



Self-Efficacy and Job Satisfaction among School Mathematics Teachers in Nepal: Contributing and Contradicting Aspects

Krishna Prasad Adhikari

Central Department of Education, Tribhuvan University, Nepal

Email: krishna.adhikari@cded.tu.edu.np

Abstract

The efficacy of the teachers in teaching mathematics plays a crucial role in professional development as well as satisfaction. This study explored how efficacy beliefs and the job satisfaction of teachers are interrelated. A cross-sectional survey conducted among school mathematics teachers revealed a significant positive relationship between self-efficacy and job satisfaction. The findings of the study opened up new discourse in teachers and teaching mathematics. The findings of the study reveal that the professional development of the teachers is essential for the teachers to be motivated and satisfied in the teaching profession.

Keywords: self-efficacy, job satisfaction, mathematics teachers, classroom management, instructional design.

Introduction

A teacher is one of the important factors which can directly affect the teaching and learning process. Students' learning outcome mostly depends upon the environment generated by the teacher (Umbach & Wawrzynski, 2005). An efficient and well-motivated teacher can create a conducive learning environment for students (Khany & Malekzadeh, 2015). The teaching and learning process adopted by teachers in the classroom is unquestionably a key determinant in students' learning and achievement (Stronge, 2018). Only the teachers who have belief in their efficiency and motivation (Kunter et al., 2013) can make teaching and learning effective.

According to Bandura (2012), self-efficacy has a multifaceted impact on human functioning, influencing cognitive, motivational, emotional, and decision-making processes. Teachers with stronger self-efficacy beliefs have the ability to cultivate a positive and conducive learning environment, as highlighted by Boz and Cetin-Dindar (2023). Moreover, self-efficacy plays a role in predicting students' academic performance across various skill levels and subject areas, as noted by Urdan and Pajares (2006). It also serves as a predictor for factors such as stress, burnout, and job satisfaction levels, as demonstrated in the study by Fives et al. (2007). Additionally, self-efficacy in teaching is associated with teachers' perceptions of their own success, the perceived difficulty of teaching tasks, assignment-related factors, and the perceived level of support (Woolfolk Hoy & Spero, 2005).

There are several constructs that are interrelated with self-efficacy, among them job satisfaction is one. The job satisfaction of teachers plays a crucial role in imparting excellent education to students. A teacher who is dissatisfied with his/her job tends to be demotivated and more likely to escape from his/her responsibilities. Demotivated teachers usually display little concern for professional matters and this automatically impacts negatively on the performance of students. Teachers' job satisfaction can be impacted by various factors, including students' achievements and interpersonal relationships. Furthermore, the presence of performance-based rewards is a significant contributor to job satisfaction, as highlighted by Conley and Levinson (1993). However, professional job satisfaction is under threat in different countries due to evolving job roles and the absence of appropriate incentives, as discussed by Caprara et al. (2006). These challenges may arise from the rapid changes occurring in the educational landscape, heightened expectations from parents, shifts in societal norms, evolving student dynamics, and changing administrative practices. Additionally, alterations in policies and the introduction of new laws concerning teachers and the teaching profession can also have an influence on a teacher's job satisfaction within the context of Nepal.

Job satisfaction may enable teachers to put their best to do the assigned duties. Teachers are influenced by personal and situational factors such as school and societal culture. Attitude developed by employees matters in job satisfaction. In order to increase the level of satisfaction, every employee needs to focus on changing the possible individual or contextual factors (Turkoglu et al., 2017). A review done by Gkolia et al. (2014) explained that job satisfaction can corroborate work efficiency. Job satisfaction of professionals is determined through six dimensions. These are the nature of work, salary/payment, professional development opportunities and promotion criteria, working environment, interpersonal relationship, and organizational structure. After reviewing different literature, six factors to measure job satisfaction of teachers were categorized which are matched in our job context. These factors are interpersonal relationships, organization and supervision, pay, rewards and promotion, working conditions, and social recognition.

