TEACHERS LEADERSHIP COMPETENCY AND ITS EFFECT ON JOB SATISFACTION AND STUDENT OUTCOMES IN SECONDARY SCHOOLS

By

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1. Introduction

The quality of classroom teaching, students' achievements from it and school's effectiveness are vitally affected by the effectiveness of teaching and competency of leadership qualities in teaching, which can be achieved through instruction, motivation and sharing knowledge effectively (Light, 2009). This goal can be attained through effective leadership, and though the importance of teacher leaders is globally known, teachers seldom get opportunities to develop their leadership skills in India. Therefore, teacher leadership competency should be promoted and supported for the success of any effort pertaining to education reform. Three principles, namely, growth, professional collaboration, and development form the basis for efficient teacher leadership competency (Muhammad, 2010). Teacher leadership competency acquires two chief dimensions, namely, emphasis on collaborative professional functioning and focus on enhanced learning outcomes of the developmental work. These aspects result in the incorporation of three important areas of activity, namely, "leadership of other teachers", "leadership of developmental tasks", and "leadership of pedagogy" among teacher leaders. The first area is about mentoring, coaching, and leading work groups; the second area is crucial for improved teaching and learning; and the third area is about modeling and developing of efficient teaching forms (Muijs and Harris, 2007). Further, leading educators sketched specific competencies, such as abilities, skills, and knowledge, of teacher leaders to help

them attain success. Four main pillars, namely, (1) driving initiatives, (2) leading teams, (3) coaching others, and (4) developing self, constitute the 15 competencies, which collectively constitute the competency framework of teacher leaders (Educational Leadership: Teachers as Leaders: The Many Faces of Leadership", 2017).

Apart from competency, job satisfaction is one of the significant influencers of teachers' efficiency and competency. Job satisfaction in teaching profession enables teachers to improve the quality of education resulting in students' academic achievements. Employees possess several attitudes towards their colleagues, working conditions, opportunities, terms and conditions, and salary, which results in job satisfaction. A positive relation is found between school effectiveness and teacher participation in decision-making. Another area where the intervention of the teacher leader has its positive effects is in school-level decision making. The researchers claimed that the teacher leaders influence the professional learning communities, which in turn, has its direct effect on student outcome (Katzenmeyer and Moller, 2009). Lack of redesigning of teachers' work causes students' outcome to be directly affected by teacher leadership; however, it is not yet evident. Thus, the teacher leadership competency directly and positively influences job satisfaction of the teacher, which also has a significant relationship to student outcome progress.

In this study, apart from investigating the characteristics of teacher leaders and their involvement in motivating other teachers, developmental tasks and involvement in pedagogy, the influence of teacher leadership on job satisfaction and in student outcome have also been examined. The arbitrating effects of job satisfaction on the students' outcome were investigated and the interaction of these factors with each other was considered.

2. Statement of the Problem

The Indian teachers do not have many opportunities to develop the skills for being effective in their role as leaders. The literature on teacher leadership, especially from India, reports the consistent lack of training for those who have assumed new leadership roles (Shulman, 1987). Indian teachers, though capable of understanding and applying leadership abilities, are not provided with opportunities because of the stereotypic educational processes followed here. The latest teaching methodologies, facilitating students' development, and assessment methods largely remain unexplored. The Directorate of Education (India), Government of NCT of Delhi (2005; No.PS/DE/2005/3383), while describing the role and responsibilities of teachers focuses on the routine chores of teachers, such as attending

the morning assembly daily on time, addressing the students on moral, social and environment issues, maintaining the teacher's diary regularly, etc. However, it did not contain a single mention of a teacher's role as leaders to students. This type of restricted environment that exists in India does not provide any scope for 'self-renewal' and thus do not associate leadership to teaching. The apathy and neglect largely affects the teachers and lead them to the state of dissatisfaction in a job which has a cascading effect on students' outcome. This, along with the present educational scenario of India, which is undergoing fast and insistent change and the quality of education in schools being constantly challenged by the parents, policymakers and administrators fuels the investigation about the effects of leadership abilities of teachers in Indian education system. In this context, the current study examines the effect of the teacher leadership on teacher's job satisfaction and whether it has a direct positive effect on student outcomes.

3.   Research Questions

1. Are the teachers in the Hassan district of Karnataka given the opportunity to develop teacher leadership competency?

2. How effective is the teacher leadership competency in engaging the students in their outcomes (academically and socially)?

3. Having teacher leadership competency, does it bring about a sense of satisfaction in their jobs?

4.   Objectives of the Study

1. To investigate the different measures of teacher leadership competency, job satisfaction and student outcomes.

2. To study the effect of teacher leadership competency on secondary school teachers' job satisfaction.

3. To analyze the effect of teacher leadership competency on student outcomes.

4. To explore the relationship between secondary school teachers' job satisfaction and student outcomes.

5. To examine the association between teacher leadership competency and demographic variables.

6. To study the association of demographic variables with teachers' job satisfaction.

5. Hypothesis of the study

Hypothesis 1$_0$: There is no significant relationship between the measures of teacher leadership competency, job satisfaction and student outcomes

Hypothesis 2$_0$: Teacher leadership competency does not have a significant effect on job satisfaction

Hypothesis 3$_0$: Teacher leadership competency does not have a significant effect on student outcomes.

Hypothesis 4$_0$: Job satisfaction has no significant effect on student outcomes

Hypothesis 5$_0$: There is no significant relationship between teacher leadership competency and demographic variables

Hypothesis 6$_0$: Demographic variables do not have any effect on job satisfaction of the teachers

Hypothesis 7$_0$: Teacher mentorship has no significant effect on the job satisfaction of teachers

Hypothesis 8$_0$: Leadership of developmental tasks has no significant effect on the job satisfaction of teachers

Hypothesis 9$_0$: Leadership of pedagogy has no significant effect on the job satisfaction of teachers

Hypothesis 10$_0$: Job satisfaction has no significant effect on academic outcome

Hypothesis 11$_0$: Job satisfaction has no significant effect on social outcome

Hypothesis 12$_0$: Teacher mentorship has no significant effect on academic outcome

Hypothesis 13$_0$: Teacher mentorship has no significant effect on social outcome

6. Review of Literature

6.1 Relationship between Teaching Leadership Competency and Job Satisfaction

Teachers have the paramount responsibility of imparting education to the children. Over the years, the role and expectations of teachers have altered. **Elmazi (2018)** studied the role of school leadership style on the job satisfaction of the teachers in 25 high schools located in Albania and Kosovo. The study identified that

transformational leadership style of the Principals exerted a direct impact by transferring their ideas and professionally empowering the teachers to achieve the mission of the schools, which optimistically influenced the job satisfaction of the teachers.

