# Beyond the Grades: Measuring Teacher's Efficacy for the Psychosocial Grooming of Students

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## ABSTRACT

The true spirit of education involves psychosocial grooming and character building of learners. Teacher's efficacy plays a vital role in achieving educational objectives. The effectiveness of teachers is usually evaluated through the academic grades of their students. Teacher's efficacy, however, is originally the ability of a teacher to improve the cognitive functioning and humanistic values of students. The current study developed and validated a new scale entitled the Qualiquant Teacher's Efficacy Scale (QTES) by involving 147 teachers and 59 students. The sample was selected thru a mixed method that involved convenient and purposive sampling techniques. QTES reflected strong validity and excellent reliability thru exploratory factor analysis, Cronbach's alpha, item-scale, and item-total correlations. QTES is a unique measure for teacher's efficacy because it defines teacher's efficacy through cognitive functioning and humanistic values, offers two parallel and separate versions for teachers and students, and quantifies the qualitative data.

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# INTRODUCTION

Teacher's efficacy is the perception of a teacher about his capabilities which intend to bring the desired outcomes in learning and student engagement (Cakiroglu, 2008). The process of education is imparted by teachers. Teachers serve as the drivers for education. Teachers are the most dedicated and respectful factors of human society (Kadioglu Ates & Kadioglu, 2018). UNESCO defines teacher as a person who is inquisitive, passionate, outgoing, loveable and comprehensive about his pupils, i.e. a complete person from the inside (Ansari & Malik, 2013). Four prototypes that depict an ideal teacher are acculturation (having broad knowledge with the ability to transmit), socialization (spreading and maintaining social norms and order), individualization (mentoring each student), and expertise in his discipline (Arnon & Reichel, 2007). Having a certificate or a degree does not necessarily represent the effectiveness of a teacher in raising students (Kane et al., 2008). It is the effective actions of a teacher which can make a positive impact on a student's life (Gourneau, 2005). Every teacher cannot fit in a complete role of a teachers as a mentor. Some teachers are not thoughtful to create a close relationship with students and nurture them, and some are not capable and willing to mask the role of a teacher (Zachary, 2002).

To understand the construct of teacher's efficacy, the objectives of education must also be understood against which a teacher's efficacy should be measured i.e. what targets a teacher must achieve in order to be efficient. Education is a lifelong process of learning (Kadioglu Ates & Kadioglu, 2018). Philosophers and educationists have been suggesting several core objectives of education throughout the history. These objectives mostly include discovering truth, forming positive attitudes, developing a desired personality, enhancing intellect, realizing one's potentials, being able for judgment and action, getting wise and respectful learning, being able to practice knowledge in practical situations, bringing positive change in life, developing hope for future, being able to help others, achieving the physical and spiritual goals of life, getting ready for social roles, preserving the already established customs, abolishing social evils, ensuring progress in the economy, establishing public goods, bringing a positive change in the society, and refining the society (Beckett, 2013; Eisele, 1980; Horne, 1912; Imamuddin et al., 2020; Moran, 2018; Thangeda et al., 2016; Yogi, 2008).

Teacher's efficacy positively effects teacher's performance (Cakiroglu, 2008). The effectiveness of teachers is usually regarded only through the academic growth of students (Stronge et al., 2011). The effectiveness of a teacher, however, involves several psychosocial aspects beyond the academic grades of students. An effective teacher must possess some personal qualities (Bozkus & Tastan, 2016) which enable him to feel and behave as a mentor (Zachary, 2002), a pedagogue, an educator, an evaluator, a guardian, an advisor, an innovator, a worker, a molder of minds, a civil servant (Kyridis et al., 2014), a counsellor, a therapist or even a parent (Mbuva, 2017) who makes the students independent and self-regulated learners (Ansari & Malik, 2013; Liston et al., 2008) by using a variety of methods and strategies (Bozkus & Tastan, 2016). Moreover, the effective teacher changes himself according to new situations and always looks forward to his personal and professional growth as well (Bozkus & Tastan, 2016; Dewar, 2002; Minor et al., 2002).

