SECTION 21. Pedagogy. Psychology. Innovations in the field of education.

ASSESSMENT OF THE LEVEL OF TEACHING SELF-EFFICACY OF PRIMARY SCHOOLTEACHERS OF CHABAHAR CITY

Abstract: The aim of this research was to assess self-efficacy of chabahar education primary school teachers. The study population included all of the chabahar primary school teachers (male and female). Samples were 268 men and women teachers who were selected randomly. This is a descriptive survey research methods and in order to analysis self-efficacy of Teachers, the method proposed by Friedman was followed. The other results of the study indicate that there is no significant difference between the variables of teachers' self-efficacy in class and at school in terms of academic degree, teaching experience and employment type. Also, the findings showed that there was a significant difference between the variables of self-efficacy in class in terms of gender and school type, but there was no significant difference between the variables of self-efficacy at school in terms of gender and school type.

Key words: self-efficacy, self-efficacy in school, self-efficacy in classroom.

Language: English

Citation: Loghmanna M, Ahmadiyegane T, Balouch S (2018) ASSESSMENT OF THE LEVEL OF TEACHING SELF-EFFICACY OF PRIMARY SCHOOLTEACHERS OF CHABAHAR CITY. ISJ Theoretical & Applied Science, 01 (57): 241-249.

Introduction

All societies, for development and progress, using conscious and responsible persons, training efficient human resource and also for creating desirable, creative and good habits and behaviors and in general for training humans and leading them towards supreme human values, so that they can understand, accept, love and apply those values, have focused their approach on education and training. Education is aimed at training creative, self-directed, independent, social and desirable persons. Meanwhile, teachers, as one of the main pillars of the educational system, play a basic role in advancing the goals of education. If teachers are more conscious and vigilant of educational issues, equally the students and at a higher level the society members will act more consciously and vigilantly in this regard and vice versa. As stated by Immanuel Kant, if instead of teaching how to think, thoughts and ideas are taught, we will be misled and deviate from the right path.

Teachers have a strong and lasting impact on their students. They directly affect the learning method of the students, the thinking method and the method through which students interact with one another and their surrounding world. This impact is sometimes so great that it overshadows the entire life of the individual. Therefore, the type of ability, talent, belief and faith of the teachers in accepting and fulfilling this grave responsibility are important and notable issues.

Teachers’ belief in the successful completion of tasks and in the encounter with problematic and difficult situations plays a decisive role in the result of successful completion of the tasks. This concept, which is an individual’s belief that they can perform a task successfully or establish an effective relationship with others, is called self-efficacy [1]. Bandura determines contingency and aftermath determinants for every action and one of the contingency determinants of behavior is expectation of self-efficacy. Self-efficacy is one of the cognitive processes through which we develop many of our social behaviors and many personal characteristics [2].
The structure of self-efficacy has a short history which started with Bandura’s article entitled “self-efficacy: towards an integrated approach of behavioral change” [3]. As stated by Pajares& Valiant, self-efficacy is one of the basic concepts of Bandura’s theory [4]. This concept has been tested in various fields and environments and is backed by many findings [5, 6, 7]. Self-efficacy is derived from the social cognition theory or the famous psychologist Albert Bandura’s social learning theory which refers to the individual’s beliefs or judgments and the individual’s abilities in carrying out tasks and duties [8]. This theory takes notice of the behavioral aspect as well as the cognitive aspect.

Self-efficacy is the teachers’ belief regarding the ability to determine and create the context of progress and development in the field of specific assignments and in a special environment [9]. Tschannen Moran & Woolfolk also define teachers’ self-efficacy as their judgement about their abilities to bring about positive implications for students’ learning and engage them in school affairs even despite problematic or unmotivated students [10]. Furthermore, teachers’ self-efficacy in teaching refers to their belief in carrying out assignments and tasks and is related to their teaching experiences[11 & 12]. Self-efficacy is also related to the collection of beliefs of students about their abilities for the successful completion of an assignment [8 & 13]. Researchers have found few sustainable relations between the teachers’ characteristics and the learning of the learners; but what is an exception in this regard is the teachers’ self-efficacy and their beliefs in their abilities and capabilities in the field of teaching. This belief that the teachers’ beliefs determine their behaviors in teaching is a simple and powerful belief [14].

