Determining Factors Affecting Teachers’ Self-Efficacy at Secondary School Level

Tayyaba Shazadi, M.A., Sufiana Khatoon, Ph.D., Shamsa Aziz, Ph.D., and Hamid Hassan, Ph.D.

Abstract

The present research was designed to explore the self-efficacy of secondary school teachers. The main objective of the study was to find out the effect of age, gender, qualification and teaching experience on the self-efficacy of secondary school teachers. Albert Bandura’s self-efficacy scale was used. The population of the study was all the secondary school teachers working under Federal Directorate of Education Islamabad. Ten percent teachers from each of the five sectors of Federal Directorate of Islamabad were taken as sample of the study through stratified random sampling. Three experts validated the instrument. The reliability of the instrument was calculated which was (0.896). t test was used to find out the difference between two groups, one way ANOVA was used to find out the difference among more than two groups. The findings of the study revealed that gender, academic qualification, experience and locality significantly affect the self-efficacy, but age and professional qualification have no significant affect on the self-efficacy of secondary school teachers.

Keywords: self-efficacy, secondary school teachers

Introduction

Self is the core of one’s conscious existence. Awareness of self can be referred to an individual’s self-concept. When people are “getting in touch with self”, it means they are

Language in India www.languageinindia.com
11 : 10 October 2011
Tayyaba Shazadi, M.A., Sufiana Khatoon, Ph.D., Shamsa Aziz, Ph.D., and Hamid Hassan, Ph.D.
Determining Factors Affecting Teachers’ Self-Efficacy at Secondary School Level 385
trying to have a self-concept. Kreitner and Kinichi (2007) said that we know our self because we have self-concept. Due to this self-concept we are distinct human beings. With out having the capacity to think we cannot have a self-concept (Victor Gecas as cited by Kreitner and Kinichi 2007) while Kreitner and Kinichi (2007) presented their opinion about self –concept, that it is the idea an “individual has of himself as a physical, social and moral being”. According to the Halonen & Santrock (1996) describe self emerges through an individual’s experience with the world. It is “I” or “Me” of human existence.

Self-efficacy is a person’s belief about his or her ability or capacity to accomplish a task or to deal with the challenges of life. It is the belief that one is capable of performing certain thing in a certain manner to attain certain goals. It can also be seen as individual’s self-judgment of personal capabilities to initiate and successfully perform specified tasks at designated level. It is a complete concept of his or her ability to perform any type of task related to a particular context and domain. James (2010) opined that part of personality is self, through which a person represents himself but for Adler (2010), self is subjective system in which individual gives meaning to his experiences and emphasizes on those events which will fulfill the person’s lifestyle by creating goals for him and help him to fulfill those goals. It gives meaning to life. Pajares, (2010) gives a panoramic view of self-efficacy. He reports that Bandura introduced the construct of self-efficacy in 1977, in a publication “Self-efficacy: Toward a unifying theory of Behavioral Change”. After some years in 1986 he associated the construct with human behavior through social cognitive theory and implanted cognitive development within a socio cultural network. In 1997 he published “self-efficacy: the exercise of control”, here he further placed self-efficacy within a theory of personal and collective organization that operates and shows with other socio cognitive factors in regulating human well-being and accomplishment.

Self-efficacy (belief in one’s ability to handle effectively and to master a situation to bring such changes that produce desired results) is taken as main thing to psychological health. It is well thought-out that its absence is the heart of psychological problems. But Hayes (1994) argues, that Bandura (1986) said self-efficacy beliefs are important, how and whether people feel that they can direct their lives, (these beliefs play the role of settlement representative) this means they strongly attach themselves with self-concept and self-confidence. Hayes (1994) discussed Mischel’s statement; a personality is the result of combination of all these things; learning from society values, expectancies and self-efficacy beliefs. While Davdoff (1987) cited Bandura (1977, 1982,) that through various experiments realized that new behaviors can be learned by the people, simply by observing others.

Pajares, (2010) tells the chief features of self-efficacy are the nature and construction of self-efficacy beliefs, their origins and effects, the procedure through which such beliefs function, and the modes by which they can be created and strengthened.