Relation between Self-efficacy and Job Satisfaction

The research shows that teacher's self-efficacy beliefs can predict job satisfaction (Turkoglu et al., 2017 & Lopez, 2018). Among the different variables job satisfaction, self-efficacy, and collective efficacy are significant predictors of teachers' intent to leave. The association between self-efficacy and job satisfaction is significantly determined by gender, experiences, and job stress of teachers' satisfaction (Klassen & Chiu, 2010). Self-efficacy and job commitment are related significantly (Mokhtar et al., 2021; Saremi & Rezeghi, 2015) and job commitment significantly predicts the job satisfaction of the teachers (Saremi & Rezeghi, 2015). Moreover, job satisfaction of teachers is significantly correlated with emotional intelligence and self-efficacy beliefs (Hamidi & Amiri, 2013).

Different literature established self-efficacy as a valid predictor for job satisfaction. There are several researches on teacher training, training implementation, problems and factors affecting in mathematics teaching and learning in the context of Nepal but the issue regarding self-efficacy which is very important to foster the positive learning environment, commitment and job satisfaction are not explored exclusively.

Theoretical Understanding

The social-cognitive theory serves as the foundational philosophy behind the concept of self-efficacy. This theory posits that individuals actively engage with their surroundings and their own beliefs, leading to the interpretation and modification of their performance outcomes. As Pajares (1996) suggests, these interpretations and alterations subsequently influence their future performances. Furthermore, the social cognitive theory asserts that human nature is characterized by proactive tendencies, self-reflection, self-regulation, and the ability to devise alternative strategies for handling diverse situations, as supported by Skaalvik and Skaalvik (2010) and Pajares (1995). In the context of the present research, this theory can assist in identifying how teachers' behavior, beliefs, and competence interact and mutually influence one another. Specifically, the social cognitive theory is applied to examine significant constructs such as teachers' perceived proficiency in mathematics content knowledge, their beliefs concerning task design and delivery, and their classroom management abilities.

The assessment of teachers' efficacy encompasses three key dimensions in this study: instructional strategies, student engagement, and classroom management effectiveness. These dimensions are deemed essential in the context of teaching and learning activities, as underscored by Tschannen-Moran and Hoy (2001). To support this perspective, Skaalvik and Skaalvik (2014) contend that teachers' self-efficacy improves when they effectively integrate instructional strategies, strike a balance between fostering student participation and engagement in learning activities, and maintain a conducive classroom environment for optimal learning outcomes. Furthermore, teachers with strong self-efficacy beliefs are also more likely to embrace various classroom management approaches. The research suggests a significant correlation between teachers' self-efficacy beliefs and their ability to manage the classroom effectively (Abu-Tineh et al., 2011). Consequently, teachers' self-efficacy not only supports their professional development but also contributes to the overall educational process.

The other construct for this study was job satisfaction. Job satisfaction is the level of emotional satisfaction or dissatisfaction (Spector, 1997), which is also an emotional response to one's professional experience (Demirtas, 2010) and hence the sense of fulfillment, gratification and satisfaction from profession (Collie et al., 2012). Encompassing all the definitions of job satisfaction, it can be said that job satisfaction is tightly related to the psychological and physical well-being of an individual.

Extrinsic and intrinsic dimensions of job satisfaction as explained by Olorunsola (2012) could be more contextual to describe the satisfaction of teachers to their profession. The

intrinsic aspect pertains to the individual traits of employees, including their capacity for creativity, their relationships with supervisors, and the nature of their job tasks. In contrast, the extrinsic aspect is context-dependent and relies on external factors like facilities, opportunities for advancement, and job stability. This interplay between these two aspects is evident within our schools. A motivated teacher who utilizes creativity in teaching and learning activities is rewarded with access to superior facilities, opportunities for advancement, and professional development prospects (Naidoo & Naidoo, 2023).

Research Questions

This study has focused on answering the following questions:

- a. What is the status of self-efficacy beliefs and job satisfaction among the school mathematics teachers?
- b. How are self-efficacy beliefs and job satisfaction of teachers related?

Methods and Procedures

A cross-sectional survey design with quantitative approach was applied in this study. The survey was conducted among 214 mathematics teachers of both public and institutional schools from the basic to secondary levels in Kathmandu district.

Sample and Sampling Procedure

At first, 20 public and 40 institutional schools were selected randomly from 105 public and 355 institutional schools of Kathmandu Metropolitan and Kirtipur Municipality. All the mathematics teachers of grades 1 to 12 from these 60 schools were considered as the sample of the study. Thus, there were altogether 304 mathematics teachers who were invited to complete a questionnaire. Out of them, only 223 teachers returned the questionnaire. Among these, only 214 teachers had completed the questionnaire. So, the sample consisted of 214 mathematics teachers, 109 were from institutions and 105 were from public schools.