Schwartz (2017) explored the association between leadership competency of Principals and the extent of job satisfaction of the teachers teaching in a small school in East Tennessee consisting of strength of 9 Principals and 228 teachers. The study identified an undeviating relation between the leadership competency of the Principals and overall satisfaction of the teachers in their jobs, found to be statistically significant. The study observed that the leadership competency of the Principals involving transformation of ideas influenced the teachers' job satisfaction levels, both externally as well as internally.

Ali and Dahie (2015) investigated the effect of the different competencies of leadership on the satisfaction of the teachers regarding their jobs in secondary schools in Somalia. The investigators covered a mass of 200 teachers in the research. The study identified an optimistic influence of the different leadership competencies, such as, transformational, transactional, and non-interfering on the job satisfaction of the teachers.

Bateh and Wilton Heyliger (2014) examined the relationship between three perceived leadership competencies of academic administrators by the faculties on the job satisfaction of teachers. The core idea behind the research is the vital role played by faculties in the success of higher education institutions. The three leadership competencies as perceived by the faculties were transformational, transactional and passive leadership. The populations in the study were 567 teaching faculty and the three survey instruments used in the study were the Multifactor Leadership Questionnaire, the Spector's Job Satisfaction Survey and a brief demographic survey. The research findings suggest that the faculties were content with transformational leadership competency and showed higher levels of job satisfaction. On the contrary, faculties were dissatisfied with the passive leadership competency, but to some extent were satisfied with the transactional leadership competency. Thus, the study concluded that transformational and transactional leadership competencies increased the level of job satisfaction among faculties, resulting in higher retention rate while passive leadership competency decreased the likelihood of the faculties being satisfied with their job.

Hui et al. (2013) attempted to verify the relationship between principal's decision-making competency, their leadership competency and teachers' job satisfaction. The study was based on the context that teachers who are satisfied with the job tend to be more enthusiastic and hence, devote more time and energy in student development. Accordingly, data were collected from principals and teachers of 180 elementary schools, 172 secondary schools and 187 high schools using a questionnaire consisting of four sections- demographic details, principals' leadership competency, principal's decision making competency and lastly teachers' job satisfaction. The study revealed that a significant relationship exists between principal's leadership competency and teachers' job satisfaction. The study also emphasized on the positive influence of principals' leadership competency on their decision making competency implying that certain leadership competencies such as transformational and transactional competencies bring about certain decision making competencies such as rational, spontaneous, intuitive, and avoidant. Another distinguishing result obtained from the study was that positive relationship existed between principals' decision-making competency and teachers' job satisfaction, which was a consequence of teachers' involvement in principals' decision-making process. Thus, the study concluded that principals' decision-making competency is a critical variable that brings about effective leadership competencies and higher level of teachers' job satisfaction.

Val and Kemp (2011) examined the leadership competency that is most suitable in an outdoor environment. The aim of the study was to examine the leadership competency that best suits a large group expedition and the influence of this leadership competency on the group's dynamics. The qualitative study gathered data in three different ways: from self-diagnosis of individuals' own leadership, daily field notes by researchers and a focus group held at the end of the trip. The researchers had also made a list of the predicted and actual conflicts that may ultimately point towards the leadership competency. However, the study found that the Myers-Brigs personality test was inappropriate in determining the leadership competencies in the participants. The study further concluded that it is impossible to determine the exact leadership competency that would be more suitable for large group expedition as they are incredibly diverse and unique. Therefore, the authors suggest that it is always better to adopt a dynamic leadership competency that can bring about positive group dynamics.

6.2 Relationship between Teaching Leadership Competency and Student Outcome

Though certain studies reveal that school principals are not directly accountable for student outcome, Ross and Gray (2006) assumed that indirectly they are responsible for student outcome in terms of teacher commitment and teacher efficiency. Accordingly, they developed a model by path analysis that predicted that transformational leadership influences teachers' commitment with respect to school mission, professional community and community-school partnership. They collected data through questionnaires on various categories such as transformational leadership, collective teacher efficacy, current student outcome and prior student outcome. However, the study attempted to find the direct effect of leadership on student outcome by considering various factors and theorizing a model, the study failed to demonstrate this statistically. However, similar to other studies, this study also has found that principals who adopt the transformational leadership competency positively influence teacher beliefs about their instructional abilities and organizational commitment.

Robinson and Gray (2018) investigated how learning of the students was affected by the leadership competencies used in the school premises. The investigators used the student-centric leadership model developed by themselves to identify the parameters of the leadership practices of the teachers. The study identified an optimistic influence of the leadership activities to the learning and accomplishment of the students and encouraged the upbringing of more academic concepts based on the identified parameters of leadership competencies.

Blazar (2016) investigated the parameters of leadership competencies prevalent among teachers and their influence on the performance of students in Math from four school districts. The study identified that students' performance in Math and their classroom behavior was influenced by some elements of the leadership practices, like self-ability of the teachers and management of the classroom and organization as a whole. The researcher recommended on further developing policies to simplify the existing complexities in the leadership competencies.

Gurr (2015) developed a model for successful school leadership from the International Successful School Principalship Project (ISSPP). ISSPP has been successfully conducting research on successful principals since 2001. Gurr derived a model of successful school leadership based on the models derived from this project. He reported that successful teacher leadership could be measured using three aspects of student outcomes, namely

academic outcome, social and spiritual development. Hence, student outcome is an important factor in assessing the success of teacher leadership.

Jamal (2014) conducted a consistent review of literature on leadership evolution, transactional and transformational leadership competencies and the relationships between them. He identified that educational institutions undertake reforms to improve the efficiency of teachers and school functioning. The literature review showed that transformational leadership competency helps in enhancing the functioning and teaching practices of the school. Transformational leadership competency provides a significant, valuable contribution towards enhancing the efficiency of school management by improving the student's academic standards.

Hughes and Pickeral (2013) found that there exists a positive relationship between shared leadership competencies and positive environment in schools, which in turn influences student outcome. According to them, school climate renewal strategies result in increased student outcome, reduced high school dropout rates, prevented various forms of violence, such as bullying, fostered school connectedness and increased teacher retention. Students must also be collectively involved in shared decision making along with principal, teachers, staff and parents in order to encourage them. As teachers are the most effective means for achieving students' improvement, principals must constantly encourage and motivate teachers to meet the needs of student learning.

Albanese (2012) reported that with distributed leadership competencies, where the responsibilities are shared with the teachers for finding solutions collaboratively, ideas for achieving student improvement could be obtained. Transformational leadership with innovative measures can also improve student outcome. Principals must reward the students according to their outcomes; thereby, motivating them to achieve more. Instructional leadership is the most critical model in educational leadership. Instructional leadership model is focused on the professional development of teachers.

