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# PRE-SERVICE ENGLISH LANGUAGE TEACHERS' ATTITUDES AND THEIR CONCEPTIONS OF RESEARCH

# İNGİLİZCE ÖĞRETMEN ADAYLARININ BİLİMSEL ARAŞTIRMA TUTUM VE ALGILARININ İNCELENMESİ

Araştırma Makalesi

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# Abstract

With the recent addition of courses revolving around scientific research in the curricula of ELT (English Language Teaching) classes in Turkish institutions of higher education, it was noticed that the ideals of lectures were highly focusing on the structures of investigation and how to fully participate in it. There is the need to take into account the existing perceptions of the teacher candidates to make informed choices about the planning of the research methods education. Such research could delineate teacher candidates' views on what research is and find out to which extent they think they are research-engaged. This study examines English language pre-service teachers' attitudes and conceptions of research. The participants were students from a state university in Turkey. They were delivered a questionnaire to determine their attitudes and conceptions. The results showed that the participants held positive attitudes towards research and that their understanding of research was in line with conventional conceptions of scientific inquiry.

Key words: Conceptions of research, attitudes towards research, teacher research engagement, pre-service

# Özet

İngilizce öğretmenliği programlarında Bilimsel Araştırma Becerileri derslerinin yer almasından sonra bu derslerin daha çok araştırma türleri ve bunların nasıl yapılacağına yoğunlaştığı gözlemlenmektedir. Hâlbuki bu derslerin planlanmasında önemli bir unsur da öğrencilerin hali hazırda var olan tutum ve algılarının nasıl olduğunun bilinmesidir. Bu konularda yapılacak araştırmalar öğretmen adaylarının araştırma ile ilgili düşüncelerini ve kendilerini araştırmacı olarak görüp göremediklerini ortaya çıkarabilir. Bu çalışmada İngilizce Öğretmenliği bölümü öğrencilerinin bilimsel araştırma tutum ve algıları araştırılmıştır. Türkiye'deki bir devlet üniversitesi öğrencileri olan katılımcılara tutum ve algılarını belirlemek üzere bir anket uygulanmıştır. Sonuçlar katılımcıların araştırmaya karşı olumlu tutum içinde olduklarını ve araştırma algılarının da geleneksel bilimsel araştırma anlayışı ile aynı doğrultuda olduğunu göstermiştir.

Anahtar Kelimeler: Araştırma algıları, araştırmaya karşı tutum, öğretmenin araştırma yapması, öğretmen adayları

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## **INTRODUCTION**

With various developments through the rise of technology, education has changed drastically by reforming itself repeatedly. According to Yeşilyurt & Demiröz (2008) research in education has become essential, aiming to turn the practice of teaching into a professional discipline. The recent addition of scientific research courses in ELT curricula of Turkish and other national universities was another step to support this goal. But it was noticed that these courses were focusing on the structures of investigation and how to participate in it, ignoring the needs and ideas of the teacher candidates towards the topic. The aim of this study is to find out the attitudes of the students towards research and what they interpret of it. This study could help delineate teacher candidates' views on research by finding out to which extent they think they engage in research.

Nunan and Bailey (2009) define teacher-research as "investigations which are carried out in or outside the classrooms, utilizing a range of qualitative and quantitative methods of data collection and analysis, done by teachers, in order to improve practice, and/or to generate insights and understanding to related practice and theory" (p.19). So Instructors participate in systematic research aiming to deepen their understanding of issues, broaden their views, and look for ways to maximize the outcomes of their lectures (Ögeyik, 2013; Öztabay, 2017; Yeşilyurt & Demiröz, 2008; Worall, 2004). Some teachers might also want to engage in research in order to satisfy their curiosity about the nature of some problems they encounter with (Nunan & Bailey, 2009; Worall, 2004).