Tschannen Moran & Woolfolk in 1998 reviewed a large amount of the written works on teachers’ self-efficacy and showed two main sources to formulate this concept; one of these studies is attributed to the researchers in “Rend” Company who have based their studies on Rater’s work and the second one has been attributed to Bandura[15]. In these studies, a distinction has been made between professional teaching and teachers’ sense of self-efficacy (personal merit of teachers). This difference is the basis for Gibson & Dembo’s measuring scale of teachers’ sense of self-efficacy.

Emmer and Hickman in 1991 standardized Gibson & Dembo’s tools by the classroom management position. Sudak and Pudel also in 1996 developed Gibson & Dembo’s questionnaire so that it can include the behavioral and emotional problems of students as well as the simple issues related to learning[16].

Rich Fischer & Lev in 1996 devised a scale to measure teachers' self-efficacy in increasing social communications among students by re-rewriting the prepared scale of Gibson[16]. They completed this scale by taking some items from other scales that considered the teachers’ responsibility for the academic achievement of the students or teachers’ professional self-concept and self-declaration about the teaching behaviors. Gibson & Dembo’s scale of teachers’ self-efficacy is a thirty-article instrument which is comprised of two factors and the authors believed that it assesses teachers’ personal self-efficacy and general teaching self-efficacy[17]. Studies that have used this scale have confirmed its two-factor structure [18 & 19]. Despite the great application of Gibson & Dembo’s scale in the studies on teachers’ self-efficacy, this scale has several statistical and conceptual problems. One of these problems is related to the structures of this scale [9]. Namely, Guskey&Passaro refer to the two factors of internal and external control instead of the two factors of personal and general self-efficacy [20].

Moran et al. in 1998 suggested a complete model of teachers’ self-efficacy that included two dimensions; the first was the duties of teaching and its field and the second was the teachers’ perception of their teaching merits [16]. In analysis of the first dimension, the relative importance of the factors that bring about some problems in teaching or impose some restrictions was assessed in the face of evaluation of available resources that facilitated learning. In evaluation of the second dimension, the teachers were judged based on their personal facilities such as skills, knowledge or balanced personality traits in the face of personal weakness or commitment in a special teaching field. The model by Moran et al. focuses on the distinguished activity of teachers in the school context and teaching special issues to students and in a special field, which does not include the value beliefs related to the other aspects of the classroom context. Moran & Woolfolk-Hoy in 2001 proposed a new model for evaluation of teachers’ efficacy which includes the three subcategories of: efficacy for structural strategies, efficacy for class management and efficacy in challenging the students [9]. Chernnis suggested that teachers’ efficacy include the three areas of duty, interpersonal relationship and organization, but did not make any more efforts for his suggested concept, more than its basic definition [21]. Based on the two main fields of teachers’ activity, which are class and school, Fridman proposed the model of teacher’s self-efficacy in class and at school, which includes a combination of teaching activities and personal communications with students, parents, colleagues and managers and also organizational performance [15].

Impact Factor:

| Journal | Impact Factor |
|---------|--------------|
| ISRA (India) | 1.344 |
| ISI (Dubai, UAE) | 0.829 |
| GIF (Australia) | 0.564 |
| JIF | 1.500 |
| SIS (USA) | 0.912 |
| PHIII (Russia) | 0.207 |
| ESJI (KZ) | 4.102 |
| IBI (India) | 4.260 |
| ICV (Poland) | 6.630 |

Philadelphia, USA
From among the other studies, the work by Isaac A. Fridman & Efrat Kass entitled “teachers’ self-efficacy: establishing an organized class” in 2001 can be mentioned, in which the researchers intend to provide a proper model to explain the concept of teachers’ self-efficacy and eventually provide a new concept of teachers’ self-efficacy. Their population includes 555 teachers from 22 primary and secondary schools who have been randomly selected. They eventually present the CSC1 model. In this model, teachers’ self-efficacy is examined in two fields of classroom and school environment. This model is the basis of this study and intends to assess the level of assessment of self-efficacy in teachers, which can lead to effective solutions for improvement in the field of learning, teaching and successful result of the tasks.