Instruments for Data Collection

The survey questionnaire was used to explore the self-efficacy beliefs and job satisfaction of the mathematics teachers. The questionnaire consisted three parts; demographic information, self-efficacy scale, and job satisfaction scale.

The Teacher's Self-Efficacy Scale (TSES) comprises three dimensions: self-efficacy for student engagement (SESE), self-efficacy for classroom management (SECM), and self-efficacy for instructional strategy (SEIS). Originally consisting of 24 items, the scale developed by Tschannen-Moran and Hoy (2017) was streamlined to 15 items after a pilot test. Within this revised scale, each dimension consisted of five items. The scale underwent a pretest phase among school mathematics teachers in a non-selected school and was subsequently refined as needed. The adjusted 15-item scale demonstrated a Cronbach's Alpha value of 0.88 (Mean=6.88, SD= 1.14), a widely accepted measure of internal consistency in behavioral

science (Drost, 2011). Each dimension also exhibited Cronbach's alpha values exceeding 0.80, and the "Cronbach's Alpha if item deleted" values were lower than the overall Cronbach's Alpha value, indicating that each item in the scale maintained internal consistency.

When completing the TSES, participants rated themselves on items using a 5-point Likert scale, where a low score indicated low self-efficacy beliefs, and a high score indicated high self-efficacy beliefs. The scale points were labeled as follows: 1 for "nothing," 3 for "very little," 5 for "some influence," 7 for "quite a bit," and 9 for "a great deal."

Similarly, teacher job satisfaction was measured using Spector's (1994) Job Satisfaction Survey (JSS). The initial scale, consisting of 36 items, was designed to assess participants' satisfaction with their current job placement and employer, as developed by Spector in 1997. However, following the pilot study results and to ensure relevance in our specific context, the scale underwent slight modifications. Originally, this scale featured nine facets, each containing four items, which were as follows: (a) pay, (b) promotion, (c) supervision, (d) fringe benefits, (e) contingent rewards, (f) operating conditions, (g) coworkers, (h) nature of work, and (i) communication.

After conducting the pilot study and seeking expert content validity judgments, the scale was refined to include only 32 items. The scale was organized into six facets: Interpersonal Relationship (IR), Organization and Supervision (OS), Pay, Rewards and Promotion (RP), Working Condition (WC), and Social Recognition (SR). This adjusted scale exhibited a Cronbach's alpha value of 0.87, with a mean score of 3.96 and a standard deviation of 0.47.

To ensure the validity of both scales, copies of the questionnaire were provided to various individuals. Initially, five secondary school mathematics teachers, each possessing 20 or more years of teaching experience, received the questionnaire along with a cover letter outlining the research inquiries. Subsequently, the questionnaire was distributed to two trainers and later to colleagues and the investigator's supervisor. To establish face validity, the selected collaborators were tasked with assessing whether the questionnaire was suitable for its intended purpose. In terms of content validity, these collaborators evaluated the relevance of each item with regard to its placement, language, and content. Additionally, experts provided written feedback and recommendations during this process.

Data Analysis Procedures

All the questionnaires were systematically identified by assigning a unique participant ID code. The questionnaire encompassed two scales: TSES and the JSS. To gauge their confidence levels, the TSES items were presented in a question format, each rated on a scale from 1 to 9. Conversely, the JSS featured 32 statements designed to assess participants' perceptions of job satisfaction in the teaching profession. A six-point Likert scale was employed for the JSS, with 19 items oriented positively, ranging from 1 for "Very Much Disagree" to 6 for "Very Much

Agree." Meanwhile, the remaining 13 items were reverse-scored, meaning 6 represented "Very Much Disagree," and 1 represented "Very Much Agree." The average mean for TSES items was five, while for JSS items, it was 3.5. These values served as the threshold for categorizing teachers as either proficient or satisfied in their profession.

