The Effect of In-Service Teachers’ Morale Training on their Motivation to Teach at Secondary School Level in Lahore

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ABSTRACT

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This study examines the effect of in-service teachers’ morale training on their motivation to teach at secondary school level in Lahore. The study was experimental in nature and the Single Subject (A-B-A) Design was used to conduct the study. The population of the study was comprised of all female teachers working in private secondary school level in Punjab. Sample of thirty teachers of a private secondary school was selected through convenient sampling technique. Teachers’ motivation scale developed by Shoura & Singh (1998) and Everard & Morris (1996) was adapted for this study. Parametric statistics Kolmoverov-Simmrov and Shapiro-Wilk were applied to check the normal distribution of the data. The data were analyzed by using statistical package of social sciences (SPSS) version 22. Mean score, Standard Deviation, and Independent sample t-test were used to find difference between demographic variables. The results concluded that teachers’ morale training has a significant effect on teacher’ motivation to teach at secondary school level. The results of the study were likely to help teachers, administrators and policy makers in improving the quality of teaching and teachers’ training.

Introduction

In-service training projects are expected to stay up with the latest as well as to address the issues which happen in their practice teaching. Given the significance of this mandate and the time and spending put into these projects, it is important for them in any case scrutinize these programs to decide if they satisfy the objectives figured for them in any case. The inadequacy of teachers training has
been addressed by various researchers (Chiang, 2008; Clarke, 2009; Freeman and Johnson, 2007), underline the troublesome and complex obligation of teachers, and the advancement of teachers' psyches and aptitude on the grounds that their commitment to education and the general public's morals and qualities is especially pivotal.

As indicated by Kazmi, Pervez and Mumtaz (2011), in-service training for instructors empower the teachers to be increasingly precise and consistent in their educating style. In-service training is an arranged procedure whereby the adequacy of teachers all things considered or independently is upgraded in the light of new information, new thoughts and changing conditions so as to improve, straightforwardly or in a roundabout way the nature of students' education.

Mendel (1987) characterizes morale as a believing, a perspective, a psychological mentality, and a passionate disposition. Meaning of motivation alludes to "the reasons fundamental conduct" (Guay et al., 2010). Perumal (2011) additionally battles that morale is the condition of the soul of an individual or a group as shown with certainty, sparkle, control, and eagerness to perform allocated errands. Bentley and Rempel (1980) to portray morale as the professional interest and enthusiasm that an individual presentation towards the accomplishment of individual and group objectives in a given job circumstance. Kirau (2013) opines that employer stability, teaching facilities, student intrigue, advancements, and authoritative help are the most significant factors as far as teachers working morale.

Construct good morale to improve faculty morale one at times should begin toward the start (Zee, 2016). In accordance with teacher motivation, Sinclair (2006, p. 37) has characterized it as 'what draws in people teaching, to what extent they stay in their underlying teacher training courses and accordingly the teaching profession, and the degree to which they connect with their courses and the teaching profession.' Teachers' motivation is additionally significant for educational changes; as motivated teachers can move in the direction of improving the educational framework. All the more critically, teachers’ motivation can guarantee that strategy changes are executed. Furthermore, teachers' motivation is significant for their self-satisfaction and to accomplish their objectives. Along these lines, it very well may be contended that teacher motivation is added to the long haul achievement and execution of the educational framework (Otube, 2004; Recepoglu, 2013).

It very well may be reasoned that there is a progressing banter on characterizing motivation and recognizing the variables that motivate employees. In any case, with the end goal of this study, teachers' motivation alludes to the main impetus which supports secondary teachers' endeavors to meet their work objectives inside the Pakistani educational setting. Motivation levels seem, by all
accounts, to be commonly higher among secondary teachers in a large portion of the contextual analysis nations (Bennell & Mukyanuzi, 2005).

Also, considering the accentuation and significance set on in-service training program for teachers, the researcher of the present examination felt the desire and need to explore the teachers’ education through finding a response for the inquiry: Do in-service morale, training programs for teachers have any statistically significant effect on their motivation.

Hypotheses

H₀₁: There is no significant difference in pretest score of in-service teacher’s moral training on their motivation to teach at secondary school level.

H₀₂: There is no significant difference in posttest score of in-service teacher’s moral training on their motivation to teach at secondary school level.