Often, in principle, teacher research is not distinguished from research done by non-teaching academicians (for example, Borg, 2009). Despite sharing similar qualities such as being purposeful, methodologically appropriate, technically competent and contributing to the field, teacher-research is not respected as much as investigations done by academicians (Borg, 2010; Cochran-Smith & Lytle, 1993). However, it is also notable that teacher-research differs from academic research in some practical aspects such as sampling techniques, focus, methods and dissemination. As stated by Cochran-Smith and Lytle (1993) academic research is rather interested in the "knowledge of teaching" with the goal of expanding theoretic information whilst teacher-research engages with practical issues faced by instructors. Tabatabaei and Nazem (2013) describe the difference between the teacher-researcher and the traditional researcher by stating that the educationalists construct questions and design studies revolving those, manage investigations in schools acting as "outside observers" while the teacher-researcher evaluates their own and the students' performances. To do so the teacher researcher collects student work, analyses their own classrooms, searches for solutions and investigates the effects of new methods and techniques presented, looking for ways to make lessons more meaningful for their pupils (Cochran-Smith & Lytle, 1993; Ekiz, 2006; Güler, Şen & Sabancı, 2017; Nunan & Bailey, 2009).

Teachers' attitudes, conceptions and their level of engagement in research has been investigated and analysed by a number of educationalists (Borg, 2009; Bulut, 2011; Çakmak, Taşkıran & Bulut, 2015; Eryılmaz & Dikilitaş, 2016; Güler, Şen & Sabancı, 2017; Hargreaves, 2001; Hemsley-Brown & Sharp, 2003; İlhan, Çelik & Aslan, 2016; Shkedi, 1998; Tabatabaei & Nazem, 2013; Yavuz-Konokman, Tanrıseven & Karasolak, 2013; Yeşilyurt & Demiröz, 2008). They came to the conclusion that teachers are not fond of investigation for multiple reasons. As found by Borg (2009) teachers do not engage in research because of the lack of time, sources, lack of understanding and inaccessibility. Similar findings took place in Bulut's (2011), Kutlay's (2013), Tabatabaei and Nazem's (2013) studies which used the same data collection tool as in Borg's study. Teachers' conceptions towards research show that lecturers have specific ideas about investigation. Borg (2009) noticed that the participants identified projects which used high numbers of subjects, scales and statistics as scientific research. In Shkedi's (1998) study, a participant states that "Research is research, tables, statistics and numbers" when it comes to speak about the topic. Others claim that instructors saw scientific research as activities which focus on expanding theory using data and declaring findings with a complex jargon (Bulut, 2011; Güler, Şen & Sabancı, 2017; Healey et al., 2010; Shkedi, 1998). Hemsley-Brown and Sharp's (2003) citation of Zeuli's (1994) statement connects attitude and conceptions toward research briefly, "Teachers respond more positively when credible and concrete cases or examples are used" (p.453). In conclusion, it is seen that teachers are not aware of the different types of research, especially teacher-research (Borg, 2009; Bulut, 2011; Kutluay, 2013; Tabatabaei & Nazem, 2013).

Hancock (1997) stated that despite teacher-research being active for more than twenty years now, most teachers remain distant to it. Examining studies about attitudes, we can see teachers reporting that they do not engage in research because they do not perceive it as a part of their job (Borg, 2009; Güler, Sen & Sabancı, 2017) and that they think that research findings are irrelevant for the classroom (Bas & Kıvılcım, 2017; Hemsley-Brown & Sharp, 2003; Shkedi, 1998; Yesilyurt & Demiröz, 2008) and that it is a waste of time to participate in such activities since it will not reach its intended goal (Çakmak, Taşkıran & Bulut, 2015). There were also groups stating that they had no interest in research at all (Borg, 2009; Bulut, 2011; Kutluay, 2013; Tabatabaei & Nazem, 2013). Some also express that the last time they engaged in research was when they were doing their bachelor degrees or were pushed by their own institutions to do so (Borg, 2009; Eryılmaz & Dikilitaş, 2016; Shkedi, 1998). Most Teachers choose to avoid scientific research articles also because of the perceived gap between the researcher and the instructor (Bulut, 2011; Bjøness, 2014; Cepni & Küçük, 2003; Güler, Şen & Sabancı, 2017; Shkedi, 1998; Yeşilyurt & Demiröz, 2008; Worall, 2004). Teachers believe that educationalists are far from reality and that they lack in understanding classroom problems (Güler, Şen & Sabancı, 2017; Shkedi, 1998). A teacher made a statement about the writers ignoring practical problems since they view the act of teaching and the teacher as an object of technical knowledge (Shkedi, 1998). It is possible to say that teachers do not accept small-scale investigations as scientific research but that they also have trust issues with works which include larger numbers of individuals because they believe that the researcher is seen to be disconnected with reality (Borg, 2009, Güler, Sen & Sabancı, 2017; Shkedi, 1998). On the other hand, the group of teachers who are interested in conducting research stated that they had no support from their institutions and lacked enough time to participate (Ekiz, 2006 as cited by Yavuz-Konokman, Tanrıseven & Karasolak, 2013;Tabatabei & Nazem, 2013).