Behavioral theories suggest that a teacher should be able to identify and arrange cues and conditions with no initial triggering power and should enable the students to gain reinforcement (Ertmer & Newby, 2013). Cognitivism proposes that it is the duty of a teacher to acknowledge difference in prior experiences of learners to frame effective practices which shall help in efficient assimilation, accommodation, and organization of the new information by learner (Ertmer & Newby, 2013). According to the constructivist pedagogy, the new teachers are being asked to play the role to actively engage students and use their ideas to help them create more accurate understanding rather than just being a dispenser of knowledge (Holt-Reynolds, 2000). It also suggests that a teacher should teach construction of the meaning and its effective monitoring, evaluation, and upgradation by strategizing practices for the learner to experience the authentic and relevant context (Ertmer & Newby, 2013).

Earlier researchers have tried to measure teacher's efficacy by applying different theoretical grounds. Teacher Self Efficacy Scale, developed by Bandura, was a self-respondent scale

for teachers to measure their efficacy in teaching. The scale looked into seven factors i.e. efficacy to influence decision making, efficacy to influence school resources, instructional efficacy, disciplinary efficacy, efficacy to enlist parental involvement, efficacy to enlist community involvement, and efficacy to create positive school environment (Hoy, 2000). Teacher Effectiveness Scale in Higher Education (Calaguas, 2012) and Evaluation of Teaching Competencies Scale (Catano et al., 2011) intend to measure teacher's effectiveness through students' responses. Self-Assessment Instrument for Teacher Evaluation (Akram & Zepeda, 2016) is a self-assessment scale for teachers and measures teacher's efficacy through five standards of teacher effectiveness i.e. subject matter knowledge, instructional planning and strategies, assessment, learning environment and effective communication. Standard Performance Continuum (Doherty et al., 2002) observes and assesses performance of teachers on five standards which are joint productive activity, language and literacy development, contextualization, challenging activities, and instructional conversation. Efficacy Scale for Teachers (Bituin & Dacanay, 2018) assesses if a basic education teacher of elementary and high school level considers himself competent to execute behavior for the desired outcome. Teacher Self Efficacy Scale (De Paul, 2012) measures seven dimensions i.e. community environment efficacy, school environment efficacy, classroom environment efficacy, problem solving efficacy, linkage efficacy, role model efficacy, and coping efficacy. Teacher's Job Performance Scale (Hanif & Pervez, 2004) evaluates teacher's performance at workplace and can also be used to identify their strengths, weaknesses, performance at individual and organizational level.

The rationale and uniqueness of the current study is the addition of humanistic values (respect, sympathy, honesty, tolerance, courage, gratitude, humor, social intelligence, & happiness) besides the cognitive abilities (motivation, attention, intelligence, communication, memory, & creativity) in measuring teacher's efficacy. The current study developed and validated a new scale in this regard which was labeled 'Qualiquant Teacher's Efficacy Scale – QTES'. The QTES is a unique measure for teacher's efficacy because it defines teacher's efficacy through cognitive functioning and humanistic values, offers two parallel and separate versions for teachers and students, and quantifies the qualitative data.

## METHOD

The current study developed and validated a new scale to measure the humanistic and cognitive dimensions of teacher's efficacy. This process involved item-construction and measuring the accuracy, adequacy, reliability, validity, and factor structure of the scale.

### PARTICIPANTS

The study involved 206 participants from Pakistan. Among them, 147 were teachers and 59 were students. The teachers included 34 male teachers, 113 female teachers, 77 teaching in schools, 30 teaching in colleges, 40 teaching in universities, 91 teaching in public sector, and 56 teaching in private sector. Their age ranged between 22 to 56 years with a mean of 32 years. The educational qualification of the teachers ranged from 14 years of education to PhD with a mean educational qualification of 16 years education i.e. Masters in a subject. The students were all unmarried, included 40 males, 19 females, 10 studying in colleges, 49 studying in universities, 31 studying in public sector, and 28 studying in private sector. Their age ranged between 16 to 27 years with a mean of 22 years. All the students had acquired 14 years of education and were enrolled in different Master level programs. The teachers and the students both were included in the study based on convenient sampling technique.

