

Iranian EFL Teachers' Conceptions of Research: An Explanatory Mixed Methods Approach

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Received: 12/04/2015

Accepted: 19/10/2015

Abstract

This study reports a mixed methods design investigation into language teachers' conception of research. The study drew on various sources of data, including teachers' responses to questionnaires items, qualitative comments in follow-up interviews, and contributions to e-mail inquiries. Results showed that the teachers' understanding of research is mainly associated with a standard view of research. From the teachers' perspectives, key elements of research include the existence of a priori research questions, objectives and rigorous data, a large number of participants, and the use of statistics for the analysis of results. Findings also pointed to the teachers' consensus on the idea that educational research must address practical problems and have pedagogical implications. In addition, the teachers seemed to see research as a producer of new knowledge, an activity that will result in discovering and offering new pedagogical alternatives. The study concludes with the discussion of the underlying factors that have shaped the teachers' views of research.

Keywords: Educational Research; Iranian EFL Teachers; Research Engagement; Research-Practice Gap; Teachers' Conception

1. Introduction

In the Iranian ELT context, reading and doing research have traditionally been considered optional activities for teachers. However, the teachers' research engagement has recently received resurgent and sustained interest in academic discussions. For example, during the last few years, The Institute for Educational Research has hosted several national conferences to promote the utilization of educational research in classroom practice. Some professional journals, including *Roshd Foreign Language Teaching*, have specified special columns for the teachers' reflective practice and action research. For many teacher educators and policy makers, the teachers' engagement in research has recently become a prime concern, too. For instance, The 10th International Annual Meeting of Teaching English Language and Literature Society of Iran (TELLSI 10) was particularly devoted to the integration of research, practice, and policy in the Iranian ELT context. In the light of arguments for improving the quality of instruction, Iran's Ministry of

Education has also launched a number of incentives to encourage the teachers to do action research.

The motivations behind these initiatives and a more particular drive to make language teaching an evidence-based profession come from the assumption that teachers' involvement in reading and carrying out research helps them move out of their submissive positions in educational systems and encourages them to play more innovatory and important roles in curriculum development (Gurney, 1989). A further thinking behind these attempts is that when teachers make use of research findings. They can make more pedagogically sound and research-supported decisions (Borg, 2007, 2009).

Inspired by these assumptions and interests in encouraging practitioners' informed use of and involvement in research, in the Iranian ELT context, various strands of inquiry have recently emerged. Some researchers, for instance, have investigated the teachers' motivations for reading and doing research (e.g., Mehrani, 2015). Others have explored the methodological features, ideological foundations, and the content of the Iranian ELT research papers (e.g., Mehrani & Khodi, 2014; Mirhosseini & Samar 2015; Samar, Mehrani, & Kiyani, 2012). Further contributions come from the researchers who have compared academicians' research interests with practitioners' research demands (e.g., Samar & Mehrani, 2012) as well as those who have investigated barriers to the teachers' research engagement (Mehrani & Behzadnia, 2013). A few studies have also explored the potential strategies that can be employed in order to promote utilization of research findings in classroom practice and foster teacher-researcher collaborations (e.g., Mehrani, 2014).

The present study intends to make a further contribution to the ongoing debates by exploring the language teachers' conceptions of what comprises educational research. In particular, the study examines the general characteristics of educational research and the features of good quality research, from the perspectives of teachers. Therefore, the following research questions are addressed:

1. What are the general characteristics of research according to the Iranian English language teachers?
2. What are the qualities of good educational research according to the Iranian English teachers?

Although directly relevant to the ELT context, these issues are also of more general interest to the Iranian mainstream education, particularly at a time when encouraging initiatives are made to support the teachers' research engagement. Akerlind (2008) suggests that the study of teachers' conception of research is particularly valuable in contexts where there is growing emphasis on academic research activities. Based on the information provided above, the Iranian ELT

profession is clearly such a context. Thus, the results of this study can also offer important implications for similar educational systems that intend to promote the role of a researcher among language teachers.

2. Literature Review

Perhaps, the earliest studies on language teachers' conceptions of research were conducted by McDonough and McDonough (1990) and Brown (1992). These authors reported that the conceptions that teachers have about research are mainly related to empirical and quantitative studies. However, McNamara (2002) argued that teachers often hold negative views about the statistical nature of research. They believe that academicians produce dry facts which are not applicable to practice. This issue was later studied by Allison and Carey (2007) who examined the comments of the language teachers about how they perceived the actual and possible relationship between their professional practice and language teaching research. The key findings were that teachers hold an equivocal attitude toward research, and they believe that real (formal) research is something "more structured and demanding" (p. 71), and it needs certain competences. Distinguishing between research as feudalism and research as associated work, Allison and Carey (2007) argued that teachers' narrow view of a research stance and their lack of engagement in and with research could be the results of social inequalities and asymmetrical distribution of power between the distinct communities of researchers and teachers.