Verbiest (2011) identified that the instructional leadership model is an integration of transformational and distributed leadership. The author also suggested that instructional leadership is not the core function of the school leaders as they are solely responsible for other leadership functions such as creating a structure and culture for professional learning where teachers learn as individuals and as a group to improve the performance of the students.

Participation of teachers in structured professional groups resulted in neutral or negative student outcomes in several cases, as the educators could not focus on the student outcomes since they were engaged in professional development activities. However, in both the cases the emphasis was on the school leader as an instructional leader in developing professional learning. It is also demonstrated that transformational leadership activities are a prerequisite for instructional leadership.

6.3   Relationship between Teaching Leadership Competency and Job Satisfaction

Ekpenyong and Joseph (2017) investigated the connection between job satisfaction of teachers and academic excellence of students in Social Studies in Taraba State Colleges of Education Zing and Federal College of Education Yola in Nigeria. The total count of students and teachers employed in the study was 128 and 64. The study identified a strong and an optimistic influence of the extent of satisfaction of the teachers regarding their jobs on the upgradation of students in Social Studies, thereby indicating the implementation of schemes to inspire the teachers to bring out the welfare of the students.

Iqbal et al. (2016) investigated the influence of job satisfaction of the teachers on the academic outcome of the students considering 332 teachers teaching in secondary schools in Faisalabad. The study identified a correlation of working conditions and supervisory practices with job satisfaction of the teachers, which in turn, depicted no significant influence on the academic outcome of the students.

Akiri (2014) investigated the effect of organizational-induced teaching practices on the correlation between job satisfaction and student outcome in Delta public school in Nigeria. The study identified that the most qualified teachers had minimum satisfaction from their jobs due to lack of recognition and inefficient organizational strategies towards teaching practices. This, in turn, also had minimum effect on student outcome.

Palardy and Rumberger (2008), Guarino et al. (2006), and **Wayne and Youngs (2003)** reported that there are no available scientific evidences to prove that the background characteristics of teachers have a direct significant effect on student outcome. The present evidences that are available to prove the importance of teachers' background on student achievement also show the need for further research on alternative explanations.

6.4   Research Gap

A review of existing studies relating to school leadership competency indicates the availability of many empirical studies on the effect of principals' leadership competency on student outcome and teachers' job satisfaction. However, studies that discuss the effect of leadership competency in various situations, for instance, the leadership competency of physical educators, vocational trainers, and in various other contexts are to be explored. Moreover, research can also focus on the validity of integration of various leadership styles on student outcome, teachers' job satisfaction and other organizational variables. An extensive survey of literatures on educational leadership models, mostly focus on transactional, transformational, and instructional leadership styles followed by educational leaders in primary, secondary, and higher education. Some studies recommend the integrated approach consisting of a combination of the above-mentioned models, while there are other studies which also recommend the leaders to adopt contingency theory that insists on adopting different leadership competencies in different contexts. However, a dearth of empirical studies effectively analyzes the applicability of each model in various situations and the ways in which they are implemented. Moreover, these models proposed are directed solely towards achieving instructional proficiency and professional development of teachers. They do not focus on the development of administrative and managerial skills of teachers, although studies related to the administrative and managerial skills of principals are available. Further, the impact of leadership competency on job satisfaction and student outcome has been discussed in numerous literatures, whereas the significance of teachers' job satisfaction with their performance and student achievement has not been analyzed in recent times. If a direct relationship between teachers' job satisfaction and performance is established, then schools will take considerable efforts in ensuring teachers' satisfaction in any role.

7.   Conceptual Framework of the study

Reviewing the literature, certain limitations were found. A detailed review of literature relating to school leadership styles indicates that studies related to the effect of leadership styles in various situations, for instance, the leadership style adopted by physical educators, vocational training institutes and various other contexts are to be explored. There is a dearth of empirical studies that effectively analyses the applicability of each leadership model in various

situations and the ways in which they are implemented. The significance of teachers' leadership competency on job satisfaction and student outcome has not been analysed in recent times. If a direct relationship between teachers' job satisfaction and performance is established, then schools will take considerable efforts in ensuring teachers' job satisfaction in any role. Further research is needed for identifying the contribution of individual traits that influences the job satisfaction and motivation of teachers. Based on the variables identified in the literature, a theoretical framework was proposed (Figure 1).
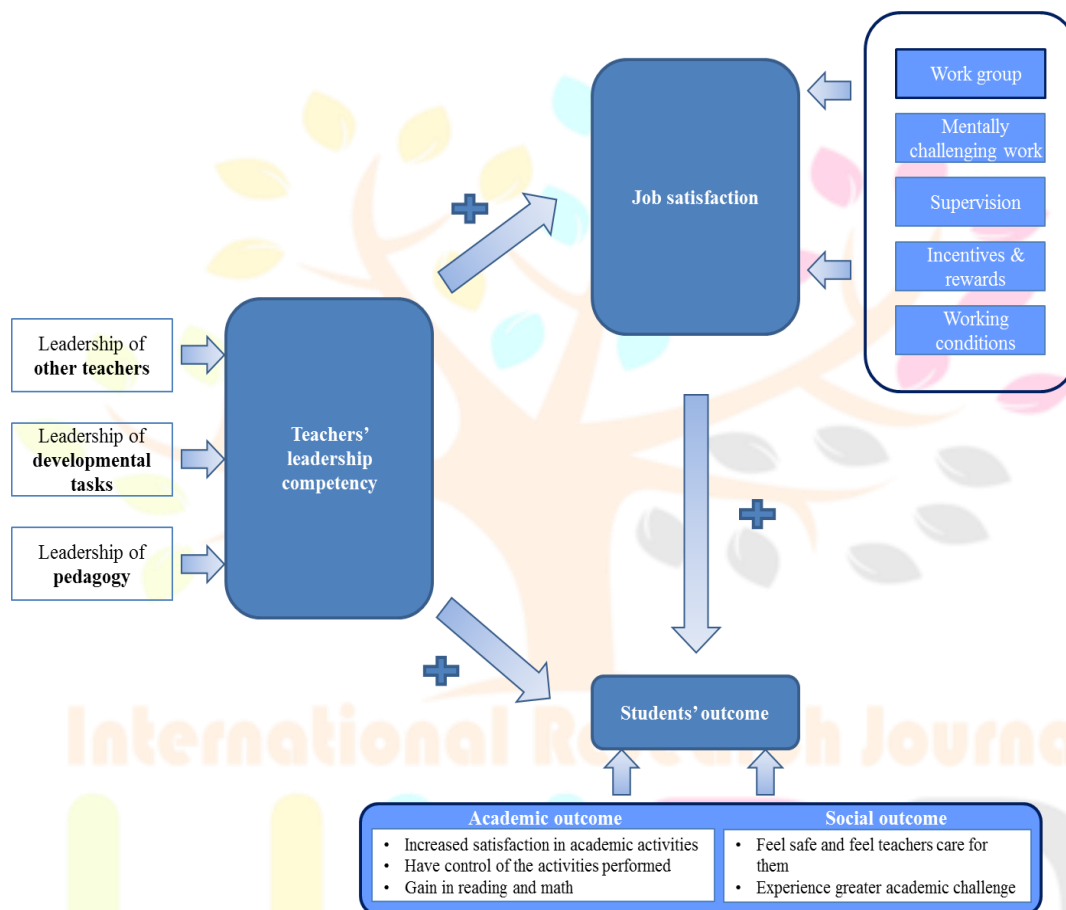
Figure 1: Proposed Theoretical Model

