Self-efficacy Beliefs of English and Urdu Medium Schools’ Male and Female Teachers

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Abstract
This research explores the difference in self-efficacy beliefs by gender and language of instruction of teachers. This descriptive study uses survey. The multistage stratified random sampling is employed to choose the sample for the study. The sample comprises 1761 teachers: 880 male and 881 female teachers from 419 primary, middle and high school. Out of 1761 teachers 923 are from English medium and 838 are from Urdu medium schools. The schools are selected from nine districts of the Punjab. The data are collected by using Teachers’ Sense of Efficacy Scale. The t-test and ANOVA are run to find mean self-efficacy. The study finds self-efficacy level of teachers from Urdu medium schools being higher than teachers from English medium schools. No difference in self-efficacy by gender is reported. It is further concluded that effect of medium of instruction on self-efficacy does not depend upon gender.

Key Words:
Self-efficacy, Beliefs, Gender, Medium of Instructions

Introduction
Pakistan is a multilingual society since its inception in 1947. The First Education Conference 1947 deliberated on medium of instruction in Pakistani schools and proposed that Urdu should be taught as a compulsory subject in Pakistan. This decision was made in the presence of other widely spoken languages in Pakistan such as Bengali, Punjabi, Sindhi, Pashto, Barohi, Saraiki and Balochi. A closer look at the proceedings of the First National Conference reveals concerns of the Conference members regarding using Urdu as a compulsory language to be taught to all students. The separation of East Pakistan in 1971 is primarily attributed to the issue of one official national language. Pakistan even today is facing problems regarding deciding upon medium of instruction, especially at primary school level, which has been switched between English and Urdu multiple times during last two decades. Though English is considered as the language of instruction, scholarship, internet, and commerce and business (Nunan, 2003). Research has revealed that

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the children who attend primary education in their mother tongue outperform their counterparts (Awopetu, 2016; Oluwole, 2008).

Whenever the medium of instruction in schools is changed, teachers and students are the first people to face the challenges. Just think for a while that a teacher who was teaching in Urdu or some other local language, one fine morning comes to know that he has to teach the subject in a foreign language. He must have to go through situation helplessness due their own preparedness for the changed situation. The students would also have to go through a similar situation. Such a decision can badly affect the self-efficacy (SE) of the teachers as well as the students. A brief summary regarding medium of instruction is presented below:

1. Mother-tongues may be used as medium of instruction if they are already being used for that purpose. English should be a compulsory subject from class 6th to 12th in all schools. In English-medium schools Urdu or Bengali should be taught as compulsory subjects. Natural sciences will be taught and examined in English language for another fifteen years though in non-science subjects universities may consider changing to Urdu sooner (Bengali 1999).

2. English-medium schools will use Urdu, or an approved provincial language, as medium of instruction and examination. Both Urdu and English will be used for university education with the aim to switch over to Urdu in a few years. (Bengali 1999)

3. Math and science will be taught in English language from class 4 onwards. However, five years will be given to the provinces to transit to English from Urdu. (Government of Pakistan, 2009).

In pursuance of the Government of Pakistan (2009), the School Education Department, Punjab declared 2352 schools as English medium (EM) schools in two phases. The Directorate of Staff Development (2010; 2) decided that “from 1st April 2009, the subjects of science and mathematics will be taught in English from class 6, in some of the selected high/higher secondary schools”.

Changing of medium of instruction with immediate effect may have many implications for students and the teachers. Teachers would be weary of using a language which they may not be comfortable with. Teachers may face problems in explaining content in a new language, they may not know the English equivalent of various terms that may lead to low motivation and SE. The worst affected people could be recipients of education in a new (second or foreign) language. It may destroy their confidence and motivation overnight.

The quality of teaching depends upon the teachers’ proficiency of the language of instruction (Norman, 1997) and his comfort. Franklin (1990) has also pointed out that teaching in a second language can raise various problems for the teacher and the learner. When the teacher and student speak same language, both tempt to switch to their language due to students ability, behavior, and confidence in using second language and school culture.
Keeping in the context where students come from diverse socio-economic backgrounds, varying English language proficiency, and varied competence in mathematics and science become even more complex (Ovando & Collier, 1985). Such a context is very much present in Pakistani public schools. In this kind of situations it becomes problematic for the teachers to gain language proficiency and guarantee students’ academic performance.

Ovando and Collier (1985) suggested that the problem of medium of instruction becomes even more complex because the public school teachers have to teach students from diverse socio-economic backgrounds, and low level of English language proficiency. Met (1994, p.167) asserted that “enabling students to develop content knowledge and concepts when they are being educated in a language in which they have limited proficiency is not easy”.

