presented here could therefore be of use to guide research self-efficacy studies with similar populations in other contexts. Then, the overall goal of this study is to describe the research self-efficacy beliefs, research motivation, importance attributed to research, and perceptions of research obstacles held by the foreign language faculty at three Mexican public universities: Northeastern University (NU), Central University (CU), and Southeastern University (su). We also compare the self-efficacy beliefs of faculty with strong research engagement with those of faculty that are less engaged in research. Our results suggest that the latter tend to overestimate their research capacities, which has implications for policy-making and for further research.

Literature Review

Studies of FL teachers' research started in the 1980s (Borg, 2013) out of an interest to improve FL teaching through action research. As a result, most studies of this subject have followed an action research perspective (Atay, 2008; Borg & Liu, 2013; Burns, 2010; Wyatt & Dikilitaş, 2016). Other studies have focused on teachers' commitment to research (Borg & Alshumaimeri, 2012; Gao, Barkhuizen, & Chow, 2011), their perceptions of research (Allison & Carey, 2007), teachers' motivation and attitude toward research (Bai & Hudson, 2011; Borg, 2009), and the development of teachers' research identities in connection with contextual influences (Xu, 2013). In general, the studies indicate that teachers find research difficult and even alien to their identities, but can engage with it meaningfully with adequate support. Various factors such as intrinsic pay incentives and institutional support, or lack thereof, play a role in both teachers' motivation to conduct research and actual research engagement.

To the best of our knowledge, only two studies have focused on FL university teachers' research selfefficacy. One is by Wyatt and Dikilitaş (2016). Working from a qualitative action research perspective, they found that engaging teachers in a continuing professional development program helped them to become more self-efficacious by providing enactive mastery experiences that led to the development of practical knowledge about various aspects of research. These positive outcomes occurred despite the teachers' initially low self-efficacy beliefs.

The second study is by Reyes-Cruz and Perales-Escudero (2016), who used qualitative methods to identify variation in Mexican FL faculty research self-efficacy levels and motivation in connection with

37

academic degree, motivation types, and strategic behaviors. Professors with doctorates, intrinsic motivation, and strategic behaviors showed the highest self-efficacy. Professors with master's degrees and low motivation showed the lowest self-efficacy. Previous experience and mentoring were influential sources of self-efficacy.

With regard to obstacles to conduct research, insufficient time and training have been reported as the most prevalent ones by FL faculty, both in Mexico (Busseniers, Nuñez, & Rodríguez; 2010; Reyes-Cruz & Hernández-Méndez, 2014; Reyes-Cruz & Higuera-Bonfil, 2015) and internationally (Bai & Hudson, 2011; Borg, 2009; Xu, 2013). As for research motivation, the literature paints a complex picture with some studies showing that teachers are intrinsically motivated to conduct research and others indicating that teachers' research motivation, if it exists, is mostly extrinsic. For example, Mehrani (2015) investigated the research involvement and research motivation of 24 Iranian EFL teachers. The findings showed that the teachers were motivated by an intrinsic interest in professional development, by the thought that research could help with pedagogical concerns, and by extrinsic factors such as institutional requirements and incentives.

By contrast, the Chinese EFL teachers in Yuan, Sun, and Teng (2016) had little to no motivation to conduct research before their participation in an action research program. Their motivation during this program was heavily influenced by identity factors such as (mis) matches between different selves that the participating teachers constructed during their engagement in action research. Some were demotivated because they thought their research self would compete negatively with their teaching-centered self. Others were able to resolve this conflict and develop research-oriented selves. Also in China, and somewhat similarly, Xu (2013) found that the Chinese EFL teachers in his sample were motivated to conduct research by extrinsic factors such as promotion opportunities and pay incentives. In Mexico, Reyes-Cruz and Perales-Escudero (2016) found variation in the levels and types of FL faculty motivation related basically to the academic degree. FL professors with doctorates were intrinsically and extrinsically motivated to conduct research, whereas FL professors with master's degrees tended to be motivated only extrinsically, but some of them were beginning to develop intrinsic forms of motivation thanks to mentoring and active engagement in research. It seems, then, that the context-embedded situations and identities of teachers exert powerful influences on their research motivation.

This study was different from previous ones because it used a qualitative design and focused simultaneously on research motivation and research self-efficacy. Its design also incorporated an explicit focus on the differences in the degrees held by the participants (MA vs. PhD). This proved to be a relevant factor to reveal some underlying causes of the differences in participants' research self-efficacy and motivation.

The present study builds on our previous ones in two ways. First, it continues to probe possible mismatches between perceived and actual efficacy by incorporating membership in Mexico's National Research System (*Sistema Nacional de Investigadores*, SNI in Spanish, hereafter NRS) as a factor under consideration. Second, it features a much larger sample that spans three different universities in three distinct and distant regions of Mexico. It thus overcomes one of the key limitations of previous studies, namely, their small sample sizes and their focus on only one university. The results are thus more robust and representative of the national situation.

