

# Experienced and Novice Iranian Teachers' Perceptions as to the Effect of Extrinsic Factors on Teacher Efficacy

Abbas Ali Zarei, Niloofar Afshari

**Abstract**— To investigate the perceptions of experienced and novice teachers as to the effect of extrinsic factors (classroom management, instruction, need of students, technology) on teacher efficacy, 53 experienced teachers who had more than 10 years of experience in teaching and 46 novice teachers who had less than 3 years of experience in teaching participated in the study. To accomplish the aim of the study, a 30-item general proficiency test and an 80-item questionnaire measuring the perceptions of the teachers about one of the extrinsic factors, were administered to all participants. The gathered data were analyzed through Mann Whitney U procedure. Results indicated that there were no significant differences between experienced and novice teachers' perceptions as to the effect of classroom management, instruction, and technology on teacher efficacy. But significant differences were observed between the perceptions of novice and experienced teachers with regard to the effects of need of students on teacher efficacy. The findings of this study can have implications for teachers and teacher trainers.

**Index Terms**— Classroom Management, Instruction, Need of Students, Technology, Teacher Efficacy, Teachers' Perceptions.

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## 1 INTRODUCTION

EFFECTIVE teaching is a common desire of all teachers. However, teacher efficacy is viewed differently by different teachers. What is regarded as effective teaching by one teacher is not necessarily effective for another. A multitude of factors could influence and shape one's idea of what constitutes effective teaching. A number of studies have been conducted on teacher perceptions with regard to various aspects of language teaching. According to Dunkin (2002), teachers' conception of teaching is likely to be a subjective assessment including their judgments about the effectiveness of teaching, their estimates of personal influence upon students, and criteria by which they evaluate their own teaching.

Moreover, experiences of teachers during teaching can affect teachers' perceptions of self-efficacy. The comparisons of low and high efficacy teachers and their behavior in the classroom were investigated by Schunk (1990). According to Schunk, teachers with low efficacy were not so certain about their capabilities and the effects they had on students' learning. But teachers with higher efficacy helped students in challenging classroom situations. In the present study, the perceptions of experienced and novice teachers as to the effect of extrinsic (classroom management, instruction, need of students, technology) factors on teacher efficacy are investigated.

## 2 REVIEW OF LITERATURE

Many researchers have described characteristics of experienced and novice teachers and their differences in the teaching

process. For example, Angell, Ryder, and Scott (2005) believe that novice teachers are differentiated from expert teachers based on three aspects of professional practice: knowledge base, pedagogical action and fundamental influences. Similarly, Hogan, Rabinowitz, and Craven (2003) compared novice and expert teachers following Shulman's (1986) categories (content knowledge, pedagogical content knowledge, and pedagogical knowledge). Accordingly, experts differed from novice ones in 4 main characteristic: 1- expert teachers were found to plan both long-term (overall curriculum) and short-term (lesson plan), while novices tended to focus on short-term planning. 2- The strategies that were planned by expert teachers to teach specific skills were more than the ones used by novice teachers. 3- Unlike expert teachers who perceived of the class as comprised of unique individuals, novice teachers saw the class as a whole. 4- Student achievement was important for expert teachers, while novice teachers paid more attention to class interest.

According to Berliner (1988), there are five stages in the development of teachers. The first stage is the novice stage where the novice teachers need help to guide their actions, the second stage is the advanced beginner. The third stage is competent and then proficient. In stage 3 (the competent stage), most of the advanced beginners who have more experience and motivation become competent teachers. The competent have the ability to choose consciously what they need and decide on plans. Furthermore, the experience that the competent teachers attain helps them decide what is important to attend to and what is not. In the proficient stage of development, which happens after approximately five years of experience, a small number of teachers will move beyond competence and into the proficient stage of development. The last stage is expert stage in which teachers' own actions are more holistic, where the teacher and the task are integrated and the teacher

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- Imam Khomeini International University, Qazvin, Iran.  
Email: a.zarei@hum.ikiu.ac.ir
  - M.A. Islamic Azad University, Takestan, Iran.

is fully adapted to the situation. The way teachers think will serve as their construct and the construct will then act as guidance in their action.