Research Method and Measuring Tools

The method for implementation of this study is descriptive-survey. The required data of research have been collected from 268 questionnaires. From among the persons under study, 83 persons (31%) are male and 185 persons (69%) are female. 26 persons (9.7%) hold diploma and 157 persons (58.6%) hold post-diploma degrees; 83 persons (31%) hold BA/BS degrees and 2 persons (0.07%) hold MA/MS degrees and higher. Also, 194 persons (72.4%) are in public schools and 74% (27.6%) are in private schools.

The measuring tool is Fridman’s scale of teachers’ self-efficacy. This scale is comprised of 33 items including the scales of teachers’ self-efficacy in class and teachers’ self-efficacy at school, among which 19 items investigate the teachers’ state of self-efficacy in class and 14 items are a scale for assessment of the level of teachers’ self-efficacy at school [15]. In order to evaluate teachers’ self-efficacy, the subjects were asked to specify their level of agreement by each of the items, from “very high” to “very low”, on a 5-point Likert scale.

Findings

In order to provide a clear view of the research findings, the descriptive indicators related to the main research variable have been presented in table 1.

| Variables               | Self-efficacy | Self-efficacy in class | Self-efficacy at school |
|-------------------------|---------------|------------------------|-------------------------|
| Mean                    | 131.8731      | 80.9328                | 9627.50                 |
| Medium                  | 131           | 80                     | 50                      |
| View                    | 130           | 79                     | 44                      |
| Standard deviation      | 14.8782       | 8.82005                | 9.06936                 |
| Variance                | 221.362       | 77.793                 | 82.253                  |
| Elongation              | 0.609         | 1.163                  | 0.262                   |
| Curvature               | 0.944         | 6.490                  | -0.911                  |
| Min.                    | 102           | 60                     | 33                      |
| Max.                    | 201           | 137                    | 70                      |

In order to answer the first research question of “what is the level of teaching self-efficacy of primary school teachers of Chabahar City?”, the score of the variable has been obtained through calculation of the sum of scores of the questions related to the teaching self-efficacy questionnaire and for description of this variable, its scores were divided into the three classes of low, average and high. From among 268 teachers under study, the level of self-efficacy of 0 persons (0%), 16 persons (6%) and 252 persons (94%) have been determined as low, average and high respectively. Also, the calculations through the Chi-square test show that the test statistic equals 85.060 and p-value (significance) equals 0.007 and is smaller than the \( \alpha = 0.05 \) significance level. Thus, at this level, \( H_0 \) hypothesis is rejected and \( H_1 \)
Impact Factor:

|                | ISRA (India) | SIS (USA) | ICV (Poland) | ISI (Dubai, UAE) | PIII (Russia) | PIF (India) | GIF (Australia) | ESJI (KZ) | IBJ (India) | JIF | SIS (USA) | CIF (KZ) | SJIF (Morocco) | ICV (Poland) |
|----------------|--------------|-----------|--------------|------------------|---------------|-------------|-----------------|-----------|-------------|-----|----------|----------|---------------|--------------|
| Impact Factor  | 1.344        | 0.912     | 6.630        | 0.829            | 0.207         | 1.940       | 0.564           | 4.102    | 4.260       | 1.500| 0.912    | 4.102    | 2.031         | 6.630        |

hypothesis is confirmed. As the level of teaching self-efficacy of primary school teachers of Chabahar City at a high level equals 94% and is more than the other two levels, it can be therefore concluded that the level of teaching self-efficacy of primary school teachers of Chabahar City is high (table 2).

