



RESEARCH PAPER

Teaching Effectiveness and Character Strengths of Secondary School Teachers: Mediating Role of Teacher' Sense of Self-Efficacy

¹Sidra Shoaib* ²Maryam Ahmed and ³Dr. Fareeha Kanwal

1. Senior Lecturer, Institute of Professional Psychology, Bahria University, Karachi, Sindh, Pakistan
2. Lecturer, Institute of Professional Psychology, Bahria University, Karachi, Sindh, Pakistan
3. Assistant Professor, Institute of Professional Psychology, Bahria University, Karachi, Sindh, Pakistan

*Corresponding Author: sidrashoaib.ipp@bahria.edu.pk

ABSTRACT

This research explored the relationship of multiple ratings of teaching effectiveness (TE) i.e. self-ratings (SR) and students' ratings (StR) with Character Strengths (CS) with the mediating role of teacher's sense of self-efficacy (TSE) among secondary school teachers. Teaching, if done effectively, plays an integral role in shaping student outcomes and overall educational performance. Understanding the factors that contribute to teaching effectiveness (TE) is vital for improving instructional practices and fostering student success. Traditional assessments of TE often rely on students' ratings (StR) and self-ratings (SR) by teachers. However, these evaluations can be influenced by various internal and external factors, including the teacher's sense of self-efficacy (TSE) and their character strengths (CS). The participants consisted of N=303 secondary school teachers and their three students per teacher (N= 909). The instruments included Teaching Effectiveness Self and Students' Rating Scales, VIA-Inventory of Strengths and Teacher's Sense of Self-efficacy Scale. The results revealed TSE mediated the relationship (except for humility in StR) with the strengths of vitality, kindness, leadership, humility, spirituality (SR & StR), curiosity, open-mindedness, persistence, integrity, citizenship, social intelligence, prudence, hope, gratitude (SR) and love of learning (StR) positively predicting TE. This was subjected to a positive relationship among TE (SR & StR) with all the CS (except for bravery and perspective in StR) and TSE. These findings have implications in teachers' selection, recruitment and training. This research can be extended to CS of different levels of teachers like pre-school, primary, middle and secondary school teachers should be compared with respect to their effectiveness and subject specialization.

KEYWORDS Character Strengths, Secondary School Teachers, Teachers' Sense of Self-Efficacy, Teaching Effectiveness

Introduction

A significant figure Teachers have been shown to have an important influence on students' academic and social achievements and they also play a crucial role in educational attainment because a teacher is ultimately responsible for translating policy into action and principles based on practice during interaction with the students (Barile, 2012; Heineke, 2015). Both teaching and learning depend on teachers: an effective teacher has been conceptualized as one who produces desired results in the course of his duty (Mujis, 2014). Effective teaching is generally defined by its outcome, i.e. students' learning. There are different perspectives regarding these outcomes like development of the basic skills or proficient students' learning (Kyriacou, 2009; Kunter et al., 2013).

There are a lot of factors that influence effective teaching and among them personal characteristics of the teachers have a vital standing (Kyriacou, 2009; Curtis & Cheng, 2001). Characteristics are defined as the stable traits that are related to, and influence, the way teachers practice their profession. Faull (2008) have identified five clusters of dispositions that appear to be characterized by highly effective teachers. The 'umbrella' term selected for the dispositional cluster were *authentic* (caring, empathetic, openness, reflective), *Committed* (purposeful, organized, motivated, resilient), *Creative* (risk taking, originally), *Communicative* (knowledge, listener, engagement, humor) and *Passionate* (enthusiastic, excitability, positive, energetic). Each of these five 'primary' dispositional clusters can be defined in terms of 'secondary' dispositions that are conceptualized as being interactive and interdependent. Plenty of research has been found on the personal characteristics of the teachers (Gao & Liu, 2013; Ingersoll, Merrill & May, 2014; Toropova, Myrberg & Johansson, 2020) but most of the research is qualitative in nature and is not based on any of the personality characteristic model. Therefore, the current research is aimed to see the relationship of TE with personality characteristics of the teacher particularly their Character strengths (CS).

