



A study on the relationship between participation in professional development programs and self-efficacy and empowerment of Bandar Abbas primary schools teachers

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ABSTRACT: This study aimed to investigate the relationship between participation in professional development programs and self-efficacy and empowerment of teachers in Bandar Abbas primary schools in academic year of 2012-2013. The study was descriptive and correlational. Research required information were collected through questionnaires of professional development (researcher-made), Sharar general self -efficacy questionnaire and Empowerment Questionnaire (Spritzer). The study sample is comprised of 1181 male and female teachers in primary schools of district one and two of Bandar Abbas education system in academic year of 2012-2013. Size of the sample was 300 primary school teachers who were selected stratified randomly by Morgan table. Multiple regression was used to analyze the data. Data analysis revealed that there is a significant relationship between teacher's participation in professional development programs and their professional ability. Teacher's participation in professional development programs can predict their professional ability. Results also showed that there is a significant relationship between components of participation in professional development programs and empowering teachers. Among the components of participation in professional development programs, teachers' teaching techniques of teaching and learning (teaching skills) has the most expectation to empower teachers. But on the other hand, the findings and results showed that there is no significant relationship between teacher's participation in professional development programs and teachers' self-efficacy. That is to say, participation in professional development programs does not play a role on teachers' self-efficacy explanation.

Keywords: Professional Development, Self- Efficacy, Empowerment

INTRODUCTION

Developments and dramatic changes that occur in scientific various areas in the world every day manifest the importance of education better. Growth and development of sciences are performed by compiled and systematic financial, human and material investment planning (management) in order to achieve predetermined goals. Several factors can affect the achievement of educational goals that is improving teaching process; the teacher's role is the most important factor that is directly related to the student ¹.

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Progression or professional development is a broad term that becomes applicable for teachers participation in programs designed to increase teachers' knowledge or improve student learning level at schools. This expression can include things like seminars, workshops, joint work with colleagues and monitoring ².

Efficacy is derived from, the famous psychologist, Albert Bandura's social cognitive theory that refers to a person's beliefs or judgments on his/her abilities to perform the duties and responsibilities.

Empowerment is to reinforce people opinions and build confidence in them about themselves and to effort for the effectiveness of the organization activities. In fact empowerment is the process of changing individuals' inner beliefs. In another definition it can be said that empowerment is the induction of the strength sense to individuals; because each management approach that can reinforce individuals independence sense, can lead to strength sense in them³.

Asghari et al. found that there is no relationship between the "empowerment" and "job satisfaction", while "empowerment" and "self- efficacy" interactional relationship with "job satisfaction". Analysis results suggest a bilateral relationship between "empowerment" and "self- efficacy". This means that, self- efficacy in teachers is effective in increasing their empowerment and empowerment is also effective in increasing self- efficacy as well.

SarvGhad in a research showed that there is a positive significant relationship between empowerment and job performance, and self- efficacy and job performance there is a significant. Also, there is a positive significant relationship between some components of these three variables, and the empowerment and self-efficacy can be a predictor of job performance.

Omidi et al. found that there is a positive significant relationship between participation motivation and the emotional commitment of the employees of physical education organization, due to the mediating role of psychological empowerment and large part of its variance is distributed on both psychological empowerment and emotional commitment driven from motivation part of participation.

Buczynski and Hansen in a qualitative case study examined the impact of professional development. The results indicated that professional development leads to teachers' content knowledge increase, applying research teaching methods in the classroom and improving student scores on standardized tests⁷.

Linnenbrink and Pintrich summarized the results of different studies on self-efficacy and academic engagement components and presented a conceptual model of the interrelationships between these variables. They state that self-efficacy can cause more conflict, and thus lead to better learning and progress. They also argue that the correlation between self-efficacy and academic engagement among various groups as well as for all ages and all types of students are similar⁸.

VernilleBlocklin investigated the effect of teacher interaction on the achievement and self-efficacy of the students. Results showed significant improvement in student achievement, confidence and a positive attitude to teacher in the comparison of grades of pre-and post-tests in the experimental groups⁹.

MATERIALS AND METHODS

Research Methodology

The objective of this study is applicable and with regard to the appropriateness of the topic and in order to achieve the objectives of the research correlational and survey descriptive method has been used. The study sample includes 1181 teachers who are engaged in primary schools of district one and two of Bandar Abbas education system in academic year of 2012-2013 .

The sample in this study due to one and two districts of Bandar Abbas education system is selected stratified randomly. Size of the sample was 300 primary school teachers who were selected by crejsi and Morgan table. To gather the data needed to measure the variables of the research, Sharar general self -efficacy questionnaire and Empowerment Questionnaire¹⁰ as well as questionnaire of the participation in professional development programs designed by the researchers.

Questionnaire of the participation in professional development programs designed by the researchers is a 20- item that measures the three components of general education, professional education and training of teaching and learning techniques (teaching skills). This questionnaire is set based on a three spectral scale (Yes, No and frequency of attendance).