8. Operational definition

Secondary school: A secondary school refers to an educational institution that provides secondary education to students above school age. Secondary school is the next step followed on from primary school and before college where students are given general, vocational, tertiary or pre-college education.

Teachers' leadership: This study will adopt the views of Frost (2011) to define teacher leadership. Thus, we define, "Teachers are professionals, who initiate and lead change, contribute to knowledge building and have effect on their schools, and more widely through collective action."

Teacher leadership competency: The present study defined the teacher leadership competency as the ability of the teachers to lead the teams, drive the initiatives, coach others and develop self so as to produce an improved student outcome.

Job satisfaction: This study will adopt the views of Bogler (2001) for defining job satisfaction. Job satisfaction is defined as comprising intrinsic factors which are associated with satisfiers, such as achievement, autonomy at work, professional prestige and development and extrinsic factors which are associated to work conditions, pay or benefits."

Student outcomes: We have defined the student outcomes as that which pertains to students' satisfaction in academic activities, having control over the activities performed and achieving considerably in reading and Math. The students must also feel secure, realize that teachers take care of them, and experience greater academic challenges.

9. Methodology

The study adopted an objective, positivistic and quantitative research philosophy. Explanatory and descriptive methods were used to conduct the research. Hypotheses (total 13) were formulated based on the relationship between the different variables.

9.1 Study variables

Independent variable: Teachers leadership competency

Dependent variables: Teachers' job satisfaction and students' outcomes (academic and social outcomes).

9.2 Questionnaire

Two sets of questionnaires were prepared for teachers. One set of the questionnaire for teachers comprised of three sections – demographic profile, teacher leadership competency and student outcomes. The other set of the questionnaire for teachers comprised questions related to their job satisfaction. The academic outcome of the high

school students was measured through the responses of the participants from the questionnaire. The social outcome of the students was also measured through the responses of the participants from the questionnaire. A pilot study was performed by obtaining responses from a sample size of 50 teachers. The reliability and validity of the questionnaires were verified using Cronbach's alpha method and Confirmatory Factor Analysis, respectively. The results showed that the scale had a high level of internal consistency and significance.

9.3   Sampling

The present study used stratified random sampling method (Figure 2). The general population was considered to be the secondary school teachers of Karnataka and the target population was the secondary school teachers of the Hassan district of Karnataka. The sample size was calculated by Yamane formula which yielded 400 as the minimum requirement. Accordingly, questionnaires were distributed to 650 respondents, from which 500 responses were found to be complete and as a result, 500 was taken as the sample size for teachers.
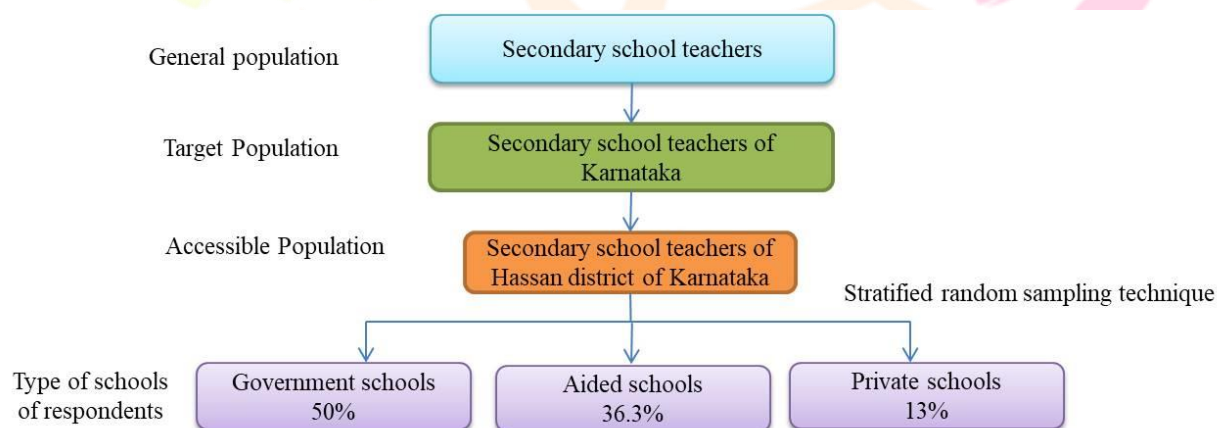
Figure 2: Distribution of the sample size

9.4   Data Analysis

Appropriate statistical techniques were used for data analysis based on the objectives and the nature of data collected such as descriptive statistics, independent t-test, ANOVA, Tukey test, Pearson correlation, simple and multiple regression and structure equation model. For data analysis, Statistical Package of Social Sciences (SPSS) Version 24 was used.

10. Results

Demographic details of the respondents and the results of correlation and regression analysis to examine the relationship between the different variables such as teacher leadership competencies, job satisfaction, and student outcome are presented. Cross-tabulation and t-test were carried out to identify the relationship between teacher leadership competency and demographic variables. One-way ANOVA, two way ANOVA and Structural equation modelling (SEM) was performed in order to examine a set of relationships between one or more dependent variables and the independent variable.

10.1 Demographic details about the respondents

10.1.1 Age of the respondents

It was observed that the maximum number of respondents included in this study belonged to the age group of 41 to 50 years (32.1%), followed by 31 to 41 years age group (28.8%) and 21 to 30 years age group (22.8%). Only 15.2% of respondents were found to be above 50 years age group. The results indicate that 60% of the secondary school teachers who are included in the study are middle-aged teachers (31-50 years).

10.1.2 Gender of the respondents

The study found that 65.8% of the respondents were females while 33.2% were male. It indicates the presence of a significant ratio of women teachers at the secondary school levels in India.