Many attempts were made internationally in order to change the presumptions of the teachers. In order to encourage engagement in research, theories, and programs where constructed. Wyatt and Dikilitas (2016) list following activities and factors which play role in convincing and educating the teacher regarding this matter;

- Awareness-raising activities.
- Giving opportunities to gain practical knowledge by conducting small-scale classroom research.
- The encouragement of reflective skills.
- Mentoring.
- More formal input through workshops.
- A supportive school environment.
- Opportunities provided teachers to present and publish their research. (p. 555)

Hemsley-Brown and Sharp (2003) mentioned Rogers' suggestion of peer networks, leaders and/or models where teachers during their education and their work life, should be provided with models who conduct and follow research actively and that there should be peer networks formed when it comes to follow, participate or share results of research projects (Rogers as cited in Hemsley-Brown & Sharp, 2003). There have been also programs encouraging the teachers to contribute in research activities (Bulut, 2011; Healey et al. 2010). Also the government policies about the ability to compete internationally in the field of empirical research has led to the creation of new college courses regarding scientific research methodology and the founding of new institutions which support research culture. (Healey et al. 2010). As stated by Tomakin (2007), investigation in Turkey was not a notable practice until the 1950s. With the following years, multiple changes in the curriculums of the Turkish institutions of higher education were made to add elective courses about systematic research. Recently in 2006-2007, the Higher Education Board (YÖK) has included the Research Methods course as a compulsory course in the faculties of education. Those courses included general essential methodologies and rules about systematic research also explaining what it is and how it can be useful to the ones engaging with it (YÖK, 2007).

Papanastasiou (2005) came to the conclusion that undergraduate students carry a rather negative attitude towards the Research Methods course. According to her, in order to change the attitude in a positive way, studies should be conducted respecting the learners. Studies as those will serve as an aid for the lecturer of the Research Methods course, especially when it comes to designing the lessons. Making learners aware of the differences and possibilities of teacher and academic research, it is suitable to state that prejudices

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towards research may be diminished. It is also important not to forget while examining studies regarding this issue the aim is to understand the mindset of the target group first before solutions are sought. This paper follows the idea of Borg's (2009) study and aims to support both lecturer and students by trying to understand the perceptions and attitudes of the students enrolled in the Research Methods course at the beginning of the term. The researchers aimed to find out the starting condition of the study group rather than measuring the effects of the course. By viewing the thoughts of the learners at the beginning of the term, it is believed that the Research Methods course can be aligned better for the needs of the students and designed successfully enough to encourage teachers and pre-service teachers to be more engaged in research and understand the purpose and benefits of it.

In this respect, the research questions for the study were identified as follows:

- 1. What are the factors that define the term 'research' according to pre-service ELT teachers?
- 2. How much research do pre-service ELT teachers read? What are the reasons if they do not read research?
- 3. What are their attitudes towards research?

# **METHOD**

In this study, identifying pre-service English teachers' attitudes and conceptions of research was aimed. An attitude scale developed by Korkmaz, Şahin and Yeşil (2011) and a questionnaire adapted from Borg (2009) were used. The results were analysed using descriptive statistics. Therefore, this study can be considered as a quantitative study.

The participants were 2<sup>nd</sup> year ELT department students enrolled in the Research Methods course in a state university in Turkey (n=57). The participants were selected according to the convenience sampling technique, which is often used in SLA studies (Dörnyei, 2007). The first researcher was the instructor of the Research Method course and the other researchers were students who were enrolled in this course. Despite the limitations of convenience sampling, the insider status of the researchers rendered possible advantages during interpretation of the results and implications for practice. In addition, the researchers included all of the enrolled students without excluding anyone and the participants can be considered a typical example of a group which takes the course in a state university in Turkey.

