International Journal of Learning, Teaching and Educational Research
Vol. 25, No. 5, pp. 416-438, May 2026
https://doi.org/10.26803/ijlter.25.5.18
Received Feb 14, 2026; Revised Apr 17, 2026; Accepted Apr 20, 2026

The Impact of Work Environment on Teacher Training Transfer: The Mediating Role of Motivation to Transfer

Yajie Zou[1], Jamil Bin Ahmad and Bity Salwana Alias
Faculty of Education, Universiti Kebangsaan Malaysia (UKM),
Bangi, Selangor, Malaysia

Abstract. Drawing on training transfer theory and expectancy–value perspectives, this study aimed to examine how the Work Environment for Transfer (WET) influences teachers' Transfer of Training (TOT) through the mediating role of Motivation to Transfer (MT). Using a paper-based survey of 333 in-service lower secondary school teachers in Hubei Province, China, the hypothesised second-order model was tested using structural equation modelling. The results showed that WET was a significant positive predictor of MT ($\beta = 0.915$), whereas MT was a significant positive predictor of TOT ($\beta = 0.887$). By contrast, the direct effect of WET on TOT was not significant, and MT fully mediated the relationship between WET and TOT. Overall, the model explained 83.7% of the variance in MT and 65.4% of the variance in TOT. These findings suggest that workplace support translates into sustained training transfer primarily through teachers' transfer motivation in a policy-driven professional development context. This study advances a contextual–motivational explanation of transfer and offers practical implications for strengthening transfer climates, expanding opportunities to apply learning, and designing supports that build transfer motivation to enhance the generalisation and maintenance of trained practices.

Keywords: mediation model; motivation to transfer; teacher professional development; transfer of training; work environment

Citation:
Zou, Y., Ahmad, J. B., & Alias, B. S. (2026). The Impact of Work Environment on Teacher Training Transfer: The Mediating Role of Motivation to Transfer. *International Journal of Learning, Teaching and Educational Research*, 25(5), 416–438. https://doi.org/10.26803/ijlter.25.5.18

1. Introduction

As learning demands grow more complex in the twenty-first-century knowledge economy, enhancing teacher learning has become a core concern for researchers, practitioners, and policymakers worldwide (Darling-Hammond et al., 2017). Teacher Professional Development (TPD) is widely recognised as a strategic means of strengthening in-service teachers' knowledge, skills, and pedagogical beliefs (Guskey, 2002). However, the value of TPD depends not only on what

[1]Corresponding author: Yajie Zou; *p147269@siswa.ukm.edu.my*

teachers learn during training, but also on whether that learning is enacted effectively and sustained in workplace practice (Sasson & Miedijensky, 2023). This process is generally known as transfer of training and concerns whether what is learned in training is applied in work settings and sustained over time, through generalisation and maintenance (Baldwin & Ford, 1988; Blume et al., 2010, 2019). Despite continued investment in training, much of what is learned in training still does not translate into improved job performance or sustained changes in workplace practice. As a result, the transfer problem remains a persistent concern, reducing training effectiveness and wasting resources (Grossman & Salas, 2011; Muduli & Raval, 2018).

In teacher professional development, this issue is especially important because the value of professional learning lies not only in what teachers gain during training, but also in whether that learning leads to sustained changes in practice (Darling-Hammond et al., 2017; Desimone, 2009; Guskey, 2002). After training, however, teachers return to school environments that vary in leadership support, collegial collaboration, workload, and opportunities to try out new practices. Recent research on Chinese teachers similarly shows that collaborative and supportive professional communities can foster teachers' professional growth, peer learning, and the enactment of new practices (Wang & Fan, 2025). Against this backdrop, a key question is how training is carried into classroom practice. The present study addresses this question in a province-level training context in Hubei Province, where in-service junior secondary teachers participate in centralised training and then return to diverse school environments to implement what they have learned.

