



Co-Worker Support and Teacher Work Performance: A Social Exchange and Job Demands-Resources Perspective

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ABSTRACT

Teacher work performance is a critical determinant of educational quality, yet the social dimensions of the workplace, specifically peer relationships, are often overlooked in performance models within the education sector. Grounded in Social Exchange Theory and the Job Demands-Resources (JD-R) Model, this study examines the association between co-worker support and teacher work performance in private and non-governmental organization (NGO) schools. Using a quantitative cross-sectional research design, data were collected from a sample of 300 teachers in Phnom Penh, Cambodia, through a multistage sampling procedure involving purposive selection of schools and simple random sampling of teachers within schools. Data analysis involved exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to assess the construct validity of the adapted scales, with internal consistency reliability assessed separately using Cronbach's alpha and McDonald's omega; descriptive statistics to summarize the distribution of perceived work performance and co-worker support; bivariate correlation to examine the association between the two variables; and hierarchical multiple regression to examine the incremental predictive contribution of co-worker support beyond demographic and institutional covariates. Descriptive statistics showed high levels of both perceived co-worker support and teacher work performance; bivariate analysis revealed a significant, moderate-to-strong positive correlation between the two variables; and the final regression model explained 31% of the total variance in teacher performance. These findings support the proposition that collegial support functions as both a socio-emotional exchange resource and a buffer against job demands, sustaining teacher performance. School administrators should prioritize peer support networks and relational quality as strategic tools for professional development, while also considering how demographic factors such as age and school context relate to work outcomes.

Keywords: teacher performance, co-worker relationships, workplace relationships, school environment, employee performance, organizational behavior

INTRODUCTION

In the rapidly evolving landscape of 21st-century education, teacher work performance has emerged as the cornerstone of institutional success and student achievement. High-performing teachers do not merely deliver curriculum; they demonstrate a complex blend of in-role task performance, quality orientation, and professional responsibility (Alfandi, 2016; Azer, 2005; Wartenberg et al., 2023), which means these tasks require individuals who are competent in pedagogical knowledge and have years of experience (Hollenstein & Brühwiler, 2024; Sariakin et al., 2025; Veliz et al., 2025). However, as teaching is a profound social endeavor, the environment in which a teacher operates, specifically the quality of their interpersonal relationships, can significantly catalyze or constrain their professional output (OECD, 2025b; Szostek, 2019). Building co-worker support may involve mutual respect, support, and collaboration among colleagues (Paredes-Saavedra et al., 2024; Smerek & Peterson, 2007).

In the context of private schools and non-governmental organizations (NGOs), where resources may be variable and professional demands high, the emotional and functional support provided by peers becomes a critical buffer, as when teachers experience a sense of belonging and care within their workplace, they are more likely to exhibit the diligence and persistence necessary for effective instruction (Allen et al., 2025; Melzak et al., 2025; Wator et al., 2025). According to Allen et al. (2025), interpersonal relationships (peer relationships, student and parent relationships) are one of six factors that influence teachers' sense of belonging. The other factors, for example, support and collaboration (providing and receiving support; team dynamics and collaborative efforts); professional and personal growth (influence and contribution to society, professional learning opportunities, individual professional identity and characteristics); institutional factors (leadership support, positive school environment, employment stability), motivators (teaching passion, acknowledgment and appreciation); and external networks (engagement in professional networks) also play a significant role in influencing teachers' sense of belonging.

Despite the intuitive importance of workplace harmony, empirical research specifically linking co-worker support to measured work performance remains fragmented, particularly within the private and NGO educational sectors in Cambodia. Previous research has extensively covered pedagogical strategies in early childhood and higher education; however, research has under-explored the socio-emotional work environment of primary and lower secondary teachers, who manage the critical transition from childhood to adolescence. In this unique context (the private and NGO sectors), where administrative support may vary, the reliance on peer-to-peer relational capital becomes a primary determinant of whether a teacher maintains high-quality instructional standards or succumbs to professional stagnation. Many studies have examined "job satisfaction" or "organizational commitment" as outcomes of workplace relationships (Adeniji et al., 2019; Cho & Park, 2011), but fewer have directly quantified how these relationships predict the actual behavioral performance of teachers (Kaiyom et al., 2021; Uslukaya & Demirtas, 2024; Van Den Ouweland et al., 2019). Furthermore, as educational institutions face increasing pressure to maintain high standards with limited budgets, understanding the "low-cost, high-impact" potential of fostering a collaborative culture is of paramount importance to school administrators.

Therefore, this study seeks to fill this gap by examining the association between co-worker support and teacher work performance among 300 teachers from private schools and NGOs. By employing a rigorous quantitative approach, including factor analysis and hierarchical regression, the research aims to determine the extent to which relational quality predicts performance. This study was guided by two research questions:

- **RQ1:** What is the relationship between perceived co-worker support and perceived teacher work performance among primary and lower secondary teachers?
- **RQ2:** To what extent do co-worker relationships significantly predict teacher work performance?

