



Araştırma Makalesi / Research Article

Factors Affecting Academics' Self-Efficacy Beliefs for Oral Communication in a Foreign Language

Akademisyenlerin Yabancı Dilde Sözlü İletişim Kurabilme Özyeterlik İnançlarını Etkileyen Faktörler

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ABSTRACT: The use of a foreign language in knowledge production and dissemination is crucially important to academics. Despite this, academics' self-efficacy belief in their foreign-language oral production is under-researched with little data available for cross-cultural comparisons. This study therefore examined faculty members' self-efficacy beliefs for foreign-language oral communication by several background variables. A correlational research method was employed: a diverse sample of faculty members completed an online or paper questionnaire assessing their self-efficacy in foreign-language oral communication. The results revealed no significant differences for the gender, age or work experience of the respondents. It was found that faculty members obtained significantly higher scores on the duration of their foreign-language study, previous experience in teaching in a foreign language, experience of living abroad and academic rank. On the whole, the results suggest that there is a significant association between formal and informal foreign-language experience and self-efficacy.

Keywords: Self-efficacy, academics, oral communication in a foreign language

ÖZ: Akademisyenlerin evrensel bilgi üretme ve yaymalarında yabancı dilin çok önemli bir rolü bulunmaktadır. Buna karşın akademisyenlerin yabancı dilde sözlü iletişim kurabilme özyeterlik inançlarına yönelik veriler son derece kısıtlıdır. Bundan dolayı, bu araştırma, akademisyenlerin yabancı dilde sözlü iletişim kurabilmelerine ilişkin özyeterlik inançlarını seçilmiş bazı demografik değişkenlerle beraber belirlemek amacıyla yürütülmüştür. İlişkisel tarama modeline sahip bu çalışmada geniş bir öğretim elemanı örneklemine ulaşılmış ve onlardan yabancı dilde sözlü iletişim kurabilme özyeterlik inançlarına yönelik bir ölçeği basılı veya elektronik olarak doldurmaları istenmiştir. Araştırma sonucunda katılımcıların cinsiyet, yaş ve mesleki deneyimlerine göre anlamlı fark bulunmazken, öğretim elemanlarının yabancı dil öğrenim süresi, yabancı dil yoluyla öğretim deneyimi, yurtdışında bulunma deneyimi ve akademik unvana göre istatistiksel olarak anlamlı düzeyde yüksek puanlar elde ettikleri bulunmuştur. Bulgular bir arada değerlendirildiğinde ister örgün ister bireysel düzlemde olsun yabancı dil deneyimi ile yabancı dilde sözlü iletişim kurabilme özyeterlik inancı arasında istatistiksel olarak anlamlı bir etkileşim söz konusudur.

Anahtar sözcükler: Özyeterlik, akademisyenler, yabancı dilde sözlü iletişim

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Introduction

An essential component of higher education institutions (HEIs) is the academics and their role can take many forms, and each will require different responsibilities such as research, mentoring and community outreach (Reyes-Cruz & Perales-Escudero, 2016). Traditionally, teaching (Hemmings, 2015; Vera et al., 2011) and research (Cadez, Dimovski & Groff, 2017; Pasupathy & Siwatu, 2014) are two of the main responsibilities of most academics. The mission statements of prestigious higher education institutions on a global scale reveal that they strongly prioritise knowledge production and knowledge dissemination (Arcimaviciene, 2015). Academics are strongly encouraged to steadily enhance their research productivity, join research projects, establish a network of influential peers by participating in national and international events such as conferences (MacFarlane & Hughes, 2009, Pasupathy & Siwatu, 2014) and increase the number of their publications in peer-reviewed journals (McGrail, Rickard & Jones, 2006). Davis and Warfield (2011) and Oester et al. (2017) suggested that networking in academia paves the way for future joint research projects and co-authored academic papers. Academics' productivity is often scrutinized annually as part of performance evaluation reviews, and supervision, publication output and teaching performance are considered to be key indicators of job performance (Cadez, Dimovski & Groff, 2017; McGrail, Rickard & Jones, 2006; Subbaye & Vithal, 2017).

The development of faculty members' efficacy in educational practices and engagement in scholarly activities is indispensable and is also necessary for them to be lifelong learners (Pasupathy & Siwatu, 2014; Sethi, Schofield, McAleer & Ajjawi, 2018). They are expected to critically study and contribute to the relevant literature through prolific publications of their research findings (McGrail et al., 2006), receive research grants, deliver conference presentations (Pasupathy & Siwatu, 2014; Smith, 2017; Tamtekin Aydin, 2017), take part in international projects, engage in international mobility for teaching and research purposes (Delgado & Am, 2018), review manuscripts (Sethi et al., 2018), establish a network of influential researchers in their respective fields of specialisation and assist students in learning and applying knowledge (Smith, 2017). Research self-efficacy refers to academics' judgements about their ability to successfully perform research-related tasks (Pasupathy & Siwatu, 2014; Reyes-Cruz & Perales-Escudero, 2016). Akerlind (2008) similarly found that developing confidence is a strong indicator for understanding their own development as researchers.

Universities display a firm commitment to research as well as teaching, and both require faculty members to be proficient users of a foreign language, which is either the medium of instruction or the language of international higher education, or both (Lasagabaster, 2016). Teaching through the medium of a foreign language in higher education has been growing globally (Macaro et al., 2018; Ozer, 2020; Schmidt-Unterberger, 2018). The growth in foreign-language-medium programmes has posed a strong challenge for academics, as teaching academic subjects in a foreign language requires oral communication and a number of related skills to be at a level which meets the demands of the programme (Macaro et al., 2018; Schmidt-Unterberger, 2018). The decisive role of foreign language in knowledge production and knowledge dissemination for scholars across

the globe is obvious (McGrail, Rickard & Jones, 2006). Universities strongly encourage their academics to have their publications indexed in key global indices such as the Web of Science and Scopus (Altbach, 2015; Cadez, Dimovski & Groff, 2017; McGrail, Rickard & Jones, 2006). However, these indices cover a small number of journals, so academics across the globe are obliged to produce publications in the preferred language of the journal rather than their own native language (Altbach, 2015; Cavazos, 2015). Academics' perceptions of their proficiency in a foreign language are expected to contribute to their beliefs about their effectiveness in teaching (Nygaard, 2019; Thompson & Woodman, 2019) and carrying out research (Bauder, 2015; Nygaard, 2019). Given that all the above-mentioned activities are closely related to foreign-language proficiency, it is clear that cognitive theories such as the self-efficacy theory play a decisive role in faculty members' oral communication in a foreign language.