Method

Participants

The participants were 100 out of a total of 106 FL faculty members (94% of the total population of tenured and tenure-track professors and hourly lecturers) in three different Mexican public universities located in different regions of the country. Pseudonyms are used in this research to name the three settings: Northeastern University (NU), Central University (CU), and Southeastern University (SU). We aimed at a census of the total sample of 106 faculty members with at least one publication issuing from a research project regardless of their type of appointment. At the time, NU had 35 such faculty members, CU had 36, and su had 35. A census sample was impossible to achieve, however, due to the fact that six professors were on leave and others could not be reached. In the end, our sample included 32 NU faculty members, 33 CU faculty members, and 35 SU faculty members. Eighty-nine of the participants are full-time, tenured or tenure-track professors, four are hourly lecturers, and four are tenured, half-time professors. Under the Mexican system, some professors have half-time appointments and are thus not expected to put in as many hours of teaching, service, and research as fulltime professors. Three participants did not provide information on their type of appointment.

As stated in the introduction, one important variable in our study was the quality of research engagement in terms of training, experience, and productivity. We operationalized this variable by determining which participants are members of the NRS. The NRS was created by the Mexican government in the 1980s as a way to provide supplementary income to researchers and scholars in order to prevent brain drain. Mexican professors and other researchers can be appointed to the NRS if they meet a set of requirements such as holding a doctorate, publishing two papers per year in high-quality journals, leading funded projects, and directing undergraduate and/or graduate theses and dissertations. There are four levels of membership as determined by research productivity and impact, and researchers must reapply for membership every so many years depending on their level. Membership is highly coveted because of the financial rewards and

status it confers. Fourteen of our participants were NRS members at the time we conducted this study, 74 were not and 12 did not answer. We also gathered other information related to the research engagement variable that was not used for statistical tests but provided a backdrop for discussing self-efficacy findings, such as years of research experience and weekly hours devoted to research.

Instruments

The questionnaire's design was informed by Bandura's (1997) SCT and his advice on item design. It consisted of three sections: research engagement (NRS membership, years of research experience, weekly hours devoted to research, highest degree held; four multiple-choice items), perception of research obstacles (one open question), and research beliefs and perceptions. The latter was an 18-item, Lykert-type questionnaire consisting of the following variables: importance of research (six items), research self-efficacy (six items), and research motivation (operationalized as research goals and willingness to engage with and in research, six items). The instrument was validated by three experts. They were given the definitions of each variable and were asked to relate the items to the definition that better fit each of them. They were also asked to rank the relevance of all the items on a scale from one to three (Levy & Varela, 2005). Their ranking and comments were used as criteria to remove or modify items.

The reliability of the instrument was estimated by using Cronbach's alpha test. The instrument obtained an alpha reliability of .853. Alpha reliabilities for the three sub-scales of research self-efficacy, research importance, and research motivation were .95, .86, and .80, respectively. To determine the questionnaire's validity, three factor analysis tests were performed with Varimax Kaiser rotation. As predicted by the theory, the results yielded three components. Rotation punctuations can be seen in Table 1.

I am able to/I believe that		Component				
		2	3			
Choose a research design in order to answer a series of questions or test a series of hypotheses about a research topic of my interest.	.884	.144	.265			
Articulate a clear research question or testable hypothesis.	.878	.180	.140			
Survey a specific topic in the area of foreign languages and write a balanced, critical, and comprehensive literature review.	.865	.149	.175			
Implement the data analysis strategy that best matches my study.	.856		.217			
Design and implement the sampling strategy that best matches my research study.	.836	.194	.213			
Effectively communicate in writing the results of my study and its implications.	.829	.228	.132			
Research provides solid grounding for professional practice.	.151	.825				
Evidence-based practice promotes uptake of research results in the area of foreign language teaching.		.801	.207			
Participating in a study allows the language teacher to explore and reflect on her own practice.	.305	.796	110			
A strong research base underpinning practice can increase substantially the credibility and profile of foreign language faculty.	.323	.713				
Researching their own work is useful for foreign language faculty.	.281	.705	132			
It is necessary to conduct research in the field of foreign languages.	.420	.700				
I try to become a member of networks or research groups that work on my line of inquiry.	.168		.800			
I try to network with more experienced researchers in order to learn from them.			.752			
Since I became a faculty member, I've taken advantage of/actively sought any opportunity to get training as a researcher.	.250		.737			
I keep up to date with the publications on my line of inquiry.	.318	103	.671			
Every year, I have a well-defined research plan.	.154		.619			
I like participating in seminars, conferences, and lectures.	.212	.113	.433			

Table 1. Principal Axis Factoring With Varimax Rotation for All Items

Extraction method: Main component analysis.