Gibbs (2000) talked about teachers. He says teachers stand as role models. They inculcate their experience, their understanding, and their ideas into the minds of their students to develop their mental spheres. Teacher affects student’s actions and perception. For the knowledge seekers, teacher’s motivation and devotion always provide light. High self-efficacy of teachers shows a positive impact on their students’ life. Thus, self-efficacy of a teacher is an influential predictor of how and what a teacher will perform. Gibbs says that the
way a teacher believes about his ability is strongly associated with teacher’s work, motivation and his effective performance.

If the efficacy perception of a teacher is higher than they are more motivated to perform their work and they apply more mental powers for performing their task. Tschannen and Woolfolk (2001) say teacher’s self-efficacy is his belief in his capabilities to arrange and perform such actions which are necessary to accomplish a particular teaching task in specific frame work. Efficacy of a teacher is referred to teacher’s belief that he can self-assuredly change and improve the results for “struggling students”. Those teachers who have high self-efficacy, they have more positive attitude towards students. They respond to students’ experiences and show less anger about students’ negative behavior. Such patterns of characteristics in teachers are associated with achievement.

Woolfolk, (2004) explored that self-efficacy of a teacher is a sense of his judgment about capabilities to manipulate student engagement and learning, and bring them on desired path even among those students who may be unmotivated or difficult.

Bandura (1994) says schools in which staff collectively judges themselves as powerless to get students to achieve academic success they pass on a group sense of academic futility that can encompass the entire life of the school.

Adeyemo (2010) studied the moderating influence of emotional intelligence on the link between academic self-efficacy and achievement among university students. His results showed that emotional intelligence and academic self-efficacy is significantly correlated with academic achievement and moderating effect of emotional intelligence on the relationship between academic self-efficacy and achievement.

Fayyaz, (2006-08) found a significant correlation between emotional intelligence and self-efficacy among government and private college teachers. Akhter, (2009) found government teachers as highly efficacious regarding class room management as compare to the private sector teachers.

Although in Pakistan research on the self-efficacy of the teachers is a new concept yet it is very much needed. As the importance of teacher is undeniable in the progress of any nation and teachers’ self-efficacy directly influences the students’ performance. If the teacher has high level of self-efficacy, it will improve the performance and confidence of his students. If the teacher has positive attitude about his abilities, he feels more confident in teaching and will have full command over the subject.

Methodology

The present study was initiated to explore the efficacy of secondary school teachers and effect of certain factors like gender, locality, age, experience and qualification on self-efficacy of teachers. The population of the study comprised of all the secondary school teachers working under Federal Directorate of Education (FDE), Islamabad. According to the record provided by Federal Directorate of Education, Islamabad, the total number of secondary school teachers working under Federal Directorate, was 2274. Out of this total population 1027 were male and 1247 were female teachers. Ten percent of the teachers from Language in India www.languageinindia.com
11 : 10 October 2011
Tayyaba Shazadi, M.A., Sufiana Khatoon, Ph.D., Shamsa Aziz, Ph.D., and
Hamid Hassan, Ph.D.
Determining Factors Affecting Teachers’ Self-Efficacy at Secondary School Level
each of five sectors of FDE (i.e., from Sihala, Bhara kahu, Nilore, Tarnaul and Islamabad city) were selected which comprised the total of 226 teachers.

Data for the study were collected through Bandura’s self-efficacy scale. The original instrument was based on Twenty one itemed nine point Likert scale. The researchers converted it into Five point Likert scale ranging from Nothing (N) to A Great Deal (AGD) for the convenience of teachers. Three experts one Psychologist and two educationists were requested to validate the instrument. The experts were of the view that this instrument can be used in Pakistani culture and situation. After the collection of data the reliability of the instrument was calculated. The reliability (i.e., standard alpha calculated) was 0.89. Data were collected through mail and personal visits of the researcher. The final turnout was 75%.

Data Analysis

Table: 1 Gender wise difference in self-efficacy

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>T</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>77</td>
<td>70.0649</td>
<td>3.996</td>
<td>3.97</td>
<td>.000</td>
</tr>
<tr>
<td>Female</td>
<td>92</td>
<td>78.1304</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table indicates that t value is significant, so it is concluded that there is a gender wise significant difference in the self-efficacy of the secondary school teachers. It is further added that the mean score of female teachers is higher than the male teachers.