A substantial body of research has investigated determinants of training transfer and has converged on a broad framework in which transfer outcomes are shaped by training design, trainee characteristics, and the work environment (Baldwin & Ford, 1988; Burke & Hutchins, 2007). Meta-analytic evidence further shows that contextual factors—especially supervisory support, peer support, and opportunities for transfer—are among the most consistent predictors of successful transfer (Blume et al., 2010; Grossman & Salas, 2011). The work environment is often captured through the notion of transfer climate, referring to the extent to which trainees are encouraged and enabled to apply trained skills in their work roles (Rouiller & Goldstein, 1993; Tracey et al., 1995). A perspective that continues to inform recent studies of training transfer (Fauth & González-Martínez, 2023; Mehner et al., 2025).

In particular, "opportunity to perform" has been theorised and empirically supported as a critical bridge between training and workplace enactment, reflecting whether trainees can access suitable tasks, resources, and situational conditions to use what they learned (Ford et al., 1992). Recent research also suggests that application opportunities and workplace support play an important role in shaping post-training transfer (Mehner et al., 2025; Nafukho et al., 2023). In educational settings, emerging evidence likewise highlights the importance of workplace support for converting professional learning into classroom practice, especially in technology-mediated and virtual training contexts where social support may carry greater weight than formal organisational arrangements

(Fauth & González-Martínez, 2023; Nafukho et al., 2023). Recent research further shows that peer and supervisor support play an important role in training transfer and related post-training outcomes (Mehner et al., 2025).

Alongside contextual support, motivation has long been viewed as a proximal mechanism shaping whether learning is converted into action. Foundational work drew attention to trainees' motivational and attitudinal factors as underappreciated influences on training effectiveness (Noe, 1986), and later meta-analytic syntheses showed that training motivation explains incremental variance in training outcomes, including transfer, beyond cognitive ability (Colquitt et al., 2000). Contemporary motivational perspectives suggest that motivation to transfer is not a single construct; rather, it reflects expectancy for success, perceived value of transfer, and perceived costs or barriers, consistent with expectancy–value traditions and related work-motivation frameworks (Eccles & Wigfield, 2002).

Complementary perspectives, such as self-determination theory, further argue that supportive contexts can foster internalisation and sustained enactment by satisfying basic psychological needs for competence, autonomy, and relatedness (Deci & Ryan, 2013; Ryan & Deci, 2000). Recent transfer research increasingly treats motivation to transfer as a key mediator linking contextual resources to transfer behaviour, and calls for more nuanced, multidimensional conceptualisations and measurements of transfer motivation (De Jong et al., 2023; Gegenfurtner & Quesada-Pallares, 2022). Teacher-focused studies similarly indicate that motivation to transfer educational innovation is shaped by perceived value, social practices, and organisational factors, reinforcing the importance of examining contextual–motivational mechanisms in educational work environments (Stumbrienė et al., 2024).

Even with expanding scholarship on training transfer, important gaps remain in the teacher professional development literature, particularly in policy-driven contexts. Although work-environment factors such as supervisor and peer support and opportunities to apply learning are consistently emphasised, the mechanisms through which these contextual resources lead to sustained transfer outcomes are still not sufficiently specified or tested in teacher training settings. Prior studies report heterogeneous findings on whether the work environment directly influences transfer or operates mainly through intervening psychological processes (Fauth & González-Martínez, 2023; Nafukho et al., 2023). These inconsistencies point to the potential importance of motivational pathways, yet quantitative verification in teacher PD contexts—especially within non-Western systems characterised by strong policy steering—remains limited (Blume et al., 2023; Trang, 2024).

Recent research recognises the multidimensionality of motivation to transfer and its predictive value for transfer behaviour. However, empirical models that explicitly integrate work-environment support with expectancy–value components of transfer motivation and link them to sustained transfer outcomes remain scarce, particularly among Chinese primary and secondary school

teachers (De Jong et al., 2023; Gegenfurtner & Quesada-Pallares, 2022). This gap matters because teacher development in China is embedded in a governance logic strongly shaped by national policy mandates and differentiated development priorities, which may reshape how contextual supports and motivational processes operate in the transfer process.

In response, this study examined how the work environment for transfer—specifically supervisor support, colleague support, and opportunity to use trained competencies—influences teachers' transfer of training, operationalised as generalisation and maintenance, with particular attention to the mediating role of motivation to transfer conceptualised through expectancy for success, task value, and perceived cost (De Jong et al., 2023; Eccles & Wigfield, 2002; Ford et al., 1992). Focusing on in-service junior secondary school teachers in Hubei Province who participated in a province-level professional development programme and subsequently returned to their schools for implementation, the study tested an integrated contextual–motivational model using quantitative survey methods.