Rotation method: Varimax with Kaiser.

a. Rotation has converged for 6 iterations.

Procedure

Members of the research team, including the authors, contacted the participants selected using the criteria above (having published at least one paper as a result of involvement in a research project), elicited informed consent, gave the questionnaires to the participants and collected the completed questionnaires from them after a few days. The resulting data were entered into and processed with SPSS v.20. Visual inspection and the Kolmogorov-Smirnov test were used to determine the normality of the data as a whole and in different sub-scales: all the data showed normal distributions.

Results

Research Self-Efficacy

Faculty answers about their ability to carry out activities pertaining to the different stages of research studies were mostly at the very able and able levels. Question 4 had the highest proportion of participants choosing these two levels (82%), followed by Question 6 (80%). The level of average ability got the highest proportion for Question 1 (22%), followed by Question 5 (20%). The level of low ability got the highest proportion for Question 4 (10%), followed by Question 3 (7%). The choices "unable" and "I don't know" did not get significant numbers (see Table 2).

Having a high sense of self-efficacy is, in principle, a promising sign. However, if self-efficacy beliefs are not founded on realistic self-assessments of one's capacities, individuals may never undertake actions to breach the gap between actual and perceived efficacy (Bandura, 1997), which is inimical to reflection and improvement (Wheatley, 2002).

Research engagement information suggests a lack of fit between participants' research self-efficacy and actual efficacy. For example, 54 reported less than four years of research experience, 74 only hold master's degrees, and 66 reported dedicating less than 10 hours a week to research. All of this means they have had few chances to engage in enactive mastery experiences that would build actual research efficacy. Although one could also gain expertise by participation in research projects that afford enactive mastery and vicarious experiences, this possibility is unlikely for our participants. Up to about 10 years ago, the main activity of FL university faculty in Mexico was teacher training, with no research of any kind (Lengeling, 2010). From this fact it can be inferred that with few exceptions, faculty did not have early research socialization experiences and only a handful might have learned how to do research before getting their doctorates.

Further evidence for this lack of fit comes from a comparison of the means of the six self-efficacy items for the two groups: NRS members and non-members. We ran a chi-square test that showed no significant differences across the means and groups (Pearson $\chi^2 = 12.758$, p > .5), with both groups showing moderately high self-efficacy for the six items. This lack of difference in self-efficacy is inconsistent with the expectation that NRS members would have a higher sense of self-efficacy because of their demonstrably higher actual research efficacy.

I am able to	1	2	3	4	5	6
1. Choose a research design in order to answer a series of questions or test a series of hypotheses about a research topic of my interest.	29	43	22	5	0	1
2. Articulate clear research questions or a testable hypothesis.	33	43	19	4	0	1
3. Survey a specific topic in the area of foreign languages and write a balanced, critical, and comprehensive literature review.	31	42	18	7	1	1
4. Implement the data analysis strategy that best matches my study.	23	50	16	10	0	1
5. Design and implement the sampling strategy that best matches my research study.	21	49	20	6	4	0
6. Effectively communicate in writing the results of my study and its implications.	32	48	17	2	0	1

Table 2. Research Self-Efficacy

Note. 1 = Very capable, 2 = Capable, 3 = Average capability, 4 = Not very capable, 5 = Incapable, 6 = I don't know. Numbers are percentages.

According to Bandura (1997), the relationship between perceived self-efficacy and actual performance depends on the conditions and context where people are located. He suggests that individuals may overestimate their capabilities in situations where there are no reference criteria, or the existing ones are not adequate. This may be the case in Mexico, a country where the field of foreign language teaching is still very young when it comes to research; therefore, a critical mass of research activity is still developing. That is, few national venues—conferences or journals feature high standards of scientific assessment; contacts with international peers are still inchoate. Therefore, Mexican FL faculty may lack adequate reference criteria to judge their actual research efficacy, leading to inflated self-efficacy.

As suggested by other studies (e.g., Wyatt, 2015), social desirability bias may also play a role in this lack of fit between actual research efficacy and self-efficacy beliefs. Bandura (1997) suggests that it is important for the adequate development of self-efficacy to avoid placing individuals in situations where they are likely to fail early in the process. FL faculty in Mexico have been increasingly pushed to conduct research because of national and institutional policy pressures. Most faculty, however, do not have the necessary training (Reyes-Cruz & Hernández Méndez, 2014). Then, it is possible that they tend to overestimate their capabilities because of a desire to gain a better social image (Dörnyei, 2003) or to be accepted and valued (Brown & Levinson, 1987).