**Table 2**

**Frequency distribution, Ch-square descriptive statistics of the level of teaching self-efficacy of primary school teachers of Chabahar City**

| Significance | Chi-square | Standard deviation | Mean | Frequency percentage | Frequency | Level of awareness |
|--------------|------------|--------------------|------|----------------------|-----------|--------------------|
| 0/007        | 85/060     | 14/878             | 131/873 | 0                     | 0         | Low                |
|              |            |                    |      | 6                    | 16        | Average            |
|              |            |                    |      | 94                   | 252       | High               |
|              |            |                    |      | %100                 | 268       | Total              |

In order to answer the first research hypothesis of “there is a relationship between teachers’ self-efficacy in class and their self-efficacy at school”, Pearson’s correlation test has been used. As the results show, the obtained correlation coefficient in Pearson’s correlation equals 0.384 and the significance value at the 0.01 level equals 0.001. Thus, H1 hypothesis is confirmed and the relationship is significant. Based on these results, it can be said that there is a correlation between teachers’ self-efficacy in class and their self-efficacy at school (Table 3).

**Table 3**

**Correlation test statistics of the two variables of teachers’ self-efficacy in class and their self-efficacy at school**

| Pearson’s correlation | Variable test                |
|-----------------------|-----------------------------|
| P-value               | r                           |
| 0/001                 | 0/384                       |

| Self-efficacy score in class |
|------------------------------|

| Self-efficacy school at school |
|-------------------------------|

In order to investigate the second research hypothesis of “there is a difference between the level of teachers’ self-efficacy in class and at school in terms of gender”, independent T-test has been used. Based on the calculations, the T obtained showed that in the table below there was a significant difference between female and male teachers’ self-efficacy in class but there was no significant difference between female and male teachers’ self-efficacy in school (table 4).
Impact Factor:

| JIF (USA) | 0.829 | ISI (Dubai, UAE) | 1.500 | ICV (Poland) | 6.630 |
|-----------|--------|------------------|--------|--------------|-------|
| GIF (Australia) | 0.564 | PII (Russia) | 0.207 | PIF (India) | 1.940 |
| JIF | 1.344 | ESJI (KZ) | 4.102 | IBJ (India) | 4.260 |
| SJIF (Morocco) | 2.031 |中俄 | |

**Table 4**

The T-test statistics for comparison of teachers’ self-efficacy in class and at school in terms of gender

| Difference | Significance | Degree of freedom | Standard deviation | Mean | School | Gender | Variables and statistic |
|-----------|-------------|------------------|--------------------|------|--------|--------|------------------------|
| Confirmed | 0/002       | -3/111           | 7.89618            | 78.4699 | 83     | Male | Self-efficacy at class |
| Rejected  | 0/283       | -1/077           | 9.00747            | 82.0378 | 185    | Female | Self-efficacy at school |
|           |             |                  | 9.37405            | 50.0723 | 83     | Male | |
|           |             |                  | 8.92625            | 51.3622 | 185    | Female | |

The third research hypothesis was that “there is a difference between the level of teachers’ self-efficacy in class and at school in terms of the academic degree”. To investigate this hypothesis, ANOVA test was used. The results have been reported in table 5.

**Table 5**

One-way ANOVA test statistics for comparison of the level of teachers’ self-efficacy in class and at school in terms of the academic degree

| Variable                  | Statistic  | Sum of squares | df | Mean square | F    | Significance |
|---------------------------|------------|----------------|----|-------------|------|--------------|
| Self-efficacy in class    | Intergroup | 116/010        | 3  | 38/670      | 0/494| 0/687        |
|                           | Intragroup | 20654/781      | 264| 78/238      |      |              |
|                           | Total      | 20770/791      | 267|             |      |              |
| Self-efficacy at school   | Intergroup | 381/185        | 3  | 127/062     | 1/554| 0/201        |
|                           | Intragroup | 21580/442      | 264| 81/744      |      |              |
|                           | Total      | 21961/627      | 267|             |      |              |