Table: 2 Locality-wise differences in self-efficacy

<table>
<thead>
<tr>
<th>Locality</th>
<th>N</th>
<th>Mean</th>
<th>t</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>88</td>
<td>70.72</td>
<td>4.125</td>
<td>166</td>
<td>.000</td>
</tr>
<tr>
<td>Urban</td>
<td>80</td>
<td>78.94</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As t is significant, so it is concluded that there is a significant locality wise difference in the self-efficacy of secondary school teachers. The mean score of urban teachers is higher than rural teachers.
Table: 3 Qualification (academic) wise differences in self-efficacy

<table>
<thead>
<tr>
<th>Qualification</th>
<th>N</th>
<th>Mean</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate FA / FSc</td>
<td>5</td>
<td>65.800</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduation BA / BSc</td>
<td>61</td>
<td>71.491</td>
<td>3</td>
<td>2.740</td>
<td>.045</td>
</tr>
<tr>
<td>Post-Graduation MA / MSc</td>
<td>94</td>
<td>76.723</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>79.500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>164</td>
<td>74.512</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table indicates, F is significant, therefore it is concluded that there is a qualification (academic) wise significant difference regarding the self-efficacy of secondary school teachers. As the results were significant hence it was decided to run LSD post hoc test of multiple comparisons.

Table: 4 Summary of Multiple Comparisons regarding qualification (academic) wise difference

<table>
<thead>
<tr>
<th>(I) Qualification Academic</th>
<th>(J) Qualification Academic</th>
<th>Mean Difference (I-J)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Graduation MA / MSc</td>
<td>Graduation BA / BSc</td>
<td>5.232</td>
<td>.020</td>
</tr>
</tbody>
</table>

The above table shows that mean difference between post graduate and graduate teachers is significant; hence, the significant difference among teachers having different academic qualification is contributed by this mean difference.

Table: 5 Qualification (professional) wise differences in self-efficacy

<table>
<thead>
<tr>
<th>Qualification</th>
<th>N</th>
<th>Mean</th>
<th>Df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT / PTC</td>
<td>7</td>
<td>74.7143</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Ed</td>
<td>94</td>
<td>75.0638</td>
<td>4</td>
<td>1.315</td>
<td>.267</td>
</tr>
<tr>
<td>M. Ed</td>
<td>44</td>
<td>74.8409</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA Education</td>
<td>19</td>
<td>69.6316</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>90.5000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Above table shows that F value is not significant, so it is concluded that there is no qualification (professional) wise difference regarding self-efficacy of secondary school teachers.

Table: 5

<table>
<thead>
<tr>
<th>AGE</th>
<th>N</th>
<th>Mean</th>
<th>Df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30</td>
<td>52</td>
<td>74.2885</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-40</td>
<td>64</td>
<td>73.6406</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-50</td>
<td>25</td>
<td>77.4400</td>
<td></td>
<td>1.686</td>
<td>.173</td>
</tr>
<tr>
<td>51-60</td>
<td>7</td>
<td>82.1429</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>148</td>
<td>74.9122</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As F value is not significant so it is concluded that there is no age wise significant difference regarding self-efficacy of secondary school teachers.

Table: 6

<table>
<thead>
<tr>
<th>Experience wise</th>
<th>N</th>
<th>Mean</th>
<th>F</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 - 05 Years</td>
<td>33</td>
<td>75.9091</td>
<td>2.902</td>
<td>3</td>
<td>.037</td>
</tr>
<tr>
<td>06 - 10 Years</td>
<td>43</td>
<td>76.8837</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 - 15 Years</td>
<td>51</td>
<td>71.1961</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 15 Years</td>
<td>37</td>
<td>78.0541</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>164</td>
<td>75.1829</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table indicates that F value is significant so it is concluded that there is an experience wise significant difference regarding self-efficacy of secondary school teachers. As the results are significant it was decided to run LSD post hoc test of multiple comparison.
Table: 7 Summary of Multiple comparisons regarding experience wise differences

<table>
<thead>
<tr>
<th>(I) Teaching Experience</th>
<th>(J) Teaching Experience</th>
<th>Mean Difference (I-J)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 – 15 Years</td>
<td>06 - 10 Years</td>
<td>-5.688</td>
<td>.024</td>
</tr>
<tr>
<td>11 – 15 Years</td>
<td>More than 15 Years</td>
<td>-6.858</td>
<td>.009</td>
</tr>
</tbody>
</table>