H₀₃: There is no significant difference between pretest and posttest scores of in-service teachers’ moral training on their motivation to teach at secondary school level.

Literature Review

The term in-service teachers’ training interfaces any program gave to teachers officially working in schools, with the unequivocal motivation behind refreshing and reestablishing their knowledge, specialized abilities and so on, for fundamental preparing or potentially upgrading their efficiency (Deshmukh & Mishra, 2014). It advances an entirely adaptable condition and enables teachers to adjust with the working circumstance and it is additionally one type of motivation for employees or employers and it will keep on expanding innovativeness in teaching and learning process (Frederick and Stephen, 2010).

Along these lines, to improve teaching adequacy, there is a basic need of redesigning the staff and teachers' abilities and information. The requirement for in-service training or staff advancement program for teachers assumes a basic job in effective education change. It additionally fills in as a scaffold among prospective and experienced teachers to address the new difficulties of directing students towards higher gauges of learning and self-improvement. In building up the polished skill status of teachers, the training program, for example, in-service training ought not flee from the reconstruction that happens (Zulkifli Che Omer, 2014).

Theories of Teacher Morale

Perumal (2011) additionally battles that morale is the condition of the soul of an individual or a group as shown with certainty, sparkle, control, and
eagerness to perform allocated errands. Mendel (1987) characterizes morale as a believing, a perspective, a psychological mentality, and a passionate disposition. Evans (1997) characterized morale as a perspective that is inferred by people's expectation of satisfaction for those necessities that they see as significant variables influencing their environment.

Koerner (1990) offered even more an all-encompassing methodology when he alluded to staff morale as the nature of lives inside a network that included "being known and acknowledged, having proficient information esteemed, and being given the opportunity to act". Also, the author expressed it included getting the hang of, developmental, committing errors, pondering them, and proceeding onward. Hocking (1918) in his study, reports a number of factors which can be applied to school conditions. He states that morale will be enhanced by:

1. Proper time in which to accomplish work,
2. Good physical conditions,
3. Confidence in one's skill and ability,
4. Respect and co-operation from the community,
5. Elimination of friction, and
6. Appeals to the imagination and ambition.

**Teachers’ Motivation**

Motivation is characterized as a lot of interrelated convictions and feelings. These convictions and feelings drive and impact conduct (Martin and Dowson 2009; Wentzel 1999) Motivation for teaching is explored fundamentally by examining teachers regarding differing sorts of motivation (Watt and Richardson 1992), for example: 'working with children' or 'have had inspiring teachers'.

Sinclair et al. (2006) have estimated that teachers' motivation supports teachers' occupational commitment. Change in teachers' degree of motivation contributes decidedly to teachers' professional commitment and research whether this relationship is really present. An expansion in teachers' degree of motivation will prompt increasingly occupational commitment and that a diminishing in the teachers' level of motivation will prompt less occupational commitment.

**Significance of teacher's motivation**

For instance, Moreira, Fox and Sparkes (2002) express that teachers' motivation identifies with their perception and try at completing their work and to their ability to stay in training; disappointed teachers may look for elective choices
with increasingly appealing prospects for work accomplishments, career improvement and personal satisfaction.

Another basic part of teachers' motivation to educate is its effect on students' motivation to learn (Recepoglu, 2013). Subsequently, Rashid et al. (2010) underscore that motivated teachers add to the advancement of educational quality and the improvement of students into productive members of society.

Teachers' motivation is additionally significant for educational changes; as motivated teachers can move in the direction of improving the educational framework. All the more critically, teachers' motivation can guarantee that strategy changes are executed. Furthermore, teachers' motivation is significant for their smugness and to accomplish their objectives. Along these lines, it very well may be contended that teacher motivation added to the long haul achievement and execution of the educational framework (Otube, 2004; Recepoglu, 2013).

It very well may be reasoned that there is a progressing banter on characterizing motivation and recognizing the variables that motivate employees. In any case, with the end goal of this study, teachers' motivation alludes to the main impetus which supports secondary teachers' endeavors to meet their work objectives inside the Pakistani educational setting.