By clarifying how workplace support is converted into sustained training-to-practice transfer through motivational mechanisms, the study aimed to extend training transfer theory in educational contexts and to offer evidence-based recommendations for improving the effectiveness of large-scale teacher professional development initiatives. Accordingly, this study has two related aims. The first is to examine the direct relationships among Work Environment for Transfer, Motivation to Transfer, and Transfer of Training. The second is to test whether Motivation to Transfer mediates the relationship between Work Environment for Transfer and Transfer of Training. On this basis, the study addresses two research questions:

(1) To what extent is Work Environment for Transfer associated with Motivation to Transfer and Transfer of Training among in-service junior secondary school teachers?

(2) To what extent does Motivation to Transfer mediate the association between Work Environment for Transfer and Transfer of Training?

2. Literature Review and Hypotheses Development

To explain the relationships examined in this study, this section first outlines the theoretical framework and then presents the research model and hypotheses.

2.1 Theoretical Framework and Research Model

Research on teacher professional development (TPD) consistently shows that professional learning is ultimately judged not only by what teachers acquire during training, but by whether that learning is carried forward into sustained changes in classroom practice (Borko, 2004; Desimone, 2009; Guskey, 2002). In this study, transfer of training refers to the application and continued use of what trainees learn in workplace practice, reflected in generalisation and maintenance (Baldwin & Ford, 1988; Blume et al., 2010, 2019). Meta-analytic work suggests that transfer does not occur uniformly, but depends on trainee characteristics, training

design, and work-environment conditions (Blume et al., 2010; Burke & Hutchins, 2007).

Baldwin and Ford's framework remain central to research on training transfer. The model positions these factors upstream of learning and retention, which then shape generalisation and maintenance. Later reviews also point to transfer climate, supervisory and peer support, and opportunity to perform as recurring workplace influences on transfer across settings (Grossman & Salas, 2011; Rouiller & Goldstein, 1993; Tracey et al., 1995). In teacher development, these conditions may be especially consequential because enactment often requires time, resources, collegial interaction, and authentic opportunities to apply trained practices within everyday instructional routines (Fauth & González-Martínez, 2023; Nafukho et al., 2023).

At the same time, although the transfer framework proposed by Baldwin and Ford usefully classifies major antecedents of transfer (Baldwin & Ford, 1988), it is less explicit about the psychological processes through which work-environment conditions are translated into transfer behaviour. To better specify this mechanism, the present study drew on two complementary lenses. First, Organisational Support Theory suggests that employees respond more positively when they feel that the organisation values what they do and is concerned about their well-being (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). Recent transfer research likewise indicates that supervisory and peer support can strengthen post-training application and related transfer processes (Mehner et al., 2025).

In school settings, supervisor and colleague support, together with opportunities to apply new practices, can therefore be understood as institutional signals that transfer efforts are valued and likely to be recognised, which may encourage enactment. Second, Expectancy–Value Theory explains achievement-related behaviour as a function of expectancy for success and subjective task value, while also recognising perceived cost as a key deterrent to persistence and engagement (Eccles & Wigfield, 2002). In training research, motivation to transfer is increasingly treated as multidimensional, capturing expectancy, value, and cost considerations that shape decisions about whether to apply learning at work (De Jong et al., 2023; Gegenfurtner & Quesada-Pallares, 2022).

Building on these perspectives, this study advances an integrated model in which Work Environment for Transfer (WET)—operationalised as supervisor support, colleague support, and opportunity to use trained competencies—shapes teachers' Motivation to Transfer (MT) (expectancy for success, task value, and perceived cost), which then predicts Transfer of Training (TOT) (generalisation and maintenance). The model is consistent with transfer systems perspectives that treat contextual enablement and motivational readiness as central conditions for transfer (Andoh et al., 2024; De Jong et al., 2023; Kauffeld et al., 2025; Mehner et al., 2025).