While RQ1 addresses the bivariate association between the two variables, RQ2 extends this by examining the extent to which co-worker support incrementally predicts teacher work performance after accounting for relevant demographic and institutional covariates, which serves a distinct analytic purpose from RQ1.

LITERATURE REVIEW

Teacher work performance (TWP) is a multidimensional construct. It encompasses instructional quality, professional responsibilities, and contributions to student outcomes. Martin (2018) defined teacher performance as the set of behaviors and attitudes of teachers in helping their students to succeed in their learning. Within this view, student academic achievement can be regarded as one observable manifestation of teacher effectiveness rather than as the defining or sole measure of teacher performance. This suggests that teacher performance is not an isolated set of skills, but also considers the complex set of affective factors, which play a significant role in supporting students' learning. In this sense, the quality of an education system cannot exceed the quality of its teachers, positioning them as the most decisive factor in student learning and achievement (Engida et al., 2024; OECD, 2019). Core dimensions of effective TWP include active teaching, high-quality classroom management, instructional clarity, and creating high success rates for learners—one of several key parameter indicators used to gauge teacher effectiveness (OECD, 2025b; Papaioannou et al., 2026; Witter & Hattie, 2024). Li et al. (2025) conceptualized TWP as shaped by individual, motivational, and work-related conditions, where teachers' role perceptions and organizational environment influence performance outcomes. On the other hand, the success of education stems not from isolated individual effort but from collective action and collaboration; in schools, good co-worker relationships feature collaboration, mutual trust, social support, and open communication, shaping teachers' daily professional environment—a foundational dimension of professional life beyond task coordination (Meneses-La-Riva et al., 2025; OECD, 2025a; Rechsteiner et al., 2026). A collaborative school culture involves shared responsibility, mutual support, and reliance among teachers who actively participate in decisions (Arar et al., 2026; Corcelles-Seuba et al., 2024). Trust is central, with a meaningful link between teachers' embeddedness in collaboration networks and stronger trust relationships, as teachers work in teams and co-construct practices (Kolleck et al., 2021; Rechsteiner et al., 2026). Open communication enables idea exchange, reduces conflict, and supports feedback for shared goals.

From a theoretical perspective, the current study is grounded in two theories/models, specifically Social Exchange Theory (SET) and the Job Demands-Resources (JD-R) Model, to understand the relationship between good co-worker relationships and teacher work performance. First, the Social Exchange Theory (SET), rooted in the foundational work of Homans (1958) and elaborated by Blau (1964), holds that relationships are governed by reciprocity. The theory suggests that people exchange material and non-material resources, creating moral obligations to give back. In organizations, these resources include salary and respect, trust, and fairness (Rajâa & Mekkaoui, 2025; Wanga & Ngugi, 2026). Positive exchanges, such as organizational justice fostering performance, and negative actions, such as incivility, rupture them (Ahmad et al., 2023; Pan et al., 2018); trust in management remains vital for collaboration and loyalty within the organization (Rajâa & Mekkaoui, 2025). In addition, the Job Demands-Resources (JD-R) Model (Demerouti et al., 2001; Bakker & Demerouti, 2017) complements SET by classifying coworker support as a key job resource that buffers burnout and sustains engagement (Chen, 2024; Kim & Wang, 2018). Studies of healthcare workers confirm that collegial support and team climate drive engagement while reducing burnout, ultimately improving service quality (Kaiser et al., 2020).

Empirically, a growing body of research establishes that co-worker relationship quality significantly shapes individual work performance across educational and organizational settings. In education, TALIS 2024 data show that teachers with good school community relationships report higher job satisfaction, while those engaging in monthly collaboration report greater fulfilment of lesson aims (OECD, 2025a). A quantitative study

of 198 academic staff in Mogadishu further confirmed that positive employer-employee relationships significantly enhance job satisfaction and performance, though sometimes producing complex and contradictory dynamics (Mohamed et al., 2024). These findings suggest that relational dynamics are a significant factor in the workplace environment's contribution to the performance of the employee/teachers. Beyond education, meta-analytic evidence across industries links coworker support to role clarity and individual effectiveness. In hospitality, coworker incivility reduced both work engagement and job performance more strongly than customer incivility, while engagement positively predicted performance (Wang & Chen, 2020). Similarly, a second-order meta-analysis found that positive teacher-school community relationships yield very large correlations with student academic achievement (Göktaş & Kaya, 2023). These findings indicate that, whether in a school or an industrial environment, building good relationships among employees/teachers improves staff performance.