The results showed that there is no difference between the level of teachers’ self-efficacy in class and at school in terms of the academic degree (p>0.05)

In order to investigate the fourth research hypothesis of “there is a difference between the level of teachers’ self-efficacy in class and at school in terms of the teaching experience”, ANOVA test was used. The results have been reported in the following table (table 6).
Impact Factor:

| Country       | Impact Factor |
|---------------|---------------|
| ISRA (India)  | 1.344         |
| ISI (Dubai, UAE) | 0.829       |
| GIF (Australia) | 0.564        |
| JIF           | 1.500         |
| SIS (USA)     | 0.912         |
| PHII (Russia) | 0.207         |
| ESJI (KZ)     | 4.102         |
| SIF (Morocco) | 2.031         |
| ICV (Poland)  | 6.630         |
| PIF (India)   | 1.940         |
| IBI (India)   | 4.260         |

Table 6

One-way ANOVA test statistics for comparison of the level of teachers’ self-efficacy in class and at school in terms of the teaching experience

| Variable            | Statistic          | Sum of squares | df | Mean square | F   | Significance |
|---------------------|--------------------|----------------|----|-------------|-----|-------------|
| Self-efficacy in class | Intergroup | 114/982        | 2  | 57/491      | 0/738 | 0/479       |
|                     | Intragroup       | 20655/810      | 265| 77/946      |     |             |
| Total               |                    | 20770/791      | 267|             |     |             |
| Self-efficacy at school | Intergroup | 111/855        | 2  | 55/928      | 0/678 | 0/508       |
|                     | Intragroup       | 21849/771      | 265| 82/452      |     |             |
| Total               |                    | 21961/627      | 267|             |     |             |

The results showed that there is no difference between the level of teachers’ self-efficacy in class and at school in terms of the teaching experience (p>0.05).

In order to investigate the fifth research hypothesis of ‘there is a significant difference between the level of teachers’ self-efficacy in class and at school in terms of the school type’, independent T-test has been used. Based on the obtained T calculations, it was shown that there was a significant difference between the variables of self-efficacy in class in terms of the school type; but there was no significant difference between the variables of self-efficacy in school in terms of the school type (table 7).

Table 7

The T-test statistics for comparison of teachers’ self-efficacy in class and at school in terms of the school type

| Difference | Significance | Degree of freedom | Standard deviation | Mean | University | School type | Variables and statistic |
|------------|--------------|-------------------|--------------------|------|------------|-------------|------------------------|
| Confirmed  | 0/002        | 0/840             | 266                | 9.25292 | 81.0000 | 194 | Public | Self-efficacy in class |
|            |              |                   |                    | 7.62442 | 80.7568 | 74 | Private |
| Rejected   | 0/034        | 2/127             | 266                | 8.83816 | 51.6856 | 194 | Public | Self-efficacy in school |
|            |              |                   |                    | 9.44970 | 49.0676 | 74 | Private |

In order to investigate the sixth research hypothesis of ‘there is a difference between the level of teachers’ self-efficacy in class and at school in terms of the employment type’, independent T-test has been used. Based on the calculations, the T obtained showed that there was no significant difference between self-efficacy in class and at school in terms of the employment type (table 8).
Impact Factor:

| Journal         | Impact Factor |
|-----------------|---------------|
| ISRA (India)    | 1.344         |
| ISI (Dubai, UAE)| 0.829         |
| GIF (Australia) | 0.564         |
| JIF             | 1.500         |
| SIS (USA)       | 0.912         |
| PIIH (Russia)   | 0.207         |
| ESJI (KZ)       | 4.102         |
| SJIF (Morocco)  | 2.031         |
| ICV (Poland)    | 6.630         |
| PIF (India)     | 1.940         |
| IBI (India)     | 4.260         |