The participants were provided with the two instruments towards the beginning of the term. The first instrument was adapted from Borg (2009). It consisted of two sections one of which focused on the participants' conceptions of what counts as research and the qualities of good research. The other section focused on their engagement with research. The answers of the participants were presented in terms of frequencies.

The second instrument was an attitude scale which was developed by Korkmaz, Sahin and Yeşil (2011). It consisted of four sub-factors. The researchers advised that each factor should be considered separately, therefore the reliability of each factor were calculated separately and presented in Table 1 below.

Tuble 1. Cronbuch-Alpha balues for each factor of the attitude scale				
	Factors	Cronbach-Alpha value		
Factor 1	Reticence to cooperate with researchers	0.85		
Factor 2	Negative attitudes towards research	0.81		
Factor 3	Positive attitudes towards research	0.80		
Factor 4	Positive attitudes towards the researcher	0.76		

Table 1 Cronhach-Alpha values for each factor of the attitude scale

If the Cronbach-Alpha value is above 0.70, the scale is considered reliable (Büyüköztürk, 2002). Therefore, the scale was considered reliable.

### **RESULTS AND DISCUSSION**

# Findings about Research Question 1: What are the factors that define the term 'research' according to pre-service ELT teachers?

The results will be given in terms of each research question and discussed in this section. The first section in the Borg (2009) questionnaire consisted of 10 scenarios. The participants were asked to rate each scenario according to whether they thought the situation described in the scenario could be considered research. By this means, the participants' conceptions of research were determined. The participants' responses to the scenarios were presented in Table 2.

	Not Research	Research
Scenario 1	42.59%	57.40%
Scenario 2	94.3%	90.56%
Scenario 3	24.07%	75.92%
Scenario 4	9.25%	90.74%
Scenario 5	37.03%	62.96%
Scenario 6	24.07%	75.92%
Scenario 7	35.84%	64.15%
Scenario 8	62.96%	37.03%
Scenario 9	35.18%	64.81%
Scenario 10	28.30%	71.69%

#### Table 2. Responses to scenarios

As seen in the table, the Scenarios 4 (90.74%) and 2 (90.56%) were the situations that were accepted as research the most. Comparing the information with the similar results of other studies (Altınsoy & Birgün, 2016; Bulut, 2011; Tabatabaei & Nazem, 2013; Şahin & Arcagök, 2013) it is possible to state that teachers and pre-service teachers have similar imagination of academic research. Scenario 4 given in Table 3 below is a typical example of academic, quantitative research which relies on vast amounts of data and is seen as a liable source because of the use of statistics, etc.

#### Table 3: Scenario 4

Scenario 4: A university lecturer gave a questionnaire about the use of				
computers in language teaching to 500 teachers. Statistics were used to				
analyse the questionnaires. The lecturer wrote an article about the work				
in an academic journal.				
Accepted as research by: 49	90.74%			

As seen above in scenario 4 the lecturer depends on quantitative research methods and reaches a high number of teachers. 90.74% percent of the participants supported that this scenario is definitely research. When it comes to reasons we see answers such as; "There is an academic journal", "She used statistics to analyse" and "It's like an experiment." From this information we can deduce that the pre-service teachers conceive academic research as experiments which make use of multiple subjects, showcasing results with statistics. Examining the mention of an academic journal it is possible to say that the candidates see works, especially shared like this as research pieces. Although there were comments questioning the reliability of the source in the study, such as; "Questionnaires aren't enough" and "Sources are not reliable". This can be concluded by looking back at the study made by Shkedi (1998) where teachers stated that

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quantitative research does lack understanding of real and complex classroom issues, adding that teachers and students are rather seen as tools which employ the different ideas of the researcher.

The scenario chosen the least as research, on the other hand, was Scenario 8 (62.96%). Again, comparing our result with similar studies it was noticed that this result was common amongst the participants.

	Table 4. Scenario 8
Scenario 8:	Mid-way through a course, a teacher gave a class of 30
students a f	eedback form. The next day, five students handed in their
completed f	forms. The teacher read these and used the information to
decide wha	t to do in the second part of the course.