Three key mechanisms explain how co-worker relationships enhance teacher work performance. First, emotional support buffers stress and burnout. Grounded in the JD-R model, supervisor and coworker support reduce emotional exhaustion and depersonalization, mitigating job demands while sustaining instructional capacity (Hlado et al., 2025). Teacher narratives confirm that peer reassurance alleviates burnout and translates into higher-quality instruction (Padilla, 2024). Second, collegial relationships facilitate professional knowledge exchange. A systematic review of 66 studies identifies a spectrum from informal conversations fostering trust to formalized mentoring and resource-sharing (Wijarwadi et al., 2025). High-quality teacher collaboration improves mathematics achievement through enhanced instructional quality (Wullschleger et al., 2025). Third, positive relational environments strengthen motivation and commitment. Fostering collaboration, social skills, and positive personality traits promotes psychological conditions necessary for high performance (Li et al., 2025). A study confirms that perceived organizational support positively influences satisfaction and commitment, with SET explaining that employees reciprocate support with increased engagement (Wang, 2024). Despite growing evidence, significant gaps remain. Most studies use cross-sectional designs that cannot establish causality or capture the dynamic impact of relational resources on teacher performance (Uslukaya & Zincirli, 2025). Co-worker relationships are rarely isolated as a distinct construct, often embedded within broader organizational climate scales, and JD-R model pathways are seldom comprehensively tested in education-specific contexts (Cao et al., 2020). Literature remains dominated by Western and East Asian settings, with limited evidence from Southeast Asia and the Global South, restricting generalizability (Nilsen & Gustafsson, 2016).

CONCEPTUAL FRAMEWORK

The conceptual framework positions co-worker relationship quality as the independent variable directly influencing teacher work performance (TWP) as the dependent variable. Grounded in Social Exchange Theory (SET) and the Job Demands-Resources (JD-R) Model, the framework argues that high-quality collegial relationships constitute reciprocal socio-emotional exchanges, trust, support, and respect, motivating greater professional commitment (SET), while simultaneously buffering teaching demands and sustaining work engagement (JD-R). The two frameworks are therefore complementary rather than competing: SET explains why teachers reciprocate relational resources with greater effort and commitment, whereas the JD-R Model explains how such resources offset the demands inherent in teaching work; together, they provide a fuller account of the pathway linking co-worker relationships to performance. Three empirically supported mechanisms operationalize this relationship: emotional support reducing burnout, knowledge sharing improving instructional quality, and a positive social environment enhancing motivation and satisfaction—all are essential preconditions for sustained TWP. These three mechanisms are presented as theoretically derived explanatory pathways drawn from prior empirical work rather than as mediating variables that are formally tested within the present study's correlational and regression-based design; testing them as statistical mediators is proposed as a direction for future research.

Association between co-worker relationships and teacher work performance

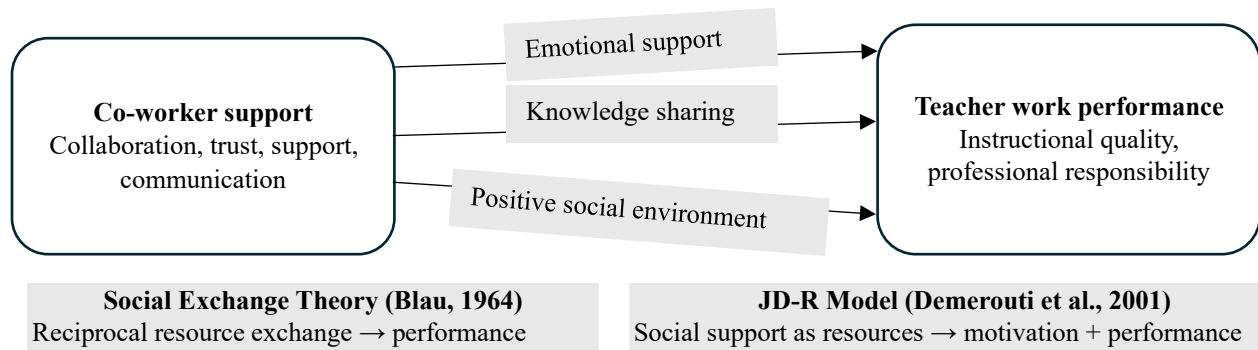


Figure 1. Conceptual framework (Source: The author)

METHODOLOGY

Research Design

This study employed a quantitative cross-sectional research design to examine the association between co-worker support and teacher work performance. The cross-sectional research design assesses data from a population at a single time point (Creswell & Creswell, 2018), making it relatively inexpensive and easy to conduct (Wang & Cheng, 2020). This study is used to examine the association between variables but does not make causal inferences except in special circumstances (Kesmodel, 2018).

Sample and Sampling Technique

This study collected data from a sample of 300 teachers from private schools and NGOs. For factor analyses, the optimum item-to-response ratio is between 1:3 and 1:20, and the suggested sample size ranges from 50 to over 1000. Additionally, the predicted parameter-to-sample ratio ranges from 1:5 to 1:20 (Gunawan et al., 2021). Because the sample size varies based on the research design, the current study follows Kline's (2016) recommendations (1:5 to 1:20 parameter-to-sample ratio). Schools were selected using a purposive sampling technique based on three criteria: (a) the school was a private or non-governmental organization (NGO) school located in Phnom Penh, the capital city of Cambodia; (b) the school operated at the primary or lower secondary level; and (c) the school's management formally agreed to participate in the research and its publication, following a request letter sent by the research team and a signed letter of approval returned by the school. Five private schools and two NGO schools met these criteria and agreed to participate. Within each participating school, teachers were then selected using a simple random sampling technique to provide an equitable opportunity for all eligible teachers to be included (Noor et al., 2022). This multistage approach (purposive selection of schools followed by random selection of teachers within schools) was adopted because a fully randomized sample of teachers across all private and NGO schools in Phnom Penh was not logistically feasible without prior institutional approval. This study included 300 participants. Among them, 65.3% were female, with ages ranging from under 25 to over 45, and more than half (56.3%) were married. Most teachers (69.3%) hold a bachelor's degree, while 40.3% have 1–5 years or more; 51.0% taught at primary schools, 38.0% at lower secondary schools (grades 7–9). While 22.3% worked in NGO schools, the majority of participants (77.7%) were employed in private schools.