From the perspective of positive psychology (Peterson, 2006), the Values in Action (VIA) Classification of Strengths focuses on what is right about people and more specifically about the strengths of character that contribute to optimal development across the lifespan (Park & Peterson, 2009; Peterson & Seligman, 2004). CS is the emerging field of positive psychology and is defined as the personal capacities and capabilities that lead towards human thriving (Wong, 2011). This classification of common virtues is to be used both as a basis for empirical study and foundation for creating practical applications for character development. The model was created as a positive intellectual counterpoint to the Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 1994). It connects and expands on literature on CS such as leadership. Furthermore, it is descriptive, not prescriptive; it was created to thoroughly examine and describe what is best in human beings; they are the basic building blocks of human goodness and human flourishing (Peterson & Seligman, 2004).

The general scheme of the VIA-classification of CS (Peterson & Seligman, 2004) relies on six overarching virtues (domains) that almost every culture across the world endorses which includes a) strengths of wisdom and knowledge (creativity, curiosity, open-mindedness, love of learning & perspective) b) strengths of courage (bravery, persistence, integrity & vitality) c) strengths of humanity (love, kindness & social intelligence) d) strengths of justice (citizenship, fairness & leadership) e) strengths of temperance (forgiveness & mercy, humility/modesty, prudence & self-regulation) f) strengths of transcendence (Appreciation of Beauty and Excellence; AOB, gratitude, hope, humor & spirituality).

Within the theoretical framework of Fredrickson's (2004) broaden build theory, the VIA- classification of CS has a positive relationship with job performance (Peterson, Stephens, Park, Lee & Seligman, 2010). It has also been shown that five strengths i.e. curiosity, love, gratitude, zest, and optimism are more related to happiness than others (Bachik, Carey, & Craighead, 2020). It also suggests that positive emotions positively affect performance. Despite these theoretical links between strength demonstration, well-being, and performance (Peterson, Ruch, Beermann, Park & Seligman, 2007) the empirical examination of these relationships is still in its initial stages (Engel, Westman & Heller, 2011). Furthermore, there is a vital need to study the relationship of CS with job performance with respect to different professions like teaching, business, medicine, engineering etc. In addition to that it is also required that these CS should be taken as a

whole, and not in isolation or in respect to one or two virtues. That is why research is intended to see the role CS in effective teaching.

Literature Review

Engel, Westman and Heller (2011) aimed to examine the effect of the demonstration of CS on employee performance and they found a positive relationship between CS and job performance. By keeping this view, the current research is exploring the relationship of CS of the teachers with the specialized field of education that is, TE.

From the prior literature the relationship between TE and strengths of wisdom and knowledge (Faull, 2008; Gurney, 2007) in which particularly love of learning (McBer, 2000);, creativity (Faull, 2008; Tamblyn, 2000) & open-mindedness (Faull, 2008); among the strengths of courage (Elizabeth, May & Chee, 2008) particularly persistence (Gurney, 2007), integrity (Faull, 2008) and vitality (Gurney, 2007); social intelligence (Park & Peterson, 2009) and kindness (Elizabeth, May, & Chee, 2008; Faull, 2008); fairness (Gao & Liu, 2013; Elizabeth, May & Chee, 2008) and leadership (McBer, 2000); humor (Tamblyn, 2000; Faull, 2008) were seen in relationship with TE.

CS have been studied among teachers once by Gradisek (2012) as she has seen the relationship of CS and life satisfaction among Slovenian pre-service and in-service primary school teachers, and it has found the positive relationship of life satisfaction and CS. This also provides evidence for the above-mentioned theoretical relationships among the teachers and field of education. Moreover, Duckworth, Patrick, Quinn and Seligman (2009) showed that various teachers are dramatically more effective than others, but traditional indicators of their effectiveness are competence but at the same time explain minimal variance in performance. The diligence of teaching proposes that positive traits of personality that defend against difficulties certainly support effective teaching. In addition to that effective teachers that are evaluated by the scores of their students on standardized tests are seen as those who are high in humor, social intelligence, and zest in a longitudinal study (Park & Peterson, 2009). These research recommended considering CS with teaching.

Other than personality characteristics, teachers' motivation and efficacy beliefs in teaching (Klassen & Chiu, 2010; Zee & Koomen, 2016; McLennan et al., 2017; Granziera & Perera, 2019) also influence the teachers' effectiveness. In this regard Hanif (2004) has found a moderating relationship of teacher's job performance with TSE among Pakistani school teachers.