Table 8

The T-test statistics for comparison of teachers’ self-efficacy in class and at school in terms of the employment type

| Difference | Significance | Degree of freedom | Standard deviation | Mean        | University | Employment type | Variables and statistic |
|------------|--------------|-------------------|--------------------|-------------|------------|-----------------|------------------------|
| Rejected   | 0/288        | -1/064            | 266                | 8.63958     | 80.6351    | 211             | Formal                 | Self-efficacy in class |
|            |              |                   |                    | 9.45660     | 82.0351    | 57              | Free                   |                        |
| Rejected   | 0/385        | 0/870             | 266                | 8.95210     | 51.2133    | 211             | Formal                 | Self-efficacy at school|
|            |              |                   |                    | 9.51496     | 50.0351    | 57              | Free                   |                        |

Conclusion

The research question was: “what is the level of teaching self-efficacy of primary school teachers of Chabahar City?” The obtained findings showed that the level of teaching self-efficacy of primary school teachers of Chabahar City was high and equal to 94% and more than the other two levels (average and low). In fact, it can be concluded that the level of teaching self-efficacy of primary school teachers of Chabahar City is high. Due to the positive beliefs they had regarding their abilities in carrying out the tasks and duties, these teachers attempted to take effective steps in the academic achievement of the students. Many studies have been conducted on self-efficacy and academic achievement, most of which indicate the existence of a relationship between these two variables [22, 23, 24, 25, 26, 27, 28]; but unlike the mentioned results, Arabian et al. believed that self-efficacy beliefs do not affect university students’ academic achievement [29].

In this study, in addition to the research question, six hypotheses are also considered which will be mentioned as follows.

The first research hypothesis indicates that “there is a relationship between teachers’ self-efficacy in class and their self-efficacy at school”. In order to investigate the existence of relationship between teachers’ self-efficacy in class and their self-efficacy at school, Pearson’s correlation test was used and the results indicated that there is a correlation between teachers’ self-efficacy in class and their self-efficacy at school. Based on the main research question which showed that the level of teachers’ self-efficacy is high, it can be concluded that in total, teachers’ self-efficacy is high in class as well as at school.

The second research hypothesis indicates that “there is a significant difference between teachers’ self-efficacy in class and at school in terms of gender”. The obtained findings showed that there is a significant difference between female and male teachers’ self-efficacy in class but that there is no significant difference between female and male teachers’ self-efficacy at school. There are different results regarding self-efficacy and gender and some have referred to the existence of relationship [30, 31, 32, 33, 34] and some have indicated no relationship between those two [29, 35, 36, 37].

The third research hypothesis indicates that “there is a difference between the level of teachers’ self-efficacy in class and at school in terms of the academic degree”. The results showed lack of confirmation of this hypothesis and it was determined that there is no difference between the level of teachers’ self-efficacy in class and at school in terms of the academic degree. In this study, 89% of the teachers held post-diploma and BA/BS degrees and only 11% of them held lower and higher degrees, from among whom 9.7% held a diploma. The results of Moradkhani’s study are also in line with the results of this study. He showed that there is no significant difference between teachers’ sense of self-efficacy and academic degree. He also concluded that with the increase of sense of self-efficacy of teachers with relevant MA/MS degrees, students’ academic achievement greatly improves as well [38].

The fourth research hypothesis indicated that there is a difference between the level of teachers’ self-efficacy in class and at school in terms of the teaching experience. In this study, from among the persons under study, 146 persons (55.2%) have work experience of under 10 years, 94 persons (35.1%) have work experience of between 11 and 20 years and 26 persons (9.7%) have work experience of over...
21 years. The results showed that there is no difference between the level of teachers’ self-efficacy in class and at school in terms of the teaching experience; but the results of some studies indicated a significant difference between self-efficacy and work experience [39, 40].