Berliner (2004) explored the nature of expertise in pedagogy. According to Berliner (p. 22), the novice is deliberate, the advanced beginner insightful, the competent performer rational, the proficient performer intuitive, and the expert arational. Experts have both an intuitive grasp of the situation and seem to sense in non-analytic and non-deliberative ways the appropriate response to be made. The calculation or deliberate thought is not involved for experts. Experts do not consciously choose what to attend to and what to do.

## 2.1 Teacher efficacy

Many studies have been conducted in the area of self-efficacy and teacher efficacy (Evers, Brouwers, & Tomic, 2002; Fives, Hamman, & Olivarez, 2005; Tschannen-Moran & Woolfolk Hoy, 2001). Ever et al. (2002) maintain that there are relations between burnout level and self-efficacy of teachers. A random sample of 490 teachers was involved in their study wherein it was reported that teachers with strong self-efficacy beliefs implement new educational practices more than teachers with low self-efficacy. Moreover, the study by Fives et al. (2005) support the connection between teacher efficacy and teacher burnout.

According to Tschannen-Moran et al. (1998, p. 233), teacher efficacy is "the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context".

Bandura (1977) has defined teacher efficacy as a type of self-efficacy in which people construct belief about their capacity to perform at a given level of attainment. This type of self-efficacy is future-oriented and influences thought patterns and emotions. According to this theory, efficacy may be easily influenced early in learning, so the first years of teaching could be critical to the long-term development of teacher efficacy.

Personal teaching efficacy (one's own feeling of competence as a teacher) and general teaching efficacy are two factors concerning teacher efficacy. General teaching efficacy is also called outcome expectancy (Riggs & Enochs, 1989), which means people assess the consequences of the performance level they expect to achieve.

Tschannen-Moran et al. (1998) hold that efficacy belief of novice teachers is different from experienced teachers. Having less stress, more commitment to teaching and satisfaction in teaching are some important factors to efficacious novice teachers in first year of their teaching. Unlike novice teachers, efficacy belief of experienced teachers seems resistant to change.

## 2.2 Extrinsic factors

A number of factors may influence teachers' sense efficacy. Some of these factors are intrinsic and some are extrinsic. Extrinsic factors (contextual) are not inherent; rather they act from outside. The effect of extrinsic factors on teacher efficacy can depend on how teachers act in the classroom. It means that teachers should consider different aspects of teaching relating to their ability in conducting appropriate content, learning strategies and technology for students' improvement. Ex-

trinsic factors, in this study, are limited to classroom management, instruction, need of students, and technology.

### 2.2.1 Teacher efficacy and classroom management

The way of classroom management has a primary effect on teaching and learning (Marzano, Marzano, & Pickering, 2003). In a poorly managed classroom with lots of discipline issues, teachers are in difficult circumstances to teach, and students usually learn less than they should, while a well-managed classroom provides an environment in which teaching and learning can flourish. There are two reasons relating to teachers' inability in classroom management. One is related to low achievement of students in education and the other is their insufficient preparation.

Research on traditional classroom management and resources dealing with behavior issues is abundant. Conversely, there is little research on CRCM (culturally responsive classroom management), which causes problems for teachers lacking cultural competence (Weinstein, Tomlinson-Clarke, & Curran, 2004). A research by Giallo and Little (2003) on classroom behavior problems showed the importance of self-efficacy as a predictor of behavioral management. Similarly, a study by Sridhar (2011) revealed that teacher efficacy affects classroom management directly. In this research, the effect of teacher efficacy on different components of classroom management style (instructional management, people management and behavior management) was investigated and the result showed that male teachers had higher levels of classroom management compared to female teachers (behavioral management was an exception).

### 2.2.2 Teacher efficacy and instruction

Superfine (2008) proposes planning as an important phase of teaching which is more effective when teachers make decisions about various aspects of instruction that ultimately help students to learn. Planning commonly refers to the time teachers spend preparing and designing activities for students. In order to apply tasks and instructional practices during lessons, teachers need to consider many aspects of their instruction before students enter the classroom.

There is a connection between student achievement, teacher accountability and quality of classroom instruction. Accordingly, when teachers are highly qualified, students' achievement will increase. One of the responsibilities of teachers is to be informed of educational practices and research that affect the instruction delivered to students (Ballard & Bates, 2008). Meyer (2004) compared expert and novice teachers' conception of prior knowledge and the way of using this knowledge for instructional decision making. She concludes that since prior knowledge of novice teachers is insufficient, its role in instruction is not vivid. On the other hand, expert teachers' complex conception of prior knowledge as well as their conception of students' prior knowledge will help them during instruction.