Enochs, Smith and Huinker (2000) were among those who contextualized self-efficacy for teaching. They explained that personal teaching efficacy has been defined as a belief in one's ability to teach effectively and teaching outcome expectancy as the belief that effective teaching will have a positive effect on student learning. Teachers should have not only personal talents but also have professional efficacy for an effective teaching (Çelikten, Sanal & Yeni, 2005). It is expected that teachers use their potential effectively in addition to their participation in class activities. Teachers who have a high level of self-efficacy, also has the tendency to perform in organizational planning and are more willing to use new methods to satisfy students' learning needs. Most of the studies show that self-efficacy affects teachers' decision-making process, academic motivation, learning and academic achievement (Rashidi & Moghadam, 2014). Teachers' belief about achieving responsibilities allows teachers to reach their goals. At the same time, it is proven by researches that TSE can change services in education

effectively (Kahyaoglu, 2009). Based on Banduras' self-efficacy model, Tschannen-Moran, Hoy and Hoy (1998)'s model consists of a 5 dimensioned circular process which enables to elicit, evaluate, use and create new self-efficacy beliefs.

Concluding the above-mentioned literature, it has been found that importance of a teacher cannot be denied by anybody; hence, a teacher can fulfill his duty completely until he is effective. So, it is necessary that every aspect of effective teachers and teaching should be explored. According to Kim, Jörg, & Klassen (2019) effective teaching requires knowledge, skills and a lot of personal characteristics, that is why their exploration and later inculcation is an important area of research.

Furthermore, Harzer & Ruch (2012) has found a positive association of VIA classification of CS with job satisfaction across different professions that is why the need merges for the model to be studied with the specialized fields of different professions and it is also recommended by Niemiec (in. press) that the impact of CS should be seen in classroom learning, hence there can be two sets of CS that would be affecting classroom learning; CS of students and CS of teachers. As Lounsbury, Fisher, Levy and Welsh (2009) have already explored the relationship of CS and academic success so this research would be exploring the role of teachers' personal CS on their effectiveness. Additionally, the research that is done on this model do not entertain the whole model that is why in this research whole model would be used.

Furthermore, TE is also altered by the TSE and their demographic variables, but this relationship had only been addressed in the correlation studies but to explore the new dimensions of this relationship the TSE would be taken as mediator.

Methodology

The current research is based on quantitative correlation survey research design.

Demographic and Sample Size

The conveniently approached participants included secondary school teachers ($n=303$ Male $n=86$; Female $n=216$) with age ranging from 20-60 years ($M=33.85$, $SD=9.43$), and three students per teacher were selected ($N= 909$). A simple random sampling technique was employed to ensure the sample is representative. Two ratings were taken on TE i.e. self rating (SR) and students' rating (StR) based on literature (Berk, 2005; Seldin, 1999). The sample was conveniently approached from the different secondary schools.

Measures

Teacher effectiveness rating scales.

Two TE five-point Likert rating scales were used i.e. TE Self Rating Scale (TESRS) for teachers and TE Student Rating Scale (TEStRS) for students. The 34 items are divided into three subscales in both scales; namely instructor's delivery of course information, teacher's role in facilitating instructor/ student interactions, and instructor's role in regulating students' learning. and the reliability coefficients for the overall TESRS is $r=.93$; while the overall reliability coefficient for TEStRS is $r=.94$. The higher score indicates higher TE.

Value in Action Inventory of Strengths (VIA-IS)

Peterson and Park (2009) developed VIA-IS, a five-point Likert scale with 240 items representing 24 subscales (10 items per strength). The mean correlation across the 24 scales between VIA and IS-R and VIA-IS-P was 0.92 (Niemi & McGrath, 2019). The mean reliability across the 24 scales of the VIA-IS-P was 0.77.

The Teachers' Sense of Self-Efficacy Scale (short form)

This 12 items scale was developed by Tschannen-Moran and Hoy in 2001, measuring domains of efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management having a 9 point-Likert scale. The alpha reliability coefficient of the overall scale is $r=.87$, and for the subscales are $r=.74$, $r=.71$ and $r=.70$ respectively.

Results and Discussion

Before data analysis a category of StR was computed after taking the average of the three ratings of students on a single teacher.

