ABSTRACT

Professions are distinct from other kinds of occupations by the degree of expertise and complexity involved in the work itself. Teaching is one such profession where educators, as professionals, are proficient in their activities and primarily improve students’ learning opportunities continuously. Research finds that educators’ characteristics have a significant role to play in student achievement, either directly or indirectly. Another attribute of educators found to play a significant role in student achievement, was teacher efficacy, which is defined as ‘the extent to which the teacher believes he or she has the capacity to affect student performance’. As the impact of an extensive set of professional characteristics on teacher efficacy was lacking, the research explored identifying a comprehensive set of professional characteristics of educators and whether there was any significant relationship between the professional characteristics identified and teacher efficacy.

The professional characteristics identified were subject knowledge (SK), teaching prowess (TP), updating knowledge (UK), collegiality (COL), teacher - student relationship (TSR), commitment (CMT), empowerment (EMP), self development (SD) and remuneration (REM) from literature review.

Methodology involved model validation, instrument - development and validation, data collection and appropriate analysis strategy. A model that depicts the inter-relationships between the nine constructs based on their
properties supported by literature review and their influence on teacher efficacy was developed. Subject knowledge and updating knowledge were connected to teaching prowess, collegiality and teacher student relationship were connected to commitment in the theoretical model. And finally teaching prowess, commitment, empowerment, self-development and remuneration were connected to the dependent variable teacher efficacy. Therefore teaching prowess, commitment and teacher efficacy were endogenous variables and the remaining professional characteristics were presented as exogenous variables leading towards them. The research analyzed for the impact of the various exogenous variables on the endogenous variables. The theoretical model is then estimated and validated using PLS path model.

Items generated for each construct were discussed with experts to test their content validity. The reliability was examined using Cronbach alpha supported by purification through corrected-item total correlation of each item with respect to a specific dimension of a construct. Construct validity that comprises convergent validity and discriminant validity was tested using partial least squares analysis. The factor loadings and cross loadings were analyzed for factor analysis, where it was checked if the items have loaded highly on their respective constructs. The measurement model and structural models obtained through the PLS path model were examined using the fit indices. The criterion validity and the coefficient of determination (R²) value of teacher efficacy were also found valid.

Ten percent of the four major strata in education were selected as sample and 648 valid responses that comprised of 324 arts and science
educators, 175 engineering educators, 52 management educators and 97 medical college educators were collected.

The data collected was analyzed using t test, ANOVA, correlation, multiple regression, discriminant analysis and path modeling.

Subject knowledge has been scoring the highest average and remuneration the lowest, depicting that, educators are competent in their subject knowledge content and give less importance to remuneration comparatively. There is significant difference in the male and female perception of subject knowledge, empowerment and remuneration. The characteristics profile based on designation, age and teaching experience show that educators in higher designation status and with increased experience in the teaching field are observing the characteristics significantly higher than the younger respondents. It is also found that there is variation in the perception of the characteristics among educators from various disciplines of arts and science, engineering, management and medicine. There wasn’t much difference in the perception of most of the characteristics based on industrial experience, family income and family size among the educator groups. The perception of teacher efficacy based on the demographics was similar to that of the professional characteristics.

Teacher efficacy was also found to correlate with all the characteristics with statistical significance. This is further substantiated with the multiple regression results giving an \( R^2 \) value of 47.3 \%. The items pertaining to the characteristics subject knowledge, teaching prowess, collegiality,
empowerment, self development and remuneration are found to discriminate the highly efficacious and less efficacious groups of educators. The measurement model and the structural model obtained from the path analysis were analyzed and evaluated fit. Strengthening the identified characteristics will definitely result in enriching teacher efficacy.