Schug, Tarver, and Western (2001) investigated the relationship between direct instruction and teacher training. The result showed that direct instruction is not noteworthy for teachers in the first-year of teaching. It is also possible that

their information about direct instruction is limited to the observation guided by their cooperating teachers in student teaching.

Davies (2004) holds that teacher efficacy influences higher order instruction. He believes teachers with high self-efficacy who have greater belief in their ability are more likely to emphasize higher order instructional objectives and outcomes than teachers with low self-efficacy.

### **2.2.3. Teacher efficacy and need of students**

Learning needs have an important effect on educational situation. Learning needs are the skills, knowledge and competencies that need to be attained by an individual in order to perform at the desired level of expertise when performing a particular task or job. Hanh (2005) compared 52 learners and teachers' preferences in Vietnam through questionnaires and interviews. The result showed 25% discrepancy between the learners' and teachers' preferences. Based on this research, teachers must be aware of their students' needs, wants, and development of classroom practice. This probably implies that it is impossible to provide the same instruction in the same way for all students even if students are grouped in the same way because students have different abilities, talents, and needs.

A study by Ernest, Heckaman, Thompson, Hull, and Carter (2011) shows that using differentiated instructions regarding students' need increases teacher efficacy. Kaner (2010) compared teacher efficacy beliefs of teachers who worked with students with special needs and students without special needs. Kaner found that teacher efficacy beliefs do not differ based on the type of students' need. Lewandowski (2005) holds that there is a positive correlation between teacher self-efficacy and student achievement. So, the responsibility of teachers to consider diverse needs of students is important.

### **2.2.4 Teacher efficacy and technology**

Vrasidas and McIsaac (2001) emphasize the integration of technology into teaching and teacher education. Meskill, Mosop, DiAngelo, and Pasquale (2002) studied the experiences of professionals acquired during teaching, which can best inform those new to teaching and learning in general, and teaching with technologies in particular. There are differences between novice and expert teachers in using technologies. One of the differences is that experienced teachers use technologies effectively as a means rather than an end to learning, but novice teachers limit themselves to mastering the routines and rituals of new contexts.

To consider more details of differences between expert and novice teachers, Lazonder, Biemans, and Wopereis (2000) studied their differences in searching for information on the World Wide Web. Examination of 25 students at a Dutch pre-university education indicated that subjects with WWW-experience were more proficient in locating Web sites than novice WWW-users. Furthermore, expert teachers were faster to provide a greater number of correct responses to the tasks, and needed fewer actions and less time to find relevant Web sites.

Recently, modern technologies (computers, internet, multime-

dia, communication technologies) have been introduced into school curricula. Teachers' attitudes toward modern technologies as well as individual factors (such as computer self-efficacy, self-concept, motivation, needs) help the development of modern technologies (Paraskeva, Bouta, & Papagian, 2008).

Strong self-efficacy of teachers has an important effect on the emergence of new ideas. Moreover, teachers can experiment with new methods to offer students new experiences (Tschanen-Moran & Woolfolk Hoy, 2001). Teacher computer self-efficacy is another effective educational tool that helps the development of technologies. Meanwhile, the importance of technology in changing teachers' role (from traditional to facilitator) must not be ignored (OTA, 1995).

Integration of technology into teachers' teaching practice and prior experience in the use of technology may influence teacher self-efficacy (Albion, 1999; Paraskeva et al., 2008). Albion adds that teacher self-efficacy beliefs about using technology may help them to prepare students for technology use. It is also reported that teachers who use communication technology (e.g. email) are more successful and show more confidence in teaching compared to other teachers who lack such technology. According to Hulstijn (2000), computer and computer software are tools which have great impact on the study of language acquisition and use. In the past, the use of technology in language acquisition and use was not very important, but today researchers are trying to get closer to integrating technology into teaching (Godwin-Jones, 2002).

It is the aim of the present study to compare the experienced and Novice Iranian Teachers' perceptions as to the effect of extrinsic factors on teacher efficacy.