The fifth research hypothesis also indicated that “there is a significant difference between teachers’ self-efficacy in class and at school in terms of the school type”. From among the persons under study, 194 persons (72.4%) are in public schools and 74 persons (27.6%) are in private schools. The given results of the study showed that there was a significant difference between the variables of self-efficacy in class in terms of public and private schools but that there was no significant difference between the variables of self-efficacy in school in terms of public and private schools. Regarding the sixth research hypothesis according to which “there is a significant difference between the variables of teachers’ self-efficacy in class and at school in terms of the employment type”, the results showed that there is no significant difference between self-efficacy in class and at school in terms of the employment type (formal teachers and non-formal teachers).

References:

1. Bandura, A. (1982). Self-efficacy mechanism in human agency, American psychologist, 37(1), 122-147.
2. Bandura, A. (1977). Social learning theory, Englewood Cliffs, N.J.: Prentice-Hall.
3. Bandura, A. (1997). Self-efficacy: the exercise of control, New York: W.H. Freeman.
4. Pajares, F. & Valiante, G. (1997). Predictive and mediational roles of the self-efficacy beliefs of upper elementary school students, Journal of Educational Research, 90: 353-360.
5. Maddux, J. E., & Stanley, M. A. (1986). Self-efficacy theory in contemporary psychology: An overview, Journal of Social and Clinical Psychology, 4(3), 249-255.
6. Multon, K. D., Brown, S.D., & Lent R.W. (1991). Relation of Self-efficacy beliefs to academic outcomes: A meta-analytic investigation, Journal of Counseling Psychology, 38(1), 30-38.
7. Perry, J. C., DeWine, D. B., Duffy R. D., & Vance, K. S. (2007). The academic self-efficacy of urban youth: A mixed-methods study of a school-to-work program, Journal of Career Development, 34 (2), 103-126.
8. Seif, A., (2005). Educational psychology. Agah Publications. Tehran.
9. Tschanen-Moran, M. & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct, Teaching and Teacher Education, 17:783-805.
10. Bandura, A. (2006). Guide for constructing self-efficacy scales, In F. Pajares & T. Urdan (Eds.). Self-efficacy beliefs of adolescents (pp, 307–337), New York: H.H. Freeman.
11. Yenice, N. (2009). Search of scince teachers teacher efficacy and self efficacy levels relating to science teaching for some variables, Procedia Social and Behavioral Sciences, 1: 1062-1067.
12. Chan, D. W. (2008). General, collective, and domain- specific teacher self efficacy among Chinese prospective and in service teachers in Hong Kong, Teaching and Teacher Education, 24: 10547-1069.
13. Schunk, D.H.(2008). Metacognition, self-regulation, and self-regulated learning: Research recommendations, Educational Psychology Review, 20, 463-467.
14. Woolfolk, A (2007). Educational psychology: Instructors copy, Boston: Alley and Bacon.
15. Friedman, J.A., & Kass, E. (2002). Teacher self-efficacy: A classroom organization conceptualization, Teaching and Teacher Education, 18, 675-686.
16. Friedman, Isaac, A. (2002). "teacherself_efficacy: classroom_organization conceptualization,” Journal Teaching & teacher education ,18.
17. Gibson, S. & Dembo, M. (1984). Teacher efficacy: A construct validation, Journal of Educational Psychology, 76, 569-582.
18. Hoy, W. K. & Woolfolk, A. E. (1993). Teachers’ sense of efficacy and the organizational health of schools, Elementary School Journal, 93: 355-372.
19. Moore, W. & Esselman, M. (1992, April). Teacher efficacy, power, school climate and achievement: A desegregating district’s experience, Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
20. Guskey, T. R. & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions, American Educational Research Journal, 31: 627-643.

21. Cherniss, C. (1993). The role of professional self-efficacy in the etiology and amelioration of burnout, In Schanfeli, WB; Maslach, C; Marek, T (Eds.), Professional burnout: Recent developments in theory and research, Taylor and Francis, Washington DC, pp, 115–129.

22. Asqarzadeh, T.;Khodapanahi, M.;Heydari, M., (2004).Study of the relationship between self-efficacy beliefs and locus of control, and academic achievement, Journal of Psychology, N. 31, Pp. 218-226.