Everton, Galton, and Pell (2002) surveyed over 500 British teachers' views about research and asked them how research influenced their teaching. Everton et al. (2002) reported that the teachers acknowledged the potential positive impact of research on various aspects of their professional practice. In particular, 49% of the teachers reported that studying research improved their views about teaching, 29% said that research questioned their views, and 22% responded that research confirmed their views. The study by Ratcliffe et al. (2004), based on interviews with over 60 educators, showed that the majority of the respondents had very limited understanding of the nature and the process of research in social sciences. The study also revealed that the influence of research on the educational activities of these teachers was more indirect (e.g., through curricula and instructional materials) than direct (e.g., through reading research reports). Another study of particular interest was conducted by Kiley and Mullins (2005). They examined university supervisors' conceptions of research and their views about high-quality research in a range of English-speaking countries, including England, Australia, New Zealand, and South Africa. The findings showed that the dominant view of research held by the academic supervisors was basically a scholarly procedure "characterized by the rigorous application of systematic methods" (p. 249). In describing high-quality

research, however, the respondents emphasized, above all, innovation, creativity, and originality.

Recent empirical studies by Borg (2006, 2007, 2009) reflect growing interest on teachers' research engagement in ELT at an international level. In a series of survey studies involving more than 2,900 ELT practitioners, Borg (2006, 2007, 2009) examined the teachers' conceptions of research. His studies, echoing the findings of previous studies, showed that the teachers' conceptions of research were aligned with conventional scientific notions of inquiry. That is, the teachers viewed research as an activity that is conducted objectively and that produces true and valid results. Borg also discussed that limitations in teachers' attitude, knowledge, and skills can, to a large extent, explain why for many teachers' research engagement is neither feasible nor even desirable (Borg, 2009, 2010). However, Shkedi (1998) argues that teachers' narrow view of research is rooted in the fact that, over the past few decades, educational researchers have mainly followed an empiricist-positivist paradigm of research which is based on statistical and quantitative methods, claiming that the results are unquestionable as they stem from objective, statistical analysis.

Studies conducted by researchers in other contexts have reported similar findings. For instance, Kutlay (2013) investigated the conceptions held by the ELT instructors in a public university in Turkey and found that their understanding of academic research is basically compatible with scientific research paradigm. From their perspective, research should be explicit, systematic, and methodological, and research findings should be generalizable from the research site to other contexts. Similarly, Borg and Alshumaimeri (2012) reported that the English teachers in Saudi Arabia have largely technical views of research, including experimental designs, large samples, and the use of questionnaires. There was, however, an awareness among the Saudi teachers toward the value of originality of research and its relevance to practice. This latter finding echoes the conclusions made by Bills (2004) whose research on academic supervisors' conceptions of research generated similar results.

Gao, Barkhuizen, and Chow (2010) studied the research engagement of 33 Chinese primary school teachers. They reported that the majority of these teachers saw research as a type of inquiry that involves experimental use of particular methods or approaches in their classrooms that is closely related to the improvement of their practice. However, the teachers did not place as much emphasis on publication as they did on the application of research findings to improve practice. In a similar vein, Barkhuizen (2009) explored the research experiences of English teachers in China and his findings reflected the dominance of practical and professional concerns as important factors in research. A more recent study in the

Chinese context was recently conducted by Borg and Liu (2013). They explored the conceptions of research held by the college English teachers in China and the extent to which the teachers' conceptions were conducive to their professional development. They reported that research, as perceived by the Chinese teachers, is not considered a useful way of exploring, understanding, and improving their teaching. Their study also highlighted several tensions that the teachers experience between doing research for publication and for pedagogical practice, conducting theoretical research and practical research, quantitative and qualitative studies, and personal and external motivations for doing research. Similar tensions were also reported by the participants of Nassaji's study (2012) who found that some teachers believed that knowing about research is useful and that it can improve their teaching practice. However, many teachers indicated that the knowledge they gain from teaching experience is more relevant to their teaching practices than the knowledge they gain from research.

In sum, the literature suggests that teachers mainly hold an ambivalent view of research, valuing its potential for providing insights and improving practice, while at the same time, disapproving it for being overwhelmingly demanding and inaccessible. As presented in the literature, the teachers' understanding of research is mainly associated with a scientific view of research. However, the examination of the contexts of the existing studies shows that most of these investigations were conducted in European countries or in East Asia; thus, the findings of these studies cannot necessarily reflect the teachers' conception of research in other contexts. Borg (2007) points out that further empirical research into English teachers' research engagement in different contexts is required "if we are to develop an evidence-base which can inform policy and initiatives aimed at promoting research engagement by teachers in ELT" (p. 733). In other words, local and realistic understanding of the teachers' conceptions of research is an essential step for promoting their research engagement.

Although teachers are expected to take charge of their professional development and are encouraged to be research active, little information is available in the Iranian context about how the teachers respond to these expectations. This makes inquiries into their understanding of research both necessary and useful. In addition, the decisions to be made about teachers' research engagement must be informed by a realistic understanding of what teachers exactly think about research (Borg, 2009). To this end, the present study was conducted to provide a descriptive account of the Iranian English language teachers' conceptions of research.