10.1.3 Education of the respondents

In this study, 36% of the respondents had a B.Ed. degree as their primary qualification. Of the rest, 38.6% were UG along with B.Ed. degree, 17% had completed their PG, 3.8% had M.Ed. qualification, 2.2% had UG degree, and 1.1% had PG as well as a B.Ed. qualification.

10.1.4 Total Experience of the respondents

The study reveals 35% of the secondary school teachers have 15 or more years of experience in teaching, 21% have 10 to 15 years of experience, 25% have 5 to 10 years of experience and 19% have less than 5 years of experience. On the whole, the distribution with the experience was not distorted towards any specific group, indicating that there was an almost undifferentiated distribution of the sample towards the total years of experience.

10.1.5 Total Teaching Experience of the respondents in secondary schools.

It has been found that 34.8% of the secondary school teachers have more than 15 years of experience in teaching science and arts. Further, 20.7% of the respondents had 10 to 15 years of experience, 25% of the respondents have 5 to 10 years of experience and 19% of the respondents have less than 5 years of experience.

10.1.6 Marital status of the respondents

In this study, to identify the relationship between marital status and teachers' leadership competency, the information on the marital status of the teachers was gathered through the questionnaire and then analysed. It shows that a majority of the respondents (79%) were married and the rest were single (20%).

10.1.7 Salary of the respondents

Around 9.2% of the respondents had more than Rs.50,000 as monthly income, 14% of the respondents has income between Rs.41,000 and Rs.50,000, 31% of the respondents have income (monthly salary) between Rs.31,000 and Rs.40,000, 23.4% of the respondents have income in between Rs.21,000 and Rs.30, 000 and 22% of the respondents have income less than Rs.20,000.

10.1.8 Locality of the respondents

The main intention of collecting the information on the locality of the respondents is to determine whether living area or locality is one of the influences that contribute to the low job satisfaction of teachers. According to the study results, more than half of the respondents, i.e., 54% of the study population belong to the rural area and 45% of the respondents belong to the urban area.

10.1.9 Type of school of the respondents

In India, there is an assumption that only private schools and aided ones are known to provide a good standard of education and facilities for the students, but not the government schools. So, for identifying the differences in teacher leadership competencies and student outcome, the respondents from three different types of schools were included. Maximum respondents were from government schools (77%), followed by the respondents from Aided schools (16.3%) and 6% of the respondents are from private schools.

10.2 Reliability and Validity

Reliability and validity were verified using Cronbach's alpha method and Confirmatory Factor Analysis, respectively. According to Sekaran et al., (2003), a Cronbach's alpha coefficient greater than 0.5 is considered to be acceptable. The results state that the Cronbach's alpha coefficients for teacher leadership qualities, teacher leadership competencies, job satisfaction and student outcomes were greater than 0.5 and less than 1.0, suggesting an acceptable level of internal consistency of the scales. The Kaiser-Meyer-Olkin (KMO) test was used to measure the sampling adequacy and to test if the distribution of values was adequate for conducting factor analysis. A KMO value of greater than 0.5 indicated that the answers obtained from a questionnaire are acceptable to measure the problem that is being evaluated in the study. The exploratory factor analysis (EFA) was used to measure the accountability of every item by evaluating the factor loading values In this study, the factor loadings with values greater than 0.40 with Eigenvalue 1 implied satisfactory validity. Among all the factors 'Knowledge Sharing' is the most important factor which explains 29.687% of variation in the teacher's leadership competencies. In the case of job satisfaction, 24.446% of total variation was explained by the Work Group. Finally, the social outcome explained 37.620% of total variation in the student outcome.

10.3 Correlation between measures of Teacher Leadership Competency (TLC), Job Satisfaction (JS) and Student Outcome

Correlation analysis was executed to study the strength of a relationship between two, statistically measured, constant variables. Pearson correlation was measured to determine the degree of the relationship between linearly related variables.

10.3.1 Correlation of measures of Teacher Leadership competency with Teachers' Job Satisfaction and Student's Outcome

The different measures of Teacher Leadership Competencies (TLC) include Leadership of other teachers/Teacher Mentorship (TM), Leadership of Developmental Tasks (LDT) and Leadership of Pedagogy (LP). The sub-measures of TM include Knowledge Sharing (KS), Coaching and Mentoring (CM), Facilitating Collaborative Relationships (FCR), Building Capacity of Others (BCO) and Personal Effectiveness (PE). The following null hypothesis was considered and found rejected (Table 1).

Hypothesis 1$_0$: There is no significant relationship between the measures of teacher leadership competency, job satisfaction and student outcome

Table 1: Correlation of Teacher Leadership Competency with Job Satisfaction and Student Outcome Determinants

	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
TLC_TM_KS (1)	4.190	0.447	1													
TLC_TM_CM (2)	4.113	0.500	.832**	1												
TLC_TM_FCR (3)	4.134	0.521	.828**	.875**	1											
TLC_TM_BCO (4)	4.092	0.506	.541**	.606**	.713**	1										
TLC_TM_PE (5)	4.176	0.449	.616**	.675**	.756**	.689**	1									
TLC_LDT (6)	3.945	0.402	.598**	.595**	.630**	.604**	.646**	1								
TLC_LP (7)	4.074	0.414	.574**	.604**	.658**	.576**	.656**	.811**	1							
JS_WG (8)	3.956	0.447	.492**	.529**	.582**	.498**	.547**	.563**	.650**	1						
JS_MCW (9)	3.974	0.389	.573**	.564**	.594**	.457**	.514**	.656**	.703**	.740**	1					
JS_S (10)	3.749	0.472	.278**	.298**	.357**	.302**	.405**	.441**	.429**	.560**	.565**	1				
JS_IR (11)	3.729	0.609	.197**	.157*	.255**	.164*	.301**	.307**	.365**	.488**	.484**	.718**	1			
JS_WC (12)	3.811	0.668	.207**	.220**	.259**	.255**	.343**	.422**	.465**	.353**	.412**	.504**	.494**	1		
ST_AO (13)	3.931	0.409	.385**	.382**	.453**	.321**	.434**	.546**	.576**	.595**	.653**	.662**	.554**	.621**	1	
ST_SO (14)	4.012	0.411	.440**	.475**	.567**	.419**	.493**	.543**	.549**	.587**	.673**	.624**	.518**	.372**	.732**	1

The results confirmed that TLC measures, namely TM (KS, CM, FCR, PE) and LDT and LP are important variables for predicting TLC. Further, it also reveals that secondary school teachers have utilized teacher leadership competencies for building efficiency of teachers and also for enhancing student performance, which contributes to the effective functioning of the school. The results conclude that highly competent teachers are crucial to the learning environments and therefore endorse teacher leadership competencies for refining the excellence of teachers and learning of students.