Research Motivation

The analysis of our goal-oriented items shows that faculty are strongly motivated to conduct research. As shown in Table 3, the question that got the highest proportion of positive answers, as determined by putting together the "completely agree" and "agree" answers, was Number 4 (97%), which asked about participants' engagement with research seminars, conferences, and lectures. The item with the lowest proportion of these positive answers was Item 1 (54%), related to the establishment of an annual research plan. This item also got the highest proportion of answers indicating ambivalence or disagreement (46%). Readers should note that some of the participants did not answer all the questions in this and other sections, so the numbers do not always add to 100.

The fact that most of the faculty favors researchoriented goals is very positive. At the same time, the fact that Item 4 (which pertains to participation in research seminars, conferences, and lectures) got the highest numbers suggests that this motivation has an extrinsic component. This is because institutional policies across the three universities under study compel faculty to get involved in these activities and reward them financially for doing so.

	1	2	3	4	5	6	7
1. Every year, I have a well-defined research plan.	15	39	16	16	8	5	1
2. I keep up to date with the publications on my line of inquiry.	26	48	11	13	1	0	1
3. Since I became a faculty member, I've taken advantage of/ actively sought any opportunity to get training as a researcher.	33	37	9	17	1	3	0
4. I like participating in seminars, conferences, and lectures.	66	31	2	1	0	0	0
5. I try to network with more experienced researchers in order to learn from them.	48	36	6	8	0	1	1
6. I try to become a member of networks or research groups that work on my line of inquiry.	36	36	13	11	1	2	1

Table 3. Motivation to Conduct Research

Note. 1 = Strongly agree, 2 = Agree, 3 = I can't decide, 4 = Disagree, 5 = Strongly disagree, 6 = I don't know, 7 = Did not answer. Numbers are percentages.

With regard to Item 1 (establishing an annual research plan), an implication of Bandura's (1997) goal theory is that establishing an annual research plan is an important step in the development of self-efficacy. The low figures for this item then suggest that faculty would benefit from setting realistic, short term goals in this regard. If professors effectively pursue goals to keep up to date, publish more, and associate with other colleagues to learn, surely trying to reach those goals will produce good results. However, such goals must be clear, realistic, and temporally close if they are to contribute to motivation and self-efficacy. Faculty thus needs the support of their institutions and recognition for their short-term achievements, even if they are not extraordinary. Recognition would allow them to slowly build their sense of research self-efficacy and persevere in the face of the drawbacks they will surely experience along the way.

The results reported above are comparable to the high motivation of FL faculty found by Reyes-Cruz and Higuera-Bonfil (2015). The participants in that study and this one reported high levels of motivation, probably because the context and research design (quantitative) are similar. Nevertheless, the qualitative research by Reyes-Cruz and Perales-Escudero (2016), which was conducted in the same context, found that professors with doctorates are the ones who show more motivation, particularly intrinsic motivation, whereas professors with master's degrees tend to be motivated extrinsically. This difference may be due to the research design itself. Other studies have investigated motivation in connection with promotion or tenure; our instrument did not address that variable. Future studies should incorporate questions about these dimensions of extrinsic motivation.

Importance of Research

The overwhelming majority of faculty fully agreed that it is important to conduct research in foreign languages for a variety of reasons. The lowest proportion was for Item 6 about the necessity to conduct research in FL, with 85%; the highest was for Item 1 stating that research provides solid ground for professional practice, with 96% (see Table 4).

	1	2	3	4	5	6	7
1. Research provides solid ground for professional practice.	74	20	3	1	0	2	0
2. Evidence-based practice promotes uptake of research results in the area of foreign language teaching.	42	43	6	0	3	5	1
3. Participating in a study allows the language teacher to explore and reflect on her own practice.	83	15	0	1	0	1	0
4. A strong research base underpinning practice can increase substantially the credibility and profile of foreign language faculty.	73	22	3	0	0	2	0
5. Researching their own work is useful for foreign language faculty.	68	25	5	1	0	1	0
6. It is necessary to conduct research in the field of foreign languages.	42	43	6	3	0	5	1

Table 4. Importance of Research

Note. 1 = Strongly agree, 2 = Agree, 3 = Can't decide, 4 = Disagree, 5 = Strongly disagree, 6 = I don't know, 7 = Did not answer. Numbers are percentages.

This positive stance towards research aligns with current trends that see research as a tool to make informed pedagogical decisions (Hargreaves, 2001), promote professional development (Kirkwood & Christie, 2006), understand theoretical findings, and take a more innovative role toward the curriculum (Gurney, 1989). Bandura (1997) states that the goals most persistently pursued are those of the highest personal value and standing in one's hierarchy. In this case, all faculty appear to agree that research is very important; it follows that they are likely to engage in this activity.