TSE mediating the relationship of CS and TE (SR & StR)

The predicting role of CS on TE would be extended in mediation analysis where the significant predicting CS would be the independent variables (IV), TE (SR & StR) be the dependent variable (DV) and TSE the mediator (M) by following the Preacher and Haey's (2008) indirect bootstrap method supported by Haey's, (2009) and Mallinckrodt, Abraham, Wei and Russell (2006). Furthermore, the significance of the mediation analysis was analyzed by a) looking at the zero which should not lie within the Bias Corrected Confidence Interval (BCCI; Field, 2013) b) the value of Sobel test c) Kappa square (Preacher & Kelly, 2011). The results are given in Table 1.

Table 1
Mediation analysis showing the role of CS on TE in the presence of TSE

	Effect of IV on M	Effect of M on DV	Total effect	Direct effect	BIE	BCCI	Sobel Z	K ²
<i>Strengths of knowledge and wisdom</i>								
Curiosity → TSE → TE (SR)	1.04**	.52**	1.64**	1.10**	.55	[.35,.76]	5.85**	.19
OM → TSE → TE (SR)	.86**	.54**	1.68**	1.22**	.46	[.29,.65]	5.34**	.17
LOL → TSE → TE (StR)	.77**	.22**	.53**	.36*	.17	[.02,.33]	2.55**	.06
<i>Strengths of courage</i>								
Vitality → TSE → TE (SR)	1.10**	.56**	1.49**	.88**	.61	[.44,.84]	6.08**	.20
Persistence → TSE → TE (SR)	.98**	.56**	1.61**	1.07**	.54	[.36,.75]	5.60**	.18
Integrity → TSE → TE (SR)	.95**	.57**	1.63**	1.10**	.54	[.32,.78]	5.38**	.17
Vitality → TSE → TE (StR)	1.10**	.21**	.61**	.37	.24	[.02,.47]	2.45**	.07
<i>Strengths of humanity</i>								
Kindness → TSE → TE (SR)	1.08**	.56**	1.64**	1.04**	.60	[.44,.81]	5.79**	.19
SI → TSE → TE (SR)	.97**	.57**	1.42**	.86**	.55	[.37,.78]	5.82**	.19
Kindness → TSE → TE (StR)	1.08**	.20*	.77**	.56**	.21	[.03,.46]	2.31*	.06
<i>Strengths of Justice</i>								
Leadership → TSE → TE (SR)	1.21**	.51**	1.67**	1.04**	.63	[.44,.86]	6.05**	.19
Citizenship → TSE → TE (SR)	1.11**	.54**	1.76**	1.16**	.60	[.43,.80]	5.77**	.18
Leadership → TSE → TE (StR)	1.21***	.19**	.67***	.43*	.24	[.03,.50]	2.27*	.06
<i>Strengths of temperance</i>								
Humility → TSE → TE (SR)	1.07**	.55**	1.64**	1.05**	.59	[.40,.80]	5.82**	.19
Prudence → TSE → TE (SR)	1.05**	.55**	1.59**	1.01**	.58	[.40,.80]	5.84**	.19
Humility → TSE → TE (SR)	1.07**	.16*	.95**	.78**	.17	[-.03,.40]	1.89	.05
<i>Strengths of transcendence</i>								

Spirituality→ TSE→ TE (SR)	1.05**	.55**	1.64**	1.06**	.57	[.40,,80]	5.76**	.18
Hope→ TSE→ TE (SR)	1.00**	.55**	1.62**	1.07**	.55	[.38,,78]	5.63**	.18
Gratitude→ TSE→ TE(SR)	.99**	.56**	1.62**	1.06**	.55	[.37,,75]	5.38**	.18
Spirituality→ TSE→ TE(StR)	1.05**	.18*	.83**	.65**	.19	[.01,,40]	.19*	.05

TE(SR)=teaching effectiveness self-rating, TE(StR)= Teaching effectiveness student's rating, IV= independent variable, DV=dependent variable, M=mediator, BIE=Bootstrap indirect effect, BCCI= Biased corrected confidence interval K²=Kappa Square, OM=open-mindedness, LOL= love of learning, SI=Social intelligence

The current research was aimed to find out the relationship of CS of the secondary school teachers with their TE and TSE as a mediator. The above-mentioned table is showing that TSE is mediating the relationship of, vitality, kindness and spirituality and TE (SR & StR), the relationship of curiosity, open-mindedness, persistence, integrity, kindness, social intelligence, citizenship, hope and gratitude and TE (SR) and the relationship of love of learning and TE (StR) and not mediating the relationship of humility and TE (SR).