In this study, the important determinants of job satisfaction include Work Group (WG), Mentally Challenging Work (MCW), Supervision (S), Incentives & Rewards (IR) and Working Conditions (WC). The study found that the measures of job satisfaction have a profound positive influence on the job satisfaction of secondary school teachers. Therefore, the study recommends the adoption of some strategies to implement assumed resolutions to promote teachers' commitment to teaching and their dedication to their students.

In this study, the measures of student outcomes include Academic Outcome (AO) and Social Outcome (SO). According to literature, academic outcome includes, studying skills, problem-solving skills, critical decision-making skills, task management skills and performance skills. The social outcome of the students include attentiveness, skills to engage in cooperative learning, gentle behavior in the class, compliant behavior toward classmates and teachers, etc. The study found that measures of academic and social outcome have a profound influence on student outcome and thus, suggests teachers to understand the environmental and social environment in which students learn and to create and evaluate learning conditions that give students the opportunity to activate, establish and develop social and academic competencies among them.

These results lead to the rejection of the null hypothesis and acceptance of the alternate hypothesis that there is a significant relationship between the measures of teacher leadership competency, job satisfaction and student outcome.

10.4 Effect of Teacher Leadership Competency on Job Satisfaction and Student Outcome

In this study, regression analysis was used to understand the relation between the independent variable and the dependent variables. Multiple linear regression analysis was employed because the analysis includes two dependent variables and one independent variable.

10.4.1 Effect of Teacher Leadership Competencies on Job Satisfaction

In this study, teacher leadership competency is measured in terms of teacher mentorship, leadership of developmental tasks and leadership pedagogy. The following hypothesis was posited and found partially accepted (Table 2).

Hypothesis 2$_0$: Teacher leadership competency does not have a significant effect on job satisfaction.

Table 2: Model Summary of the effect of teacher mentorship, leadership of pedagogy and leadership of developmental tasks on job satisfaction

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
0.679	0.462	0.452	0.301	0.462	50.863	3	178	0.000

a. Predictors: (Constant), TM, LP, LDT

Table 3: Regression Analysis of the effect of teacher mentorship, leadership of developmental tasks and leadership of pedagogy on job satisfaction

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.025	0.243		4.214	0.000
Leadership of Pedagogy	0.409	0.073	0.455	5.605	0.000
Teacher Mentorship	0.052	0.095	0.052	0.543	0.588
Leadership of Developmental Tasks	0.249	0.090	0.240	2.764	0.006

a. Dependent Variable: Job Satisfaction

The determining value revealed a significant positive relationship between the dependent variable (job satisfaction) and the independent variable (teacher leadership competency; Table 2). According to the results (Table 3), the regression constant value is 1.025. The β value of leadership of pedagogy (0.455) is greater than β values of leadership of developmental tasks (0.240) and teacher mentorship (0.052). Among all the factors, leadership of pedagogy and leadership of developmental tasks have a significant effect on job satisfaction. It also states that teachers who will be satisfied with their work will always try to improve their teaching skills and improve their personal leadership competencies in order to help the students and their colleagues.

10.4.2 Effect of Teacher Leadership Competencies on Student Outcome

The following null hypothesis was presumed and found partially accepted.

Hypothesis 3_0: Teacher leadership competency do not have a significant effect on student outcome.

Table 4: Model Summary of effect of teacher mentorship, leadership of developmental tasks and leadership of pedagogy on student outcome

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
0.640[a]	0.409	0.399	0.296	0.409	41.093	3	178	0.000

Table 5: Regression analysis of the effect of teacher mentorship, leadership of developmental tasks and leadership of pedagogy on student outcome

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.356	0.239		5.681	0.000
Leadership of Pedagogy	0.194	0.072	0.230	2.708	0.007
Leadership of Developmental Tasks	0.153	0.093	0.166	1.636	0.104
Teacher Mentorship	0.307	0.088	0.316	3.477	0.001

Teacher leadership competency variables, teacher mentorship, leadership of developmental tasks and leadership of pedagogy had a significant effect on student outcomes (Table 4). It was found that leadership of pedagogy (β = 0.230, $p < 0.01$) and teacher mentorship (β = 0.316, $p < 0.01$) had a significant effect on student outcome (Table 5). The study found that effective teacher leadership competencies make a difference in improving student learning and student outcome. Therefore, recommending school teachers to recognize that leadership, in one form or another to influence student outcomes in a positive way.

10.4.3 Effect of Job Satisfaction on Student Outcome

Teachers' job satisfaction and student outcomes are considered as dependent variables. The following null hypothesis was presumed and found rejected.

H4$_0$: Job satisfaction has no significant effect on student outcome

Table 6: Model Summary of the effect of job satisfaction on student outcome

| | | | Std. Error of the Estimate | Change Statistics | | | | |
R	R Square	Adjusted R Square		R Square Change	F Change	df1	df2	Sig. F Change
0.783[a]	0.614	0.611	0.238	0.614	285.859	1	180	0.000

Teachers' job satisfaction had a significant effect on student outcomes (Table 6). It was found that job satisfaction ($\beta = 0.783$, $p < 0.01$) had a significant effect on student outcomes (Table 7). The study found that job satisfaction of the teachers makes a difference in improving student learning outcome. Therefore, recommending school management to recognize that satisfaction of the teachers regarding their job tend to influence student outcomes in a positive way.

Table 7: Regression analysis of effect of job satisfaction on student outcome

| | Unstandardized Coefficients | | Standardized Coefficients | | |
	B	Std. Error	Beta	t	Sig.
(Constant)	1.149	0.168		6.844	0.000
Job Satisfaction	0.734	0.043	0.783	16.907	0.000

10.4.4 Association between Teacher Leadership Competency and Demographic Variables

In this study, cross-tabulation was performed for comparing the relationship between the teacher leadership competency and demographic variables such as gender, age, education, teacher's experience, marital status, locality, type of school and monthly income and Chi-square test was used to determine the significant differences between different variables in one or more categories.

Hypothesis 5$_0$: There is no significant association between teacher leadership competency and demographic variables

The results show that among all the demographic factors, the respondents who were married, belonging to the middle-aged group 41-50 years and working in government schools displayed teacher leadership competency.

Thus, the study found a significant difference in the teacher leadership competency based on the age, marital status, and the type of school of the secondary level teachers.

10.4.5 Difference in perception of Job Satisfaction with respect to Demographic Variables

ANOVA was adopted to see whether there are any significant differences between the means of two or more dependent groups based on demographic factors (moderating variables).