Perceived self-efficacy refers to individuals' beliefs in their capabilities to organise and execute behaviours needed to produce a desired outcome (Bandura 1986, 1997). In other words, individuals' beliefs in what they are capable of affect what courses of action they prefer to pursue, how much effort they will mobilize and how long they will persevere despite repeated failures (Bandura, 1986, 1993; Schunk & Usher, 2019). Based on their level of perceived self-efficacy, individuals' thought patterns can take self-hindering or self-aiding forms (Bandura, 1986; Schmidt & DeShon, 2010). According to Bandura (1997), the formation of self-efficacy beliefs is a result of the cognitive processing of four different sources of information: performance accomplishments, vicarious experiences, verbal persuasion and physiological states.

Most courses of action are initially rehearsed in thought. Individuals' beliefs in their efficacy affect the anticipatory scenarios which they construct and rehearse. Desired or feared visions of the future provide the basis for these anticipatory scenarios. Individuals who have a high sense of self-efficacy visualise successful scenarios whereas those with a low sense of self-efficacy visualise failure scenarios (Bandura, 1993). People with self-doubt and who are accustomed to experiencing easy successes only have a tendency to dwell on failure scenarios and this negative thinking lowers their motivation and undermines subsequent performance (Bandura, 1986, 2012). The ability to visualise the probable outcomes of prospective actions regulates human motivation and action (Bandura, 1989).

Effects of self-efficacy within academic contexts

The two main roles of academics as teachers and researchers encapsulate tasks across a variety of domains. Teaching efficacy refers to "a judgement about capabilities to influence student engagement and learning" (Woolfolk Hoy, 2004). Teachers who have a high sense of efficacy tend to put greater levels of planning, organisation, enthusiasm and effort into teaching (Reyes-Cruz & Perales-Escudero, 2016; Woolfolk Hoy, 2004), so self-efficacy beliefs affect how teachers persist in their efforts until they achieve their goals (Bandura, 2012; Woolfolk Hoy, 2004). Efficacious teachers persist when things do not go smoothly, and this enables them to be more committed to and more enthusiastic about teaching (Reyes-Cruz & Perales-Escudero, 2016; Woolfolk Hoy, 2004). Studies conducted by Reyes-Cruz and Perales Escudero (2016), Hemmings and Kay (2010) and Vera, Salanova and Martin del

Rio (2011) showed that professors teaching through a foreign language showed the highest research self-efficacy levels compared with those in other academic ranks.

In some HEIs, academics are obliged to increase their research productivity in international peer-reviewed journals or to teach through the medium of a foreign language (Landa, 2006; Pasupathy & Siwatu, 2014), and this requires them to use a foreign language fluently, predominantly English. This is seen in various context-specific situations from teaching to research-related tasks (Costa & Coleman, 2013; Hemmings et al., 2012; Macaro et al., 2018). Some higher education institutions (henceforth 'HEIs') in Turkey and worldwide directly or indirectly force academics to publish in foreign-language journals with a high impact factor because they use citation performance to evaluate academic productivity (Aytekin, Erdil, Erdoğan & Akgün, 2016; Cameron et al., 2015). Citation indices such as the h-index and the i-index are some of the performance indicators used by universities (Demir, Göloğlu-Demir & Özdemir, 2017; Tung, Law & Chon, 2017). The findings of the current study confirm the central role of foreign-language proficiency and its indirect effect on academic productivity. Knight (2013) emphasized the status of English as an international language in the domain of scientific publications and it is now a reality that academics in many non-Anglophone countries are compelled to publish their work in a foreign language, rather than their native language, in order to reach greater visibility (Cavazos, 2015). Xian (2015) found a strong correlation between academics' publication productivity and their attendance at international conferences and seminars. However, it is worth noting that there is an ongoing debate about "linguistic injustice" (Nygaard, 2019) which underlines the fact that the pressure put on scholars to use English for teaching and conducting research puts many academics at a disadvantage (Cameron et al., 2015; Flowerdew, 2008; Landa, 2006).

Oral communication and self-efficacy

Communication skills are essential for career advancement and personal development. Spontaneous speech and a command of planned speech are considered to be two requirements of the mastery of professional oral communication (Cameron et al., 2015). Landa (2006) and Oester et al. (2017) reported that academics are expected to engage in verbal communication in a foreign language in international academic settings if they aspire to belong to research networks and to disseminate their findings on a global scale. Oral communication plays a key role in academic productivity as success in academia depends on the prolific publication of research findings (Pasupathy & Siwatu, 2014), academic networking and collaboration with foreign partners (Oester et al., 2017). Xian (2015) suggested that some international factors such as producing publications in foreign-language journals might have brought about an increase in academics' research productivity. Aytekin et al. (2016), however, claimed that some Turkish academics tended to avoid using written and verbal communication in English chiefly because of their inability to meet the language use requirement of journals and scholarly communication problems with editors. Aytekin et al. (2016) and Oester et al. (2017) reported that some academics were unwilling to communicate and cooperate with foreign researchers or were reluctant to do networking at conferences or during social events. This can discourage academics from attending international conferences and collaborating on international projects and ultimately affect

their academic productivity. Even if academics attend a formal or informal scientific gathering, they might demonstrate an unwillingness to engage in conversations in a foreign language. Helm and Guarda (2015) found that faculty members can feel frustrated by their inflexibility to improvise while teaching in a foreign language and so might tend to keep conversations shorter.