Nonetheless, these answers could be motivated by a desire to gain acceptance. As stated above, research is highly valued in current university contexts, even in those academic fields that have not traditionally trained researchers. Therefore, it would be inappropriate to say that research is not important. Bandura (1997) also states that imposed goals are resisted when they do not bring about personal reward or fulfillment and only aim at improving productivity. In other words, ideally, faculty should develop intrinsic motivation rather than do research to comply with institutional policy. Institutions should assess the field's research maturity and design policies that allow for a gradual development of research self-efficacy. If policy only sets standards but does not address development, results are likely to be inconsistent and less than optimal.

Obstacles to Conduct Research

Obstacles in the questionnaire can be classified into two types: institutional and personal. The first kind is more prevalent since a large majority reported not having time for research (89%). This result matches previous findings by Busseniers et al. (2010), Borg (2009), Bai and Hudson (2011), and Xu (2013). Teachers also report insufficient flexibility on the part of administrators to apportion service and teaching duties variably in accordance with the different stages of research (67%) and insufficient funding (49%). These obstacles were also found by Reyes-Cruz and Hernández Méndez (2014). Insufficient institutional recognition of research (43%) and not having a mentor (36%) also got high numbers, which coincides with Hernández, Gómez, and Murrieta (2011). Similarly, Landino and Owen (1988) also found that an absence of institutional commitment contributes to low self-efficacy.

This result evinces the absence of changes in institutional culture that may contribute to the success of research-focused policies. Culture does not change by command (Elmore, 2004) but through the replacement of existing norms, structures, and processes by others that contribute to the changes being sought. That is, cultural change processes (in this case a change from just teaching to doing both research and teaching as equally important activities) depend mostly on modeling the new values and behaviors that are to replace existing ones. Feeling guided and included in research activities organized by the department contributes to research self-efficacy (Landino & Owen, 1988).

Regarding personal obstacles, some of them are insufficient training (31%), insufficient article writing skills (29%), and insufficient ability to write research proposals (25%). It is interesting that 11 participants referred to fear of peer review as an obstacle to conduct research. All these participants hold only MAS rather than doctorates. None is a member of the NRS. The majority of them does not belong to an AC and indicated that they have little or no training and skills to conduct and/or write up research. Our previous work (Reyes-Cruz & Perales-Escudero, 2016) suggests that their fear may stem from having received scathing reviews in the past and from attributing their failure to low ability rather than low effort. The absence of fear of peer review in the remaining 89 participants may be due to several factors. In the case of faculty with doctorates and NRS membership, this factor may be welldeveloped actual efficacy and high self-efficacy. In the case of some of the faculty with MAS and doctorates but no NRS appointment, it is possible that they have never experienced rigorous peer review and thus have not been exposed to failure. Other faculty with MAS who are actively involved in research and publication may have developed resilience to negative peer reviews as a result of their enactive mastery experiences. More research is needed to explore these possibilities.

As pointed out by Xu (2013), the most important influences on research output pertain to the individual and the work environment. These results show a combination of both factors. According to Hardré et al. (2007) the importance accorded to research by academics is predicted by the support they get from their departments, and this importance in turn predicts productivity (see Table 5 for further information).

Table 5. Obstacles to Conducting Research

Obstacle	%
Insufficient time.	89
Insufficient flexibility to manage service duties or teaching load according to the needs of different research stages.	67
Insufficient funding.	49
Insufficient institutional recognition of research.	43
Absence of a mentor (a helping, more experienced researcher).	36
Little interest of funding agencies in the field of foreign languages.	33
Insufficient research training.	31
Insufficient ability to write research articles or reports.	29
Insufficient recognition of the value of research on the part of other faculty.	26
Insufficient ability to write research proposals.	25
Insufficient research skills.	24
Poor research environment in the field of foreign languages.	22
Insufficient opportunities for the circulation of research results.	21
Insufficient publication venues in the area of foreign languages.	15
Fear of peer-review.	11

Bandura (1986) states that, under certain conditions, self-efficacy beliefs do not exert any influential, predictive, mediating role on humans' functioning. In poorly-structured systems, teachers may find that, no matter how much effort they invest in research, results are not as desired. That is, if institutions do not provide the necessary support (equipment, resources, infrastructure, practices, and an institutional culture that supports research and understands its nature), faculty are not likely to develop genuine, positive selfefficacy beliefs. Such a situation does not lead faculty to commit to raise their production and achieve higher standards. This is not to say that faculty are not capable of performing adequately as researchers; rather, this is to say that institutions appear to be hindering the development of faculty self-efficacy. In these cases, feelings of inability to cope can lead faculty to burnout (Chwalisz, Altmaier, & Russell, 1992).