Overall, the results indicated that TE (SR & StR) has a positive relationship with CS except for strengths of perspective and bravery with TE students' ratings (supports the Fredrickson's, 2004 "broaden and build" theory) and TSE (Fisler & Firestone, 2006; Onafowora, 2005; Yeh, 2006) while CS and TSE also have a significant positive relationship; hence strengthening the relationship between the predictor and mediator (Goddard & Goddard, 2001; Henson & Chambers, 2003; Yeh, 2006).

Moreover, TE (SR & StR) have a positive relationship with strengths of courage of the teachers i.e. bravery, persistence, integrity and vitality and TSE mediated the role between them as well. The literature supports the overall relationship of strengths of courage (persistence, integrity & vitality) and TE (Elizabeth, May & Chee, 2008; Faull, 2008; Gurney, 2007). Therefore, current research revealed TSE mediates the relationship between these strengths and TE. Prior literature supports the current findings (Faull, 2008; Gurney, 2007; McBer, 2000). However, the strength of bravery has no significant relationship with TE (StR) as the teachers who follow the traditional rules and standards of educational board and don't go against the odds are generally perceived as effective and not act bravely.

Furthermore, there is a positive relationship of TE of (SR & StR) and strengths of humanity i.e. love, kindness, and social intelligence of teachers and TSE (except for love; Faull, 2008; Park & Peterson, 2009). Additionally, persistence (Gurney, 2007) and integrity (Faull, 2008) tend to be the predictor of TE (SR) as it has been generally observed that these three CS are required for professional success across different occupations and supports their prediction. From the strengths of humanity kindness is the strongest predictor of TE in both ratings which is already evident in the literature (Faull, 2008) and social intelligence of teachers predicted TE (SR).

Birknerová, Frankovský and Zbihlejšová (2013) have found social intelligence as the predictor of teachers' success while the perception of love is culturally different in the current context particularly in teacher-student relationship which justifies its unpredictability. Furthermore, hope and gratitude are the predictors of TE (SR). Where George and Visvam (2013) has shown a positive relationship of TE and spiritual intelligence and Malik (2013) had seen a positive relationship of hope and job performance and Engel, Westman & Heller (2011) has seen a positive association of gratitude, life satisfaction and job performance and these findings justifies their relationship with TE. Therefore, strengths of curiosity, persistence, citizenship, open-mindedness, integrity, social intelligence, prudence, hope, gratitude and love of

learning are important for TE as they positively predicted TE and were also mediated by TSE.

Furthermore, these findings are supported by the theory of broaden and build by Fredrickson (2004) that positive emotions positively enhance life satisfaction and in the long run, the job performance as well (Engel, Westman & Heller, 2011). Furthermore, Duckworth, Patrick, Quinnb, and Seligman (2009) reported that positive personality traits lead to effective teaching which are in detailed supported by the current research.

In addition to that, between the strengths of knowledge and wisdom, curiosity predicted TE (SR). As a construct it has found that learning process in triggered by curiosity (Demirel & Coşkun, 2009) which turns out to have significant positive effect on the spontaneous learning and development of the students (Demirel & Coşkun, 2009; Kashdan & Roberts, 2004). Moreover, open minded appeared to be the second strongest predictor of TE (SR) which is evident by Musella (1969) that those teachers who rate themselves as open-minded are rated as more effective by their supervisor than those who rate themselves as close minded. Lastly love of learning predicted TE (StR) as students see their effective teacher as a motivational leader when the teacher encourages them to be responsible for their own learning (Fisher, 2003)

Furthermore, the results had revealed that TSE had mediated the relationship of the strengths of vitality, kindness, leadership, spirituality (in both ratings) curiosity, open-mindedness, persistence, integrity, social intelligence, citizenship, humility, prudence, hope, gratitude (SR), love of learning (StR) had a positive relationship and TE (except for humility in StR). These findings can be justified as the TSE has proved to be powerfully related to many meaningful educational outcomes such as teachers' persistence, enthusiasm, commitment and instructional behavior (Tschannen-Moran & Hoy, 2001). So, it shows that TSE is related with TE and is also related with the CS of the teachers and also enhances their relationship when as mediator is induced. Hence, it was proved earlier that CS of the teachers (Goddard & Goddard, 2001; Yeh, 2006) and TE (Onafowora, 2005; Yeh, 2006). Besides TSE mediates the relationship of job satisfaction and students' academic achievement (Caprara, Barbarenelli, Steca & Malone, 2006) whereas teachers' job satisfaction is positively related to CS (Harzer & Ruch, 2012) and students' academic achievement is positively related to TE (Darling-Hammond, 2000) hence based on this relationship the mediating role of TSE is justified in the current sample.