Hypothesis 6_0: There is no significant association between job satisfaction and demographic variables of the teachers.

Results show that among all the demographic factors, the respondents between 31-50 years and with >15 years of experience had a higher job satisfaction. Thus, the study found a significant difference in job satisfaction based on the age and working experience of the teachers.

10.5 Structural Equation Modelling (SEM)

To explore the relationship between dependent/exogenous (job satisfaction and student outcome) variables and independent/endogenous variable (teacher leadership competency), the proposed model was tested using SEM (Figure 3). The relationship between the identified latent endogenous and exogenous variables was analyzed by developing suitable hypotheses and tested the same with the help of a statistical package known as AMOS 21.0 version. Following hypothesis were tested using SEM (Table 8).

Table 8: Hypotheses for SEM

$H7_0$	Teacher mentorship has no significant effect on the job satisfaction of teachers
$H8_0$	Leadership of developmental tasks has no significant effect on the job satisfaction of teachers
$H9_0$	Leadership of pedagogy has no significant effect on the job satisfaction of teachers
$H10_0$	Job satisfaction has no significant effect on academic outcome
$H11_0$	Job satisfaction has no significant effect on social outcome
$H12_0$	Teacher mentorship has no significant effect on academic outcome
$H13_0$	Teacher mentorship has no significant effect on social outcome

It has been found that teacher mentorship ($\beta = 0.180$, $p > 0.01$) and leadership of pedagogy ($\beta = -0.002$, $p > 0.01$) did not have any significant effect on their job satisfaction, whereas leadership of development tasks had a significant effect on the job satisfaction of teachers with $\beta = 0.519$, $p < 0.05$. Therefore, $H7_0$ and $H9_0$ were accepted

and H8$_0$ was rejected, leading to the acceptance of the alternative H8 that there is a significant effect of leadership of developmental tasks on the job satisfaction of teachers. It was found that teacher mentorship was strongly and positively correlated with both the leadership of pedagogy (r = 0.875) and leadership of developmental tasks (r = 0.882).

Teacher's job satisfaction had a significant effect on student's academic (β = 1.029, p < 0.01) and social outcomes (β = 0.742, p < 0.01). Therefore, H10$_0$ and H11$_0$ were rejected, leading to the acceptance of the alternative H10 and H11 hypotheses that job satisfaction has a significant effect on academic and social outcomes. Thus, it can be inferred that satisfied teachers play a major role in enhancing the overall student outcomes.

The teacher mentorship had a significant effect on academic outcome (β = -0.234, p < 0.01), but not on social outcome (β = 0.019, p > 0.05), leading to the rejection of H12$_0$, thereby accepting the alternate H12 that teacher mentorship has a significant effect on academic outcome and acceptance of H13$_0$. The results suggest that teachers who become great leaders can have a positive effect on students' academic performance but not on their social behavior.
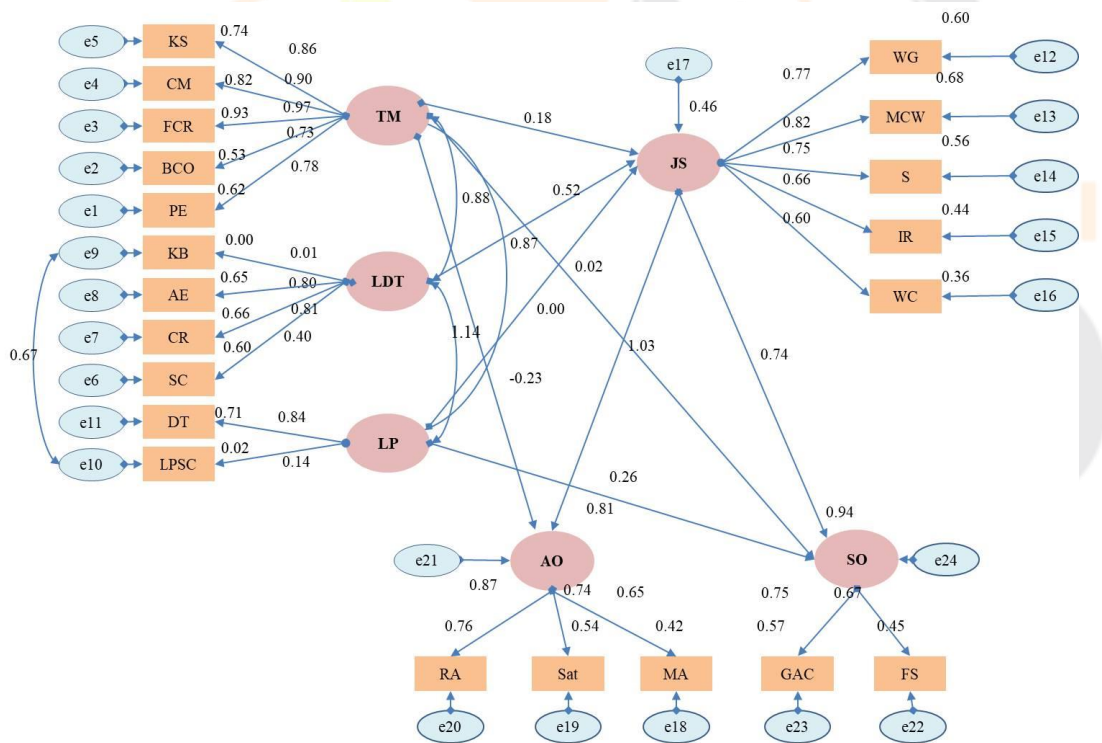

Figure 3: SEM model

11. Qualitative analysis

To investigate the effects of leadership competencies of teachers on personal outcomes, qualitative data were collected by interviewing the heads of the schools. A thematic analytical approach was taken to analyse the data. The participants had a rich teaching experience which ensured that the perceptions obtained from such participants would provide valuable insights for making meaningful inferences. The presence of school heads from all types of schools (government, private and private aided schools) enhanced the generalizability of their responses.

The first theme identified in the study was related to the qualities and attributes to be possessed by the teacher leaders. Being an honest, dedicated and punctual team player while displaying leadership skills & management skills, good communicator, knowledgeable in their subjects as well as current affairs were the qualities recognised. The most significant attribute to a teacher leader was recorded as being a role model to the students as well as the teachers through assisting in administrative work, taking up initiatives and creating a learning atmosphere for all.

The second theme is associated with the efforts taken by the teachers in three sectors. Being resourceful, expert in their subjects, supportive in classrooms and a positive influence on their peers were the efforts taken to become teacher leaders. Encouraging student participation in various activities and projects, giving utmost attention to the interests of the students, inspiring the students and boosting their curiosity in the subjects were the efforts taken by the teachers in engaging students and aiding student achievements.