Not accepted as research by: 34 62.96%

Examining the situation given in Table 4 above, it is seen that the teacher hands out a form and moves on without collecting a great number of data. The candidates justify their choice by making the following comments; "Five students are not enough to do research", "No scientific aspect", "She didn't look for articles" and "It's not research, it's an activity". From this, it is possible to state that the candidates are not aware of teacher research and its flexibilities. The certain conception of investigation being a mathematical and statistical discipline of literature is noticed to be widespread amongst teachers and preservice teachers. There were also comments, on the other hand, stating that "She (the teacher) does research" and "Students' desires are important". This leads to the conclusion that some teacher candidates find the work of the teacher valuable since she is conducting her activity around the needs of her learners.

According to Borg (2009), "Defining research is in itself not a straightforward issue." As seen in the example scenarios above it was noticed that no matter the participants were aware or not they all defined research differently. Still, it is possible to say that the candidates, also looking at similar studies (Altınsoy & Birgün, 2016; Bulut, 2011;; Şahin & Arcagök, 2013; Tabatabaei & Nazem, 2013), have only a general idea about research. We can conclude that the situations involving great numbers of data collection, etc. are accepted as research and other types of investigation are not.

Altinsoy and Birgün (2016) conducted a study to investigate teachers' conceptions of research and found that the teachers tend to value statistical analyses, objectivity and experimental research designs as research. Similarly, Bulut's (2011) study with English teachers revealed that teachers see conventional and large scale studies as research. Additionally, the results suggested that experience and education can have an influence on teachers' views. More experienced teachers think of research in terms of more conventional research methods. Those who had received MA courses on research methods were more flexible in their ideas. Tabatabaei and Nazem (2013) also found that EFL teachers' conceptions of research was very close to conventional scientific theory of research that highlighted the distinction between teaching practices and research practices. Teachers did not see investigating their own classroom practices and sharing their ideas as research. Similarly, Şahin and Arcagök (2013) found that teachers often perceive research as something done only by academicians and MA students.

In our study, the most and least-rated scenarios were consistent with the findings of other investigations (Altinsoy & Birgün, 2016; Bulut, 2011; Kutlay, 2013; Şahin & Arcagök, 2013; Tabatabaei & Nazem, 2013). And the results indicate that pre-service teachers believe that research has advantages for them. So, we realize that there is strong evidence that research is associated with conventional scientific procedures This may make research seem an irrelevant field of study for teacher candidates. The importance of smaller-scale practitioner research for professional development seems to be a relevant point to make during the Research Methods courses.

# Findings about Research Question 2: How much research do pre-service ELT teachers read? What are the reasons if they do not read research?

The second section of Borg (2009) questionnaire consisted of questions related to how research-engaged the participants were in terms of reading research. Not reading research is a common finding in related literature (Borg, 2009; Bulut, 2011; Kutlay, 2013; Şahin & Arcagök, 2013) major reasons stated by those are the lack of time and finding research irrelevant with their business. This view is supported in the related literature (i.e., Day, 1993). They do not believe the good effects of research on such situations as self-confidence, self-efficacy, high expectations, high motivation, and etc. Such a shortcoming may have arisen due to the fact that they had engaged in very limited research practice.

If we look at the results of this study, 50% of the pre-service teachers expressed that they were 'not interested in research' as a reason for not reading research. They were not enthusiastic enough to engage in reading research and they were not aware of the necessity of engagement with research. As undergraduate students in the particular setting of this research, the participants will have to read research more intensively during their courses in the third and fourth years of the ELT programme. The reason for the participants' not being interested in research might be due to their lack of familiarity with research articles. One of the purposes for the Research Methods course, then, seems to be preparing students for the forthcoming semesters by providing more experience in reading and interpreting scientific research.

#### Findings about Research Question 3: What are their attitudes towards research?

Contrary to the finding that pre-service teachers mostly do not read research, they have positive attitudes towards research and researchers. The results from the attitude scale related to each sub-factor were presented in Table 5 below.