3. Method

3.1 Design

To answer the research questions of the current study, a particular version of mixed-design research methodology was followed. This methodology was modeled after Borg's study (2007), and it reflects what Creswell (2012) calls explanatory sequential design. This design is characterized by the collection and analysis of quantitative data followed up with the collection and analysis of qualitative data. It is a popular research design to investigate relatively unexplored topics (Babbie, 1990; Creswell, 2012) and is, therefore, particularly suited to this study because it allows a substantial amount of data to be collected efficiently and in a standardized manner, while allowing the researcher to examine the teachers' conception of research through multiple perspectives.

3.2 Quantitative Analysis

3.2.1 Participants

The participants of the quantitative part of the study were a total of 184 English teachers from different geographical regions of Iran. In terms of teaching experience, as Table 1 reflects, the sample included a wide range of teachers, varying from 1 year to 32 years, though the majority had less than 10 years of experience. As Table 1 indicates, about 79% of the sample had B.A., about 15% had postgraduate qualifications, 2.7% had professional upper-diploma, and 3.2% either had diploma or did not specify their qualifications. The responses to the questionnaire also showed that 36% of the respondents worked in private institutes and 62% worked in junior and senior high schools:

Table 1. *Participants' Demographic Information*

Teaching Experiences	Number of Teachers	Percentage
0-4 Years	63	34.2
5-9 Years	42	22.8
10-14 Years	21	11.4
15-19 Years	26	14.1
20-24 Years	24	13
25+ Years	6	3.2
Total	182	98.9
Highest Academic Qualification	Number of Teachers	Percentage
Diploma or Unspecified	6	3.2
Professional Upper-Diploma	5	2.7
B.A.	145	78.8
M.A.	28	15.2
Total	184	100
Teaching Center	Number of Teachers	Percentage

Private Institutes	66	35.8
Junior High Schools	39	21.2
High Schools and Preuniversity	75	40.7
Total	180	97.7

3.2.2 Instrument

In this study, a modified version of Borg's (2009) questionnaire was used to collect the quantitative data. This instrument is originally designed based on the work of Ratcliffe et al. (2004) and intends to explore teachers' conception of research. It has been used by several researchers in various educational contexts (e.g., Borg, 2009; Borg & Alshumaimeri, 2012; Borg & Liu, 2013; Gao et al., 2010; Kutlay, 2013). The questionnaire has three sections, focusing, in turn, on the respondents' demographic information, their conceptions of what comprises research, and their views about various characteristics of high-quality research. The modifications made on the original instrument were restricted in scope and basically took into account the contextual circumstances of the teachers and their schools. First, some wording modifications were made to the first section of the original instrument (i.e., Demographic Information section) in order to maximize its relevance to the context under study. For example, because it was assumed that some of the teachers in the Iranian context have various disciplinary backgrounds, including English literature, translation, linguistics, and so on (i.e., not all the teachers are originally trained to be teachers), reference to this range of background was added.

Second 2 of Borg's questionnaire included 10 scenarios devised to portray a range of research activities with different features (e.g., methods, data, and outcomes) and which might, depending on the respondent's conception, be called research. In this section, no modifications were made, and the participants were required to indicate, on a 4-point Likert basis, the extent to which they felt each inquiry was research. Section 3 drew on a list of characteristics of quantitative-experimental research where the respondents were required to express their opinions on the importance of each of those characteristics. The researcher was cautious that the adaptation of such a list risked pushing the respondents into expressing their own beliefs only about one type of research approach. To compensate for this potential methodological bias, six additional items were inserted to make a balance between the characteristics of alternative research approaches. To ensure the validity of the questionnaire, the resulting version of the questionnaire was, then, sent to six experts (three university professors, one Ph.D. TEFL candidate, and two EFL teachers). They were asked to review and revise the questionnaire. Their comments were taken into account, and in order to detect any ambiguity in the items, the questionnaire was

administered to a group of 10 EFL teachers. Having ensured the precision and clarity of the items, the final version was administered to the participants.

3.2.3 Procedure

To obtain a sufficiently broad perspective on the issues under examination, following the procedure employed by Borg (2009), three modes of the questionnaire (i.e., hard copy, e-mail attachment, and Web-based) were designed for administration. Then, through a convenient sampling procedure, 197 English teachers from different cities covering the Eastern, Western, and Northern parts of Iran were recruited for the study. In doing so, the researcher approached his contacts in a number of ELT contexts around the country who were in positions to invite *practicing* (the only criterion for participation in the study) English teachers to contribute to the study by filling out the questionnaire. These contacts played a facilitative role in this study by providing access to the respondents and advice on which mode of questionnaire administering would work best in their particular contexts. All the three modes of administration were used, and the questionnaire data were collected from a sample of 197 English teachers. A total of 123 questionnaires were completed in hard copy, 25 via the Web-based survey, and 49 by e-mail attachment. After reviewing the collected data, however, the researcher had to remove 13 questionnaires because they either were not carefully completed or were uncompleted. Therefore, a total of 184 completed questionnaires were used in the analyses. Figure 1 schematically represents the number of the teachers from different regional clusters who participated in the quantitative part of the study:

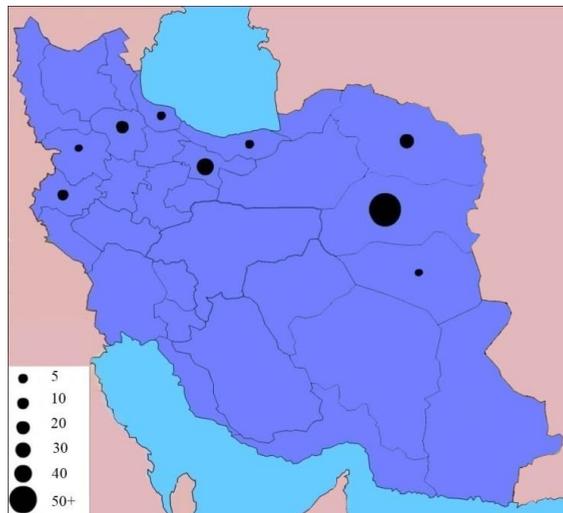


Figure 1. Number of Participants Across Provinces of Iran

3.3 Qualitative Analysis

3.3.1 Participants

An additional qualitative step was also taken to examine the teachers' conceptions of research from a rather emic perspective. Therefore, a series of follow-up interviews in Mashhad, Neyshabur, Sabzevar, Zanzan, and Tehran where 17 participants volunteered a follow-up contribution were conducted. Whereas the selection of these particular cities simply reflects their proximity and accessibility to the researcher, looking across these geographical locations enabled the researcher to consider whether the teachers' conceptions were simply the results of idiosyncratic circumstances in their schools or educational institutions.

3.3.2 Procedure

To encourage the interviewees to express their views fully and freely, they were asked whether they preferred to speak in English or Persian. All the teachers opted to speak in Persian. After obtaining each participant's agreement for audio-recording the interview sessions, the teachers were individually interviewed. During the interviews, they were asked to expand on their responses to the questionnaire items. The interviewees were also asked to give details on the characteristics which make a research study good in quality. All the questionnaire items were, thus, covered in the order that they appeared in the questionnaire. Within this framework, there was also space for more flexible interactions through which the teachers were able to elaborate on any matters relevant to their views and experiences about research. The interview sessions lasted, on average, about 30 min. They were later transcribed for content analysis.

In other contexts (accounting for the rest of the country), a proportional random sample of the teachers (45 people from six provinces) were invited to participate in the study. They were sent the interview questions through e-mail and were asked to contribute to the study by answering the questions. A total of 13 participants replied to the written questions. Then, the qualitative data generated through this follow-up step were analyzed to augment the interview data.

4. Results

This study drew on three sources of data to understand the teachers' conceptions of research: ratings of 10 research scenarios, ratings of the characteristics of good quality research (see Table 3), and the teachers' qualitative comments including follow-up interviews and contributions to e-mail inquiries.

4.1 Evaluating Research Scenarios

To examine the teachers' ratings given to the 10 items, a weight score was calculated for each item. To this end, a proportional weight score was first obtained for each teacher's response to each item. The proportional weight scores were obtained by assigning a score of +2 to every "definitely research" response and a score of +1 to every "probably research" response. Similarly, "definitely not research" responses were assigned a score of -2, and "probably not research" responses were given a score of -1. Therefore, the range of the proportional scores was between -2 and +2. For each item, the mean of the proportional scores was calculated to derive a weight score. Within this formulation, the magnitude of each weight score revealed the teachers' conception of research toward each scenario:

Table 2. *Research Scenarios Sated by Teachers*

Research Scenarios	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
A teacher noticed that an activity she used in class did not work well. She thought about this after the lesson and made some notes in her diary. She tried something different in her next lesson. This time the activity was more successful.	.22	1.43	2.04	183	.09
A teacher read about a new approach to teaching writing and decided to try it out in his class over a period of 2 weeks. He video-recorded some of his lessons and collected samples of learners' written work. He analyzed this information and then presented the results to his colleagues at a staff meeting.	1.23	1.07	15.46	183	.00
A teacher was doing an M.A. course. She read several books and articles about grammar teaching; then, wrote an essay of 6,000 words in which she discussed the main points in those readings.	.41	1.48	2.76	183	.06
A university lecturer gave a questionnaire about the use of computers in language teaching to 500 teachers. Statistics were used to analyze the questionnaires. The lecturer wrote an article about the work in an academic journal.	1.09	1.23	11.94	183	.00
Two teachers were both interested in discipline [classroom management]. They observed each other's lessons once a week for 3 months and made notes about how they controlled their classes. They discussed their notes and wrote a short article about what they learned for the newsletter of the national language teachers' association.	.39	1.76	2.60	183	.06
To find out which of two methods for teaching vocabulary was more effective, a teacher first tested two classes. Then, for 4 weeks, she taught vocabulary to each class using a different method. After that, she tested both groups again and compared the results to the first test. She decided to use the method which worked best in her own teaching.	1.08	1.23	11.86	183	.00