General self -efficacy questionnaire is a 17- item questionnaire. Grading style of this questionnaire is that each item is rated from one to five (totally disagree = 1 to totally agree = 5). The scores of the items of 3, 8, 9, 13 and 15 from left to right and others right to left increase and higher score indicates higher self-efficacy. But Spritzer empowerment questionnaire contained 12 items that measures four components of significance, competence, autonomy (self- determination) and impact. It is set based on a five spectral scale ranging from totally disagree to totally agree.

To assess the validity, the questionnaire was confirmed by educational advisor and counselor professor, and furthermore, experts, scholars, professors and professionals have also confirmed it.

Cronbach's alpha was used to calculate the reliability. Cronbach's alpha coefficients indicate the reliability of the three scales of the questionnaire. In order to determine the reliability of the questionnaire it was distributed experimentally among 30 individuals. The achieved Cronbach's alpha coefficient for Professional Development is (0.81) for self- efficacy is (0.66) and for empowerment is (0.84). In the present study in order to evaluate and draw conclusions from the data collected by questionnaire, descriptive statistics (percentage, frequency, mean, variance and standard deviation) and inferential statistics (Pearson correlation coefficient , multiple regression) were used and collected data was analyzed using the SPSS software.

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RESULTS

Table 1. Mean, standard deviation and standard deviation of self-efficacy of primary school teachers

Variable	Number	Mean	Standard Error	Standard deviation
Self- Efficacy	300	3.21	0.465	0.026

The situation in the above table shows that primary school teachers' self-efficacy score is equal to 3.21. So that standard deviation of the scores is equal to 0.465 and standard deviation of teachers' self-efficacy scores is equal to 0.026.

Table 2. Mean, standard deviation and standard deviation of primary teachers' professional abilities

Variable	Number	Mean	Standard Error	Standard deviation
Professional Ability	300	4.76	0.465	0.026

The situation in the above table shows that primary school teachers' professional ability score is equal to 4.76. So that standard deviation of the scores is equal to 0.465 and standard deviation of teachers' self-efficacy scores is equal to 0.026.

Results showed that there is a significant positive relationship between participation in professional development programs and teachers' professional abilities and. So that ANOVA resulted from running regression tests on this question indicated that participation in professional development programs has a significant effect on teachers' professional ability.

Table 3. Test results of the correlation coefficient between participation in professional development and professional ability

Predictor Variable	Correlation Coefficient	Determination Coefficient	Adjusted Coefficient
Professional Development	0.145	0.021	0.018

The results of the above table show that there is a positive correlation between the participation in professional development programs and teachers' professional ability in the level of 0.145. However, the determination coefficient in the model is in the level of 0.021. The coefficient of determination indicates that participation in professional development programs explains only 2% of teachers' professional abilities.

Table 4. ANOVA to determine the role of participation in professional development programs on primary school teachers' professional abilities

	SS	DF	MS	F	p
Regression	222.988	1	222.988	6.438	0.01
Error	10322.159	298	34.638		
Total	77.6	299			

The results of the above table show that with regard to the amount of F in the level of 6.438 and the amount of $p = 0.01$, participation in professional development

variable has a significant effect on the professional ability of primary school teachers. So that participation in professional development programs can explain 2% of primary school teachers' professional abilities.

Table 5. Prediction of primary school teachers' professional abilities based on participation in professional development programs

Predictor Variable	B	β	T value	Sig.
Participation in professional development programs	0.033	0.145	2.537	0.01

Table 5 shows that participation in professional development programs according to $p = 0.01$, is significantly able to predict the professional ability of primary school teachers.

Table 6. Test Results of correlation coefficient between participation in professional development programs and teachers' self-efficacy

Predictor Variable	Correlation Coefficient	Determination Coefficient	Adjusted Coefficient
Participation in professional development programs	0.052	0.003	-0.001

The results of the above table show that there is positive correlation between participation in professional development programs and self-efficacy of teachers in the level of 0.052. However, the determination coefficient in the model is in the level of 0.003. The coefficient of determination value indicates that teachers' self-efficacy can explain only 0.3 % of teachers' professional abilities.

Table 7. ANOVA to determine the role of participation in professional development programs on primary school teachers' self-efficacy

	SS	DF	MS	F	p
Regression	97.765	1	97.765	0.8	0.3
Error	36399.205	298	122.145		
Total	36496.97	299			

The results of the above table show that due to the value of F in the level of 0.8 and the value of $p = 0.3$, the variable of participation in professional development of primary school teachers have no significant effect on self-efficacy.

Table 8. Primary school teachers' self-efficacy prediction based on participation in professional development programs

Predictor Variable	B	β	T value	Sig.
Participation in professional	0.022	0.052	2.895	0.3

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The above table shows that participation in professional development programs due to $p = 0.3$ is not significantly able to predict the self-efficacy of primary school teachers.