Factor	x
Reticence to cooperate with researchers	2.61
Negative attitudes towards research	2.01
Positive attitudes towards research	3.26
Positive attitudes towards the researcher	4.07
Max. Possible point is 5 for each factor	

Table 5. Pre-service English teachers' attitudes towards research

As seen in Table 5, the participants had more positive attitudes toward research and researchers. These findings are in line with the literature (Beycioğlu, Özer & Uğurlu, 2009; Ekiz,2006; Yavuz-Konokman, Tanrıseven & Karasolak 2013). It has been shown that teachers tend to have more positive attitude if they engage in research (Coşgun-Ögeyik, 2013). Therefore, it can be beneficial for pre-service teachers' professional development and their academic life and because of the fact that we believe that 'attitudes can change with the Research Methods course.

## CONCLUSION AND SUGGESTIONS

Research Methods course has got an important role in teacher education since it provides the necessary information to the teachers of the future to engage in research. This study sheds light on pre-service English teachers' attitudes and conceptions of scientific research. The results showed that the pre-service teachers did not see the scientific value of qualitative, small-scale, classroom based research as much as more conventional forms of research. Another finding was that they tended to have positive attitudes towards research and researchers although they admit not reading research so often.

Getting help from our results we can suggest that the following important points for the Research Methods course: First of all, the students' conceptions of research predominantly included large-scale studies in which quantitative research paradigms were used. This can be due to the fact that they have not been exposed to smaller-scale research. Therefore, using articles which exemplify more qualitative, smaller-scale studies is suggested. In addition, students would benefit from more reading practice to

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understand various types of studies. Pre-service teachers' professional and personal development is influenced by their thoughts. For instance, according to the results of this study, pre-service teachers give importance to research but they do not read research. Teaching pre-service teachers reading strategies such as skimming and scanning and how to examine any reading passage explicitly could be useful. Finally, students can be encouraged to engage in mini-research projects in order to gain more experience is suggested.

This study is limited to the researchers' own teaching-learning situation. Although this can be considered a typical group of learners in a state university of Turkey, the results cannot be generalized with confidence unless more similar studies are conducted at other universities with similar groups. The study revealed the situation of the group at the beginning of the term, serving as a needs analysis for the terms' studies. If time and resources had permitted, a follow up study could have been investigating the effects of the course by gathering more data at the end of the term and making a comparison. In further studies, the effects of reading and engaging in small-scale research can be explored.

## REFERENCES

- Altınsoy, E., & Birgün, M. (2016). Research engagement of Turkish ELT teachers. *International Journal of Language Academy*, 4(2), 111-128. DOI: 10.18033/ijla.392
- Bas, G., & Kivilcim, Z. S. (2017). Teachers' Views about Educational Research: A Qualitative Study. *International Journal of Progressive Education*, 13(2), 60-73.
- Beycioğlu, K., Özer, N. & Uğurlu, T.C (2010). Teacher's views on educational research. *Teaching and Teacher Education*, 26, 1088-1093. DOI:10.1016/j.tate.2009.11.004
- Bjønnes, B. (2014). Bridging the gap between teaching and research on science inquiry: Reflections based on two action research projects. *Norway Action Researcher in Education*,5, 16-35.
- Borg, S. (2009). English language teachers' conceptions of research. Applied Linguistics, 30(3), 358-388.
- Bulut, M. (2011). *English language teachers' perceptions of and engagement in research*, (MA Thesis). Retrieved from tez.yok.gov.tr
- Büyüköztürk, Ş. (2002). Sosyal Bilimler İçin Veri Analizi El Kitabı. Ankara: PegemA Yayıncılık.
- Çepni, S. & Küçük, M. (2003) Eğitim araştırmalarının fen bilgisi öğretmenlerinin uygulamaları üzerindeki etkilerinin belirlenmesi: Bir örnek olay çalışması. *Eğitim Araştırmaları Dergisi*, 4(12), 75-84.
- Cochran-Smith, M. & Lytle, S. L., (1993). *Inside/outside teacher research and knowledge*. New York and London: Teacher Colleges Press.
- Coşgun-Ögeyik, M. (2013). Prospective teacher's engagement in educational research. *Educational Research and Reviews, 8*(11), 758-765.
- Çakmak, Z., Taşkıran, C., & Bulut, B. (2015). Sosyal Bilgiler Öğretmen Adaylarının Bilimsel Araştırmaya Yönelik Tutumlarının İncelenmesi. Adıyaman Üniversitesi Eğitim Bilimleri Dergisi (ADYÜEBD), 5 (2), 266-287.
- Day, C. (1993). Reflection: A necessary but not sufficient condition for professional development. *British Educational Research Journal*, 19(1), 83-93.
- Dörnyei, Z. (2007). Research methods in applied linguistics. New York: Oxford University Press.
- Ekiz, D. (2006). Primary schools teacher's attitudes towards educational research. *Educational Sciences: Theory & Practice, 6*(2), 395-402.
- Eryılmaz, R., & Dikilitaş, K. (2016). English language teachers' research reticence: A collective case-study. *TÖMER Dil Dergisi*, 167(2), 15-29.