Teaching is a demanding job. The job becomes more cumbersome when teachers are asked to teach in second language. Such a situation can put them under severe pressure that can lead to anxiety. Anxiety has both negative and positive consequences. The negative effect can potentially hinder teaching effectiveness. This may result into decline in student learning. It is important to realize such type of anxiety and students should be facilitated to develop their language abilities so that goals of education are realized.

Those with good second language skills would better enjoy teaching various subjects as compared to those who have weaker language skills. This means that language of instruction has a potential to affect, adversely or otherwise, the teacher’s effectiveness. Teacher’s effectiveness has various characteristics but the most recognized is a high sense of efficacy (Henson, Kogan, & Vacha-Haase, 2001). Bandura (1977) termed this sense of efficacy as self-efficacy (SE) which serves as the basis for enthusiasm, curiosity, progress and personal achievement. The people who have strong belief that they have ability to produce expected outcomes, have higher levels of perseverance whereas those who have weak belief in their capabilities are likely to surrender in difficult situations. According to Berman, at el., (1977) the most important characteristic that add to teacher efficiency is their sense of efficacy.

The decision regarding switching between the medium of instruction needs some research based evidence, in the context of Pakistan, to determine its effectiveness. No language can be mastered at a level of proficiency and English is not an exception to it. Presenting the mathematics and science content in English language becomes a nightmare for many teachers especially while teaching rural area students who have weak grip over the subject (Alwis, 2005). Ormrod (2006, p.2) stated that “self-efficacy is the personal belief that one is capable of performing in an appropriate and effective manner to attain certain goals”.

Keeping in view the may be faced hardships by the students and the teachers of English medium public schools, it becomes important to investigate and compare the SE beliefs of class 1 to 8 teachers who work in English and Urdu
Medium (UM) schools. This research looks into who is more efficacious: English or Urdu medium school teachers. This study also looks into gender differences in self-efficacy.

**Study Objectives**

The study would achieve the following objectives;
1. Compare SE beliefs of teachers from UM and EM schools
2. Compare by gender SE beliefs of teachers from UM and EM schools

**Theoretical Considerations**

Human beings are a complex creature due to its capability to think and teachers are no exception to it. Human thought and behavior may best be understood in the social context in which they operate (Bandura, 1977, 1986). The basic duty of a teacher is to impart knowledge to the students who come from various socio-economic backgrounds and have different learning styles, abilities, needs, behaviors and levels of motivation. The teachers’ perceptions, beliefs and philosophies keeps on developing throughout the endeavor of teaching and shape school social environment that is comprised of students, teachers and other stakeholders. These beliefs, referred as efficacy, are context specific and they change classroom settings (Tschannen-Moran, Woolfolk, & Hoy, 1998).

The efficacy is dependent upon various contexts issues such as the subject taught, location of school, student gender, medium of instruction, etc. The medium of instruction has a potential of affecting SE beliefs of a teacher. Various studies have focused on the contexts that impact teachers’ SE such as how the decisions are made, what is school climate, what is school head’s behavior and how classrooms are management (Emmer & Hickman, 1990; Moore & Esselman, 1992; Hoy & Woolfolk, 1993; Raudenbush, Rowen, & Cheong, 1992; Coladarci & Breton, 1997).

Other factors related to teachers’ SE includes principals’ leadership, teamwork, students’ traits (Lee, Dedrick, & Smith, 1991; Raudenbush, Rowan, & Choeng, 1992).

In Pakistan there is hardly any research available which has investigated into teacher SE in the context of Urdu and EMs of instruction. This study would generate new understanding and add to the current knowledge about SE beliefs by medium of instruction and by teacher gender.

**Methodology**

This study is formulated around descriptive survey research design. Since aimed at comparing SE of Urdu and EM school teachers, therefore teachers
who teach class 1 to 8 became part of this study. All the teachers who teach in public English and UM schools (primary, middle and high) and teach classes from 1-8 make the population of this study. Since mathematics and science is taught in English language from class 1 to 8, hence, schools from nine randomly selected districts, made up the accessible population.

The sample was comprised of 1761 teachers: 880 male and 881 female teachers. Out of these 1761 teachers 923 were from English and 838 were from UM. The sample came from 419 randomly selected schools.

An Urdu version of Teachers’ Sense of Efficacy Scale (Tschannen-Moran and Woolfolk, 2001) was used to collect data. The scale was comprised of 24 items. Instrument was translated into Urdu in order to facilitate the subjects. The expert opinion was sought to improve the content validity. The Urdu version was pilot tested for its reliability which was found to be Cronbach-alpha = 0.96.