There has been little research into academics' foreign-language self-efficacy beliefs in terms of communication (Amirian & Tavakoli, 2011; Cameron et al., 2015). Even though these studies have addressed diverse aspects of communication such as presentation and written communication, there are still important issues to be addressed to fill this gap in the literature. First, few studies have addressed academics' foreign language oral communication self-efficacy despite the fact that, in real life, academics' foreign-language skills are tested in both formal and informal environments. To the best of our knowledge, no studies exist which have looked into faculty members' self-efficacy for oral communication in a foreign language based on a series of hypothetical situations which necessitate either scientific or everyday usage of the foreign language. Second, this current study explores the self-efficacy beliefs of faculty members based on task-specific and context-specific scenarios. As Bandura (2006) suggested, all-purpose measures of perceived self-efficacy have limited explanatory and predictive value because most of the items might fail to demonstrate relevance to the domain of functioning. Perceived self-efficacy scales must be designed in accordance with the domain of functioning. This current study is therefore considered to make original contribution to the field of self-efficacy literature.

This study was designed to investigate Turkish academics' self-efficacy for oral communication in a foreign language as related to gender, age, academic rank, duration of foreign-language study, years of work experience, previous experience of teaching in a foreign language and previous experience of living abroad. Oral communication is a common problem for many non-native academics (Duarte & van der Ploeg, 2019; Hempel, 2013) but it is also known that individuals who see themselves as highly efficacious set themselves challenges (Bandura, 1977, 2012) and pursue their efforts when their performances fall short of the desired level of achievement (Bandura 2012). On the one hand, faculty can have difficulty in being flexible to improvise while teaching in a foreign language (Helm & Guarda, 2015), on the other hand, they try to make an impact in the research arena through the academic methods of conference presentations, peer-reviewed publications, being involved in international projects, and so on (Bai & Hudson, 2011; McGrail et al., 2006). Moreover, they are expected to be committed to further improving their foreign-language skills (Reyes-Cruz & Perales-Escudero, 2016). Despite the fact that many non-native scholars experience foreign-language-related communication problems, there still remains a dearth of research on faculty members' self-efficacy in foreign-language communication. Notwithstanding an increasing number of research studies aimed at lecturers' teaching self-efficacy (Hemmings, 2015; Hemmings et al., 2012), research self-efficacy (Pasupathy & Siwatu; Reyes-Cruz & Perales-Escudero, 2016) or the language-related needs of non-native university lecturers (Costa & Coleman, 2013; Flowerdew, 2008; Macaro et al., 2018; Ozer 2020), few studies have investigated self-efficacy in foreign-language communication (Amirian & Tavakoli, 2016; Bailey, 1999; Cameron et al., 2015).

However, no studies have investigated the perceived self-efficacy of faculty members for oral communication in a foreign language. This current study therefore examines the self-efficacy beliefs of faculty members based on task-specific and context-specific scenarios. Given conceptual understandings of the role which self-efficacy plays in academics' performance in specific situations, this study was guided by the following research questions:

RQ1. What are academics' mean self-efficacy scores of oral communication in a foreign language?

RQ2. To what extent, if any, do self-efficacy beliefs differ by gender, age, academic rank, years of work experience, duration of foreign-language study, experience of living abroad and previous experience of teaching in a foreign language?

Materials and Methods

The current study was quantitative, non-experimental and correlational in nature since its intention was to understand whether an increase or decrease in each variable corresponded to a change in academics' self-efficacy beliefs towards oral communication in a foreign language. Throughout this paper, academics' perceived self-efficacy for oral communication in a foreign language is shortened to 'self-efficacy' for linguistic thrift.

Setting and participants

Altogether, 388 academics working in state or foundation HEIs in Turkey participated in this study. An additional 102 academics completed the survey but were excluded as they provided either incomplete demographic information or invalid responses to the items in the scale. There were no exclusion criteria in order to recruit as many Turkish academics as possible. Convenience sampling was used to recruit participants in order to ensure greater representativeness of the population by reaching a larger sample and thereby producing a smaller sampling error. The sample comprised 166 (42.8%) male and 222 (57.2%) female faculty members with the biggest age-group being 26-30 years old. The participants' teaching experience ranged from one to 33 years. They held varied academic ranks: most were lecturers (42.3%) and there were also research assistants (26.8%), assistant professors (18.8%), associate professors (8%) and professors (4.1%). Associate professors, followed by professors, make up the smallest faculty group in Turkish HEIs (YÖK, 2019). Participation was voluntary and although invitations had been sent to academics of all ranks, the returns from professors were limited in number. There was therefore a disproportionate distribution of academics in this study according to academic rank.

Instruments

A scale with nineteen items related to academics' perceptions of their self-efficacy in oral communication in a foreign language was administered (Özer, Çakır & Uzun, 2019). The questionnaire comprised two sections.

In the first section, only close-ended questions with fixed alternatives were asked. This section consisted of a set of demographic questions, which were the independent variables, with regard to gender, age, academic rank, years of foreign-language study, years of work experience, previous experience of teaching in a foreign language, and experience of living abroad.