As it had been seen there is a difference between the SR and StR but they do not contradict each other although they contributes which was supported by Barnett, Mathews and Jackson (2003) who had not seen overall differences between the scores of self-evaluation and the scores of students' evaluation. Although the main purpose of taking multiple ratings was to eliminate the biasness of evaluation and common method variance and to get a comparative rating (Cashin, 1990).

Conclusion

From the above discussion it can be concluded that overall, there is a positive relationship between TE and the CS of the teachers. Strengths of curiosity, persistence, citizenship, open-mindedness, integrity, social intelligence, prudence, hope, gratitude and love of learning are important for TE as they positively predicted TE and were also mediated by TSE (except for humility in StR).

Recommendations

After the conduction of this research, it has been concluded that with some future suggestion this research can be extended when CS of different levels of teachers like pre-school, primary, middle and secondary school teachers should be compared with respect to their effectiveness and subject specialization.

As VIA-IS is a foreign scale although it can be universally used but its factor structure should be checked with a large sample and the translations of all the instruments should be done in Urdu language so a large sample of the population can be contacted.

The current research had studied a pool of CS in relation to TE and TSE and had quantitatively provided the predictor of the TE while testing a larger pool of strengths which was not done before and providing a foundation of those CS which should be inculcated in the teachers through trainings to increase their effectiveness and should be seen at the time of their requirement. It fills the indigenous literature gap and offers a beginning for collaborative research in the field of positive and educational psychology and encourages seeing the applications of one field into other fields. It also provides a basis of direction for the relationship of VIA-classification of strengths with the other professions and gives indigenous scales for the measurement of TE which can be used in future research.

References

- Barile, J.P., Donohue, D.K., Anthony, E.R. et al (2012). Teacher-student relationship climate and school outcomes: Implications for educational policy initiatives. *Journal of Youth and Adolescence* 41, 256-267. <https://doi.org/10.1007/s10964-011-9652-8>
- Barnett, C. W., Matthews, H. W., & Jackson, R. A. (2003). RESEARCH ARTICLES A Comparison Between Student Ratings and Faculty Self-ratings of Instructional Effectiveness. *American Journal of Pharmaceutical Education*, 67(4), 117.
- Berk, A. R., (2005). Survey of 12 strategies to measure teaching effectiveness. *International Journal of Teaching and Learning in Higher Education* ,17(1), 48-62.
- Birknerová, P. Z., Frankovský, M., & Zbihlejšová, M. L. (2103). Social Intelligence in the Context of Personality Traits of Teachers. *American International Journal of Contemporary Research*, 3 (7), 11-17.
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, 44(6), 473-490.
- Cashin, W. E. (1990). Students do rate different academic fields differently. *New Directions for Teaching and Learning*, (43), 113-121.
- Çelikten, M., Şanal, M., & Yeni, Y. (2005). Teaching job and its' characteristics. *Social Sciences Institute Journal*, 19, 207-237.
- Curtis, A., & Cheng, L. (2001). Teachers' self-evaluation of knowledge, skills and personality characteristics needed to manage change. *Asia-Pacific Journal of Teacher Education*, 29(2), 139-152.
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51(3), 166-173.
- Demirel, M. ve Coşkun, Y. D. (2009). Üniversite Öğrencilerinin Meraklılık Düzeylerinin Bazı Değişkenler Açısından İncelenmesi. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, Yıl 9, Sayı 18, Aralık 2009, 111-134.
- DSM, American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: author.
- Duckworth A.L., Patrick D., Quinnb & Seligman, M.E.P. (2009). Positive predictors of teacher effectiveness. *The Journal of Positive Psychology*, 4 (6), 540-547.
- Elizabeth, C. L., May, C.M., & Chee, P.K., (2008). Building a model to define the concept of teacher success in Hong Kong. *Teacher and Teacher Education*, 24, 623-634.
- Engel, R.H., Westman, M & Heller, D. (2011). Character strengths, employee well-being, and performance: a field experiment. *Working Paper No 8*.
- Enochs, L. G., Smith, P. L., & Huinker, D. (2000). Establishing factorial validity of the mathematics teaching efficacy beliefs instrument. *School Science and Mathematics*, 100(4), 194-202.