Table 9. Test results of the correlation coefficient between the components of participation in professional development programs and teachers' empowerment

Predictor Variable	Correlation Coefficient	Determination Coefficient	Adjusted Coefficient
Components of participation in professional development programs	0.25	0.062	0.053

The results of the above table show that the determination coefficient of component of participation in professional development programs with teachers' professional development is equal to 0.062. The determination coefficient indicates that the components of participation in professional development programs can explain 6% of teachers' empowerment.

Table 10. ANOVA to determine the role of participation in professional development programs on primary school teachers' empowerment

	SS	DF	MS	F	p
Regression	658.328	3	219.433	6.57	0.001
Error	9886.819	296	33.401		
Total	10545.147	299			

The results of the above table show that with regard to the value of F in the level of 6.570 as well as the value of $p = 0.001$, the components of participation in professional development of teachers have significant effect on the professional ability of primary school teachers.

Table 11. Prediction of primary school teachers' professional abilities based on component of participation in professional development programs

Predictor Variable	B	β	T value	Sig.
General Education	0.097	0.179	2.215	0.0001
Professional Education	-0.188	-0.274	-2.817	0.005
Technical Teaching	0.203	0.289	3.701	0.0001

Table 11 shows that with regard to the amount of $t > 1.96$ and the amount of $p < 0.05$ the component of participation in the professional development program is significantly able to predict the professional ability of teachers.

Table 12. Test results of the correlation coefficient between the components of participation in professional development programs and teachers' self-efficacy

Predictor Variable	Correlation Coefficient	Determination Coefficient	Adjusted Coefficient
The components of participation in professional development programs	0.109	0.012	0.002

The results of the above table show that the determination coefficient of component of participation in professional development programs with teachers' self-efficacy is equal to 0.012. The determination coefficient indicates that the components of participation in professional development programs can explain 1% of teachers' self-efficacy.

Table 13. ANOVA to determine the role of participation in professional development programs on primary school teachers' self-efficacy

	SS	DF	MS	F	p
Regression	433.414	3	144.471	1.186	0.3
Error	36063.556	296	121.831		
Total	36496.97	299			

The results of the above table show that with regard to the value of F in the level of 1.186 as well as the value of $p = 0.03$, the components of participation in professional development of teachers have no significant effect on the self-efficacy of primary school teachers.

Table 14. Prediction of primary school teachers self-efficacy based on components of participation in professional development

Predictor Variable	B	β	T value	Sig.
General Education	0.022	0.022	0.267	0.7
Professional Education	0.127	-0.099	-0.997	0.3
Learning and Teaching Technical Training	0.193	0.147	1.183	0.06

Table 14 shows that none of the components of participation in the professional development program of teachers with regard to the amount of $t > 1.96$ and the amount of $p < 0.05$ is significantly able to predict the self-efficacy of teachers.

DISCUSSION

This study examined the relationship between participation in professional development programs and self-efficacy and empowerment of Bandar Abbas primary school teachers. The results of this study showed that 99 percent of

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teachers participate in their professional development programs and from this point of view, they have span frequency, but in terms of attendance at these programs differ with each other. So that most of them have high attendance in these programs and others have high or less attendance in these programs. Research findings are consistent with⁶. Omidi et al found that teachers' motivation to participate in professional development programs is high and they are highly motivated to participate in their professional development programs.

Results also showed that teachers have high self-efficacy and professional ability. Self-efficacy is an important issue that is very significant with regard to the job. People scare threatening situations where they cannot cope with it and avoid these situations. While they think they manage to cope with these situations and are capable, they act decisively¹¹. The results showed that there is a significant relationship between participation in professional development programs of teachers and their professional abilities and teachers' participation in professional development programs can predict teachers' professional ability.

Teachers' participation in professional development programs has the advantage that can assist in their professional ability. However, many believe that teachers' participation in professional development programs help the quality of education. The teacher's role as a key element in the education system is such that the quality of every country education system depends on the quality of its teachers. As Japanese says any educational system competence is as its teachers' competence. It is necessary for education officials of countries to pay especial attention for selecting, hiring, and training capable teachers and make it the focus of their professional development activities.

Finally, the results indicate that there is no significant relationship between participation in professional development programs and self-efficacy of teachers. Self- efficacy means personal ability in dealing with issues to achieve his goals and success. Self-efficacy rather than being influenced by characteristics of intelligence and learning rehabilitation, it is influenced by personality characteristics such as self-belief (confidence), being enthusiastic and not submitting, checking the main causes of success when failing (self-assessment) , the new arrangements of premises and social methods of achieving goal (self-regulation) and making the momentum under the control (leader). These factors in some students, in comparison with learning rehabilitation, even have more impact on improving the academic progression and success.

Finally, it is suggested that in order to enhance the professional ability of teachers, education system arrange annually broad objective and efficient in-service programs or educational workshops and by proper strategic programs take steps in improving teachers' abilities.

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