For data analysis, the collected data was processed using SPSS version 20. In the descriptive analysis, parameters such as mean (M), standard deviation (SD), minimum-maximum values, skewness, and kurtosis were computed. To explore the relationships between self-efficacy and job satisfaction variables, statistical techniques including Karl Pearson's coefficient of correlation and multiple regression were employed. Specifically, regression analysis was used to assess whether teachers' self-efficacy could predict their job satisfaction. Prior to analyzing the regression results, several preconditions were assessed. Notably, the correlations between the various dependent and independent variables were found to be less than 0.7, indicating that multicollinearity assumptions were met. Outlier detection using Mahalanobis distance revealed that outliers fell within the range of -3.3 to 3.3. Additionally, other critical assumptions, including normality, linearity, homoscedasticity, and independence of residuals, were not contradicted by the data (Pallant, 2011).

Finding of the Study

This study focuses on to explore the existing status of teacher's self-efficacy and job satisfaction, relation between self-efficacy and job satisfaction and the effect of self-efficacy on the job satisfaction of the teachers. The result obtained from the questionnaire survey is presented in the subsequent headings.

Level of Job Satisfaction and Self-Efficacy

The mean score on the self-efficacy beliefs of teachers was 6.90 with a standard deviation of 1.18. The self-efficacy score ranged from 3.27 to 8.87. Among the self-efficacy components, participants scored their beliefs about instructional strategy highest with a mean value of 6.99 while they scored their beliefs of efficacy for classroom management the lowest with a mean value of 6.76. Thus, the participants showed a sufficient level of self-efficacy belief in instructional strategy.

Table 1

Descriptive Statistics on Teacher's Self-efficacy Beliefs and Job Satisfaction.

Variables	Min	Max	M	SD	Skewness	Kurtosis
Self-Efficacy	3.27	8.87	6.905	1.175	-.640	.078
SESE	3.40	9.00	6.960	1.267	-.626	-.068
SECM	3.00	9.00	6.760	1.341	-.788	.575
SEIS	2.60	9.00	6.994	1.302	-.681	.283

Job Satisfaction	1.72	4.59	3.645	.458	-.880	3.002
IR	1.50	5.50	3.817	.661	-.456	1.446
OS	1.00	5.50	3.772	.814	-1.102	1.450
WC	1.60	4.80	3.190	.573	-.298	.456
RP	1.50	5.17	3.597	.719	-.364	.438
SR	1.43	5.43	4.009	.658	-.777	1.894
Pay	1.40	5.20	3.429	.751	.000	-.184

The mean score of overall job satisfaction was 3.645 and the scores ranged from 1.72 to 4.59 with a standard deviation of 0.458. A mean score on overall job satisfaction higher than 3.5 indicated that they were not dissatisfied with their profession. On observing each factor of job satisfaction, teachers were more satisfied with social recognition (SR) with a mean score of 4.01 which was followed by interpersonal relationships (IR) with a mean score of 3.81. However, teachers were dissatisfied with working conditions (WC) and payment facility with mean scores of 3.19 and 3.43 respectively. Moreover, negative skewness values of all categories indicate the scores were clustered to the right at high values and positive kurtosis values except for self-efficacy for student engagement and pay. (Table 1).

Relation between Teacher's Job Satisfaction and Self-Efficacy Beliefs

Table 2 shows the result of correlation coefficient between self-efficacy beliefs and job satisfactions of teachers. This shows that the self-efficacy beliefs of teachers is significantly correlated with job satisfaction ($r= 0.445^{**}$, $p<0.01$). This means higher the self-efficacy beliefs better the job satisfaction among the mathematics teachers.

Table 2

Correlation between Self-efficacy and Job Satisfaction Factors.

Factors	1	2	3	4	5	6	7	8	9	10
1. Self-Efficacy	1									
2. SESE	.912**	1								
3. SECM	.881**	.689**	1							
4. SEIS	.912**	.784**	.683**	1						
5. Job Satisfaction	.445**	.424**	.389**	.390**	1					
6. IR	.313**	.300**	.311**	.236**	.579**	1				
7. OS	.253**	.212**	.222**	.248**	.598**	.136*	1			
8. WC	-.042	-.019	-.078	-.016	.336**	.045	.048	1		
9 RP	.321**	.279**	.298**	.290**	.827**	.359**	.543**	.262**	1	
10. SR	.424**	.426**	.375**	.348**	.800**	.463**	.368**	.075	.555**	1

11. Pay	.391**	.371**	.344**	.342**	.583**	.366**	.160*	-.022	.294**	.426**
---------	--------	--------	--------	--------	--------	--------	-------	-------	--------	--------

Note. $P < .05$, ** indicates correlation is significant at the 0.01 level (2-tailed), and * indicates significance at 0.05 level (2-tailed)

Efficacy beliefs for student engagement, instructional strategy, and classroom management correlated significantly with the factors of job satisfaction. The correlation between job satisfaction with student engagement was 0.424 ($p < 0.01$), with instructional strategy, was 0.390 ($p < 0.01$) and classroom management was 0.389 ($p < 0.01$). Similarly, overall self-efficacy beliefs of the teacher were significantly and positively correlated with all job satisfaction subscales except with working conditions ($r = -0.042$) of teachers (Table 2).