2.2 The Impact of Work Environment for Transfer on Transfer of Training

Classical transfer frameworks identify the work environment as an important condition for transfer. Early research suggested that even when learning occurs during training, transfer may be limited if the workplace does not provide adequate support, cues, and opportunities for applying new competencies (Baldwin & Ford, 1988). Research on transfer climate aligns with this argument: environments that communicate encouragement, expectations, and reinforcement for using trained behaviours tend to be associated with stronger post-training performance (Fauth & González-Martínez, 2023; Grossman & Salas, 2011; Mehner et al., 2025).

One prominent pathway through which the work environment affects transfer is the opportunity to perform trained tasks. Ford et al. (1992) defined opportunity to perform as the breadth and level of work activities that allow trainees to enact trained skills, and showed that supervisory attitudes and workgroup support are linked to differential opportunities to apply learning. Related evidence similarly suggests that transfer climate and social support shape whether trainees are able and willing to practise new behaviours at work (Rouiller & Goldstein, 1993; Tracey et al., 1995). More broadly, integrative reviews and meta-analyses consistently identify work-environment support as one of the strongest predictors of transfer, alongside motivation-related variables (Blume et al., 2010; Grossman & Salas, 2011).

In educational settings, these conditions may matter even more because teachers' enactment often depends on collegial collaboration, leadership support, and practical opportunities to test and refine new instructional practices. Evidence from virtual in-service ICT training indicates that school-based enablement and social support can facilitate early transfer, with social support often standing out as particularly salient (Fauth & González-Martínez, 2023). Research on continuing professional education for teachers likewise shows that contextual factors, together with programme design conditions, shape whether learning is carried into workplace practice (Nafukho et al., 2023).

Taken together, this literature suggests that a supportive transfer environment—reflected in supervisor support, colleague support, and opportunities to apply trained competencies—should strengthen teachers' transfer outcomes. More recent evidence likewise confirms that peer and supervisor support continue to function as important antecedents of training transfer and related post-training outcomes (Mehner et al., 2025). Accordingly, the following hypothesis was proposed:

H1: Work Environment for Transfer is positively associated with Transfer of Training.

2.3 The Mediating Role of Motivation to Transfer

The following subsections discuss why motivation to transfer may link work-environment support to training transfer.

2.3.1 Work Environment for Transfer and Motivation to Transfer

Motivation to transfer refers to trainees' willingness to apply what they have learned in the workplace. Recent studies increasingly treat it as a multidimensional construct and show that situational characteristics, including support and transfer opportunity, shape transfer motivation and subsequent transfer outcomes (Andoh et al., 2024; De Jong et al., 2023; Gegenfurtner & Quesada-Pallares, 2022).

From the perspective of Organisational Support Theory, supportive actions by supervisors and colleagues can be interpreted as discretionary organisational concern, strengthening perceived support and activating reciprocity norms (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). Recent workplace research likewise indicates that supervisor and colleague support can facilitate transfer-related outcomes (Mehner et al., 2025). In transfer settings, such support can increase teachers' confidence that implementation efforts are valued, reduce uncertainty around enactment, and strengthen their willingness to invest effort in applying new practices.

Empirical work in demanding contexts supports this logic, showing that perceived supervisor and colleague support can predict post-training outcomes through motivation to transfer (Junça Silva & Pinto, 2024). Evidence from higher education similarly suggests that academic support may influence transfer outcomes indirectly through motivational processes, including motivation to learn and motivation to transfer (Sharif et al., 2023). Recent qualitative evidence likewise suggests that workplace supports and barriers shape transfer motivation throughout the transfer process, and that environmental barriers can gradually weaken transfer efforts (Lau et al., 2026).

Expectancy–Value Theory further helps explain why supportive environments should strengthen transfer motivation. When teachers experience adequate guidance, resources, peer collaboration, and authentic opportunities to use new practices, they are more likely to expect successful implementation, view transfer as worthwhile, and perceive lower psychological and practical costs (Andoh et al., 2024; De Jong et al., 2023; Eccles & Wigfield, 2002). Recent motivation research also emphasises that transfer motivation is multidimensional and responsive to contextual cues, supporting models that incorporate expectancy, value, and cost components (De Jong et al., 2023; Gegenfurtner & Quesada-Pallares, 2022). Longitudinal and dynamic accounts of transfer likewise point to motivational processes as key drivers of early transfer trajectories, while contextual support shapes these processes (Diekmann & Pundt, 2025).