## **3 METHOD**

### **3.1 Participants**

In the present study, a sample of 140 Iranian teachers (both males and females) teaching English in either institutes (Iran Mehr, Kish, Iran Language) at different levels (basic, intermediate and advanced) or schools was selected. The number of teachers was then reduced to 99 teachers. 17 participants were excluded because they did not complete their questionnaire or whose proficiency level did not match that of the other participants. Another 24 participants were removed because they had between 3 to 10 years of teaching experience. Then, teachers were divided into 2 categories: 53 experienced teachers who had more than 10 years of experience in teaching and 46 novice teachers who had less than 3 years of experience in teaching.

### **3.2 Materials and instruments**

To answer the research questions, the following instruments were made use of. First, a general proficiency test was administered to see whether or not the participants had the same level of proficiency in English. It was a three-part, 30 -item multiple-choice test containing 10 grammar items, 10 vocabulary items, and 10 sentences each containing an error to be identified and corrected. A sample of test is available at [www.english-test.net](http://www.english-test.net). The reliability of general proficiency test was estimated through Kuder-Richardson 21 method,

which turned out to be .72. Second, a four-part written questionnaire, which was developed by the researchers, was given to both novice and experienced teachers. The questionnaire consisted of 4 parts and each part contained 20 items. Each item was in multiple choice format and was scored on a 5-point Likert scale from 'strongly agree' to 'strongly disagree'. The reliability of the questionnaire was estimated through Cronbach's alpha, which turned out to be .78.

### 3.3 Procedures

Initially, a sample of 140 Iranian teachers with the aforementioned characteristics was selected. Then, a general proficiency test was administered to make sure that there were no significant differences among teachers in terms of their proficiency level. To homogenize the participants, their scores on the general proficiency test were summarized, and the mean and standard deviation were computed. The scores of those who had achieved more than one standard deviation away from (above or below) the mean were excluded from all subsequent analyses. Having made sure that the participants were homogeneous, they were divided into two groups of experienced and novice teachers. For the purpose of the present study, those who had more than ten years of teaching experience were considered as experienced and those who had less

than three years of teaching experience were regarded as novice. Next, the already constructed 4-part questionnaire was given to all participants. To analyze the obtained data and to answer the research questions, a Mann Whitney U procedure was used to compare the views of experienced and novice teachers with regard to each part.

## 4 RESULTS AND DISCUSSIONS

### 4.1 Results

The research question attempted to see the differences between experienced and novice teachers' perceptions as to the effect of extrinsic factors on teacher efficacy. To this end, a Mann Whitney U procedure was run four times. The first Mann Whitney U procedure was run to see the differences between the perceptions of experienced and novice teachers with regard to the effect of classroom management on teacher efficacy. Table 4.1 illustrates the results of the descriptive and test statistics. Based on Table 4.1, the experienced group has higher mean rank (mean rank = 52.03) than the novice group (mean rank = 46.64). Moreover, Z-value is not statistically significant ( $Z = -.93, P > .05$ ). Therefore, the findings indicate that there is no statistically significant difference in classroom management scores of experienced and novice teachers.

TABLE 4.1  
 DESCRIPTIVE AND TEST STATISTICS FOR CLASSROOM MANAGEMENT SCORES

	Group	N	Mean Rank	Sum of Ranks
Classroom management	Experienced	52	52.03	2705.50
	Novice	46	46.64	2145.50
Z = -.93		Sig. = .34	$\eta^2 = .008$	

The second Mann Whitney U procedure was run to compare experienced and novice teachers' perceptions as to the effect of instruction on teacher efficacy. Based on Table 4.2, the novice group has higher mean rank (mean rank = 52.88) than the experienced group (mean rank = 43.79). In addition, Z-value is

insignificant ( $Z = -1.60, P > .05$ ). So, the difference between experienced and novice teachers' opinion in the use of instruction in the classroom is not significant

TABLE 4.2  
 DESCRIPTIVE AND TEST STATISTICS FOR INSTRUCTION SCORES

	Group	N	Mean Rank	Sum of Ranks
Instruction	Experienced	51	43.79	2233.50
	Novice	44	52.88	2326.50
Z = -1.60		Sig. = .10	$\eta^2 = .02$	

The third Mann Whitney U was used to see the differences between experienced and novice teachers in terms of their attention to the need of students. Table 4.3 contains the descriptive and test statistics. Based on Table 4.3, the mean rank of experienced group (mean rank = 55.05) is higher than novice group (mean rank = 43.23). Moreover, the Z-value is statistically significant ( $Z = -2.05, P < .05$ ). Thus, the findings indi-

cate that there is a statistically significant difference between experienced and novice teachers with regard to the need of students.