- Faull, G. A. (2008). Exceptional teachers: A case study that emphasizes dispositions when differentiating between illnesses. *Journal of Positive Psychology, 1*, 17-26.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- Fisher, J. (2003). Surface and deep approaches to business ethics. *Leadership & Organization Development Journal, 24*(2), 96-101.
- Fisler, J., & Firestone, W. (2006). Teacher learning in a school-university partnership: Exploring the role of social trust and teaching efficacy beliefs. *The Teachers College Record, 108*(6), 1155-1185.
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions-Royal Society of London Series B Biological Sciences, 1367-1378*.
- Gao, M., & Liu, Q. (2013). Personality traits of effective teachers represented in the narratives of American and Chinese preservice teachers: A cross-cultural comparison. *International Journal of Humanities and Social Science, 3*(2), 84-95.
- George, R. M. & Visvam, S. (2013). Spiritual intelligence, its correlation with teacher effectiveness and academic achievement- a study. *International Journal of Education & Psychological Research, 2* (2), 107-110.
- Goddard, R. D., & Goddard, Y. L. (2001). A multilevel analysis of the relationship between teachers and collective efficacy in urban schools. *Teaching and Teacher Education, 17*(7), 807-818.
- Gradisek, P. (2012). Character strengths and life satisfaction of Slovenian in-service and pre-service teachers. *CEPS Journal, 2*(3), 167-180.
- Granziera, H., Perera, H. N. (2019). Relations among teachers' self-efficacy beliefs, engagement, and work satisfaction: A social cognitive view. *Educational Psychology, 58*, 75-8
- Gurney, P. (2007). Five factors for effective teaching. *New Zealand Journal of Teachers' Work, 4*(2), 89-98.
- Hanif, R. (2004). Teacher stress, job performance, and self-efficacy of woman school teachers. Unpublished Thesis, National Instituted of Psychology, Quid-i-Azam University, Islamabad.
- Harzer, C., & Ruch, W. (2012). When the job is a calling: The role of applying one's signature strengths at work. *The Journal of Positive Psychology, 7*(5), 362-371.
- Heineke, A. J., Ryan, A. M., & Tocci, C. (2015). Teaching, learning, and leading: Preparing teachers as educational policy actors. *Journal of Teacher Education, 66*(4), 382-394. <https://doi.org/10.1177/0022487115592031>
- Henson, R. K., & Chambers, S. M. (2003). Personality type as a predictor of teaching efficacy and classroom control in emergency certification teachers. *Education, 124*(2), 261-268.

- Ingersoll, R., Merrill, L., & May, H. (2014). What are the effects of teacher education and preparation on beginning teacher attrition? (Research Report [#RR-82]). Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.
- Kahyaoğlu, M. (2009). Perspectives, Readiness and Self-efficacy of Pre-service Teachers Related to Teaching Environmental Problems in The Context of Science and Technology Education. *Mehmet Akif Ersoy University Journal of Faculty of Education*, 9(17), 28-40.
- Bachik, M. A. K., Carey, G., & Craighead, W. E. (2020). VIA character strengths among U.S. college students and their associations with happiness, well-being, resiliency, academic success, and psychopathology. *The Journal of Positive Psychology*, 16(4), 512-525. <https://doi.org/10.1080/17439760.2020.1752785>
- Kashdan, T. B., & Roberts, J. E. (2004). Social anxiety's impact on affect, curiosity, and social self-efficacy during a high self-focus social threat situation. *Cognitive Therapy and Research*, 28(1), 119-141.
- Kim, L. E., Jörg, V., & Klassen, R. M. (2019). A meta-analysis of the effects of teacher personality on teacher effectiveness and burnout. *Educational Psychology Review*, 31(1), 163-195. <https://doi.org/10.1007/s10648-018-9458-2>
- Klassen, R. & Chiu, M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102. 741-756. [10.1037/a0019237](https://doi.org/10.1037/a0019237).
- Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology*, 105(3), 805-820. <https://doi.org/10.1037/a0032583>
- Kyriacou, C. (2009). *Effective teaching; theory and practice*. Nelson Thornes Ltd, United Kingdom.
- Lounsbury, J. W., Fisher, L.A., Levy, J.J. & Welsh, D.B. (2009). An investigation of character strengths in relation to the academic success of college students. *Individual Differences Research*, 7(1), 52-69.
- Malik, A. (2013). Efficacy, hope, optimism and resilience at workplace-positive organizational behavior. *International Journal of Scientific and Research Publications*, 434.
- Mallinckrodt, B., Abraham, W. T., Wei, M., & Russell, D. W. (2006). Advances in testing the statistical significance of mediation effects. *Journal of Counseling Psychology*, 53(3), 372.
- McBer, H. (2000). A model of teacher effectiveness. *Department for Education and Employment. Recuperado el*, 15, 01-06.
- McLennan, Brad & McIlveen, Peter & Perera, Harsha. (2017). Pre-service teachers' self-efficacy mediates the relationship between career adaptability and career optimism. *Teaching and Teacher Education*, 63. [10.1016/j.tate.2016.12.022](https://doi.org/10.1016/j.tate.2016.12.022).