In terms of self-efficacy dimensions and job satisfaction factors, all job satisfaction factors showed significant correlations with self-efficacy dimensions except for working conditions. The strongest relationship was observed between teachers' satisfaction with social recognition and their self-efficacy, followed by satisfaction with pay. This suggests that teachers with high self-efficacy beliefs in teaching and mathematics were more likely to be satisfied with the recognition they received from society and their payment from the institution. Conversely, there was a negative correlation between working conditions and teachers' self-efficacy beliefs across all three dimensions (Table 2).

Self-Efficacy as the Predictor of Job Satisfaction

Teachers' overall job satisfaction was predicted positively and significantly by the self-efficacy dimensions. The dimensions of teacher self-efficacy together accounted for 20% of the variance in overall job satisfaction. The beta coefficient ($\beta = 0.24$, $p < 0.05$) indicates that the dimension of self-efficacy on student engagement had a significant individual contribution to determining the overall job satisfaction of teachers. Whereas the other two factors- self-efficacy in classroom management and self-efficacy in instructional strategy were not significant predictors of job satisfaction of teachers.

The influence of self-efficacy dimensions on teachers' job satisfaction varied across different factors. In terms of interpersonal relationships, self-efficacy dimensions collectively accounted for 11% of the satisfaction variance. Notably, self-efficacy in classroom management played a significant role in this aspect. For social recognition, self-efficacy dimensions explained 19% of the satisfaction variance, with self-efficacy in student engagement being a notable contributor.

However, when it came to factors like organization and supervision, pay, reward and promotion, and working conditions, the impact of self-efficacy was less pronounced. For organization and supervision, only 7% of the satisfaction variance was attributed to self-efficacy dimensions, and none of them had a significant individual influence. Similarly, for pay and reward and promotion, self-efficacy dimensions shared 15% and 10% of the satisfaction variance, respectively, but none made a significant unique contribution. Finally, the dimensions

of self-efficacy had the least predictive power in relation to teachers' satisfaction with working conditions, where only 0.9% of the satisfaction variance was jointly shared (Table 3).

Table 3

Regression Analysis on Teacher Self-efficacy and Job Satisfaction.

Variables		B	SE	β	T	P	Partial	R ²
Job Satisfaction	(Constant)	2.447	.168		14.545	.000		
	Self-Efficacy	.174	.024	.445	7.229	.000	.445	.198
Job Satisfaction	Constant	2.44	0.17		14.44	0.00		
	SESE	0.09	0.04	0.24	2.32	0.02	0.16	
	SEIS	0.03	0.04	0.09	0.84	0.40	0.09	0.20
	SECM	0.05	0.03	0.16	1.78	0.08	0.12	
Interpersonal Relationship	Constant	2.602	.257		10.138	.000		
	SESE	.110	.058	.211	1.900	.059	.130	
	SEIS	-.041	.056	-.080	-.728	.468	-.050	0.113
	SECM	.109	.047	.220	2.330	.021	.159	
Organization and Supervision	Constant	2.572	.324		7.936	.000	2.572	
	SESE	.004	.073	.006	.052	.958	.004	
	SEIS	.111	.071	.178	1.567	.119	.111	0.067
	SECM	.059	.059	.097	.998	.319	.059	
Pay	Constant	1.696	.285		5.955	.000	1.696	
	SESE	.124	.064	.208	1.918	.056	.124	
	SEIS	.045	.062	.078	.719	.473	.045	0.155
	SECM	.083	.052	.148	1.600	.111	.083	
Rewards and Promotion	Constant	2.249	.280		8.021	.000	2.249	
	SESE	.039	.063	.068	.607	.544	.039	
	SEIS	.067	.061	.122	1.095	.275	.067	0.104
	SECM	.090	.051	.168	1.773	.078	.090	
Social Recognition	Constant	2.353	.244		9.660	.000	2.353	
	SESE	.173	.055	.333	3.140	.002	.173	
	SEIS	-.013	.053	-.025	-.238	.812	-.013	0.194
	SECM	.080	.044	.163	1.811	.072	.080	
Working Condition	Constant	3.319	.235		14.117	.000	3.319	
	SESE	.016	.053	.036	.308	.759	.016	
	SEIS	.021	.051	.049	.418	.676	.021	0.009
	SECM	-.058	.043	-.136	-1.360	.175	-.058	