**TABLE 4.3**  
DESCRIPTIVE AND TEST STATISTICS FOR NEED OF STUDENTS' SCORES

	Group	N	Mean Rank	Sum of Ranks
Need of students	Experienced	52	55.05	2862.50
	Novice	46	43.23	1988.50
		Z = - 2.05	Sig. = .04	$\eta^2 = .04$

Table 4.3 also shows that 4 percent of the differences between experienced and novice teachers are accounted for by the independent variable, need of students. This means that the remaining 96 percent of the variance in the dependent variable is left unaccounted for.

The fourth Mann Whitney U procedure was run to investigate how experienced and novice teachers differ in integrating

technology to their teaching. Table 4.4 summarizes the results of descriptive and test statistics. As Table 4.4 shows, the experienced group has higher mean rank (mean rank = 52.61) than novice group (mean rank = 45.99), but the difference is not statistically significant. Moreover, the Z-value is insignificant ( $Z = - 1.15, P > .05$ ).

**TABLE 4.4**  
DESCRIPTIVE AND TEST STATISTICS FOR TECHNOLOGY SCORE

	Group	N	Mean Rank	Sum of Ranks
Technology	Experienced	52	52.61	2735.50
	Novice	46	45.99	2115.50
		Z = - 1.15	Sig. = .25	$\eta^2 = .01$

## 4.2 Discussions

One of the findings of this study was that classroom management is not a significant factor to make difference between experienced and novice teachers' perceptions. This finding contradicts those of Marzano et al. (2003), who found that classroom management has a primary effect on teaching and learning. On the other hand, this finding supports Weinstein, Tomlinson-Clarke, and Curran's (2004) finding which indicates that lack of cultural competence makes difficulties for both experienced and novice teachers in classroom management. It means that teachers should be aware of their culture, cultural diversity of students, and social context in order to deal with classroom management easily.

The other finding of the present study was that the perceptions of experienced and novice teachers about the effect of instruction on teacher efficacy are same. This finding contradicts the findings of Meyer (2004), who compared experienced and novice teachers' perceptions of prior knowledge and its role in instructional decision making. Meyer found that there is a significant difference between prior knowledge of experienced and novice teachers in using instruction in the classroom. The results of the present study also differ from those of Ballard and Bates (2008) that there is a relationship between ability of teachers and quality of classroom instruction. In addition, the findings of the present study corroborate those of Superfine (2008), who showed that experienced and novice teachers face similar planning problems.

Another finding of this study shows that there is a significant difference between experienced and novice teachers' perceptions regarding the need of students. This finding contradicts Guild's (2001) finding suggesting that few teachers accommodate the differences and needs of learners.

Furthermore, the findings of the present study are in line with Lazonder, Biemans, and Wopereis (2000), who found that experienced teachers are not better than novices in browsing Web sites to find information. Moreover, the results of this study are different from Meskill, et al. (2002), who found that there are differences between novice and experienced teachers in using technology.

A number of factors might have contributed to the obtained results, and could possibly explain the discrepancy between the findings of this and other similar studies.. These factors include the educational culture, age of the teachers irrespective of their teaching experience, class size (the number of students in class), the time available for teaching, and the evaluation system, to name only a few. These factors call for further research in an area in need of further exploration.

## 5 CONCLUSION

The results of the present study indicated that the need of students can make significant differences between experienced and novice teachers. This may have implications for teachers, learners and materials developers. The present study can help teachers to develop a clear understanding of different extrinsic factors of teaching and their applicability in a pedagogical context. Moreover, novice teachers can find new ways to bridge the gaps in their teaching and make more informed decisions as to how to use appropriate strategies to teach learners with different needs.

This study may also have implications for materials developers and syllabus designers. Awareness of how various extrinsic factors influence teacher efficacy may equip syllabus designers with an insight to develop materials and course

books specific to experienced and novice teachers, thus enabling them to match types of strategies with different purposes of language learning.

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