Conclusions

The goal of this study was to determine the selfefficacy perceived by faculty in three institutions at three distant locations in Mexico, their motivation to conduct research, and the importance they assign to this activity. Contrary to the prediction of Wyatt and Dikilitas (2016) that language teachers in many countries would have low self-efficacy, we found that most faculty rated themselves as capable or very capable in all the items pertaining to self-efficacy. This discrepancy may be due to sampling differences as our group of participants includes fulltime professors with doctorates and appointments to Mexico's National Research System. These teachers are then highly trained to conduct research and actually do so. Nevertheless, as pointed out above, the high selfefficacy of many other participants is not consistent with their years of research experience, academic degrees, and time devoted to research. It seems then that this group of FL faculty would benefit from estimating their efficacy more accurately so they can undertake concrete actions that may lead them to close the gap that appears to exist between their self-efficacy beliefs and their actual efficacy.

Our results show that the FL faculty in our sample are highly motivated to conduct research and consider it a very important activity. At the same time, the research-related activity that faculty are most interested in (attending seminars, conferences, and lectures) is one that is subject to external impositions and rewards. This fact suggests that extrinsic motivation plays an important role in our participants' research activities, which is consistent with the findings in Xu (2013).

The imbalance between the high figures in the three variables (self-efficacy, motivation, and importance of research) and the little time devoted to research and little actual research experience might be the result of a need to save face and conform to prevalent views in a context where research is highly valued. The subculture of the foreign language teaching community may also be a factor. Because research is such a new activity and because Mexican FL faculty tend to publish in safe, local venues rather than stricter international journals (Ramírez et al., 2010), it is possible that they lack adequate performance standards to measure their own efficacy. In this regard, future studies should examine the impact of specific types of publication practices on FL faculty research self-efficacy.

We found that faculty face several obstacles that are difficult to overcome, both institutional and personal. Because universities benefit if their faculty are highly productive, they should provide faculty with the right conditions to develop an adequate self-efficacy that would benefit all stakeholders. Such conditions include adequate infrastructure, a balance between teaching and research duties, training and mentoring for those without doctorates, and constant updating for those with doctorates. Likewise, support for research stays in other countries or in collaboration with more experienced colleagues is essential to achieve appropriate quality criteria against which faculty can assess their own selfefficacy. Faculty need to feel that institutional demands and their efforts are matched by institutional support.

This paper adds to our prior work by comparing the sense of self-efficacy of faculty with NRS appointments to the self-efficacy of faculty without such appointments. This comparison has provided further evidence of many professors' tendency to overestimate their research self-efficacy in questionnaire studies. This finding points to a difference between our target context of foreign language faculty in Mexico and studies of other disciplines in Anglo-Saxon countries; studies performed in the second type of context reveal a more congruent calibration between self-efficacy and actual efficacy. These differences may be due to the recent shift of the field of foreign languages in Mexico from an exclusive focus on teaching to a new orientation that includes research. Such recency may cause some faculty to have had insufficient vicarious and actual experiences with rigorous research processes. Future studies can continue to explore this possibility using qualitative designs.

Another contribution of this study to our previous ones lies in the geographical spread of our sample. Our previous papers had focused on only one university in a specific region of Mexico. The sample of this paper is larger and spans three very different and distant regions of Mexico (North, Center, and South). Despite this diversity, the results are overall consistent with those of previous studies, which highlight the national nature of the challenges facing foreign language faculty with regard to their research self-efficacy.

This study contributes empirical data on a topic that is scarcely addressed in the area of foreign languages. However, it includes limitations that should be overcome in future studies. For example, with regard to the instrument, the answer choices must be revised as the differences between some of them (such as "capable" vs. "average capability") are not very clear. Furthermore, future studies should investigate whether faculty perceive their shortcomings and do nothing about it or take actions to improve their research abilities; or whether they do not realize that such shortcomings exist. Further, the possibility that individuals might have performed the activities in the questionnaire once or twice might have eschewed the results. Limited experience with specific tasks could have hindered some participants' ability to grasp the complexity of those activities and led them to think that they could perform well as professional researchers. Therefore, future studies would benefit from matching self-perception measures to objective measures of actual research efficacy in various dimensions of the research process.

References

- Allison, D., & Carey, J. (2007). What do university language teachers say about language teaching research? *TESL Canada Journal*, 24(2), 61-81. https://doi.org/10.18806/ tesl.v24i2.139.
- Atay, D. (2008). Teacher research for professional development. *ELT Journal*, 62(2), 139-147. https://doi.org/10.1093/ elt/cclo53.
- Bai, L., & Hudson, P. (2011). Understanding Chinese TEFL academics' capacity for research. *Journal of Further and Higher Education*, 35(3), 391-407. https://doi.org/10.1080 /0309877X.2011.569014.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, US: Prentice- Hall.
- Bandura, A. (Ed). (1995). *Self-efficacy in changing societies*. Cambridge, UK: Cambridge University Press. https:// doi.org/10.1017/CBO9780511527692.
- Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York, us: Worth Publishers.
- Borg, S. (2009). English language teachers' conceptions of research. *Applied Linguistics*, 30(3), 358-388. https://doi. org/10.1093/applin/amp007.
- Borg, S. (2013). *Teacher research in language teaching: A critical analysis.* Cambridge, UK: Cambridge University Press.
- Borg, S., & Alshumaimeri, Y. (2012). University teacher educators' research engagement: Perspectives from Saudi Arabia. *Teaching and Teacher Education*, *28*(3), 347-356. https://doi.org/10.1016/j.tate.2011.10.011.