The second section of the questionnaire contained the Self-Efficacy Instrument for Academics' Oral Communication in a Foreign Language, which is a unidimensional scale for measuring academics' self-efficacy beliefs for oral communication in a foreign language. The components of the scale explain 75.709% of the variance. All the questions were answered on an eleven-point Likert scale. The Cronbach's alpha was 0.982, demonstrating high internal consistency. All items were rated on a 100-point scale, from 0 (cannot do), 50 (moderately can do) to 100 (highly certain can do). The total maximum score achievable from this scale was 190 points, with higher scores indicating higher levels of self-efficacy (Özer, Çakır & Uzun, 2019). This enabled the measurement of respondents' self-efficacy beliefs by portraying varying levels of task demands in ten-unit intervals (Bandura, 2006). The task demands represented gradations of challenges to successful performance as prescribed by Bandura (2006). The respondents were asked to rate their degree of confidence in their ability to perform a behaviour under a series of hypothetical context-specific situations which necessitated either scientific or everyday usage of the foreign language. Some of the items from the measure were: 'Seizing the opportunity to use foreign language in oral communication during scientific international meetings where there are colleagues who speak my native language', 'Answering questions which necessitate the use of field-specific language when presenting in a foreign language at a well-attended scientific event such as a congress, a symposium or a conference', 'Asking newly-met international peers in a foreign language about topics of my interest', 'Looking for opportunities to start a conversation in a foreign language at an international scientific meeting with a peer who speaks my native language and is from my institution' and 'Stating my point of view in a foreign language in the presence of colleagues who I know have higher academic rank and disagree with my scientific views'. In the present study, internal consistency reliability was assessed and the Cronbach's alpha results indicated excellent internal consistency (0.979) for the scale. This confirmed that the scale was a suitable data collection tool for measuring self-efficacy in our sample.

Data collection and analysis

Data were collected from January to August 2019. The recruitment of academics was carried out in two steps. First, the authors contacted academics from various universities and explained the purpose of the study and invited them to participate. They were informed that participation was voluntary and anonymous. For ethical reasons, the participants were free to not disclose any information which they did not wish to share. They could also decline to answer any question which they felt uncomfortable answering. Second, academics intending to participate received the questionnaire in their preferred format: online or paper. The questionnaire was also advertised on online social media groups targeting faculty members working across Turkey. Before starting to fill out the survey, the respondents had to read the

background to the study, and this practice is believed to have enhanced the reliability of the data.

Bivariate and multivariate analyses were performed on the independent variables and the total scores from the scale. Statistical analyses were conducted using SPSS. Data were checked for normality of distribution, and nonparametric statistical tests were performed when the normality assumption was not met.

Data were first tested for normality and the differences were examined to determine the appropriate statistical method. The Kolmogorov-Smirnov and Shapiro-Wilk tests were used to identify the total scores obtained from the questionnaires. They were normally distributed across each independent variable group. Table 1 presents the statistics for the distribution of the data.

Table 1. Statistics for the distribution of data obtained from the Self-Efficacy Instrument for Academics' Oral Communication in a Foreign Language

		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Gender	male	.106	166	.000	.915	166	.000
	female	.077	222	.003	.956	222	.000
Age	20-25	.110	20	.200*	.938	20	.223*
	26-30	.096	119	.009	.945	119	.000
	31-35	.115	101	.002	.925	101	.000
	36-40	.097	59	.200*	.938	59	.005
	41-45	.110	48	.198*	.952	48	.050
	46 and older	.116	41	.183*	.922	41	.008
Academic rank	research assistant	.077	104	.141*	.961	104	.004
	lecturer	.103	164	.000	.935	164	.000
	assistant	.153	73	.000	.914	73	.000
	associate	.165	31	.031	.873	31	.002
	professor	.090	16	.200*	.987	16	.996*
Work experience	less than a year	.150	32	.064*	.961	32	.292
	1-3 years	.103	82	.030	.946	82	.002
	4-6 years	.127	72	.006	.920	72	.000
	7-10 years	.126	54	.031	.922	54	.002
	11-15 years	.097	74	.084*	.942	74	.002
	16-20 years	.135	41	.057*	.904	41	.002
Foreign language study	21 years and over	.081	33	.200*	.961	33	.271
	less than a year	.119	80	.007	.924	80	.000
	1-3 years	.060	147	.200*	.975	147	.009
	4-6 years	.117	48	.095	.946	48	.028
	7-10 years	.151	57	.002	.894	57	.000
	11-15 years	.199	30	.004	.802	30	.000
Experience of living abroad	16 years and over	.249	26	.001	.763	26	.000
	no	.083	172	.005	.963	172	.000
	yes	.124	216	.000	.909	216	.000
Teaching experience	yes	.174	85	.000	.874	85	.000
	no	.074	303	.000	.955	303	.000

* Variables in which the null hypothesis is accepted (H_0 = data follow a normal distribution).

Table 1 shows that when the distribution of the data is examined between the independent variables and the dependent variable, for most of the groups' data, the distribution violated normality, necessitating the utilisation of non-parametric analysis.

In order to check if the levels of the respondents' self-efficacy beliefs towards oral communication in a foreign language showed statistically significant differences by gender, experience of living abroad and experience of previous teaching through a foreign language, the Mann-Whitney U-test was applied. For the other variables, statistical differences were detected by using the Kruskal-Wallis test. The Durbin-Watson statistic was used for pairwise comparison where significant differences were detected as a result of the Kruskal-Wallis test (Alpar, 2017). The significance level was set at $\alpha = .05$ for all statistical tests.

Results

The research questions for this study focused on determining whether there would be statistically significant differences in academics' self-efficacy beliefs towards oral production through the medium of a foreign language by independent variables. This section presents the findings of the inferential statistics and a discussion of the findings.

With respect to the first research question which addressed academics' mean self-efficacy scores of oral communication in a foreign language, descriptive statistics were computed on all data to determine means as well as to check for skewness and kurtosis. The mean self-efficacy scale score was computed ($M=125.79$, minimum-maximum=0-190). The values of skewness and kurtosis were in the normal range (skewness=-.652, kurtosis=-.251). It is worth noting that the distribution had a slight positive skew. When the total maximum score available for the measure was taken into consideration, the respondents' mean scores were slightly higher than the scale's mid-point.

With respect to the second research question, the academics' mean self-efficacy scores were examined for differences by a set of background variables: gender, age, academic rank, duration of foreign-language study, years of work experience, experience of previous teaching in a foreign language, and experience of living abroad.