### INSTRUMENT

A new scale (Qualiquant Teacher's Efficacy Scale – QTES) was developed and validated in the current study. The QTES comprised of 30 items and 2 versions i.e. the teacher's version and the student's version. Each version had 15 items in English. Each item was related to a cognitive functioning (motivation, attention, intelligence, communication, memory, & creativity) or a humanistic value (respect, sympathy, honesty, tolerance, courage, gratitude, humor, social

## PROCEDURE

The researchers approached the participants of the study individually while visiting different educational institutions in Islamabad, Pakistan. The participants were informed about the purpose of the study and their consent to participate in the study was appropriately taken. They were assured for the confidentiality of the data and were thanked for their participation. All the procedures performed in this study were in accordance with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

## ANALYSIS

The data gathered was recorded in the Statistical Package for Social Sciences. It was cleaned by analyzing missing values, unengaged responses, outliers, linearity, homoscedasticity, multicollinearity, skewness, and kurtosis. Exploratory Factor Analysis was conducted to measure the reliability and validity of the scale. T-test was applied to measure the differences between teachers and students.

# RESULTS

## DEVELOPMENT OF THE SCALE

The objective of the current study was to develop a new scale to measure teacher's efficacy to analyze the role of a teacher in character building and psychosocial grooming of the students. After reviewing plenty of earlier literature on educational objectives and the desired characteristics of a teacher as discussed above, the efficacy of a teacher in the current study was defined as a teacher's ability to improve students' cognitive functioning and humanistic values. The cognitive functioning includes motivation, attention, intelligence, communication, memory, and creativity. The humanistic values include respect, sympathy, honesty, tolerance, courage, gratitude, humor, social intelligence, and happiness. These cognitive abilities and humanistic values can be regarded as the crux which the researchers retrieved from several educational theories, as discussed earlier. The scale to be developed in this regard was aimed to have two unique features which were not incorporated in the earlier scales measuring teacher's efficacy.  The first unique feature of the scale was to develop two parallel versions of the same scale i.e. a teacher's version and a student's version. This feature was aimed at providing more valid measurement of a teacher's efficacy by taking opinions of the teacher and the students both, at the same time.  The second unique feature of the scale was to develop such a scale which could gather initial data in qualitative form and could later be able to quantify it in a pure statistical fashion. The second feature, like the first one, also intended to get a more valid measurement of a teacher's efficacy. The scale was thought to reveal more valid information about teacher's efficacy by applying these unique features.

## VALIDATION OF THE SCALE

Exploratory Factor Analysis was conducted for the three possible dimensions of the scale i.e. the combined version, the teacher's version, and the student's version. Principal Component Analysis was employed for extraction. The Rotation Method was Varimax.

Sampling adequacy, by using Kaiser-Meyer-Olkin's values (Kaiser, 1974) was found marvelous for the combined (Table 1; KMO = .958) and the teacher's version (Table 1; KMO = .949) and meritorious for the student's version (Table 1; KMO = .898).  Bartlett's test of sphericity (Bartlett, 1950) was used to analyze the adequacy of correlations between items and was found highly significant for all the three versions (Table 1; $p$ = .000). Variance explained for the combined version was 75.54% (Table 1).  It was 72.34% for the teacher's version and 71.73% for the student's version.

The Cronbach's Alpha reliability for the combined version (Table 2; α = 0.962), the teacher's version (Table 2; α = 0.955) and the student's version (Table 2; α = 0.946) was excellent. The Cronbach's Alpha reliability for the sub-scales (cognitive & moral) of all the three versions ranged between 0.895 to 0.960 (Table 2).

| SCALE | N | α | KMO | BTS | COMPONENTS EXTRACTED | VARIANCE EXPLAINED (%) |
|---|---|---|---|---|---|---|
| Both versions combined (QTES) | 15 | .962 | .958 | 2914.73* | 2 | 75.54 |
| Teacher's version (QTES -T) | 15 | .955 | .949 | 1882.53* | 2 | 72.34 |
| Student's version (QTES -S) | 15 | .946 | .898 | 764.59* | 2 | 71.73 |

**Table 1** Reliability and Data Accuracy of the Qualiquant Teacher's Efficacy Scale (QTES).

N = Number of items; *a* = Cronbach's Alpha; KMO = Kaiser-Meyer-Olkin Measure of Sample Adequacy; BTS = Bartlett's Test of Sphericity; * *p* = .000.