Note. SESE= Self-efficacy on Student Engagement; SEIS= Self-efficacy on Instructional Strategies; SECM= Self-efficacy on Classroom Management

Discussion on Findings

The objective of this study was to examine the connection between self-efficacy and job satisfaction in mathematics teachers. Prior to assessing the correlation between these variables, the study initially explored teachers' levels of self-efficacy and job satisfaction using mean and standard deviation scores. The results regarding self-efficacy beliefs are notably positive, as most teachers demonstrate strong self-efficacy beliefs across all three dimensions. Among these dimensions, teachers displayed the highest level of belief in their instructional strategies, while their confidence in classroom management was comparatively lower. This outcome suggests that school mathematics teachers feel secure in their ability to employ effective instructional strategies that enhance student learning, as highlighted by Skaalvik and Skaalvik (2014). Regarding the outcomes related to job satisfaction, it's important to note that teachers do not express dissatisfaction with their profession, as the mean score slightly exceeds the average mean value. Among the six job satisfaction factors examined in this study, teachers exhibit the highest level of satisfaction with social recognition, with a mean score of 4.01, followed by interpersonal relationships, which has a mean score of 3.81. This outcome suggests that fostering better relationships between teachers and both the community and society at large contributes positively to teachers' overall satisfaction, as noted by Reddy (2007).

Furthermore, this finding challenges the prevailing notion in Nepali society that teaching is a poorly regarded profession, as mathematics teachers appear content with the recognition they receive from society. These results could serve as motivational factors for the younger generation considering a career in teaching. However, teachers displayed dissatisfaction with the working conditions within the institution as well as the payment arrangements. The survey revealed that a majority of teachers expressed discontent with the extent of political involvement in public schools. While political influence in institutional schools was relatively low, disparities persisted in workload distribution and the assignment of roles and responsibilities. These decisions were often based on personal relationships with school principals and owners rather than on the quality and competence of the teachers. Such forms of discrimination also extended to salary discrepancies and other financial benefits provided to teachers, with this issue being more prevalent in institutional schools compared to public ones. Collaborative working conditions within institutions have a positive impact on teacher performance, ultimately increasing their efficiency. Consequently, various organizational factors play a role in shaping employee (teacher) job satisfaction, as outlined by Stamplampros et al. (2019).

It is also argued that the income dimension cannot be considered a significant factor for job satisfaction in teaching in a developed country (Miner, 2007), but in the case of a low-income country like Nepal, the pay factor could play a crucial role in determining the level of

satisfaction of teachers. Employees always seek better payment and rewards for their efforts (Stamplampros et. al., 2019). Employees (teachers) should be happy with their salary for positive attitude and behavior. So, it is central that employers are paid at a satisfactory level (Milkovich & Newman, 2008; Singh & Loncar, 2010).

The study also revealed a significant correlation between teachers' self-efficacy beliefs and their job satisfaction. This noteworthy positive correlation indicates that as teachers' self-efficacy levels increase, so does their job satisfaction, in line with the research by Karabiyik and Korumaz (2014) and Lopez (2018). Furthermore, a teacher's self-efficacy in teaching mathematics showed significant correlations with all six job satisfaction factors, except for working conditions. A similar pattern of findings was observed in the studies by Saremi and Rezeghi (2015). However, Demirdag (2015) reported non-significant and negative correlations between student engagement, instructional strategy efficacy, classroom management efficacy, and teachers' job satisfaction in the USA. These divergent results underscore the importance of considering societal context in determining job satisfaction. Additionally, the results of the regression analysis demonstrated that self-efficacy beliefs were a significant predictor of teachers' job satisfaction, with dimensions like student engagement and classroom management efficacy emerging as key predictors.