Research Instruments

The research instruments were adapted from previously validated scales to ensure the reliability and validity of the measurements. Specifically, the teacher work performance scale, consisting of fourteen items, was adapted from Alfandi (2016). The scale was used to assess teachers' in-role task performance, effort, quality orientation, and professional responsibility. The scale assesses whether teachers exhibit diligence, persistence, continual progress, compliance with standards, and dedication to high-quality teaching approaches ("e.g., I am working on improving my instruction continuously"). The co-worker support scale was adapted from Smerek and Peterson (2007). This scale consists of five items used to measure teachers' perceptions of respect, support, and collaboration among colleagues within the school workplace ("e.g., People care about each other in my school"). Hair et al. (2019) stated that construct validity is evaluated by assessing convergent and discriminant validity. The AVE should be 0.50 or higher, factor loadings should be 0.50 or higher, and construct reliability should be 0.70 or higher to suggest adequate convergent validity (Hair et al., 2019). In this study, the AVEs for the teacher work performance scale were 0.50, and the relationship with the coworkers' scale was 0.49; standardized factor loadings ranged between 0.51 and 0.92; and the construct reliabilities of the subconstructs ranged between 0.83 and 0.91. Moreover, for desired internal consistency, five items with factor loadings less than 0.50 were removed (Hair et al., 2019). When the inter-construct correlations are less than the appropriate square root values of AVE (Fornell & Larcker, 1981) or when the HTMT value is less than 0.85 (Henseler et al., 2015), discriminant validity is guaranteed. A 5-point Likert-type scale, with 1 representing "strongly disagree" and 5 representing "strongly agree," was used to record responses. In addition to these construct-validity indices, the internal consistency reliability of each scale for the current sample was assessed separately using Cronbach's alpha and McDonald's omega, with values above .70 considered acceptable (Hair et al., 2019); these coefficients are reported in the Results section.

Data Analysis

In this study, we used multi-stage data analysis. Starting from cleaning and checking the normal distribution of the data, assessing measurement validity and reliability, and examining the relationship among the study variables. The normal distribution of the data was measured by skewness and kurtosis using SPSS version 27. Data are normal if skewness is between -2 and +2 and kurtosis is between -7 and +7, according to Hair et al. (2010) and Byrne (2010). Construct validity of the measurement model was assessed in two stages using exploratory factor analysis (EFA) followed by confirmatory factor analysis (CFA); reliability was assessed separately (described above) and is not part of what EFA/CFA evaluate. EFA was used first to identify the underlying latent structure of the adapted items, using principal component extraction with varimax rotation (Kaiser normalization); sampling adequacy was evaluated using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity, and factors were retained based on an eigenvalue cutoff of 1.0 together with a minimum primary factor loading of 0.50. CFA was then used to test whether the two-factor structure identified in the EFA provided an adequate fit to the data, with each item constrained to load only on its designated factor. Because the EFA and CFA were conducted on the same full sample rather than on independent or split subsamples, the CFA findings are interpreted as evidence that the two-factor model fits adequately within the current sample, rather than as fully independent confirmation of the EFA-derived structure; this is discussed further as a limitation. The analysis was conducted using JASP version 0.19.3. The model fit is measured via several fit indices, such as: Comparative Fit Index ($CFI \geq 0.90$), Tucker-Lewis Index ($TLI \geq 0.90$) (Jöreskog et al., 2000), Root Mean Square Error of Approximation (RMSEA range of 0.05 to 0.10 considered an indication of fair fit) (MacCallum et al., 1996), and Standardized Root Mean Square Residual ($SRMR \leq 0.08$) (Brown, 2006). Furthermore, Pearson product-moment correlation was used to examine the bivariate association between co-worker support and teachers' work performance, and a three-stage hierarchical multiple regression was used to examine the extent to which co-worker support predicted teacher work performance beyond the demographic and institutional covariates of school type and age. Co-worker support was entered first as the

study's focal theoretical predictor; school type and age were then entered in Steps 2 and 3 in an exploratory manner, rather than according to a strong a priori theoretical rationale, to examine whether the co-worker support-performance relationship held after accounting for these covariates. Prior to interpreting the regression results, the assumptions of linearity, homoscedasticity, normality of residuals, and multicollinearity (assessed via Tolerance and VIF values) were examined and met. The null hypothesis (H_0) is that "No significant relationship exists between a positive relationship with co-workers and teacher work performance".