- Güler G., Şen C. & Sabancı Ö. (2017). Investigation of mathematics teachers' level of following, understanding and applying educational research. *International Online Journal of Educational Sciences*, 9 (1), 40-64.
- Hancock, R. (1997). Why are class teachers reluctant to become researchers? *British Journal of In-service Education*, 23(1), 85-99, DOI:10.1080/13674589700200009
- Healey, M., Jordan, F., Pell, B., & Short, C. (2010). The research-teaching nexus: a case study of students' awareness, experiences and perceptions of research. *Innovations in Education and Teaching International*, 47(2), p.235-246.
- Hargreaves, D. (2001). 'Revitalising educational research: past lessons and future prospects,' in Fielding, M. (ed).
- Healey, M., Jordan, F., Pell, B., & Short, C. (2010). The research-teaching nexus: a case study of students' awareness, experiences and perceptions of research. *Innovations in Education and Teaching International*, 47(2), 235-246. DOI: 10.1080/14703291003718968
- Hemsley-Brown J., Sharp C. (2003). The use of research to improve professional practice: a systematic review of the literature. *Oxford Review of Education*, 29(4), 449-471.
- Ilhan, A., Çelik, Ç., & Aslan, A., (2016). Evaluating the attitudes of university students about scientific research. *Journal of the Faculty of Education*, 7 (12), 141-156, DOI: 10.17679/iuefd.17218132.
- Korkmaz, Ö., Şahin, A. & Yeşil, R. (2011). Study of validity and reliability of scale of attitude towards scientific research. *Elementary Education Online*, 10 (3), 961-973.
- Kutlay, N. (2013). A survey of English language teacher's views of research. *Procedia Social and Behavioral Sciences*, 188 206, DOI: 10.1016/j.sbspro.2013.01.055
- Nunan, D., & Bailey, K.M. (2009). Exploring second language classroom research, Boston: Heinle.
- Papanastasiou, E. C., (2005). Factor structure of the "attitudes towards research" scale. *Statistics Education Research Journal*, 4(1), 16-26, (http://www.stat.auckland.ac.nz/serj)
- Şahin, Ç. & Arcagök, S. (2013). İlköğretim öğretmenlerinin eğitim araştırmalarına yönelik yaklaşımları. Bilgisayar ve Eğitim Araştırmaları Dergisi, 1(2), 1-20.
- Shkedi A., (1998) Teachers' attitudes towards research. *International Journal of Qualitative Studies in Education*, 11(4), 559-577.
- Tabatabaei, O. & Nazem, Y. (2013). English language teachers' conceptions of research. *Theory and Practice in Language Studies*, 3(3), 521-532.
- Tomakin, E. (2007). Bilimsel araştırma yöntemleri dersinin etkin öğretilmesinin incelenmesi. *JOKKEF*,16, 37-65.
- Worall N., (2004). Trying to build a research culture in a school: trying to find the right question to ask, *Teacher Development*, 8(2&3), 137-148.
- 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.
- Yavuz-Konokman, G., Tanrıseven, I. & Karasolak, K. (2013). Examining prospective teachers' attitudes towards educational research according to several variables. Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD), 14(1), 141-158.
- Yeşilyurt S., Demiröz H. (2008). In-Service highschool English teachers' views on the role of research in English language teaching, *KKEFD*, *17*, 271-285.
- YÖK (2007). Öğretmen yetiştirme ve eğitim fakülteleri (1982-2007). Retrieved from http://www.yok.gov.tr/index.php?option=com\_docman&task=doc\_download&gid=70

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