Table 2. Mann-Whitney U-test results of academics' self-efficacy beliefs by gender

Gender	n	M	SD	Mean rank	U	SE	p
female	222	1230.18	31.54	186,39	16625.5	1092.8	0.099
male	166	1294.99	37.67	205,35			

The Mann-Whitney U-tests indicated that the self-efficacy scores were not significantly greater for female faculty members than male faculty members ($U= -16625.5$; $p>0.05$).

Table 3. Kruskal-Wallis test results of academics' self-efficacy beliefs by age

Age group	N	Mean rank	df	χ^2	p
20-25	20	160.15	5	6.00	0.306
26-30	119	186.63			
31-35	101	212.30			
36-40	59	185.19			
41-45	48	191.26			
46 and older	41	207.43			

The Kruskal-Wallis tests showed no statistically significant differences in self-efficacy in oral communication in a foreign language between the six age groups ($\chi^2=35.039$; $p>0.05$).

Table 4. Kruskal-Wallis test results of academics' self-efficacy beliefs by academic rank

Academic rank	n	Mean rank	df	χ^2	p	Sig. Diff.
Research assistant (1)	104	161.60	4	13.132	0.011	1 - 2 3 - 1
Lecturer (2)	164	202.78				
Assistant professor (3)	73	216.38				
Associate professor (4)	31	208.71				
Professor (5)	16	196.06				

A Kruskal-Wallis test was run to determine if there were differences in self-efficacy score between the five groups of participants with varying academic ranks. The test showed that there was a statistically significant difference between the self-efficacy scores according to academic rank, ($\chi^2=13.132$; $p<0.05$). As a result of the pairwise comparisons of subgroups performed to determine the source of the difference, statistically significant differences between research assistants and lecturers (in favour of lecturers: $U_{1-2}=-41.187$; $p<0.05$) and between research assistants and assistant professors (in favour of assistant professors: $U_{1-3}=-54.794$; $p<0.05$) were found. With respect to pairwise comparisons of medians, it can be stated that research assistants were reportedly less self-efficacious in oral communication in a foreign language than lecturers and assistant professors.

Table 5. Kruskal-Wallis test results of academics' self-efficacy beliefs according to work experience

Work experience	n	Mean rank	df	χ^2	p
less than a year	32	182.23	6	3.053	0.802
1-3 years	82	189.60			
4-6 years	72	183.56			
7-10 years	54	208.99			
11-15 years	74	206.78			
16-20 years	41	194.95			
21 years and over	33	190.64			

A Kruskal-Wallis test was run to determine if there were differences in self-efficacy scores between the seven groups of respondents with varying lengths of work experience

and the results indicated that differences in years of work experience made no difference to academics' self-efficacy beliefs in oral communication in a foreign language ($\chi^2=3.053$; $p>0.05$).

Table 6. Kruskal-Wallis test results of academics' self-efficacy beliefs according to duration of foreign-language study

Duration of foreign-language study	n	Mean rank	df	χ^2	p	Sig. diff.
less than a year (1)	80	175.61	5	22.440	0.001	1-5
1-3 (2) years	147	180.89				1-6
4-6 (3) years	48	205.42				2-5
7-10 (4) years	57	191.82				
11-15 (5) years	30	257.82				
16 and over (6)	26	256.52				

A Kruskal-Wallis test was run to determine if there were differences in self-efficacy scores between the six groups of participants with varying durations of foreign-language study. The test showed a statistically significant difference between academics' self-efficacy beliefs towards oral communication in a foreign language ($\chi^2=22.440$; $p<0.05$).

Pairwise comparisons of subgroups performed to determine the source of the difference showed statistically significant differences between academics with foreign-language study of less than a year and those with foreign-language study for 11-15 years and for 16 or more years, respectively (in favour of those with foreign-language study for 11-15 years and for 16 and more years ($U_{1-5}=-82.210$; $p<0.05$; $U_{1-6}=-80.915$; $p<0.05$). A statistically significant difference also existed between academics who had studied a foreign language for 1-3 years and those who studied one for 11-15 years (in favour of the 11-15 years group; $U_{2-5}=-76.922$; $p<0.05$). In the light of the pairwise comparisons, it can be asserted that academics who studied a foreign language for eleven or more years seemingly had higher self-efficacy levels than those with three years or fewer of foreign-language study.

Table 7. Mann-Whitney U-test results showing comparison of the academics' self-efficacy beliefs by previous experience of living abroad

Experience of living abroad	N	M	SD	Mean Rank	U	SE	p
Yes	216	1366.34	31.48	222.15	24.549	1.097	0.000
No	172	1121.74	35.14	159.77			

A Mann-Whitney U-test was run to determine if there were differences in self-efficacy scores between academics who had previous experience of living abroad. The results show that self-efficacy scores significantly differed in favour of those with experience of living abroad ($U=24.549$; $p<0.05$).

Table 8. Mann-Whitney U-test results of academics' self-efficacy beliefs by previous experience of teaching in a foreign language

Teaching experience	n	M	SD	Mean rank	U	SE	P
With experience	85	1377.12	54.03	228.74	9967.500	913.605	0.001
With no experience	303	1224.46	26.80	184.90			

From these data, it can be concluded that self-efficacy levels in the group with previous experience of teaching in a foreign language were statistically significantly higher than those of the group without experience ($U = 9967.500$, $p = .001$). When the median of the distribution is taken into consideration, it can be stated that the self-efficacy beliefs showed differences in favour of those with previous experience of teaching in a foreign language.

Discussion

The purpose of this study was to assess the cross-sectional associations between academics' perceived self-efficacy towards oral communication in a foreign language and seven variables which might be associated with it. It could take years for an academic to become qualified to teach in a foreign language, to become a prolific author, to deliver a presentation of her/his research findings to an audience of native speakers of the foreign language in which they are presenting or to start academic networking at a social event. However, becoming a qualified teacher and researcher does not rely only on years of practice, but also on individuals' beliefs in their ability to succeed in the given situations (Bandura, 1977) and in their persistence in taking on and completing challenging tasks.