A headmaster met every teacher individually and asked them about their working conditions. The head made notes about the teachers' answers. He used his notes to write a report which he submitted to the Ministry of Education.	.01	1.58	.93	183	.35
Mid-way through a course, a teacher gave a class of 30 students a feedback form. The next day, five students handed in their completed forms. The teacher read these and used the information to decide what to do in the second part of the course.	-.31	1.48	-1.79	181	.26
A teacher trainer asked his trainees to write an essay about ways of motivating teenage learners of English. After reading the assignments, the trainer decided to write an article on the trainees' ideas about motivation. He submitted his article to a professional journal.	.16	1.54	1.43	183	.15
The Head of the English department wanted to know what teachers thought of the new course book. She gave all teachers a questionnaire to complete, studied their responses and then presented the results at a staff meeting.	.61	1.46	5.64	183	.00

To determine if statistically significant differences existed among the ratings given to research scenarios, one-sample *t* tests were conducted to compare the mean weight scores to a score of zero (i.e., a neutral position toward each scenario). As shown in Table 2, the results indicated that the teachers' ratings given to scenarios # 2 ($t = 15.46$, $df = 183$, $p = .000$), 4 ($t = 11.94$, $df = 183$, $p = .000$), 6 ($t = 11.86$, $df = 183$, $p = .000$), and 10 ($t = 5.64$, $df = 183$, $p = .000$) were significantly different from those of the other scenarios.

A cross-sectional analysis of the above four research scenarios reveals that there are a number of commonalities across these highly rated items. First, all these scenarios began with the research questions that had been formulated before the study was carried out. Second, the studies were conducted in contexts where first-hand data were collected. Thirdly, the collected data in these scenarios were subject to rigorous analysis. Furthermore, implementation of alternative teaching method/instrument was an essential part of all these scenarios. In addition, scenarios # 2, 4, and 10 shared a feature of being made public. These common qualities across the highly rated scenarios as research clearly signals the dominance of a positivistic overtone in the teachers' conceptions of research. They also reflect the assumption that research findings can/do provide the requisite knowledge and advice to optimize teaching practice.

The statistical analyses also revealed that scenarios # 1 ($t = 2.04$, $df = 183$, $p > .091$), 7 ($t = .93$, $df = 183$, $p > .352$), 8 ($t = -1.79$, $df = 181$, $p > .262$), and 9 ($t = 1.43$, $df = 183$, $p > .154$) were not recognized by the teachers as research. Scenario # 8, which received the lowest score, described a situation where a teacher asked his

or her students for feedback. In this scenario, there was no a priori research problem/question to guide the process of research. There also seemed to be a lack of systematic procedure in this scenario. The teacher did not have any direct supervision on or collaboration with the learners. In addition, the low number of responses to the teacher's inquiry reflected a lack of rigorous data collection and analysis. Furthermore, the fact that the teacher did not make the inquiry available to the public may have contributed to the teachers' low ratings of this scenario.

Similarly, ratings given to scenarios # 1, 7, and 9 were also low. Scenario # 1 portrayed a reflective practice which included no systematic procedure and no a priori research questions. In scenario # 7, the role of the researcher was played by a headmaster who approached a number of school teachers and asked them about their working conditions. Here, no mention of the classroom practice was made, nor was there any reference made to pedagogical activities. Besides, talking to colleagues about working conditions and asking them for feedback is a common administrative activity which is usually done in educational centers and is not normally recognized as research in the Iranian context. The context of scenario # 9 was not a language classroom, but a teacher education program. Although it depicted an activity centered on a pedagogical issue (i.e., motivation), the teachers were required to express their own personal beliefs in their assignments. In addition, there was no field data and no rigorous analysis in this scenario.

From these data, it is evident that for many teachers, research is characterized by a number of particular qualities. For instance, the existence of an a priori research question, rigorous data collection and analysis, a clear effect on or implication for the classroom practice are considered by the teachers in this study to be among the distinguishing features of research.

The results of the t tests on the ratings given to scenarios 3 ($t = 2.76, df = 183, p = .063$) and 5 ($t = 2.60, df = 183, p = .061$) showed that they were rated as marginally different from others. These indicate further diversity among the teachers in terms of their conceptions of research. In what follows, these diverse conceptions are explored in more detail.