The above table shows that the mean difference of secondary school teachers, having, experience of 11-15 years are significantly different from the teachers having 06-10 years of teaching experience and those having more than 15 years of teaching experience on self-efficacy scale

Findings

1- There is a significant gender wise difference in the self-efficacy of secondary school teachers
2- The mean score of female was higher than the male on self-efficacy scale.
3- There is a significant locality wise difference in the self-efficacy of secondary school teachers
4- The mean score of urban teachers is higher than the rural teachers on self-efficacy scale.
5- There is qualification (academic) wise significant difference in the self-efficacy of secondary school teachers
6- The mean score of those teachers, who have qualification other than intermediate, graduation and masters in their academic achievements, was higher than those who were graduate or post graduate.
7- The mean difference between post graduate and graduate teachers is significant
8- There is no qualification (professional) wise significant difference in the self-efficacy of teachers
9- The mean score of those teachers who have B.Ed. degree is higher than those teachers who have professional degrees, other than B.Ed.
10- There is no age wise significant difference in the self-efficacy of secondary school teachers
11- The mean score of those teachers who belonged to the age group of 51 -60 years, is higher than other teachers.
12- There is experience wise significant difference in the self-efficacy of secondary school teachers
13- The mean score of teachers who have more than 15 years of experience is higher than those teachers who have less than 15 years experience.
14- The mean difference between the teachers having, 11-15 years of teaching experience is different from those teachers who have 06-10 and more than 15 years of teaching experience

Conclusions and Discussion

The present study was aimed to investigate the self-efficacy of secondary school teachers. It was further aimed to study the effects of gender, locality, academic qualification,
professional qualification, age and experience of the teachers on their self-efficacy. Most of the findings are logical and are in accordance with the literature review. However, some are debatable.

There is a significant gender wise difference and majority of the female teachers scored higher on the self-efficacy scale. This finding shows that female teachers have more self-efficacy than male teachers. They feel more comfortable in teaching. So, they prove more effective. The findings of Eccles (1987) and Baumrind (1989) are in line with these findings as they have researched that in different areas of achievement; there is vast gender wise difference. They both agree that teaching is considered as a female profession. Other reasons may be that female teachers find teaching a more secure profession. It is also feasible for them in the perspective of time constraint, which may have strengthen their belief that they can perform well if they choose teaching as a profession which ultimately is an efficacy belief. Different researchers explain it through different examples, such as Hayes (1994) explains it in self-efficacy expectations and outcome expectation. Rathus (2001) and Kreitner and Kinicki (2007) also say the same thing that if a person has a belief that he can do a given task, he perform it much better than that person who has some fears or reservations about that task.

It is concluded that there is locality wise significant difference in the self-efficacy of secondary school teachers. It is also concluded that the teachers teaching in urban area score high on self-efficacy scale. The reason for this disparity seems to be that they have more resources, better working conditions and respect in the society as compared to the teachers who teach in rural areas. The teachers who belong to rural area they face more difficulties. They work in hard conditions. In Pakistani environment particularly, they receive less incentives. Hence, all these factors may have influenced on the low performance of teachers on self-efficacy scale in rural areas. Rehmani (2010) in her article quotes that Halai’s 2007 research shows that teaching profession in Pakistan is a low status job. It is further added that the teachers are low paid, have no promising career that is why the best talent is not attracted to opt this profession as a career.

Regarding the affect of qualification on the self-efficacy of secondary school teachers; qualification was divided in to academic qualification and professional qualification. It is concluded that the teachers who have high academic qualification they score high on the self-efficacy scale. Academic qualification plays a very important role in boosting confidence. It is a source of grooming a personality especially in teaching profession. Highly qualified teachers have more monitory and professional incentives. Hence the teachers who have high academic qualification are more self assure and have high level of self-efficacy. Pajares (2010) presented the research results of Lent and Hackett 1987 which showed a strong relationship between self-efficacy and college subjects, career choices particularly in math and science subjects. Therefore the findings of present study are consistent with Pajares (2010).

No effect of professional qualification on the self-efficacy of secondary school teachers was noted. One major reason for this finding may be that mostly professional education is theoretical; it has poor relation with the real job environment, unfortunately, proper skill development is not emphasized in teacher training institutions’ curriculum.