- Muijs, D., Kyriakides, L., van der Werf, G., Creemers, B., Timperley, H., & Earl, L. (2014). State of the art - teacher effectiveness and professional learning. *School Effectiveness and School Improvement*, 25(2), 231-256. <https://doi.org/10.1080/09243453.2014.885451>.
- Musella, D. (1969). Perceptual-cognitive style as related to self-evaluation and supervisor rating by student teachers. *The Journal of Experimental Educational*, 51-55.
- Niemiec, R. M. (in press). VIA character strengths - research and practice: The first 10 years of adolescents. In A. Delle Fave (Ed.), *Cross cultural advancements in positive psychology*. Springer. (Vol. 2, pp. 1-27). Greenwich, CT: Information Age.
- Onafowora, L. L. (2005). Teacher Efficacy Issues in the Practice of Novice Teachers. *Educational Research Quarterly*, 28(4), 34-43.
- Park, N., & Peterson, C. (2009). Character strengths: Research and practice. *Journal of College and Character*, 10(4).
- Peterson, C. & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, D.C.: American Psychological Association.
- Peterson, C. (2006). *A premier in positive psychology*. Oxford University Press.
- Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M. E. (2007). Strengths of character, orientations to happiness, and life satisfaction. *The Journal of Positive Psychology*, 2(3), 149-156.
- Peterson, C., Stephens, J. P., Park, N., Lee, F., & Seligman, M.E.P. (2010). Strengths of character and work. In P. A. Linley, S. Harrington, & N. Page (Eds.), *Oxford handbook of positive psychology and work*. (pp. 221-231). New York: Oxford University Press.
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: quantitative strategies for communicating indirect effects. *Psychological Methods*, 16(2), 93.
- Rashidi, N. & Moghadam, M. (2014). The effect of teachers' beliefs and sense of self-efficacy on Iranian Efl learners' satisfaction and academic achievement.
- Seldin, P. (1999). Self-evaluation: What works? What doesn't? In P. Seldin & Associates (Eds.), *Changing practices in evaluating teaching: A practical guide to improved faculty performance and promotion/tenure decisions*, 97-115. Bolton, MA: Anker.
- Tamblyn, P. (2000). Qualities of Success: Lessons from a Teaching Career. *Education Canada*, 40(1), 16-19.
- Toropova, A., Myrberg, E., & Johansson, S. (2020). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review*, 73(1), 71-97. <https://doi.org/10.1080/00131911.2019.1705247>
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.
- Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248.

- Wong P. T. P. (2011). Positive psychology 2.0: Towards a balanced interactive model of the good life. *Can. Psychol.*, 52 69–81. 10.1037/a0022511
- Yeh, Y. C. (2006). The interactive effects of personal traits and guided practices on preservice teachers' changes in personal teaching efficacy. *British Journal of Educational Technology*, 37(4), 513-526.
- Zee, M. & Koomen, H. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research*, 86. 10.3102/0034654315626801.
- Niemiec, R. M., & McGrath, R. E. (2019). *The power of character strengths: Appreciate and ignite your positive personality*. Cincinnati, OH: VIA Institute on Character.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420.