Conclusion

The findings of the study showed that teachers are satisfied with their job and their beliefs on self-efficacy about teaching mathematics are positive. However, the issue of job security and professional development are existing. This finding arose an interesting fact that those teachers who are efficient in their teaching and learning activities are also satisfied with the profession. This finding also indicates that those teachers who are efficient in their profession can earn and learn more to become satisfied with the job.

The effectiveness and job satisfaction of teachers undeniably have a significant impact on students' learning outcomes. Only teachers who are both competent and self-motivated can tailor their lessons to match students' varying levels of comprehension, effectively manage diverse classrooms, and actively engage students in the learning process. It is imperative for governments and educational institutions to organize professional development programs aimed at enhancing teachers' efficacy because a teacher's effectiveness not only positively influences students' academic achievements but also contributes to their job satisfaction.

However, it's important to note that this study's findings were derived solely from teacher questionnaires collected in the Kathmandu district. Consequently, the results may not be applicable to different educational contexts within Nepal. Therefore, it is recommended to conduct a similar study involving a larger and more diverse sample from various regions of the country. Additionally, to further validate the study, qualitative research methods such as in-depth interviews, observations, and focused group discussions could be employed.

References

- Abu-Tineh, A. M., Khasawneh, S. A., & Khalailah, H. A. (2011). Teacher self-efficacy and classroom management styles in Jordanian schools. *Management in Education*, 25(4), 175–181. <https://doi.org/10.1177/0892020611420597>
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(1), 9-44. doi:10.1177/0149206311410606
- Boz, Y., & Cetin-Dindar, A. (2023). Teaching concerns, self-efficacy beliefs and constructivist learning environment of pre-service science teachers: a modelling study. *European Journal of Teacher Education*, 46(2), 274–292. <https://doi.org/10.1080/02619768.2021.1919079>
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, 44(6), 473-490. doi:10.1016/j.jsp.2006.09.001
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction and teaching efficacy. *Journal of Educational Psychology*, 104(4), 1189-1208. doi:10.1037/a0029356
- Conley, S., & Levinson, R. (1993). Teacher work redesign and job satisfaction. *Educational Administration Quarterly*, 29(4), 453-478. doi:10.1177/0013161X93029004004
- Demirdag, S. (2015). Assessing teachers self-efficacy and job satisfaction: Middle school teachers. *Journal of Educational and Instructional Studies in the World*, 5(3). Retrieved from <http://www.wjeis.org>
- Demirtas, Z. (2010). Teachers' job satisfaction levels. *Procedia-Social and Behavioral Sciences*, 9, 1069-1073. doi:10.1016/j.sbspro.2010.12.287
- Drost, E. A. (2011). Validity and reliability in social science research. *Validity and Reliability in Social Science Research*, 105-124. Retrieved from https://www.researchgate.net/publication/261473819_Validity_and_Reliability_in_Social_Science_Research
- Fives, H., Hamman, D., & Olivarez, A. (2007). Does burnout begin with student-teaching? Analyzing efficacy, burnout, and support during the student-teaching semester. *Teaching and Teacher Education*, 23(6), 916-934. doi:10.1016/j.tate.2006.03.013
- Gkolia, A., Belias, D., & Koustelios, A. (2014). Teacher's job satisfaction and self-efficacy: A review. *European Scientific Journal*, 10(22), 321-342. doi:1857-7431
- Hamidi, F., & Amiri, M. (2013). Predicting the job satisfaction of teachers based on their emotional intelligence and self-efficacy. *International Journal of Psychology*, 7(2), 73-95. Retrieved from <https://www.researchgate.net/publication/272817752>
-