Language in India www.languageinindia.com
11 : 10 October 2011
Tayyaba Shazadi, M.A., Sufiana Khatoon, Ph.D., Shamsa Aziz, Ph.D., and Hamid Hassan, Ph.D.
Determining Factors Affecting Teachers’ Self-Efficacy at Secondary School Level
Rehmani (2010) writes that quality of teacher training programs is scarce, she is of the opinion that curriculum is obsolete. Furthermore, the curriculum of teacher training programs has no relevance with present day problems. She further adds that Farooq 1996 researched, the basic education required for teachers and duration of training programmes are also insufficient in Pakistan. Furthermore, the curriculum of teacher training programmes is out dated which have no relevance with present day problems, which teachers face. She gives the reference of the researches of Kalmthout & o’Grady (1992), Qureshi, Bridges (1992), Ali (1998), and, Warwick and Reimers (1991), all these researchers talked about these factors in teacher training programmes. Hence the findings of present study are consistent with these studies.

Findings of the research revealed that there is no age wise significant difference in the self-efficacy of the secondary school teachers but the teachers who are more than 40 years of age their mean score is relatively high on efficacy scale so, it can be concluded, with the increase in age people have more firm belief about their abilities.

Experience affected the self-efficacy of secondary school teachers. It was revealed through the findings that those teachers who have longer period of experience have high self-efficacy which means more experienced teachers are more self assured and they score high on self-efficacy scale. The finding is quite logical since it is a common observation that if a person has experience of some job, he performs better than the one who is less experienced. Robbins and Jude (n.d) explain experience of any work makes it easy and improve performance this experience may be in the form of ‘vicarious modeling’ learning through watching others performing a task or ‘enactive mastery’ by doing that job practically or by gaining experience of the required task. The findings of present study are consistent with Robbins and Jude (n.d). Bandura (1986) also views the more experience an individual has the higher self-efficacy he will have. Hence findings of current study are also consistent with Bandura (1986),

**Recommendations**

1- Findings reported higher mean score of female secondary school teachers than male. Teaching is last choice for male in their career selection. That is why their self efficacy level was found low as compared to female secondary school teachers. It is suggested that teaching profession may be made more attractive so that male are attracted to this profession and join it by choice and not by chance.

2- The role of high academic qualification is very important so it is suggested that highly qualified teachers be appointed by the recruiting authorities at secondary school level.

3- Research findings show professional qualification is not making much difference; hence, it is recommended that the curriculum of teacher education may be revised based on practical teaching i.e. skills development.

4- Obsolete things from curriculum of teacher education may be replaced by new teaching techniques, and modern technology. Innovative styles of teaching needs to be adopted.

5- Curriculum needs to be activity based, so that the teachers put their efforts to utilize their capabilities.
6- Teachers serving in rural area score low on self-efficacy scale. Therefore, it is a need to provide equal resources to urban and rural schools. Special pay packages and other incentives may be introduced to raise the efficacy of teachers serving in rural areas.

7- Teacher education programs may incorporate the aspect of prospective teachers’ self-efficacy development.

References


Fayyaz, Sehrish, (06-08). Relation ship between Emotional Intelligence and Self-efficacy among Government and Private College teachers, Lahore: Department of Psychology and Applied Psychology, University of the Punjab unpublished thesis of Master of Applied Psychology


James, (Retrieved on March 2010) from http://psychclassics.asu.edu/James/Principles


================================================================

Tayyaba Shazadi, M.A.
Garrison Academy, Lahore, Pakistan
phd_edu@windowslive.com

Sufiana Khatoon, Ph.D.
National University of Modern Languages, Islamabad, Pakistan
education_peace@yahoo.com

Shamsa Aziz, Ph.D. International Islamic University Islamabad, Pakistan
phd_edu@yahoo.com

Hamid Hassan, Ph.D.
Federal College of Education Islamabad, Pakistan
phd_edu@hotmail.com

Language in India www.languageinindia.com
11 : 10 October 2011
Tayyaba Shazadi, M.A., Sufiana Khatoon, Ph.D., Shamsa Aziz, Ph.D., and Hamid Hassan, Ph.D.
Determining Factors Affecting Teachers’ Self-Efficacy at Secondary School Level 395