4.2 Characteristics of Good Quality Research

The second part of the questionnaire included a list of 16 features of research where the participants could indicate the importance of each feature by acting on a 5-point Likert scale. To determine the relative significance of each feature, following the procedure used in the previous section, a weight score was calculated for each item. Then, one-sample t tests were conducted on the teachers' ratings to determine the significant differences among the features of research:

Table 3. *Teachers' Views on Importance of Research Characteristics*

Characteristics of Good Quality Research	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
The researcher is objective.	.97	1.70	11.11	181	.05
Observations are used.	.64	1.21	3.97	178	.14
A large number of people are studied.	1.03	1.08	12.36	181	.03
Hypotheses are generated.	.74	1.10	6.71	179	.12
Variables are controlled.	1.32	.98	17.73	175	.00
Participants' views are reflected.	.28	1.44	1.77	178	.26
Information is collected in real classrooms.	.81	1.61	7.01	181	.08
Hypotheses are tested.	.77	1.09	6.05	180	.09
Tests are used.	.63	1.32	3.97	179	.14
The results apply to many ELT contexts.	.68	1.06	4.01	179	.11
The results provide teachers with working solutions.	1.03	1.12	12.65	175	.04
Participants' individual differences are considered.	.64	1.67	3.98	180	.15
Information is analyzed statistically.	1.22	.95	17.17	179	.00
Questionnaires are used.	.75	1.12	6.11	181	.11
The results are made public.	.49	1.32	2.21	182	.23
Interviews are used.	.34	1.09	2.27	180	.24
Practical teaching problems are studied.	.93	1.01	12.39	181	.03

As Table 3 indicates, the respondents' data revealed that the characteristics, which were seen the most important, and significantly different from other characteristics, were "Variables are controlled" ($t = 17.73$, $df = 175$, $p = .00$), "Information is analyzed statistically" ($t = 17.17$, $df = 179$, $p = .00$), and "A large number of people are studied" ($t = 12.36$, $df = 181$, $p = .03$), followed by "Practical teaching problems are studied" ($t = 12.39$, $df = 181$, $p = .03$), "The results provide teachers with working solutions" ($t = 12.65$, $df = 175$, $p = .04$), and "The researcher is objective" ($t = 11.11$, $df = 181$, $p = .05$).

In line with the results of the previous section, these highly rated characteristics reflect, *inter alia*, a conception that is associated with a scientific-experimental understanding of research. They also reflect the practical concerns of teachers about research, implying that teachers expect research studies to provide them with practical solutions that can be applied to their immediate teaching context.

Another noteworthy point in the results is that other notions normally aligned with a scientific-experimental conception of research such as the "use of tests and questionnaires and "testing hypotheses" are not highly rated by the teachers. This may indicate that, for the teachers who participated in this study, data collection methods alone are not indicative of good quality research. A further point worth noting here is that the ratings given to "The results are made public" were

relatively low. This suggests that, from the teachers' perspectives, dissemination of a research does not perhaps contribute to its quality.

4.3 Follow-Up Interviews

The ratings given to the questionnaire items revealed the significance of each characteristic of research from the perspective of the language teachers. Throughout the follow-up interviews and e-mail inquiries, the teachers were further asked to explain and elaborate on their responses to the questionnaire items. Once the qualitative data were collected, based on the guidelines recommended by Richards (2003) and Berg (2007), a thematic content analysis procedure was followed to analyze the results of the qualitative data. The process involved extracting the main themes in the interview transcripts and e-mail responses and attempting to verify, confirm, and qualify them by searching through the data. The whole procedure was repeated 3 times in order to identify any further themes. In what follows, attempts are made to discuss the results of the analysis of the interviews with direct quotes from the participants used to illustrate and exemplify the key points.

4.3.1 A large amount of data, a lot of participants, and statistical analysis

Throughout the interviews, one of the themes repeatedly highlighted as an important element of research was related to the data collected for research. The teachers made recurrent references to the number of participants and the body of the data that should be statistically analyzed. The following assertions made by three high school teachers show the importance of data collection in research from their perspectives.

In line with the findings of the previous sections, these comments indicate that the conception of research held by the majority of the teachers is mainly associated with a "standard" (Robson, 2002, p. 19) view of scientific inquiry, where many participants are studied and large volumes of data are collected and rigorously analyzed.

4.3.2 Practicality of research findings

Another consistent concern recurrently articulated by the teachers was that research studies must yield practical results. Many teachers particularly referred to research contexts and some challenged studies that focus on research problems that are not pertinent to what language teachers experience in their classrooms. This is reflected in the following quotes, provided by some of the interviewees:

- *Here, the teacher wanted to test and choose the best method of vocabulary instruction by teaching students in a real language classroom . . . This research can greatly help other teachers, too.*

- *My perspective is more practical When it [research] is done out of the classroom, they [researchers] ignore the dynamic parts of teaching.*
- *If the results do not give teachers practical ideas, they are of no use.*

The above assertions show that many teachers want practical advice on how to best handle the process of teaching in their classrooms. This poses a challenge against theoretical research studies that are carried out in controlled, experimental conditions and often fail to provide practitioners with practical implications.

4.3.3 Innovation and novelty

References to “new methods” and “new techniques” of language teaching were frequently made in teachers’ responses to the interview questions. The term *new* seemed to be associated with the teachers’ conception of research as illustrated in the following assertions:

- *Well, many teachers know about it [teaching grammar] They’d better introduce something else which is interesting, not something that everybody knows.*
- *For example, [in teaching speaking skill] task-based instruction is new Ok, they can do a research on new tasks and discuss the pros and cons of each task.*
- *I think whenever we discover or test a new idea, then our activity can be called research.*

As reflected in these statements, the teachers expect researchers to find out and offer “unknown” concepts. This suggests that some teachers not only believe that researchers have deep and comprehensive knowledge of language teaching, but also assume a high level of creativity and innovation on the part of researchers. However, a more realistic version of this expectation was expressed by another teacher:

- *I mean he could introduce, compare and contrast different techniques not just two, so when I am going to teach vocabulary, I know what techniques to use, when, and why.*

According to this teacher’s comments, the role that is here being assumed for research is that of a repertoire of pedagogical choices. The teachers want research to provide them with a constantly-being-revised list of alternatives that can help them make informed decisions.