The final theme established was the job satisfaction of the teachers. The participants showed a moderate to high level of satisfaction in their job depending on the success of their efforts. The recognition and appreciation of their efforts were stated as the suggestions for increasing their job satisfaction.

12. Educational Implications

- The present study indicates that teacher leadership competency plays a prominent role in affecting the job satisfaction of teachers and student outcomes; therefore, teachers must be encouraged to develop leadership competencies to facilitate maximum outcomes of students as well as performance of the schools.

- The study implies that there is a significant requirement of teacher leadership competency in the secondary schools of the Hassan district of Karnataka.

- A strong correlation between teacher leadership competency and job satisfaction implies that teachers need to be satisfied with their jobs in order to deliver optimum professional competency.

- Besides, the study observed a strong correlation between teachers' job satisfaction and student outcomes, implying that teachers must be satisfied with their jobs to contribute to effective student outcomes.

13. Recommendations

The study recommendations are based on its current findings which have been outlined from the perspective of the secondary school teachers.

- On the basis of the findings of the present study, the researcher has come to the conclusion that teacher leadership competency has a significant effect on teachers' job satisfaction and student outcomes. Besides, there is a significant requirement of teacher leadership competency among the secondary school teachers in the Hassan district of Karnataka. Therefore, the school management must take necessary steps to improve both the teacher leadership competency and the job satisfaction of the teachers so that there is a positive outcome and the benefits are passed on to the students. Restructuring the role of the teachers in the Indian education system is the need of the hour.

- To increase student outcomes, teacher leadership competency plays an important role. To improve skills and abilities of teachers in secondary schools, certain training programs must be implemented as per job characteristics and requirements. The training programs should be designed in such a way that it promotes quality professional and leadership development. Continuous monitoring of teacher leadership competency is needed to track the improvement of individuals.

- Retention of high quality teacher leaders in secondary schools is possible if overall job satisfaction is high. Job satisfaction can be increased by maintaining a positive and encouraging work environment, assigning the teachers with mind boosting work that will keep them involved and will contribute to their professional growth. Building up a competent teacher leadership team requires strong intentional support and transparency. This leadership has a significant relation with job satisfaction will further fetch better prospects for student outcomes. In the present study, lack of job satisfaction in young individuals is an alarming concern that needs to be addressed.

- There is a growing need for the school management to conduct government aided training programs and policies that will support leadership development in high potential teachers. Workshops should be conducted to spread the necessity of teacher leadership competences in secondary schools. Developing core fundamental leadership beliefs like educational equity, committing towards students' goals and believing in

their potential, encouraging students' social interactions, etc. will ensure students' success within their scope of influence. In addition, relationship building with key educational stakeholders, execution of assigned tasks within time, deadline project management, self-awareness, self-management and most importantly careful conflict management will help the teachers to build up leadership competencies. All these initiatives by the school management will lead to a progressive education leveraging both academic and social outcomes of students.

- Teachers' job satisfaction has a significant effect on student outcomes. Thus, teachers should be given opportunities to improve their job satisfaction within the academic framework. In addition to school management and policymakers, teachers should also be actively involved in decisions related to curriculum, teaching and learning process. Teacher should also have a say in decision-making, parents-teachers interactions and other measures of their schools. Such teachers, empowered by a sense of leadership, will contribute more towards effective student outcomes and better performance of the schools, as a whole.

- Furthermore, improvisation of technological facility and infrastructure in secondary schools will lead to better management of professional responsibilities and add to the leadership capacity in teachers. This will also favor communication and collaboration beyond academics. Effective use of modern technologies will make the teachers technologically competent adding value to their skills and knowledge. Developing cultural competence is essential since this will help the teachers to embrace the ways of how other teacher leaders in different institutions are delivering education. Accordingly, they can perceive the needs for change implementation in their current leadership competence level.

- Many highly qualified and efficient teachers lack abilities to provide inspiration and adequate care for students. In such cases, students tend to lose their interest in learning. Apart from instruction delivery and classroom management, having positive regards and showing empathy for students is an indispensable soft skill that a competent teacher should possess. Thus, the policymakers must take necessary steps to ensure thorough development of teacher leadership competency, in particular personable competency in secondary schools through the Indian education system.

- More research waits for development of teacher leadership competency measurement scales in the Indian context. This will have a positive long term effect on young mind developments and will make the teachers aware about their good leadership practices. It is important for teachers to rise beyond socio-economic background, ethnicity, races, physical disabilities, sexual discrimination, etc., when it comes knowledge sharing and leadership and mentoring. Every teacher has a leadership role to play to guide students to achieve their goals and success rates in students act as the direct measure of leadership competence of teachers.

14. Limitations

There is a possibility that the findings corresponding to the present study are restricted to the specific geographical area or type of population and do not necessarily give a global picture. Furthermore, the present study dealt with teacher leadership competency in secondary schools and the results might not hold true with the competency levels required for higher academic institutions. Several other competency determinants including analytical, interpersonal, etc. need to be investigated to study the teacher leadership competency in secondary schools. The study did not give any idea about the effect of student outcome on the job satisfaction of teachers that in a way is essential to build up teacher leadership competency.

15. Delimitations

The researcher has chosen a limited area for the present study

- The researcher has selected only 500 secondary school teachers working in Hassan district of Karnataka out of 114,350 secondary school teachers working in 9498 different secondary schools in different parts of Karnataka.

- Out of 30 districts of Karnataka, the researcher has chosen Hassan district of Karnataka for the present study.

- The researcher has chosen government, aided and private schools in the Hassan district of Karnataka that comes under the Secondary Education Board of Karnataka Government. The researcher has chosen a specific geographical area and population due to factors such as the accessibility to the secondary schools, availability of the teachers and their willingness to participate in the study.

- The researcher has chosen to examine only three variables, namely, Teacher leadership competency, Job satisfaction and Student outcomes and their relationship with each other.

16. Future Scope

Further research needs to be conducted from different parts of the country to warrant and confirm the present findings as the demographic details and their effect on teacher leaders varies. The study environment in school is another important factor that needs research attention to promote teachers' and students' commitment to education

and learning. Research must also be performed about key academic stakeholders like education ministry and its adopted initiatives to understand their effect on teacher leadership competencies in secondary schools.

17. Conclusion

The study concluded that there is a significant requirement of teachers' leadership competency in secondary schools as it influences the students' academic and social skills maximizing their achievements. A strong correlation between teacher leadership competency and overall job satisfaction denotes that teachers need to be satisfied with their jobs in order to deliver optimum professional competency.

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