Findings

To find difference in SE beliefs of EM and UM school t-test was applied. Table 1 shows that mean SE of UM and EM schools is not same; $t(1759) = 15.87, p<0.001$. There is a highly significant difference in mean SE of English ($M=126.86$, $SD=28.25$) and UM ($M=142.73$, $SD=28.96$) public school teachers of the Punjab province. The teachers from UM schools have higher mean SE as compared to teachers from EM schools (mean difference = 15.87)

| Medium of Instruction | N   | Mean  | Standard Deviation | Mean Difference | t     | p      |
|-----------------------|-----|-------|--------------------|-----------------|-------|--------|
| Urdu                  | 838 | 142.73| 28.96              | 15.87           | 11.618| 0.000* |
| English               | 923 | 126.86| 28.25              |                 |       |        |

Table 2 is about the results of ANOVA for comparison of SE mean scores by teacher gender of the English and UM schools of Punjab province. Two-way ANOVA was used for gender (male, female) and medium of instruction (English, Urdu). Table 2 shows that there is no effect of gender on SE, $F(1, 1757) = 3.77$, $p = .052$. However, there is a highly significant effect of medium of instruction on SE, $F(1, 1757) =132.696$, $p < .001$. The interaction effect was not found, $F(1, 1757) = 3.46$, $p = .063$. This means that effect of medium of instruction on SE does not depend upon teacher gender.
Table 2. Analysis of Variance for Gender and SE

| Sources                                      | SS     | df | MS    | F     | p    |
|----------------------------------------------|--------|----|-------|-------|------|
| Gender                                       | 3074.99| 1  | 3074.99| 3.77  | 0.052|
| Medium of Instruction                        | 108144.60 | 1 | 108144.60 | 132.70 | 0.000|
| Gender and Medium of Instruction             | 2816.50 | 1  | 2816.594 | 3.46  | 0.063|
| Error                                        | 1431921.60 | 1757 | 814.981 |       |      |

The results of the study have shown higher level of SE for the teachers of UM schools as compared to their counterparts. This simply means UM teachers believe themselves more capable of performing their tasks and achieving expected results than EM school teachers. This study did not report any difference in the level of SE by teacher gender.

Discussion and Conclusion

The analysis of data has shown higher level of SE for UM teachers as compared to EM school teachers. This result matches with another study (Tse, Shum, Ki, & Wong, 2001) from Hong Kong that was conducted when the medium of instruction was changed. Similar findings have also been shared by Flowerdew, et al. (2000) who found university lecturers from Hong Kong faced problem while teaching in a foreign language. These results are in contradiction with How (2008) who reported that the Malaysian primary school mathematics and science teachers had higher levels of SE while teaching in a foreign language instead of a local language. Tung, Lam, and Tsang (1997), obtained mixed findings in another study that was conducted in Malaysia. The difference in results may be explained by the context variation across these countries. Since Pakistan is a multi-language country, where English is used as the language of the powerful, Arabic as a language of the religion, Urdu as national language and Punjabi, Saraiki, Sindhi, Pushto or Baloochi as mother tongue, therefore frequent use of mother tongue may be prevalent in Pakistani classrooms.

Furthermore, male and female teacher had same level of SE. Results of several studies conducted in different countries are in line with this finding (Tejeda-Delgado, 2009, Senemoglu, Demlrel, Yagci, & Ustundag, 2009, Tajeddin, & Khodaverdi, 2011, Al-Watban, 2012; Celik, 2013). In contrary to above results, Karimyand (2011) reported females having higher level of self-efficacy as compared to their counterparts. Female teachers having higher SE has also reported by some other researchers (Sridhar, & Badiei, 2008; Lee, Buck, & Midgley, 1992; Rubie-Davies, Flint, & McDonald, 2012). One possible reason for this deviation could be the higher proportion of female teachers in the local contexts which may have resulted into female dominance and hence higher level of SE. Çakiroğlu and Işıksal (2009), Hackett and Betz (1989), Pajares and Miller
(1994) reported male teachers being having higher SE as compared to female teachers.

The medium of instruction has found to be a differentiating factor, irrespective of the teacher gender, as far as SE of teachers is concerned. The results have shown UM public school teacher having higher levels of SE. There is a scarcity of research on teachers’ SE in Urdu and EM schools. It, therefore, may left for the future researchers to investigate further to establish the likeliness of this finding.
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