4.3.4 Research approach and data collection instruments

As the following assertions show, another major point that emerged from the analysis of the teachers' comments was related to methods of data collection and procedure of research:

- *Because individual differences distort the results of the study . . . Thus, it [the inquiry] can be only called a sort of speculation. In research, we are after discovering truth.*
- *Sometimes, the participants provide unreal answers when you interview them. They do not say the realities. Sometimes, for example, they want to please the interviewer.*
- *He [the researcher] began with a research question, and collected impartial data through questionnaires, then used statistical procedures to analyze the data.*
- *Using tests is one of the best methods of comparing different methods [of teaching].*

In these comments, a feeling of mistrust toward some data collection instruments, particularly interviews where individual differences and participants' opinions are reflected, is invoked. In particular, some teachers emphasized that the validity of educational research can only be confirmed through the collection and analysis of unambiguous, hard-and-fast evidence. Comments of this type suggest that, from the teachers' perspectives, impartiality and objectivity are essential components of research. Nonetheless, a few teachers referred to qualitative research approaches and data collection instruments as alternative methods of research:

- *If the teacher is going to use the results of the study, he can talk to his students and collect data through interviews.*
- *Observation is a method for gathering data; it depends on the kind of research and can sometimes be used.*

Taken together, the teachers' comments pass a sense of objective discovery as a main goal of research. Traces of this ontological position refer to a positivistic perspective of reality as being independent of the researcher's volition. Such a perspective, in its extreme form, rejects the existence of any type of subjective understanding and poses huge restrictions on language teachers' conception of research.

5. Discussion

The results of both qualitative and quantitative rounds of investigation into the teachers' conception of research helped us understand some of the complexities involved in their views. Despite some minor differences in the results of the qualitative and quantitative investigations, it seems that the findings of the two sections of the study are consistent and can be considered reliable.

Taken together, the results showed that the teachers' mentalities are associated with what is conventionally called a standard view of research, where a limited range of inquiries are considered legitimate and reliable. In line with the findings reported in the literature, this view reflects what McDonough and McDonough (1997) call a "minimalist view of a research stance" (p. 7). From the teachers' perspectives, the key elements of research include the existence of a priori research questions and design, objective, and rigorous data collection, large number of participants, and the use of statistics for the analysis of results. In addition, the teachers believed that educational research must address practical problems and have pedagogical implications that can be used by practitioners in the classroom. This latter finding, however, seems to be a unique feature of the Iranian teachers' attitude toward research, not reported in the literature.

The study also revealed some further idiosyncratic aspects of the Iranian teachers' views of research. For instance, the teachers seemed to see research as a producer of new knowledge—an activity that will result in discovering and offering new pedagogical alternatives. It also appeared that the respondents held a skeptical view toward qualitative methods of data collection and analysis. However, they showed less certainty about disseminating research studies.

Given the absence of comparative data in the Iranian context, the researcher cannot comment on how these findings relate to views toward research in the Iranian ELT community more generally. Nevertheless, in line with the findings reported by other researchers in different contexts (e.g., Borg, 2007; 2009; Borg & Liu, 2013; Gao et al., 2012), this study affirms that the teachers predominantly see research as an academic and intellectual labor associated with quantification and generalization. However, an important question is how these thoughts and conceptions are shaped in the Iranian context. And, more importantly, how well the actual process of research reflects these mentalities.

Part of the answer is, perhaps, rooted in the Iranian ELT research discourse. Recent investigations into the content of the Iranian ELT research articles show that quantification, measurement, and statistical analyses are still the essential components of the methodology of most articles that appear in our scholarly journals. For example, Mehrani and Khodi (2014) surveyed the ELT research

studies published between 2001 and 2011 in nine Iranian ELT-related journals. Of the 375 studies, 302 (81%) employed quantitative research methodology, suggesting that quantitative research designs reigns supreme in the Iranian ELT research. Similar findings are reported by Mehrani, Samar, and Behzadnia (2012) who surveyed 180 scholarly articles published between 2005 and 2010. This extensive use of rigorous and quantitative research methodology in academic journals definitely influences language teachers' conception of what comprises research.