Ethical Consideration

The study strictly followed ethical standards of data collection, including the voluntary nature of participation, confidentiality, and anonymity. All participants were informed about the purpose of the study and the use of the data for research and publication. The participants were also informed that they had the right to withdraw from the study whenever they wished, without any consequences, to ensure the voluntariness of participation. No identifiable data were collected from the participants to ensure anonymity, and the data were stored in password-protected files; only the researcher had access to the data to ensure the confidentiality of the participants.

RESULTS

Exploratory Factor Analysis

Prior to conducting the exploratory factor analysis (EFA), the suitability of the data for factor detection was assessed. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.90, which is well above the recommended limit of .60. Additionally, Bartlett's Test of Sphericity reached statistical significance, $\chi^2(117) = 2751.403$, $p < .001$, indicating that the correlations between items were sufficiently large for EFA (see **Table 1**). An EFA was performed using principal component analysis with varimax rotation and Kaiser normalization to examine the underlying structure of the 19 items. The number of factors to retain was determined by using an eigenvalue cutoff of 1.0, suggesting a two-factor solution, which accounted for 44.20% of the total variance. The factor loadings are presented in the pattern matrix (see **Table 2**). Items were retained if they had a primary factor loading of 0.50. Factor 1 was labeled "Teachers' work performance" and consisted of 9 items relating to teacher in-role task performance, effort, quality orientation, and professional responsibility. Factor 2 was labeled "Co-worker support" and consisted of 5 items measuring teachers' perceptions of respect, support, and collaboration among colleagues in the school workplace. Internal consistency for each of the subscales was examined using Cronbach's alpha. The reliability coefficients were $\alpha = 0.91$ for teachers' work performance and $\alpha = 0.82$ for co-worker support, indicating excellent internal consistency (see **Table 4**).

Confirmatory Factor Analysis (CFA)

A confirmatory factor analysis (CFA) was conducted to test the measurement model identified in the previous EFA. The model specified two latent factors: Teachers' work performance and co-worker support. Each item was constrained to load only on its designated factor, and the variances of the latent variables were fixed to 1.0 to identify the model.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.90
Bartlett's Test of Sphericity	Approx. Chi-Square	2751.403
	df	117
	Sig.	0.000

Note: df = degree of freedom, Sig = level of significance

Table 2. Factor loadings, uniqueness, variance explained, and reliability for the two-factor model

Items	Factor 1	Factor 2	Uniqueness
TWP1	0.922		0.301
TWP2	0.858		0.374
TWP3	0.810		0.474
TWP4	0.778		0.388
TWP5	0.771		0.467
TWP6	0.753		0.414
TWP7	0.719		0.483
TWP8	0.553		0.506
TWP9	0.513		0.558
CWS1		0.908	0.339
CWS2		0.719	0.487
CWS3		0.695	0.543
CWS4		0.688	0.494
CWS5		0.553	0.653
<i>Variance explained</i>	36.90	7.30	
<i>Reliability</i>	0.91	0.82	

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

The initial model fit was evaluated using several goodness-of-fit indices. The model demonstrated an overall acceptable, though imperfect, fit to the data: $\chi^2(76) = 269.43$, $p < .001$; CFI = 0.91; TLI = 0.89; RMSEA = 0.09 (90% CI [0.08, 0.10]); SRMR = 0.05 (see [Table 3](#)). The TLI value was marginally below the conventional 0.90 threshold, and the RMSEA value fell at the upper, weaker end of the range typically considered acceptable. All standardized factor loadings were statistically significant ($p < .001$) and ranged from 0.59 to 0.81, exceeding the recommended threshold of .50, indicating that the indicators significantly contribute to their respective latent constructs. To further validate the model, Average Variance Extracted (AVE) and Composite Reliability (CR) were calculated. AVE of teachers' work performance was 0.55 and CR = 0.91; for co-worker support, the value of AVE was 0.49 and CR = 0.83 (see [Table 4](#)).

The AVE for co-worker support fell slightly below the conventional 0.50 threshold, suggesting that some items in this adapted scale share somewhat less variance with their underlying construct than desired; this, together with the borderline TLI and RMSEA values, may partly reflect that both scales were adapted from instruments originally developed and validated outside Cambodia, and applying them within a different linguistic, cultural, and educational context can introduce a degree of misfit even when factor loadings remain individually acceptable. Because the CFA was estimated on the same sample used for the preceding EFA (see [Data analysis](#)), these fit statistics are best interpreted as evidence that the two-factor model performs adequately within the current sample, rather than as fully independent confirmation of the EFA-derived structure. The square root of the AVE for each construct was greater than its correlation with any other construct, satisfying the Fornell-Larcker criterion, and the HTMT value was below 0.85, indicating sufficient discriminant validity.