23. Pajarez, F. (1996). Assessing efficacy beliefs and academic outcomes, www.emony. Edu/educational/mpf/earaz.html.

24. Mimi. B. (1996). Perceived similarity among tasks and genaralizability of academic, self-efficacy www.stanford.edu/group/cre/ motivation. html. (Accessed: 10.01.2018).

25. Andrew, s. & Viall, W (1998). Nursing students self-regulated learning and academic performance in Sience, Available: www.aare.edu.au/98pap/abs98319.html. (Accessed: 10.01.2018).

26. Cassidy, S. & Eachus, P.(2000). Learning Style, Academic belief system, self report student Proficiency and academic achivment in higher education, Educational Psychology, 20.

27. Sommerfield, M. & Watson, G. (2000). Academic self-efficacy and self-concept: Differential impaction performance expectations, Stanford University: Available: www.stanford.edu/group/cre/ motivation. html. (Accessed: 10.01.2018).

28. Lasane J. &Jones, J. (1999). Temporal orientation and academic goal-setting: The mediating properties of motivational, Journal of Social Behavior & Personality, 14.

29. Arabian, A.; Khodapanahi, M.; Heydari, M.; Saleh Sediqpour, B., (2004). Study of the relationship between self-efficacy beliefs, and mental health and academic achievement of students, Journal of Psychology, N. 32, Pp. 360-372.

30. Zabihollahi, K.; YazdaniVarzaneh, M.; Qolam’aliLavasani, M., (2012). Academic self-efficacy and self-handicapping in secondary school students, Journal of Developmental Psychology. Iranian Psychology- Ninth year. N. 34. Pp. 203-213.

31. Qeybi, M.; Arefi, M.; Danesh, E., (2012). The relationship between learning styles and self-efficacy of academic groups. Journal of Applied Psychology. 6th year. N. 1 (21). Pp. 53-69.

32. Zohrevand, R., (2010). Comparison of academic self-concept, emotional intelligence, gender beliefs and satisfaction with the gender of secondary school girls and boys and each of the variables’ share in predicting their academic achievement. Journal of Psychological Studies. N. 3. row. 23. Pp. 45-61.

33. Richardson, D. E. (2007). Self-efficacy and self-handicapping: A Pajarez, F. (1996). Assessing efficacy belifes and academic outcomes. Available: www.emony. Edu/educational/mpf/earaz.html. (Accessed: 10.01.2018).

34. Momanyi, J. M., Ogama, S. O, & Misigo, B. L. (2010). Gender differences in self-efficacy and academic performance in science subjects among secondary school student in Lugari District. Kenya. Educational journal of behavioral Science, 1, 62-77.

35. Zeynalipour, Zarei, &Zandinya, (2009). General and academic self-efficacy of students and its relationship with academic performance. Research Journal of Studies on Educational Psychology. N. 9. Pp. 13-28.

36. QolamaliLavasani, M.; Ejei, J.; Afshari, M., (2009). The relationship between academic self-efficacy and academic engagement, and academic achievement. Journal of Psychology. N. 51, Pp. 289-305.

37. Afrouz, Q.; Motamedi, F.; (2005). Self-efficacy and mental health in normal and gifted students. Journal of Iranian Psychologists. N. 6. Pp. 89-100.

38. Moradkhani, Sh., (2008). The effect of sense of self-efficacy and academic degree of less experienced English teachers on academic achievement of language learners, MA dissertation, Teacher Training University, Faculty of Humanities.

39. Akbari, R.; Moradkhani, Sh., (2010). Self-efficacy of English teachers in Iran: Do academic degree and experience make a difference?. Research Journal of Foreign Languages. ISSUE 15, N. 56. Pp. 25-47.

40. Almasi, A., (2012). The relationship between creativity, and personal self-efficacy and collective self-efficacy of Birjand secondary school teachers of 2010-2011 academic year. MA dissertation. Birjand University, Faculty of Psychology and Educational Sciences.