| VARIABLE | | | | | | RANGE | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ITEMS | α | M | SD | % | POTENTIAL | ACTUAL | SKEWNESS | KURTOSIS |
| VERSIONS COMBINED | | | | | | | | | |
| QTES | 15 | .962 | 33.21 | 20.31 | 44.28 | 0–75 | 0–75 | 0.40 | –0.76 |
| Cognitive | 6 | .922 | 17.63 | 8.46 | 58.76 | 0–30 | 0–30 | –0.26 | –0.93 |
| Moral | 9 | .960 | 15.58 | 13.24 | 34.62 | 0–45 | 0–45 | 0.69 | –0.62 |
| TEACHER'S VERSION | | | | | | | | | |
| QTES-T | 15 | .955 | 38.82 | 19.42 | 51.76 | 0–75 | 4–74 | 0.24 | –1.00 |
| Cognitive | 6 | .895 | 20.06 | 7.431 | 66.89 | 0–30 | 4–30 | –0.45 | –0.79 |
| Moral | 9 | .956 | 18.75 | 13.41 | 41.68 | 0–45 | 0–44 | 0.40 | –1.02 |
| STUDENT'S VERSION | | | | | | | | | |
| QTES-S | 15 | .946 | 19.24 | 15.19 | 25.65 | 0–75 | 0–75 | 1.04 | 1.71 |
| Cognitive | 6 | .920 | 11.56 | 7.85 | 38.53 | 0–30 | 0–30 | 0.42 | –0.34 |
| Moral | 9 | .942 | 7.68 | 8.84 | 17.06 | 0–45 | 0–45 | 1.76 | 4.46 |

**Table 2** Descriptive statistics and reliability of the Qualiquant Teacher's Efficacy Scale (N = 206; QTES-T = 147; QTES-S = 59).

α = Cronbach's Alpha; M = Mean; SD = Standard Deviation.

The factor structure of the scale reported 2 factors for all the three versions (Table 3) which were labeled as cognitive efficacy and moral efficacy. The communalities for all the items in all the three versions ranged between 0.56 to 0.83 (Table 3), thus acceptable as all were above 0.4 (Osborne et al., 2008).

The item-total and item-scale correlations were highly significant for all the items in the teacher's (Table 4) and the student's version (Table 5). The exploratory factor analysis of the scale revealed that the scale was highly reliable and valid. A visible consistency was found in the scale by evaluating it from the three dimensions i.e. the teacher's version was evaluated separately, the student's version was evaluated separately, and both the versions were evaluated in a combined form. All these evaluations established high reliability and validity of the scale.

## LEVELS OF TEACHER'S EFFICACY

The study revealed that the understudied teachers had 51.76% teacher's efficacy as perceived by the teachers themselves (Table 2). The level of teachers' efficacy was 25.65% as perceived by the students (Table 2).

This reflected a significance difference in the perception of teachers and students about teacher's efficacy (Table 6; M = 38.82, SD = 19.42 vs M = 19.24, SD = 15.19; *p* = 0.000; Cohen's *d* = 1.69). Teachers perceived teacher's efficacy on a significantly higher degree than students. In other words, students perceived teacher's efficacy significantly lower than the levels perceived by the teachers. Here came the beauty of the scale through which the researchers could be able to measure teacher's efficacy by the combined version of the two scales. The level of teacher's efficacy among the understudied teachers was, therefore, 44.28% as seen by combining the versions of teachers and students.