- Borg, S., & Liu, Y. (2013). Chinese college English teachers' research engagement. *TESOL Quarterly*, 47(2), 270-299. https://doi.org/10.1002/tesq.56.
- Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage*. Cambridge, UK: Cambridge University Press.
- Burns, A. (2010). *Doing action research in English language teaching: A guide for practitioners*. New York, US: Routledge.
- Busseniers, P., Nuñez, P., & Rodríguez, V. (2010). Teachers and research at the school of languages, Universidad Veracruzana. In P. Busseniers, M. M. Hernández, & B. C. Murrieta (Eds.), Variaciones sobre un mismo tema: la investigación sobre lenguas extranjeras (pp.100-112). Xalapa, MX: Universidad Veracruzana.
- Chwalisz, K., Altmaier, E., & Russell, D. (1992). Causal attributions, self-efficacy cognitions and coping with stress. *Journal of Social and Clinical Psychology*, 11(4), 377-400. https://doi.org/10.1521/jscp.1992.11.4.377.
- Dörnyei, Z. (2003). *Questionnaires in second language research: Construction, administration and processing.* New York, US: Lawrence Erlbaum Associates.
- Elmore, R. F. (2004). *School reform from the inside out: Policy, practice, and performance.* Cambridge, US: Harvard Education Press.
- Gao, X., Barkhuizen, G., & Chow, A. (2011). Research engagement and educational decentralisation: Problematising primary school English teachers' research experiences in China. *Educational Studies*, *37*(2), 207-219. https://doi. org/10.1080/03055698.2010.506338.
- Gurney, M. (1989). Implementer or innovator: A teacher's challenge to the restrictive paradigm of traditional research. In P. Lomax (Ed.), *The management of change* (pp. 13-28). London, UK: Multilingual Matters.
- Hackett, G. (1995). Self-efficacy in career choice and development. In A. Bandura (Ed.) *Self-efficacy in adaptation of youth to changing societies* (pp. 232-258). Cambridge, UK: Cambridge University Press. https://doi.org/10.1017/ CBO9780511527692.010.
- Hardré, P. L., Miller, R. B., Beasley, A., Pace, T., Maxwell, M. S., & Xie, K. (2007). What motivates university faculty

members to do research? Tenure-track faculty in researchextensive universities. *Journal of the Professoriate*, 2(1), 75-99.

- Hargreaves, A. (2001). *Aprender a cambiar: la enseñanza más allá de las materias y los niveles* [Learning to change: Teaching beyond courses and levels]. Barcelona, ES: Octaedro.
- Hemmings, B., & Kay, R. (2010). Research self-efficacy, publication output, and early career development. *International Journal of Educational Management*, 24(7), 562-574. https://doi.org/10.1108/09513541011079978.
- Hernández, E., Gómez, L., & Murrieta, G. (2011). La investigación en el área de lenguas en la Universidad de Quintana Roo: logros, retos y expectativas [Research on languages at the University of Quintana Roo: Achievements, challenges, and expectations]. In M. R. Reyes. (Ed.), 20 años de lenguas extranjeras en la Universidad de Quintana Roo (pp. 19-42). Chetumal, MX: UQROO-Planea.
- Kim, H., & Cho, Y. (2014). Pre service teachers' motivation, teacher efficacy, and expectation of reality shock. *Asia-Pacific Journal of Teacher Education*, 42(1), 67-81. https:// doi.org/10.1080/1359866X.2013.855999.
- Kirkwood, M., & Christie, D. (2006). The role of teacher research in continuing professional development. *British Journal of Educational Studies*, 54(4), 429-448. https:// doi.org/10.1111/j.1467-8527.2006.00355.x.
- Landino, R. A., & Owen, S. V. (1988). Self-efficacy in university faculty. *Journal of Vocational Behavior*, 33(1), 1-14. https:// doi.org/10.1016/0001-8791(88)90030-9.
- Lengeling, M. (2010). *Becoming an English teacher: Participants'* voices and identities in an in-service training course in *Central Mexico, Guanajuato*. Guanajuato, MX: Universidad de Guanajuato.
- Levi, J. P., & Varela, J. (Coord.). (2005). *Análisis multivariable para las ciencias sociales* [Multivariate analysis for social science]. Spain: Pearson.
- Mehrani, M. B. (2015). English teachers' research engagement: Level of engagement and motivation. *Iranian Journal* of Language Teaching Research, 3(1), 83-97. Retrieved

from http://www.urmia.ac.ir/sites/www.urmia.ac.ir/ files/Article5.pdf.

- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66, 543-578. https://doi. org/10.3102/00346543066004543.
- Ramírez, J., Gilbón, D., & Moreno, E. (2010). Las investigaciones sobre la enseñanza de lenguas extranjeras en México: ¿dónde estamos y qué nos falta por recorrer?
 [Research on teaching foreign languages in Mexico: Where are we and what are we missing?] *Imaginales, Revista de Investigación Social,* (8), 33-39.
- Reyes-Cruz, M. R., & Hernández-Méndez, E. (2014). Productividad y condiciones para la investigación: el caso de los profesores de lenguas extranjeras. *Sinéctica*, 42, 1-17.
- Reyes-Cruz, M. R., & Higuera-Bonfil, A. (2015). Cómo se materializa la política pública sobre la investigación en tres universidades mexicanas. *Revista Congreso Universidad*, 4(3), 175-188.
- Reyes-Cruz, M. R., & Perales-Escudero, M. D. (2016). Research self-efficacy and its sources in foreign language university faculty in Mexico: Implications for educational policy. *Higher Education Research and Development*, 35(4), 800-814. https://doi.org/10.1080/ 07294360.2015.1137884.
- Secretaría de Educación Pública. (2006). Programa de mejoramiento del profesorado: un primer análisis de su operación e impactos en el proceso de fortalecimiento académico de las universidades públicas [Program for the improvement of the teaching staff: A first analysis of its operation and impacts in the process of academic strengthening of the public universities]. México D.F.: Author.
- Schunk, D. H. (1982). Progress self-monitoring: Effects on children's self-efficacy and achievement. *Journal of Experimental Education*, 51(2), 89-93. https://doi.org/1 0.1080/00220973.1982.11011845.
- Vasil, L. (1992). Self-efficacy expectations and causal attributions for achievement among male and female university faculty. *Journal of Vocational Behavior*, 41(3), 259-69. https://doi.org/10.1016/0001-8791(92)90028-X.

- Wheatley, K. F. (2002). The potential benefit of teacher selfefficacy doubts for educational reform. *Teaching and Teacher Education*, 18(1), 5-22. https://doi.org/10.1016/ S0742-051X(01)00047-6.
- Wyatt, M. (2015). Using qualitative research methods to assess the degree of fit between teachers' reported self-efficacy beliefs and their practical knowledge during teacher education. *Australian Journal of Teacher Education*, 40(1), 117-145. https://doi.org/10.14221/ajte.2015v40n1.7.
- Wyatt, M., & Dikilitaş, K. (2016). English language teachers becoming more efficacious through research engagement at their Turkish university. *Educational Action Research*, 24(4), 550-570. https://doi.org/10.1080/09650792.2015.1076731.
- Xu, Y. (2013). Becoming researchers: A narrative study of Chinese university EFL teachers' research practice and their professional identity construction. *Language Teaching Research*, 18(2), 1-18. https://doi. org/10.1177/1362168813505943.
- Yuan, R., Sun, P., & Teng, L. (2016). Understanding language teachers' motivations towards research. *TESOL Quarterly*, 50(1), 220-234. https://doi.org/10.1002/tesq.279.
- Zimmerman, B. J. (1995). Self-efficacy and educational development. In A. Bandura (Ed.), Self-efficacy in changing societies (pp. 202-231). Cambridge, UK: Cambridge University Press. https://doi.org/10.1017/ CBO9780511527692.009.

About the Authors

María del Rosario Reyes-Cruz holds a PhD in International Education from the Universidad Autónoma de Tamaulipas. She is a professor of Language and Education at the Universidad de Quintana Roo (Mexico), and a member of Mexico's national research system. She has published several articles in the field of informational technology, self-efficacy teaching beliefs, learning beliefs, and foreign language research.

Griselda Murrieta-Loyo holds a PhD in Education from the Universidad Autónoma de Morelos. She is an associate professor of Language and Education at Universidad de Quintana Roo (Mexico), and a member of Mexico's national research system. She has published articles in the field of learning beliefs, English teaching program in public schools, and foreign language research.

Moisés Damián Perales-Escudero holds a PhD in English and Education from the University of Michigan. He is an associate professor of language and education at Universidad de Quintana Roo (Mexico), and a member of Mexico's national research system and of the Editorial boards of *JEAP*, *CALJ*, and the *WAC* Clearinghouse. He has published extensively in the field of L1 and L2 academic and disciplinary literacies.