Teacher Motivation Patterns Emerging from the Research

Qualified versus Non-Qualified Teachers

Guaranteeing that all teachers are qualified may be required to be a significant method for improving and keeping up large amounts of professional commitment and motivation. In any case, in almost all the nation cases in Bennell and Akyeampong (2007) study, there were no sizeable contrasts between the motivation levels of qualified and unqualified teachers, even given that unqualified teachers are paid considerably less and many are baffled by constraining chances to procure essential teaching qualifications.

Normally, the entire issue of qualification and motivation is unequivocally age-related. More youthful teachers are better instructed and have procured higher professional capabilities. However, regardless of whether they can discover schools in favor areas, motivation levels don't give off an impression of being higher. In reality, in certain nations, it is very evident that more youthful teachers are genuinely de-motivated (Armstrong, 2007).

Rural versus Urban

It is ordinarily expected that working in rural schools is impressively progressively troublesome, and consequently more de-motivating than working in urban schools because of the poor living and working conditions. Be that as it may,
the discoveries from nation studies demonstrate this isn't the situation generally. Teachers who work at schools in their home (rural) territory can have more elevated amounts of employment fulfillment than their associates who are 'outsiders' in the area (Bennell and Akyeompong, 2007). Teachers in the latter communities were less fulfilled, while teachers in the rural towns with less inhabitants were occupied with rural ventures and felt progressively connected with and engaged with their work (Sargent & Hannum, 2005).

**Primary versus Secondary**

Motivation levels seem, by all accounts, to be commonly higher among secondary teachers in a large portion of the contextual analysis nations. This is proven by the way that huge extents of elementary teachers need to overhaul their qualification with the goal that they can end up secondary teachers (Bennell and Mukyanuzi, 2005). Interview data demonstrated that secondary teachers would in general be better motivated. In this specific situation, teachers' living conditions, which are prominently better for secondary schools, was a key factor (Kadzamira, 2006).

**Private versus Government**

As indicated by Bennell and Mukyanuzi, (2005) teachers’ job satisfaction and motivation were apparently higher in private schools, in contrast to public schools. Littler class sizes, closer supervision by the executives and owners, and somewhat the accessibility of assets were exceptionally significant factors in clarifying this divergence (Kadzamira, 2006). Different elements impacting motivation in private schools are more significant compensation, better working and living conditions, and increasingly viable administration.

A few examinations have demonstrated that when accountability frameworks in government schools are feeble at both the school and locale level – and there is little data imparted to guardians or parent mindfulness about how to consider schools in charge of teacher’s professional conduct – there isn’t much that can in force the professional conduct of teachers (Sargent & Hannum, 2005). Albeit (private school) pay rates are viewed as commonly agreeable, the expanding rivalry between private schools combined with the weight of free education in the public division has prompted a great deal of pressure and has added to morale in these schools. Morale in private schools providing food for low-pay groups is poor since most teachers are unqualified, are paid an allowance, and need to suffer very poor working conditions’ (Hyde et al., 2005).

**Male versus Female**

A couple of studies have featured contrasts in levels of motivation among male and female teachers, while others found no statistically significant variation (Richardson, 2014).
Bennell and Mukyanuzi, (2005) study on teacher motivation in Africa and Asia found that motivational examples were diverse among men and women. Men were progressively worried about extrinsic prizes though women concentrated on intrinsic rewards as far as the fulfillment of teaching and working with kids. Correspondingly, in an investigation of pre-service English teachers in Turkey, female teachers announced philanthropic and intrinsic motivations for entering the profession, in contrast with male teachers (Topkaya & Uztosun, 2012).

A few investigations, then again, found no major motivational contrasts among male and female teachers. Bennell and Mukyanuzi’s (2005) study in Tanzania found that there was no significant difference between genders as for teachers’ close to home explanations concerning motivation. Moreover, Ramachandran et al. (2005) found that there was no correlation between gender and motivation levels among public school teachers in India. Alcázar et al., (2006) additionally found that male and female teachers had comparable reactions during interviews; their nonattendance rates were similar, also.