Table 3. Model fit indices for the confirmatory factor analysis

Model	χ^2 (df)	p	CFI	TLI	RMSEA [90% CI]	SRMR
Factor model	269.43(76)	< .001	0.91	0.89	0.092 [.08, .104]	0.050

Note. χ^2 = chi-square test of model fit. CFI = Comparative Fit Index. TLI = Tucker-Lewis Index. RMSEA = Root Mean Square Error of Approximation. SRMR = Standardized Root Mean Square Residual. RMSEA 90% confidence interval is reported in brackets. Estimation method: ML. The standard error method is used.

Table 4. Factor loadings, validity, and reliability of constructs

Construct	Factor Loadings	AVE / $\sqrt{\text{AVE}}$	ω / α	CR	HTMT
TWP	0.61–0.81	0.55 / 0.74	0.92 / 0.91	0.91	0.61
CWS	0.59–0.78	0.49 / 0.70	0.83 / 0.82	0.83	

Note. Factor loadings are standardized; range indicates minimum to maximum loading per factor. AVE = Average Variance Extracted; $\sqrt{\text{AVE}}$ = square root of AVE; ω = McDonald's omega; α = Cronbach's alpha; values > 0.70 indicate acceptable reliability; CR = Composite reliability; HTMT = Heterotrait-Monotrait ratio of correlations; values below 0.85 indicate adequate discriminant validity.

Table 5. Descriptive statistics and bivariate correlations among study variables

Variable	TP	CWS
1. TWP	—	
2. CWS	0.527***	—
Mean	4.19	4.09
Std. Deviation	0.33	0.34
Skewness	1.30	0.86
SE of skewness	0.14	0.14
Kurtosis	0.55	2.29
SE of kurtosis	0.28	0.28

Note. $p < .05$. ** $p < .01$. *** $p < .001$. TWP = teacher work performance; CWS = Co-worker support

Descriptive Statistic and Bivariate Analysis

Table 5 presents the results of descriptive statistics and bivariate analysis. Mean scores summarized in Table 5 show that teacher work performance (TWP) was 4.19 (SD = 0.33), and Co-worker support (CWS) was 4.09 (SD = 0.34), indicating that teachers' perceptions of their own performance and of workplace relational quality were both high. The skewness and kurtosis values were within the acceptable range of ± 2.0 and ± 7.0 , respectively (Byrne, 2010; Hair et al., 2010), supporting the use of parametric analyses. Bivariate analysis showed a moderate-to-strong relationship between teacher work performance and co-worker support ($r = .53$, $p < .001$), indicating that teachers who perceived higher-quality relationships with their co-workers also tended to report higher work performance.

Multiple Regression Analysis

A three-stage hierarchical multiple regression was conducted to predict teacher work performance (TWP). Multicollinearity was not a concern, as all Tolerance values were above 0.10 and VIF values were well below the threshold of 10 (Kim, 2019) (see Table 6). Co-worker support (CWS) was entered first as the study's focal theoretical predictor; school type and age were entered in Steps 2 and 3 in an exploratory manner to examine whether the CWS-TWP relationship held after accounting for these covariates. Firstly, co-worker support (CWS) was entered; the model was statistically significant, $F(1, 298) = 115.52$, $p < .001$, and explained 27% of the variance in TWP. CWS was a significant positive predictor ($\beta = 0.52$, $p < .001$). In the second step, school type was added to the model. This model was also significant, $F(2, 297) = 52.60$, $p < .001$, and explained a total of 30% of the variance. The addition of school type contributed an additional 3% of explained variance. Both CWS ($\beta = 0.50$, $p < .001$) and school type ($\beta = 0.16$, $p < .01$) were significant predictors. In the final step, age was added. The total variance explained by the final model was 31%, $F(3, 296) = 43.59$, $p < .001$. In this model, all three predictors were statistically significant: CWS remained the strongest predictor ($\beta = 0.49$, $p < .001$); school type was a significant positive predictor ($\beta = 0.14$, $p < .01$); age was a significant negative predictor ($\beta = -0.10$, $p < .05$).

Table 6. Hierarchical multiple regression predicting teacher work performance

Model	Predictors	B	SE	β	t	R ²	F	df	P (Model)	Tolerance	VIF
1	(Constant)	2.12	0.20		10.77	0.27	115.52	1, 298	< .001	1.00	1.00
	CWS	0.51	0.05	0.52***	10.56						
2	(Constant)	2.07	0.19		10.63	0.30	52.60	2, 297	< .001	0.97	1.03
	CWS	0.48	0.05	0.50***	10.07						
	School	0.12	0.04	0.16**	3.20						
	types										
3	(Constant)	2.17	0.20		10.86	0.31	43.59	3, 296	< .001	0.97	1.03
	CWS	0.48	0.05	0.49***	10.05						
	School	0.11	0.04	0.14**	2.87						
	types										
	Age	-0.03	0.01	-0.10*	-2.05						

Note. TWP = Teacher work performance; CWS = Co-worker support; B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient; t = t-statistic; p = significance level; R² = proportion of variance explained; F = F-statistic for model fit; df = degrees of freedom.