Mention should also be made of the role of teacher education programs in shaping language teachers' conception of research. Retrospective investigations show that the research methodology courses offered in our teacher education programs are often replete with discussions of quantitative research studies. Although some qualitative-oriented textbooks are used in research courses at graduate levels, the most popular and widespread textbooks in research methodology courses, particularly at B.A. level, (e.g., Hatch and Farhady's *Research Design and Statistics for Applied Linguistics*; Farhady's *Research Methods in Applied Linguistics*; Brown's *Understanding Research in Second Language Learning: A Teacher's Guide to Statistics and Research Design*, and Hatch and Lazaraton's *The Research Manual: Design and Statistics for Applied Linguistics*) provide solid introductions only to quantitative research methodology and statistics for language teachers and teacher educators (Mirhosseini & Samar, 2015). Examples are also based on numerical data, and there is a heavy emphasis on understanding experimental and correlational inference; there is little, if any, explanation about alternative research designs such as ethnography, narrative, grounded theory, and so on (Mehrani, in press). Thus, prospective and practicing teachers' immense exposure to these major research textbooks and various journal articles has basically shaped their current thinking on research in applied linguistics.

Teachers' emphasis on practicality of research as a criterion of good quality, on the other hand, seems to stem from the nature of conflicting knowledge bases of research and practice (Tom, 1997). Whereas research often offers a form of knowledge that is propositional, analytical, fully cognitive, unaffected by emotions or desires, and is ideally connected to a scientific understanding of a problem, language teachers need perceptual, practical, situational, and often-unconscious type of knowing that aims at helping them decide how to act in a particular situation (Brown, Collins, & Duguid, 1989; Fenstermacher, 1994). In other words, language teachers need prompt and concrete answers to solve their ongoing pedagogical problems (Kessels & Korthagen, 1996; Korthagen, 2007). Therefore, language teachers' heavy reliance on the practicality aspect of research is justified to the extent that research does not offer pertinent and practical results (Burkhardt & Schoenfeld, 2003).

A further concern regarding the findings of the present study that deserves attention is the implications of the teachers' narrow and limited understating of the concept of research. Perhaps, one result is that a great deal of research conducted within alternative research paradigms (e.g., action research, ethnography, case study, etc.) remains obscure and unappealing to practitioners. Teachers' quantitatively-oriented conceptions, coupled with the appeal of statistical analyses and experimental research designs, cause positivism to reign supreme as the most popular (and perhaps the only legitimate) form of inquiry in the Iranian ELT context. This may, in turn, promote what Lazaraton (2005) calls a sort of "wag the dog" (p. 219) syndrome. In other words, language teachers' narrow stance of research may tempt them to focus solely on what can be statistically measured, rather than on what is important in language education.

A second outcome has to do with the results of the extensive attempts that are being made by the Ministry of Education to engage teachers with research and to promote teacher-research in the Iranian schooling system. Regarding current teachers' conception of research, it seems unlikely that these attempts would accomplish very much because sustainable research engagement and teacher-research can only be expected to develop when teachers have positive attitudes toward small-scale research activities which they can feasibly engage in. Thus, unless their biased conceptions of research are altered, language teachers cannot be expected to be researchers of their own contexts.

Language teachers' emphasis on practical research studies, on the other hand, challenges the credibility of theoretical research studies that do not offer knowledge that can be directly translated into classroom practice. Their responses and comments imply that they doubt the relevance of theoretical research to their work and convey a sense that such research does not and cannot answer questions that may be specific to a single classroom. Sometimes, RAs deal with problems that are too insignificant or too remote from the context of teachers' interest. For instance, studying "how Iran's nuclear issue is represented in British newspapers" or "examining the ways through which the idea of war has been suppressed in George Bush's speech" never falls into teachers' primary teaching concerns. Yet, such off-the-point issues remain the focal areas of a number of published articles in the Iranian ELT-related journals.

6. Conclusion

This study examined the conceptions of the Iranian English teachers toward research. Such an examination is critical to the understanding that is required for the decisions to be made about the gap between research and practice in the Iranian ELT context because it helps to examine academic research discourse from the points of view of those who have largely been excluded from it (Cochran-Smith & Lytle,

1993). Empirical studies of this type have significant potential to inform our understandings and decisions in relation to integrating research and practice and promoting language teachers' research engagement.

Unlike any other form of professional development, research engagement remains open to language teachers throughout their career. Specifically, it can increase the number of teaching plans, educational objectives, teaching strategies, and teachers' knowledge of what is being taught. In addition, engagement with and in research improves teachers' reflective behavior, awareness of praise, focus on evaluation, and observations of pupils (Campbell & Jacques, 2004). Studies have shown that research can inform and improve practice by providing different interpretations and understanding of educational activities (Biesta, 2007). For these reasons, it seems that further research on language teachers' research experiences is needed in order to provide relevant and useful knowledge to teacher educators and policymakers, the aim being to explore the potential strategies that can be employed in order to promote more feasible forms of teacher research engagement in the Iranian ELT context.

Among the related issues worthy of further investigation is examining the impact of language teachers' research engagement on their instructional practices and student achievement. In addition, future studies can explore the barriers to research engagement and problems that teachers encounter when they read and do research. There is also a need to explore influential factors in the formation of teachers' conception of research. In particular, future research can investigate what aspects of research are emphasized in our research methodology courses and what forms of educational inquiries are promoted in language teacher education programs.

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