**Table 3** Communalities and factor structure of the Qualiquant Teacher's Efficacy Scale.

| ITEM | COMBINED VERSION | | | TEACHER'S VERSION | | | STUDENT'S VERSION | | |
|---|---|---|---|---|---|---|---|---|---|
| | EXTRACTION | COGNITIVE | MORAL | EXTRACTION | COGNITIVE | MORAL | EXTRACTION | COGNITIVE | MORAL |
| 1 | .694 | .821 | | .573 | .757 | | .728 | .834 | |
| 2 | .740 | .819 | | .674 | .786 | | .758 | .837 | |
| 3 | .797 | .828 | | .744 | .801 | | .760 | .841 | |
| 4 | .773 | .796 | | .721 | .763 | | .751 | .817 | |
| 5 | .687 | .687 | | .672 | .648 | | .694 | .790 | |
| 6 | .735 | .638 | | .730 | .603 | | .566 | .672 | |
| 7 | .725 | | .669 | .717 | | .675 | .603 | | .576 |
| 8 | .745 | | .773 | .717 | | .773 | .764 | | .720 |
| 9 | .779 | | .775 | .756 | | .815 | .713 | | .614 |
| 10 | .780 | | .816 | .776 | | .802 | .717 | | .818 |
| 11 | .792 | | .822 | .777 | | .823 | .722 | | .824 |
| 12 | .803 | | .859 | .801 | | .869 | .660 | | .769 |
| 13 | .760 | | .847 | .748 | | .850 | .742 | | .845 |
| 14 | .788 | | .844 | .747 | | .837 | .839 | | .863 |
| 15 | .734 | | .805 | .697 | | .806 | .743 | | .802 |

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization.

| ITEM NO. | ITEM | STES-T | COGNITIVE | MORAL |
|---|---|---|---|---|
| 1 | As a teacher, I perform the following activities to motivate my students toward learning | .462** | .630** | |
| 2 | As a teacher, I perform the following activities to keep my students attentive in the classroom | .650** | .800** | |
| 3 | As a teacher, I perform the following activities to improve the intelligence of my students | .722** | .870** | |
| 4 | As a teacher, I perform the following activities to improve the communicational skills of my students | .743** | .865** | |
| 5 | As a teacher, I perform the following activities to improve the memory of my students | .783** | .834** | |
| 6 | As a teacher, I perform the following activities to improve the creativity of my students | .838** | .841** | |
| 7 | As a teacher, I perform the following activities to make my students respectful toward humanity | .845** | | .823** |
| 8 | As a teacher, I perform the following activities to make my students sympathetic toward humanity | .831** | | .852** |
| 9 | As a teacher, I perform the following activities to make my students honest | .840** | | .870** |
| 10 | As a teacher, I perform the following activities to make my students tolerant | .866** | | .889** |
| 11 | As a teacher, I perform the following activities to make my students courageous | .855** | | .886** |
| 12 | As a teacher, I perform the following activities to induce gratitude in my students | .834** | | .885** |
| 13 | As a teacher, I perform the following activities to make my students humorous | .788** | | .846** |
| 14 | As a teacher, I perform the following activities to make my students socially intelligent | .811** | | .858** |
| 15 | As a teacher, I perform the following activities to enhance happiness in my students | .785** | | .831** |

**Table 4** Item-scale and item-total correlations for the Qualiquant Teacher's Efficacy Scale – Teacher's Version (QTES-T).

**. Correlation is significant at the 0.01 level (2-tailed).

| ITEM NO. | ITEM | STES-S | COGNITIVE | MORAL |
|---|---|---|---|---|
| 1 | My teachers perform the following activities to motivate me toward learning | .737** | .864** | |
| 2 | My teachers perform the following activities to keep me attentive in the classroom | .779** | .870** | |
| 3 | My teachers perform the following activities to improve the level of my intelligence | .772** | .877** | |
| 4 | My teachers perform the following activities to improve my communicational skills | .797** | .872** | |
| 5 | My teachers perform the following activities to improve my memory | .761** | .842** | |
| 6 | My teachers perform the following activities to improve my creativity | .718** | .744** | |
| 7 | My teachers perform the following activities to make me respectful toward humanity | .771** | | .785** |
| 8 | My teachers perform the following activities to make me sympathetic toward humanity | .848** | | .888** |
| 9 | My teachers perform the following activities to make me sympathetic toward humanity | .832** | | .818** |
| 10 | My teachers perform the following activities to make me tolerant | .725** | | .819** |

**Table 5** Item-scale and item-total correlations for the Qualiquant Teacher's Efficacy Scale – Student's Version (QTES-S).