DISCUSSION

The study aims to examine the association between co-worker support (CWS) and teacher work performance (TWP). Results revealed a positive correlation between these variables ($r = .53$, $p < .001$). Co-worker support (CWS) appears as the most potent predictor of performance in the final regression model ($\beta = 0.49$). This finding suggests that the school environment functions as a social ecosystem where interpersonal support may encourage pedagogical effort and quality orientation, which is the alignment between social cohesion and professional output. When teachers maintain high-quality relationships with their peers, they gain access to emotional support and professional scaffolding, which further reduces burnout, enhances instructional efficacy, and fosters a sense of psychological safety.

The study revealed that co-worker support strongly predicts teacher work performance. This finding reinforces the principles of Social Exchange Theory. This suggests that when teachers experience trust, respect, and reciprocal support from colleagues, they are motivated to reciprocate through greater professional commitment and effort. Resources rooted within social networks (e.g., trust and reciprocity) enhance both individual and team cooperation, collective action, and the achievement of shared goals or collective productivity (Lemańczyk et al., 2026; Xie et al., 2021). A supportive environment may reinforce a teacher's belief in their own capability and drive higher performance standards across the school. This finding is also consistent with the work of Demir (2021), who indicated that social capital among teachers is a primary driver of professional learning and effectiveness, while also enhancing their creative behavior (Shi et al., 2023). Teaching is rarely an entirely isolated activity, and teachers may collaborate with, support, and help one another around shared lesson plans, classroom management strategies, and collective problem-solving. This collaboration should not automatically be assumed to be effective, however: several scholars have shown that teacher collaboration can be superficial or administratively imposed rather than genuinely collegial, a pattern that Hargreaves (1994) termed “contrived collegiality” and that later work continues to document (Datnow, 2011). Because the present study relies on teachers' self-reported perceptions rather than observed collaborative behavior, the high mean levels of co-worker support found here should be read as evidence that teachers perceive their colleagues as supportive, not as direct evidence that their collaboration is uniformly effective. The findings are equally consistent with the JD-R Model, which frames co-worker support as a job resource that buffers the psychological strain associated with teaching demands. This suggests that trust, support, and the feeling of connection among teacher co-workers may significantly foster teachers' sense of belonging, which can further enhance their performance. Furthermore, the high mean scores for CWS ($M =$

4.09) and TWP ($M = 4.19$) in this sample mirror the "collegiality" trends noted in the OECD (2025a) TALIS report, which found that teachers who engage in frequent professional collaboration report significantly higher self-efficacy and fulfillment of lesson aims. The mechanism through which these relationships influence performance likely involves the reduction of psychological strain. As noted by Hostinar and Gunnar (2015) and Saud and Rice (2024), positive interactions with peers can buffer against work-related stress and burnout. Therefore, when teachers perceive their workplace as a supportive community, they are more likely to adopt "in-role" behaviors, such as diligence and professional responsibility, which were central components of the TWP scale used in this study.

Interestingly, school type emerged as a significant predictor ($\beta = 0.14$), with higher performance levels associated with private school settings compared to NGOs. These findings suggest that different organizational structures may also play a crucial role in shaping teacher performance in this context. Private educational institutions often implement more structured feedback and team-building programs, according to Mohamed et al. (2024), which means private institutions may be better at strengthening employer-employee and peer-to-peer dynamics. Considering the unique and specific context of Cambodia, further study may be able to answer this question by comparing the performance of teachers from the private and NGO sectors; however, current findings provide significant information to understand this relationship.

In addition, a notable and somewhat unexpected finding was the negative association between age and performance ($\beta = -0.10$, $p < .05$). While experience is often equated with expertise, this result suggests that in the specific context of private and NGO schools, older teachers may face unique challenges that hinder performance ratings. This aligns with research by Pascoe et al. (2020), who observed that cumulative workload stress and the rapid evolution of digital pedagogical tools can lead to decreased instructional enthusiasm and lower results-based performance among more senior staff. Alternatively, it may reflect a "survivor bias" or a shift in focus toward administrative rather than purely task-oriented classroom performance as teachers age. This study confirms that "people care about each other" is not just a sentiment but a measurable metric of school success. In a school environment, when all teachers care about each other, they tend to engage in innovative teaching practices and take the pedagogical risks necessary for professional growth. The strong predictive power of co-worker support over individual demographic factors emphasizes that administrators should prioritize the "relational climate" as a formal pillar of school improvement strategies.