Material and Method

The study was experimental in nature and the Single Subject (A-B-A) design was applied to conduct the study. The population of the present study was comprised of all private secondary schools in Punjab. The following table showed the population of the study:

| Sr No | Locality | No of Schools | No of Teacher |
|-------|----------|---------------|--------------|
| 1     | Urban    | 6,026         | 118549       |
| 2     | Rural    | 5981          | 86691        |
| 3     | Total    | 12007         | 205240       |

(Bano, 2018)

The sample of the study was selected through convenient sampling technique. All the teachers (30) of a private secondary school were the sample of the study. The instrument was a teachers’ motivation scale developed by Shoura& Singh (1998) and Everard & Morris (1996) adapted by the researcher. The researcher conducted sixteen weeks training on morale under following themes: professional interest, enthusiasm, learning environment, job satisfaction, professional identity, motivation, professional commitment, belongingness, self-esteem and school climate. The motivation scale got validated by the experts. It was pilot tested. Cronbach alpha was used to calculate the reliability. The following table shows the reliability of the instrument:
The Effect of In-Service Teachers’ Morale Training on their Motivation to Teach at Secondary School Level in Lahore

Table 2
Reliability of Scale on Pre-test and Post-test of Motivation

| Scale               | N  | Items | Cronbach α |
|---------------------|----|-------|------------|
| Pre-test Motivation | 30 | 28    | .767       |
| Post-test Motivation| 30 | 28    | .899       |

Note. N=number, α = reliability

Results

The data were analyzed by using statistical package of social sciences (SPSS) version 22. Mean score, parametric statistics Kolmovorove-Simrnov and Shapiro-Wilk were applied to check the normal distribution of data. Mean score, Standard Deviation and Independent sample t test were used to find difference between demographic variables.

Table 3
Demographical Information of Participants

| Variables                          | Frequency | Percentage |
|------------------------------------|-----------|------------|
| Age (years)                        |           |            |
| 20-25                              | 19        | 63         |
| 25-30                              | 5         | 17         |
| >30                                | 7         | 23         |
| Education Level of participants    |           |            |
| High & Higher Secondary            | 8         | 27         |
| Bachelor's Degree                  | 12        | 44         |
| Master's Degree                    | 10        | 33         |
| Marital Status                     |           |            |
| Married                            | 10        | 33         |
| Single                             | 20        | 67         |
| Bachelor                           | 9         | 30         |
| Father Education                   |           |            |
| Middle and less                    | 8         | 27         |
| High and Higher Secondary          | 13        | 43         |
| Bachelor                           | 9         | 30         |
| Father Occupation                  |           |            |
| Government                         | 9         | 30         |
| Private                            | 15        | 50         |
| Other                              | 6         | 20         |
| Family Size                        |           |            |
| 3-6                                | 19        | 63         |
| 6-9                                | 11        | 36         |
| Teaching experience in present school (years) | 7 | 23 |
Table 3 indicated that most of the teachers were 20-25 years old. Results indicated that most of the teachers were unmarried. It was highlighted by the results that most of the teachers were having a bachelor degree. While most of the teacher fathers’ education was high and higher secondary. Most of the teacher’s father’s occupation was private job, results also shown that most of the teachers have 3-6 members in the family. It was extracted from the results that most of the teachers have 1-5 years working experience overall and in present school as well. Most of the teachers working in high establishment. It indicated that most of the teachers were working in at primary level. While about students’ age who are taught by participants most of them have an age between 9-15 years. As far as lesson branches are concerned, most of the teachers belonged to others and humanities. Whereas most of the teachers come in this profession by choice Results indicated that most of the teachers have no family member working in this profession.
Table 4
Test of Normality on Motivation scores

|                          | N   |  K-S       | p-value | S-W       | p-value |
|--------------------------|-----|-----------|---------|-----------|---------|
| Motivation (Pre-test score) | 30  | 0.132    | 0.194  | 0.946    | 0.132  |
| Motivation (Post-test score) | 30  | 0.146    | 0.100  | 0.949    | 0.156  |

Note N= number, p=significance

Table 4 showed that data of the study should be normally distrusted for paramedic statistics. For this purpose, Kolmogorov-Smirnov and Shapiro-Wilk was used for normality of the test. These tests were applied to check normality on motivation, pre-test and post test scores.

The results of these tests revealed that scores of motivation were normally distributed (P>.05).