**. Correlation is significant at the 0.01 level (2-tailed).

(Contd.)

| ITEM NO. | ITEM | STES-S | COGNITIVE | MORAL |
|---|---|---|---|---|
| 11 | My teachers perform the following activities to make me courageous | .720** | | .815** |
| 12 | My teachers perform the following activities to induce gratitude in me | .711** | | .794** |
| 13 | My teachers perform the following activities to make me humorous | .702** | | .818** |
| 14 | My teachers perform the following activities to make me socially intelligent | .808** | | .905** |
| 15 | My teachers perform the following activities to enhance happiness in me | .778** | | .860** |

| VARIABLE | TEACHERS (*n* = 147) | | STUDENTS (*n* = 59) | | *t*(204) | *p* | COHEN'S *d* |
|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | | | |
| Teacher's efficacy | 38.82 | 19.42 | 19.24 | 15.19 | 6.937 | .000 | 1.069 |
| Cognitive efficacy | 20.07 | 7.43 | 11.56 | 7.84 | 7.311 | .000 | 1.127 |
| Moral efficacy | 18.76 | 13.41 | 7.68 | 8.83 | 5.850 | .000 | 0.902 |

**Table 6** Differences between teachers and students on teacher's efficacy.

## DISCUSSION

The objective of the current study was to develop a new scale to measure teacher's efficacy in character building and psychosocial grooming of the students. The researchers, in the process of developing a new scale, reviewed plenty of earlier literature on educational objectives and the desired characteristics of a teacher. Based on evaluating several educational theories, the current study summarized the concept of teacher's efficacy. The efficacy of a teacher, in the current study, was defined as a teacher's ability to improve students' cognitive functioning and humanistic values. Based on the definition and features of a teacher's efficacy as discussed above, the newly developed scale (Qualiquant Teacher's Efficacy Scale – QTES) comprised of 30 items and 2 versions i.e. the teacher's version and the student's version. Each version had 15 items in English. Each item was related to a cognitive functioning (motivation, attention, intelligence, communication, memory, & creativity) or a humanistic value (respect, sympathy, honesty, tolerance, courage, gratitude, humor, social intelligence, & happiness). The development of QTES involved a panel of 5 members i.e. three PhDs in Psychology and two PhDs in Education. The panel measured the face validity of the scale. The scale developed in the current study had two unique features which were not present in the earlier scales measuring teacher's efficacy. The first unique feature of the scale was the two parallel versions of the same scale i.e. a teacher's version and a student's version. The second unique feature of the scale was quantifying the qualitative data. The scale was enabled to reveal more valid information about teacher's efficacy by applying the two aforesaid unique features. Data for each item was taken in qualitative form, which was quantified appropriately. Item 1 in the teacher's version, for example, was "as a teacher, I perform the following activities to motivate my students toward learning" under which the respondent had to write up to 5 activities he used to perform to motivate his students. The same item, in a usual quantitative scale, would have been like "as a teacher, I perform activities to motivate my students toward learning". The common response sheet to measure this item would be a 5-point Likert scale which could be manipulated by the responding teacher easily and the truthfulness of the response would not have been assured. In the scale developed in the current study, the same item was rephrased in such a way that the responding teacher was asked to write five examples of the activities he would perform to motivate his students. The five qualitative responses were then checked by the rater for being correct or incorrect i.e. correct responses would be the appropriate activities which could motivate the students toward learning and the incorrect responses would be the inappropriate activities for student motivation. The role of the rater was considered extremely important in this regard and it was agreed that the rater must

have higher educational qualification and more experience as a teacher than the responding teacher. The rater, to summarize, needed to be sufficiently senior than the responding teacher. The quantification of qualitative data has been considered an important method in social and natural sciences (Guttman, 1944). It allows us to be more effective researchers by assuring the validity, reliability, objectivity, reproducibility, consistency, and adequacy of our data (Hayashi, 1951). The scale was found highly reliable and valid during the analysis in the current study. The exploratory factor analysis (EFA) which was conducted from three different dimensions (i.e. the EFA of the Teacher's version separately, the EFA of the student's version separately, and the EFA of the combined version) established the scale to be highly reliable and valid for further use.