LIMITATIONS AND FUTURE RESEARCH

Despite providing useful insight into work performance in the field of education, the study has several limitations to acknowledge. First, this study employed a quantitative cross-sectional design. This design collects data at a single point in time. While it provides an understanding of the relationships among the study variables, it does not allow for causal inference. Future studies should employ a longitudinal design or experimental design in a specific group of teachers or a school; this helps establish the direction of causality. Relatedly, because the exploratory and confirmatory factor analyses were both conducted on the same full sample, the CFA results should be interpreted as evidence of adequate model fit within this sample rather than as fully independent validation of the factor structure; future studies should consider validating the adapted scales using an independent or split sample. In addition, the order in which the covariates (school type and age) were entered in the hierarchical regression was exploratory rather than based on a strong a priori theoretical rationale; future research should specify and justify the entry order in advance, or consider alternative analytic strategies such as simultaneous entry. Second, the current study used a self-reported questionnaire; teacher participants rated themselves on their performance and their perceptions of their relationship with their colleagues. As they rated themselves, this use of a self-reported questionnaire may introduce common method bias or social desirability bias. A formal statistical test for common method bias, such as Harman's single-factor test, was not conducted in the present study; future research is encouraged to

apply such diagnostic procedures, alongside procedural remedies such as multi-source or multi-wave data collection, to more directly evaluate the extent to which shared method variance may have influenced the observed associations. Future research should apply a “360-degree” evaluation approach by incorporating supervisor ratings or peer-review assessments of work performance and supplementing self-reported data with qualitative methods such as semi-structured interviews or focus groups. Doing so could help mitigate this self-report bias and provide a deeper understanding of how specific relational behaviors (e.g., emotional support vs. technical collaboration) translate into higher teaching quality. Furthermore, because data were collected from teachers working at private schools and NGOs, the findings may not be generalizable to public school settings. Future comparative studies are recommended to examine whether the impact of co-worker relationships varies across public and private educational sectors and across different institutional cultures and management frameworks. In addition, to better map the psychological pathway between social support and professional output, future models should also explore potential mediators, such as job satisfaction or organizational commitment. While leadership styles, teacher self-efficacy, salary satisfaction, or student behavior were not included in this study, future studies should further expand by including these factors, as they may play an essential role in determining teacher work performance.

CONCLUSION AND PRACTICAL IMPLICATIONS

This study aims to examine the association between co-worker support (CWS) and teacher work performance (TWP) within the context of private and NGO schools. The findings provide empirical evidence that workplace relational quality is a powerful determinant of teacher effectiveness. We found high levels of both relationships with co-workers and work performance among the sampled teachers; co-worker support (CWS) was also found to have a positive relationship with teacher work performance (TWP). Based on the hierarchical regression analysis, CWS was found to be the strongest positive predictor of performance, explaining a substantial portion of the variance (31%) even when accounting for demographic and institutional factors. The study also found that school type played a significant role, suggesting that institutional structures in private schools may influence performance differently from NGOs; while the negative association found with age suggests that experience alone does not guarantee higher performance in these settings. The study underscores that a collaborative, respectful, and supportive social environment is not merely a “workplace perk” but a functional necessity for maintaining high standards of teaching.

The results of this study offer several actionable insights for school administrators, NGO project managers, and educational policymakers. Since co-worker relationships are the strongest predictor of performance ($\beta = 0.49$), school leaders should move beyond purely task-oriented management. Given that the final regression model explained 31% of the variance in TWP, and that the sample's mean CWS score ($M = 4.09$, $SD = 0.34$) provides a normative benchmark for this context, school administrators could use brief, validated co-worker support surveys, such as the adapted CWS scale used in this study, periodically to identify teams or departments scoring notably below this benchmark and to target relational-climate interventions accordingly. Leaders of the organizations should encourage open communication and mutual respect by implementing “Relational Leadership” models that can directly translate into better classroom outcomes. Schools should move from “accidental” to “intentional” collaboration. This could include structured peer-mentoring programs, collaborative lesson planning, and regular “community of practice” meetings where teachers can share challenges without fear of judgment. The finding that age was a negative predictor ($\beta = -0.10$) suggests that veteran teachers may face unique challenges, perhaps related to burnout or technological shifts; therefore, professional development should be tailored to re-engage experienced staff while leveraging their expertise to support younger colleagues. For new hires, especially in private and NGO sectors where turnover can be high, the first 90 days should focus heavily on social integration. If a teacher feels cared for by their peers (as measured by the CWS scale), they are statistically more likely to exert higher effort and demonstrate better quality orientation. This research contributes to the literature by validating the importance of the Social Capital

Theory within educational settings, confirming that the internal social capital of a school-the ties between colleagues- acts as a catalyst for human capital (the skills and performance of individual teachers). It also suggests that future models of teacher performance must look beyond individual pedagogical skills to include the relational climate of the school as a primary variable.

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Ethical statement: The study strictly followed ethical standards of data collection, including the voluntary nature of participation, confidentiality, and anonymity. All participants were informed about the purpose of the study and the use of the data for research and publication. Prior to data collection, the participants were informed that they had the right to withdraw from the study whenever they wished, without any consequences, to ensure the voluntariness of participation. No identifiable data were collected from the participants to ensure anonymity, and the data were stored in password-protected files; only the researcher has access to the data to ensure the confidentiality of the participants. Informed consent was obtained from all individual participants included in the study. Participants were informed about the purpose of the study, the procedures involved, potential risks and benefits, and their right to withdraw at any time without any consequences. They were informed that by submitting their response, they give us consent to use their data for research and publication purposes.

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