With regard to the examination of the association between independent and dependent variables, some observations should be noted. First, gender, age, and work experience showed no statistically significant difference in self-efficacy beliefs for oral communication in a foreign language. Second, academics who had previously taught through the medium of a foreign language and those who had studied a foreign language for eleven and more years obtained significantly higher scores on the self-efficacy scale. Amirian and Tavakoli (2016) found that post-graduates' experiences of presenting course contents orally showed a positive relationship with their self-efficacy in delivering an oral presentation to an audience and the results of the current study concur with their results.

The findings also showed some significant differences for academics with different backgrounds. For instance, academics who had spent time in a country where the foreign language in which they perform their scholarly activities or through which they teach felt significantly more self-efficacious. Previous studies have found that research self-efficacy and research productivity experience are closely correlated (Pasupathy & Siwatu, 2014) and this might also apply to teaching. Hemmings (2015) studied self-efficacy for teaching in early-career academics and found that their teaching experience gave them the confidence to teach and that the more academics can endure the challenges of doing research and teaching, the more self-efficacious they perceive themselves to be. This might also explain some of the findings of this current study. Academics with more foreign-language-study

experience and those with previous experience of teaching in a foreign language were found to be more self-efficacious. With regard to teaching, Chang et al. (2011) found that academics with five or fewer years of teaching experience showed lower self-efficacy scores and those with 21 or more years of teaching experience obtained higher self-efficacy scores. The findings of this current study correspond with those of Chang et al. (2011). Another significant finding is that assistant professors obtained significantly higher scores than all other academic ranks. With more experience of teaching, research and using a foreign language in scientific and everyday settings, professors could be expected to be highly self-efficacious in oral communication in a foreign language, but this was not the case in the current study. One reason for the professors' relatively low self-efficacy scores in this study might be related to their shorter durations of foreign-language study and the fact that the majority of the professors had lived abroad in a country where the foreign language in question is spoken as the native language for less than a year. Moreover, the majority of the cases in the groups with highest self-efficacy scores were assistant and associate professors who had lived abroad and studied the foreign language for two or more years. Research assistants were found to be the least self-efficacious in oral communication in a foreign language. Their lack of experience in scholarly activities using a foreign language and their lack of teaching experience might explain why research assistants had the lowest mean score. Reyes-Cruz and Perales-Escudero's (2016) findings might also explain why the research assistants obtained lower self-efficacy scores; they found that experience in scholarly activities seemed to be a powerful source of self-efficacy. Clearly more research is required into the differences in academics' self-efficacy by academic rank, especially sampling more associate professors and professors from different research disciplines.

Conclusion

The findings of the present study have shown that faculty members are likely to feel more self-efficacious and motivated to communicate orally in a foreign language when they have taught their subject previously in a foreign language and when they have spent more time studying that foreign language. Some significant differences for academics with different backgrounds were also found. The respondents with previous experience of living abroad felt more self-efficacious. Living abroad for some period of time was found to be a rewarding experience and clearly helped individuals to gain confidence to use the language for communicative purposes. These findings draw attention to the associations between language-related experience and perceived self-efficacy among faculty members. Since oral communication plays a key role in the development of faculty members' self-efficacy beliefs, university administrations should provide incentives to academics to encourage them for a more active role in engaging in international research collaboration, international academic networking and participation in international events such as conferences. Universities should also increase resources available to the faculty members in order to help them to improve their foreign language interaction skills in terms of both quality and quantity. As for academic rank, research assistants reported the lowest level of self-efficacy and assistant professors and lecturers obtained significantly higher self-efficacy scores compared with research assistants. In relation to the finding that research assistants obtained

the lowest self-efficacy scores, universities should provide ample educational opportunities through simulation training, thereby promoting oral communication and giving constructive feedback on the research assistants' performance. In the long run, expert-led simulation training might help research assistants to exhibit a resilient self-efficacy for foreign-language oral communication regardless of numerous difficulties. However, the findings of this study did not confirm that faculty members with more work experience scored higher than those with less.

The study has several limitations. One limiting aspect is that it relied on self-reported data from academics of different academic disciplines since the very nature of each academic discipline might affect faculty members' self-efficacy beliefs. However, the researchers could not obtain an adequate sample size in some disciplines, so that variable was later ruled out. Second, the sample of this study might not represent the targeted population well enough because the respondents were not randomly sampled; even so, the participants were gathered from 35 HEIs located in 25 cities across Turkey and this variety could have helped the data to be more representative of the target population. However, the participants were recruited by convenience sampling and in Turkish academia, associate professors followed by professors make up the smallest faculty group (YÖK, 2019). There was therefore a disproportionate distribution of academics in this study by academic rank, so the findings related to academic rank are not generalizable and are limited to this specific research context. Third, the findings showed the differences in self-efficacy scores across different groups of academics working in different states and foundation universities in Turkey, but stronger claims regarding the development of the self-efficacy levels of faculty members could be made through longitudinal research. Finally, causality cannot be inferred because of the cross-sectional correlational design of this study.

Despite these limitations, this study has made two major contributions. First, it has provided empirical evidence of faculty members' self-efficacy towards the use of a foreign language for oral communication not only in academic settings but also in real-life situations since the scale used included a series of hypothetical context-specific situations requiring both scientific and everyday usage of the foreign language. Second, this is the first study – to the authors' best knowledge – to have examined academics' self-efficacy beliefs towards oral production through the medium of a foreign language, by recruiting a large number of academics from across the country. For this reason, it is difficult to compare the findings with the existing literature. Future research could address the limitations discussed above and yield more conclusive cross-cultural results.

Disclosure Statement

No potential conflict of interest was reported by the authors.