The findings of the current study revealed that the level of teacher's efficacy in Pakistan is just 44.28% which is quite unsatisfactory. Several global studies were intended to measure teacher's efficacy, such as in United States (Beyazkurk & Kesner, 2005; Cakiroglu, 2008; Ellett & Teddlie, 2003; Leigh & Ryan, 2008; Meng & Muñoz, 2016), China (Cheung, 2008; Grant et al., 2013; Meng & Muñoz, 2016), Turkey (Beyazkurk & Kesner, 2005), Belgium, Germany, Netherlands (van de Grift, 2014), Scotland (Cakiroglu, 2008), Nigeria (Adeyemi & Adu, 2012), etc. These studies revealed that Western teachers are more concerned with structured subject-content and the Eastern teachers are more concerned with the active involvement of the students in learning process (Fang & Gopinathan, 2009). The findings of the current study can be related to the poor educational system emplaced in the country (Husain & Faize, 2021). As discussed earlier, both learning and teaching require adequate motivation and satisfactory psychosocial health. Pakistanis, in general, have several mental health related issues (Husain, 2018; Husain, 2019; Husain, 2021; Husain & Faize, 2020; Husain, Gulzar, & Tofail, 2016) which may hinder in the cognitive processes essential for learning and teaching (Faize & Husain, 2020; Faize et al., 2018). The moral status of Pakistanis is also not splendid (Husain, 2022) due to several psychosocial factors such as poverty and corruption. Pakistani teachers, besides other professionals (Hassan & Husain, 2020; Husain, 2020), also possess severe levels of depression, anxiety, and stress (Husain, Gulzar, Aqeel, et al., 2016). Job satisfaction of the teachers is another important factor which may reduce teacher's efficacy. The infra-structure of educational institutions in Pakistan and lack of capacity building for the teachers may also contribute to the insufficient teacher's efficacy.

The current study also revealed that students view the efficacy of a teacher significantly lower than it is perceived by the teacher himself. Several researchers have gathered students' viewpoints regarding the effectiveness of a teacher. Students expect their teachers to work as trainers, have enthusiasm to teach, have creativity, keep pace and humor in class, challenge students, discover interests in students, know good grammar, be capable of on-the-spot answering, keep question-answer time at the end of a class, reflect unbiasedness and equality by leaving emotions aside, and be encouraging (Miller, 2012). Teacher's personality traits such as external appearance, kindness, friendliness (Kyridis et al., 2014), and respect for students (Rusu et al., 2012) are also considered important by students. The findings of the current study, apart from the usage of the newly developed scale, would sensitize the stakeholders to analyze the levels of teachers' efficacy in the country more deeply and plan for the improvements required.

## LIMITATIONS AND SUGGESTIONS

Since the QTES is a unique scale with two unique features as discussed above, the current paper reflects the initial psychometric properties of QTES. The current study involved the exploratory factor analysis only and did not establish the convergent and discriminant validity of QTES. Although the purpose of a confirmatory factor analysis was covered while re-testing QTES on students after the teachers, another confirmatory factor analysis would also be of great help to establish the psychometric properties of the scale. Future researchers are encouraged to address these limitations and strengthen the psychometric properties of QTES further.

## CONCLUSION

Teacher's efficacy has been generally assumed thru the grades that the students achieve. The current paper highlighted the fundamental objectives of education to sensitize how teacher's

efficacy should be measured holistically. The paper also presented the ideal characteristics of a teacher that can contribute to teacher's efficacy. Based on the compilation of earlier literature, the paper presented a new scale to measure teacher's efficacy. The newly developed and validated scale involves humanistic values (respect, sympathy, honesty, tolerance, courage, gratitude, humor, social intelligence, & happiness) as well as the cognitive abilities (motivation, attention, intelligence, communication, memory, & creativity) in measuring teacher's efficacy. The scale offers two parallel and separate versions for teachers and students. The scale will surely be helpful for future researchers, teachers, educational management, and policy makers in evaluating teachers' performance from a holistic perspective of education. This evaluation will also sensitize the stakeholders in focusing more on the humanistic values and character building of students, apart from measuring educational achievements thru academic grades alone.

## ORIGINALITY

The authors state that the current study is original and has not been submitted anywhere else.

## DATA ACCESSIBILITY STATEMENT

The data associated with this paper can be presented on demand.

## ETHICS AND CONSENT

All the procedures performed in this study were in accordance with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

## COMPETING INTERESTS

The authors have no competing interests to declare.

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