Table 5

|                          | M   | SD   | M   | SD   | t   | df  | p     | η²  | LL  | UL  |
|--------------------------|-----|------|-----|------|-----|-----|-------|-----|-----|-----|
| Pre-test Motivation      | 2.30| 0.273| 4.16| 0.293| 25.239| 9.29| <.001 | 0.956| -2.02| -1.72|

Note. M=mean, SD= standard deviation, df= degree of freedom, p=significance

Table 5 highlighted the comparison of teacher’s Motivation for pre-test and post-test, an independent samples t-test was conducted. It was identified that there was a significant difference in scores of teachers Motivation pre-test (M = 2.30, SD= 0.273) and post-test (M = 4.16, SD = 0.293; t (29) = 25.239, p<0.001. Partial eta squared was large η² = 0.956.

Figure 1. Independent Samples T-Test of teacher’s Motivation for Pre-Test and Post-Test.
Discussion

In the teaching process, morale of teachers is key angles which impact generally achievement in schools. This research is designed to examine the effect of teachers’ morale, training on their motivation to teach at secondary school level. Findings indicate that there was a significant effect of in-service teachers’ morale, training on their motivation to teach at secondary school level. In-service training is an expert and individual instructive activity for teachers to improve their efficacy, capacity, learning and motivation in their professional work (Chenari, et al., 2016). Motivation, exertion, and job satisfaction can be connected to teachers’ morale (Huysman, 2008). Sinclair et al. (2006) have estimated that teachers' motivation supports teachers' occupational commitment. Furthermore, teachers' motivation is significant for their smugness and to accomplish their objectives. Along these lines, it very well may be contended that teacher motivation is added to the long haul achievement and execution of the educational framework (Otuboe, 2004; Recepoglu, 2013).

Conclusion

Teachers' morale is significant in the accomplishment of everyday schedule teaching and learning process. Furthermore, to find demographics and socioeconomic status of teachers can influence their motivation to teach. Findings indicate that there was a significant effect of inservice teachers’ morale, training on their motivation to teach at secondary school level. The comparison of teacher’s motivation for pre-test and post-test, an independent samples t-test was conducted. It was identified that there was a significant difference in scores of teacher’s motivation, pre-test ($M = 2.30, SD = 0.273$) and post-test ($M = 4.16, SD = 0.293$). It shows that there was no significant effect of demographic scores on

Recommendations

On the basis of findings and conclusion it is recommended that the present study was conducted with private school teachers, in future research may be conducted at public schools. Future researchers may conduct research in other districts. Moreover, the study would also be significant to the management of private schools to gain insights into measures geared towards enhancing performance of teachers and formulate motivational policies that enhance employee performance. The research findings may also be useful for Govt. institutions while taking decisions about the current pressing problems of secondary school teacher training, instruction and curriculum.
The Effect of In-Service Teachers’ Morale Training on their Motivation to Teach at Secondary School Level in Lahore

References

Alcázar, L., Rogers, F. H., Chaudhury, N., Hammer, J., Kremer, M., & Muralidharan, K. (2006). Why are teachers absent? Probing service delivery in Peruvian primary schools. International Journal of Educational Research, 45(3), 117-136.

Armstrong, M. (2006). A handbook of human resource management practice. Kogan Page Publishers.

Bano, M. (2008). Public Private Partnerships (PPPs) as ‘anchor’of educational reforms: lessons from Pakistan. Background paper prepared for the Education for All Global Monitoring Report 2009.

Bennell, P., & Akyeampong, K. (2007). Teacher motivation in sub-Saharan Africa and south Asia (Vol. 71). London: DfID.

Bennell, P., & Mukyanuzi, F. (2005). Is there a teacher motivation crisis in Tanzania? Brighton: knowledge and Skills for Development.

Bentley, R. R., & Rempel, A. M. (1980). Manual for the Purdue teacher opinionaire. Purdue Research Foundation.

Chenari, A., Sohrabimanesh, M., & Heydari, S. (2016). Studying the Effect of In-Service Training on Empowerment of School Principals (Case study: Public high school principals in Tehran). Journal of Current Research in Science, (2), 735.

Chiang, M. H. (2008). Effects of fieldwork experience on empowering prospective foreign language teachers. Teaching and Teacher Education, 24(5), 1270-1287.

Clarke, L. (2009). The POD model: Using communities of practice theory to conceptualise student teachers’ professional learning online. Computers & Education, 52(3), 521-529.

Deshmukh, N., & Mishra, M. (2014). A brief study of in-service teacher education programs. Indian Journal of Applied Research, 4(8), 33-34.