References

- Akerlind, G. S. (2008). Growing and developing as a university researcher. *Higher Education*, 55(2), 241-254. <https://doi.org/10.1007/s10734-007-9052-x>
- Alpar, R. (2017). *Uygulamalı çok değişkenli istatistiksel yöntemler [Applied multivariate statistical methods]* (5th ed.). Ankara: Detay Yayıncılık.
- Altbach, P. G. (2015). What counts for academic productivity in research universities? *International Higher Education*, (79), 6-7. <https://doi.org/10.6017/ihe.2015.79.5837>
- Amirian, S. M. R., & Tavakoli, E. (2016). Academic oral presentation self-efficacy: a cross-sectional interdisciplinary comparative study. *Higher Education Research & Development*, 35(6), 1095-1110. <http://dx.doi.org/10.1080/07294360.2016.1160874>
- Arcimaviciene, L. (2015). EU universities' mission statements: What is popularized by metaphors. *SAGE Open*, 5(2), <https://doi.org/10.1177/2158244015584378>
- Aytekin, I., Erdil, O., Erdoğan, N., & Akgün, A. E. (2016). Academicians' career capital and career satisfaction: The mediation effect of research productivity. *Educational Sciences: Theory & Practice*, 16(6), 1921-1945. <http://doi.org/10.12738/estp.2016.6.0412>
- 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>
- Bailey, J. G. (1999). Academics' motivation and self-efficacy for teaching and research. *Higher Education Research & Development*, 18(3), 343-359. <https://doi.org/10.1080/0729436990180305>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <http://dx.doi.org/10.1037/0033-295X.84.2.191>
- Bandura, A. (1986). From thought to action: Mechanisms of personal agency. *New Zealand Journal of Psychology*, 15(1), 1-17.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175-1184. <http://dx.doi.org/10.1037/0003-066X.44.9.1175>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148. http://dx.doi.org/10.1207/s15326985ep2802_3
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), *Adolescence and education*, Vol. 5: *Self-efficacy and adolescents* (pp. 307-337). Greenwich, CT: Information Age Publishing.
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(1), 9-44. <https://doi.org/10.1177/0149206311410606>
- Bauder, H. (2015). The international mobility of academics: A labour market perspective. *International Migration*, 53(1), 83-96. <https://doi.org/10.1111/j.1468-2435.2012.00783.x>
- Cadez, S., Dimovski, V., & Groff, M. Z. (2017). Research, teaching and performance evaluation in academia: the salience of quality. *Studies in Higher Education*, 42(8), 1455-1473. <https://doi.org/10.1080/03075079.2015.1104659>
- Cameron, C., Lee, H.Y., Anderson, C., Byars-Winston, A., Baldwin, C. D., & Chang, S. (2015). The role of scientific communication skills in trainees' intention to pursue biomedical research careers: A social cognitive analysis. *CBE – Life Sciences Education*, 14(4), 1-12. <http://doi.org/10.1187/cbe.14-09-0152>

- Cavazos, A. G. (2015). Multilingual faculty across academic disciplines: Language difference in scholarship. *Language and Education*, 29(4), 317-331. <https://doi.org/10.1080/09500782.2015.1014375>
- Chang, T-S., Lin, H-H., & Song, M-M. (2011). University faculty members' perceptions of their teaching efficacy. *Innovations in Education and Teaching International*, 48(1), 49-60. <https://doi.org/10.1080/14703297.2010.543770>
- Costa, F., & Coleman, J. A. (2013). A survey of English-medium instruction in Italian higher education. *International Journal of Bilingual Education and Bilingualism*, 16(1), 3-19. <https://doi.org/10.1080/13670050.2012.676621>
- Davis, D. J., & Warfield, M. (2011). The importance of networking in the academic and professional experiences of racial minority students in the USA. *Educational Research and Evaluation*, 17(2), 97-113. <https://doi.org/10.1080/13803611.2011.597113>
- Delgado, A., & Am, H. (2018). Experiments in interdisciplinarity: Responsible research and innovation and the public good. *PLoS Biol*, 16(3), 1-8. <https://doi.org/10.1371/journal.pbio.2003921>
- Demir, E., Göloğlu-Demir, C., & Özdemir, M. Ç. (2017). Faculty members' views on academic promotion and appointment process. *Journal of Higher Education and Science*, 7(1), 12-23. <http://doi.org/10.5961/jhes.2017.179>
- Duarte, J., & Van der Ploeg, M. (2019) Plurilingual lecturers in English medium instruction in the Netherlands: the key to plurilingual approaches in higher education? *European Journal of Higher Education*, 9(3), 268-284. <https://doi.org/10.1080/21568235.2019.1602476>
- Flowerdew, J. (2008). Scholarly writers who use English as an additional language: What can Goffman's "Stigma" tell us? *Journal of English for Academic Purposes*, 7(2), 77-86. <https://doi.org/10.1016/j.jeap.2008.03.002>
- Helm, F., & Guarda, M. (2015). "Improvisation is not allowed in a second language": A survey of Italian lecturers' concerns about teaching their subjects through English. *Language Learning in Higher Education*, 5(2). <https://doi.org/10.1515/cercles-2015-0017>
- Hemmings, B., & Kay, R. (2010). University lecturer publication output: Qualifications, time, and confidence count. *Journal of Higher Education Policy and Management*, 32(2), 185-197. <https://doi.org/10.1080/13600800903575520>
- Hemmings, B. C., Kay, R., Sharp, J., & Taylor, C. (2012). A transnational comparison of lecturer self-efficacy. *Journal of Further and Higher Education*, 36(3), 291-307. <https://doi.org/10.1080/0309877X.2011.614932>
- Hemmings, B. C. (2015). Strengthening the teaching self-efficacy of early career academics. *Issues in Educational Research*, 25(1), 1-17.
- Hempel, K. G. (2013). Can scholarly communication be multilingual? A glance at language use in US classical archaeology. *Humanities*, 2(2), 128-146. <https://doi.org/10.3390/h2020128>
- Knight, J. (2013). The changing landscape of higher education internationalisation – for better or worse? *Perspectives: Policy and Practice in Higher Education*, 17(3), 84-90. <https://doi.org/10.1080/13603108.2012.753957>
- Landa, L. G. G. (2006). Academic language barriers and language freedom. *Current Issues in Language Planning*, 7(1), 61-81. <https://doi.org/10.2167/cilp084.0>
- Lasagabaster, D. (2016). The relationship between motivation, gender, L1 and possible selves in English-medium instruction. *International Journal of Multilingualism*, 13(3), 315-332. <https://doi.org/10.1080/14790718.2015.1105806>

- Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). A systematic review of English medium instruction in higher education. *Language Teaching*, 51(1), 36-76. <https://doi.org/10.1017/S0261444817000350>
- Macfarlane, B., & Hughes, G. (2009). Turning teachers into academics? The role of educational development in fostering synergy between teaching and research. *Innovations in Education and Teaching International*, 46(1), 5-14. <https://doi.org/10.1080/14703290802646214>
- McGrail, M. R., Rickard, C. M., & Jones, R. (2006). Publish or perish: a systematic review of interventions to increase academic publication rates. *Higher Education Research & Development*, 25(1), 19-35. <https://doi.org/10.1080/07294360500453053>
- Nygaard, L. P. (2019). The institutional context of 'linguistic injustice': Norwegian social scientists and situated multilingualism. *Publications*, 7(1), 1-13. <https://doi.org/10.3390/publications7010010>
- Oester, S., Cigliano, J. A., Hind-Ozan, E. J., & Parsons, E. C. M. (2017). Why Conferences Matter—An illustration from the International Marine Conservation Congress. *Frontiers Marine Science*, 4. <http://doi.org/10.3389/fmars.2017.00257>
- Özer, O., Çakır, Ö., & Uzun, N. B. (2019). Akademisyenlerin yabancı dilde sözlü iletişim kurabilme öz yeterlik inancı ölçeğinin geliştirilmesi: Geçerlik ve güvenilirlik çalışması. [Reliability and validity of a self-efficacy instrument for academics' oral communication in a foreign language]. *Yükseköğretim Dergisi*, 9(1), 40–48. <http://doi.org/10.2399/yod.18.024>
- Ozer, O. (2020). Lecturers' experiences with English-medium instruction in a state university in Turkey: Practices and challenges. *Issues in Educational Research*, 30(2), 612-634.
- Pasupathy, R., & Siwatu, K. O. (2014). An investigation of research self-efficacy beliefs and research productivity among faculty members at an emerging research university in the USA. *Higher Education Research & Development*, 33(4), 728-741. <http://dx.doi.org/10.1080/07294360.2013.863843>
- Reyes-Cruz, M. D. R., & Perales-Escudero, M. D. (2016). Research self-efficacy sources and research motivation in a foreign language university faculty in Mexico: implications for educational policy. *Higher Education Research & Development*, 35(4), 800-814. <https://doi.org/10.1080/07294360.2015.1137884>
- Schmidt, A. M., & DeShon, R. P. (2010). The moderating effects of performance ambiguity on the relationship between self-efficacy and performance. *Journal of Applied Psychology*, 95(3), 572-581. <http://dx.doi.org/10.1037/a0018289>
- Schmidt-Unterberger, B. (2018). The English-medium paradigm: a conceptualisation of English-medium teaching in higher education. *International Journal of Bilingual Education and Bilingualism*, 21(5), 527-539. <https://doi.org/10.1080/13670050.2018.1491949>
- Schunk, D. H., Usher, E. L. (2019). Social cognitive theory and motivation. In R. M. Ryan (Ed.). *The Oxford handbook of human motivation* (pp. 11-26). (2nd ed.). New York: Oxford University Press. <http://dx.doi.org/10.1093/oxfordhb/9780190666453.013.2>
- Sethi, A., Schofield, S., McAleer, S., & Ajjawi, R. (2018). The influence of postgraduate qualifications on educational identity formation of healthcare professionals. *Advances in Health Sciences Education*, 23(3), 567-585. <https://doi.org/10.1007/s10459-018-9814-5>
- Smith, M. C. (2017). Get started and write: Advice for new faculty. *New Horizons in Adult Education & Human Resource Development*, 29(2), 74-79. <https://doi.org/10.1002/nha3.20184>
- Subbaye, R., & Vithal, R. (2017). Teaching criteria that matter in university academic promotions. *Assessment & Evaluation in Higher Education*, 42(1), 37-60. <https://doi.org/10.1080/02602938.2015.1082533>

- Tamtekin Aydın, O. (2017). Research performance of higher education institutions: A review on the measurements and affecting factors of research performance. *Journal of Higher Education and Science*, 7(2), 312-320. <http://doi.org/10.5961/jhes.2017.210>
- Thompson, G., & Woodman, K. (2019). Exploring Japanese high school English teachers' foreign language teacher efficacy beliefs. *Asia-Pacific Journal of Teacher Education*, 47(1), 48-65. <https://doi.org/10.1080/1359866X.2018.1498062>
- Tung, V. W. S., Law, R., & Chon, K. (2017). Changing proxies for evaluating research performance: What matters to university programme heads? *Tourism Recreation Research*, 43(3), 346-355. <https://doi.org/10.1080/02508281.2017.1415654>
- Vera, M., Salanova, M., & Martín del Río, B. (2011). Self-efficacy among university faculty: How to develop an adjusted scale. *Anales de Psicología*, 27(3), 800-807.
- Woolfolk Hoy, A. (2004). Self-efficacy in college teaching. *Essays on Teaching Excellence: Toward the Best in the Academy*, 15(7), 8-11.
- Xian, W. (2015). A quantitative study of the internationalization of the academics and research productivity: Case study of China. *Chinese Education & Society*, 48(4), 265-279. <http://dx.doi.org/10.1080/10611932.2015.1119539>
- YÖK. (2019). *Öğretim elemanı istatistikleri* [Statistics of faculty in Turkey], Retrieved December 7, 2019, from <https://istatistik.yok.gov.tr/>