- Karabiyik, B., & Korumaz, M. (2014). Relationship between teachers' self-efficacy perceptions and job satisfaction level. *Procedia- Social and Behavioral Sciences*, 116, 826-830. Retrieved from www.sciencedirect.com
- Khany, R., & Malekzadeh, P. (2015). Associations among EFL teachers' professional identity, professional, vitality, and creativity. *Teaching English Language*, 9(2), 37-74. doi:10.22132/TEL.2015.53724
- Klassen, R. M., & Chiu, M. M. (2010). Effects of teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756. doi:10.1037/a0019237
- Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology*, 105(3), 805–820. <https://doi.org/10.1037/a0032583>
- Lopez, V. (2018). *Teachers' job satisfaction and efficacy as indicators of intent to leave teaching (Doctoral dissertation)*. Retrieved from <http://scholarworks.waldenu.edu/dissertations>
- Milkovich, G. T., & Newman, J. M. (2008). *Compensation*. New York: McGraw Hill.
- Miner, J. B. (2007). *Organizational behavior 4: From theory to practice*. Armonk, NY: ME Sharp.
- Mokhtar, A., Maouloud, V. M., Omowunmi, A. K., & Nordin, M. S. bin. (2021). Teachers' commitment, self-efficacy and job satisfaction as communicated by trained teachers. *Management in Education*. <https://doi.org/10.1177/08920206211019400>
- Naidoo, K., & Naidoo, L. J. (2023). Designing teaching and reflection experiences to develop candidates' science teaching self-efficacy. *Research in Science and Technological Education*, 41(1), 211–231. <https://doi.org/10.1080/02635143.2021.1895098>
- Olorunsola, E. O. (2012). Job satisfaction and personal characteristics of administrative staff in South West Nigeria Universities. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3(1), 46-50. doi:10.1.1.301.2340
- Pajares, F. (1995). Current direction in self-efficacy research. In M. Maehr, & P. R. Pintrich, *Advances in motivation and achievement* (pp. 1-49). Greenwich, CT: JAI Press.
- Pajares, F. (1996). Self-efficacy beliefs in educational settings. *Review of Educational Research*, 66(4), 543-578. doi:10.2307/1170653
- Pallant, J. (2011). *SPSS survival manual*. Crows Nest NSW: Allen & Unwin.
- Reddy, G. L. (2007). *Special education teachers: Occupational stress, professional burnout, and job satisfaction*. New Delhi: Discovery.
- Saremi, H., & Rezeghi, A. A. (2015). A study on the relationship between self-efficacy beliefs and organizational commitment with job satisfaction in office employees in Esfarayen City, Iran. *International Journal of Life Sciences*, 9(6), 15-23. Retrieved from <http://nepjol.info/index.php/IJLS/index>
- Singh, P., & Loncar, N. (2010). Pay satisfaction, job satisfaction and turnover intent. *Relations Industrielles/Industrial Relations*, 65(3), 470-490. doi:10.2307/23078304
-

-
- Skaalvik, E. M., & Skaalvik, S. (2014). Teacher stress and teacher self-efficacy as predictors of engagement, emotional exhaustion, and motivation to leave the teaching profession. *Psychological Reports, 114*(1), 68-77. doi:10.2466/14.02.PR0.114k14w0
- Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education, 26*, 1059-1069. doi:10.1016/j.tate.2009.11.001
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Sage Publications, Inc.
- Stamplampros, P., Korfiatis, N., Chalvatzis, K., & Buhalis, D. (2019). Job satisfaction and employee turnover determinants in high contact services: Insights from employees' online reviews. *Tourism Management, 75*, 130-147. Retrieved from <https://doi.org/10.1016/j.tourman.2019.04.030>
- Stronge, J. H. (2018). *Qualities of effective teachers (3rd Ed.)*. Alexandria, VA USA: ASCD.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*, 783-805. doi:10.1016/S0742-051X(01)00036-1
- Turkoglu, M. E., Cansoy, R., & Parlar, H. (2017). Examining relationship between teachers' self-efficacy and job satisfaction. *Universal Journal of Educational Research, 5*(5), 765-772. doi:10.13189/ujer.2017.050509
- Umbach, P.D., Wawrzynski, M.R. (2005). Faculty do Matter: The Role of College Faculty in Student Learning and Engagement. *Research in Higher Education 46*, 153–184. <https://doi.org/10.1007/s11162-004-1598-1>
- Urdan, T. C., & Pajares, F. (2006). *Self-efficacy beliefs of adolescents*. Greenwich, Conn: IAP-Information Age Pub.
- Woolfolk Hoy, A., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21*(4), 343-356. doi:10.1016/j.tate.2005.01.007

To cite this article:

- Adhikari, K. P. (2023). Self-efficacy and job satisfaction among school mathematics teachers in Nepal: contributing and contradicting aspects. *Mathematics Education Forum Chitwan, 8* (1), 43-56. <https://doi.org/10.3126/mefc.v8i1.60475>