Evans, L. (1997). Understanding teacher morale and job satisfaction. Teaching and Teacher Education, 13(8), 831-845.

Everard, K. B., Morris, G., & Wilson, I. (1996). Effective School. Management, London: Harper Row.

Frederick, B., & Stephen, O. (2010). Teachers’ perceptions of staff development programmes as it relates to teachers’ effectiveness: A study of rural primary schools’ in Kenya. Educational Research and Review, 5(1), 144-178.
Freeman, D., & Johnson, K. E. (1998). Reconceptualizing the knowledge base of language teacher education. *TESOL quarterly*, 32(3), 397-417.

Guay, F., Ratelle, C. F., Roy, A., & Litalien, D. (2010). Academic self-concept, autonomous academic motivation, and academic achievement: Mediating and additive effects. *Learning and Individual Differences*, 20(6), 644-653.

Hocking, W. E. (1918). Morale and its Enemies. New Haven: Yale University Press, p. 151.

Huysman, J. T. (2008). Edward W. chance dissertation award for doctoral research in rural education. *The Rural Educator*, 29(2), 31.

Hyde, K., Muito, M., & Muito, G. (2005). Teacher motivation and incentives in Kenya. *Nairobi, Kenya*.

Kadzamira, E. C. (2006). Teacher Motivation and Incentives in Malawi: Centre for Educational Research and Training University of Malawi, 26pp.

Kazmi, S. F., Pervez, T., & Mumtaz, S. (2011). In-service teacher training in Pakistani schools and total quality management (TQM). *Interdisciplinary Journal Of Contemporary Research In Business, March Edition*, 2, 238-248.

Kirau, A. M. (2013). Perceptions of secondary school agriculture teachers on selected morale factors in Machakos district (Unpublished M.Sc thesis). Egerton University, Nakuru, Kenya.

Koerner, T. F. (1990). Developing staff morale. *The Practitioner, 16*(4), 30-33.

Mahani-Rashid & Dhindsa, H. S. (2010). Science teachers’ motivation to teach: Intrinsic factors. *Brunei International Journal of Science and Mathematics Education, 2*(1), 1631.

Martin, A. J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of educational research, 79*(1), 327-365.

Mendel, P. C. (1988). *An Investigation of Factors that Influence Teacher Morale and Satisfaction with Work Conditions*. (GUAM).

Moreira, H., Fox, K. R., & Sparkes, A. C. (2002). Job motivation profiles of physical educators: theoretical background and instrument development. *British Educational Research Journal, 28*(6), 845-861.

Omar, C. M. Z. C. (2014). The need for in-service training for teachers and its effectiveness in school. *International Journal for Innovation Education and Research, 2*(11), 1-9.
Otube, N. W. (2004). Job motivation of teachers educating learners with special needs in four provinces in Kenya.

Perumal, M. (2011). Key strategies to raise teacher morale and improve school climate. *Distinguished Fulbright Awards in Teaching*.

Ramachandran, V., Pal, M., Jain, S., Shekar, S., and Sharma, J. (2005). Teacher Motivation in India. Bangalore, Azim Premji Foundation, pp. 96-103.

Recepoglu, E. (2013). A study on teachers’ job motivation in the high schools of ministry of national education in Turkey (Karabuk and Sinop sample). *Middle-East Journal of Scientific Research, 13*(4), 532-537.

Richardson, E. (2014). Teacher motivation in low-income contexts: An actionable framework for intervention. *Emily Richardson Teacher Motivation & Strategies-Teacher Motivation Working Group*.

Sargent, T., & Hannum, E. (2005). Keeping teachers happy: Job satisfaction among primary school teachers in rural northwest China. *Comparative education review, 49*(2), 173204.

Sinclair, C., Dowson, M., & McInerney, D. M. (2006). Motivations to teach: Psychometric perspectives across the first semester of teacher education. *Teachers College Record, 108*(6), 1132.

Singh, A., & Shoura, M. M. (1998). Optimization for bidder profitability and contractor selection. *Cost Engineering, 40*(6), 31.

Topkaya, E. Z., & Uztosun, M. S. (2012). Choosing teaching as a career: Motivations of preservice English teachers in Turkey. *Journal of Language Teaching and Research, 3*(1), 126.

Zee, M. (2016). From general to student-specific teacher self-efficacy. Marjolein Zee.