On this basis, a supportive work environment is expected to enhance teachers' motivation to transfer. This expectation is also consistent with recent research suggesting that supportive organisational conditions can strengthen transfer-related motivation by increasing perceived feasibility and reducing implementation barriers (Andoh et al., 2024; Mehner et al., 2025). Therefore:

H2: Work Environment for Transfer is positively associated with Motivation to Transfer.

2.3.2 Motivation to Transfer and Transfer of Training

Motivation is repeatedly identified as a proximal predictor of whether trainees enact learning at work. Across major transfer syntheses, motivation-related variables show consistent positive associations with transfer outcomes (Blume et al., 2010; Grossman & Salas, 2011). For teachers, motivation is particularly relevant because transfer often requires sustained effort to adapt training content to heterogeneous classroom conditions and to persist despite contextual constraints.

Recent evidence continues to support the predictive role of motivation to transfer across settings and methods. Research grounded in task-specific motivation models shows that multidimensional transfer motivation predicts subsequent transfer outcomes, including externally reported transfer (De Jong et al., 2023). Studies in teacher-related training contexts similarly indicate that motivation is a key pathway through which training-related and contextual influences translate into transfer outcomes (Nafukho et al., 2023). In addition, research focused on specific transfer processes suggests that motivation to transfer positively predicts transfer outcomes and may operate as a mediator between antecedents and transfer, depending on contextual and individual conditions (Andoh et al., 2024; Yaqub et al., 2024).

Accordingly, stronger motivation to transfer—reflected in higher expectancy for success, greater perceived value, and lower perceived cost—is expected to predict greater generalisation and maintenance of trained practices. Thus:

H3: Motivation to Transfer is positively associated with Transfer of Training.

2.3.3 Motivation to Transfer as a Mediator between Work Environment for Transfer and Transfer of Training

Although work-environment support may influence transfer directly by providing resources and opportunities, theory and recent evidence suggest that its effects are often carried through motivational mechanisms. Supportive work environments may increase teachers' perceptions that transfer is feasible and worthwhile, thereby strengthening motivation to engage in transfer behaviour (Junça Silva & Pinto, 2024; Sharif et al., 2023). Contextual support may likewise shape expectancy and value beliefs and reduce perceived costs, which together influence persistence and enactment in the transfer process (Andoh et al., 2024; De Jong et al., 2023).

Empirical studies increasingly report this kind of mediation. For instance, research on training in extreme contexts shows that supervisor and colleague support can predict performance outcomes indirectly through motivation to transfer (Junça Silva & Pinto, 2024). Studies in organisational and educational settings likewise identify-motivational mediation between support-related antecedents and training transfer outcomes (Sharif et al., 2023; Yaqub et al., 2024). Recent evidence further indicates that transfer-related motivational processes may serve as an important pathway linking contextual or support-related

antecedents to transfer outcomes, although the strength of such mediation may vary across settings and predictor types (Andoh et al., 2024; Mehner et al., 2025). In teacher professional development contexts, however, this contextual—motivational pathway remains relatively underexamined. Taken together, these studies suggest that motivation to transfer may act as an important mechanism through which supportive work environments influence sustained transfer behaviour. Therefore:

H4: The association between Work Environment for Transfer and Transfer of Training is mediated by Motivation to Transfer.

3. Research Methodology

This section describes the participants, instrument, and analytical procedures used in the study.

3.1 Participants and Procedure

Using a cross-sectional survey, this study examined the relationships among WET, MT, and TOT among in-service lower secondary school teachers in Hubei Province, China. An offline convenience sampling approach was used because no accessible sampling frame was available for junior secondary teachers who had recently completed a comparable province-level professional development (PD) programme, and the study required participants with fresh post-training experiences relevant to transfer. Eligible participants were in-service lower secondary school teachers who had completed a PD programme within the previous three months and whose programme had lasted at least one full day. These criteria were applied to ensure that respondents could report on transfer-related perceptions and behaviours with reference to a recent and sufficiently substantive professional learning experience.

Data were collected over approximately 21 days through two field-based channels. First, many participants were recruited from a province-level teacher training programme that brought together nearly 200 junior secondary teachers from multiple localities in Hubei for centralised professional learning, making it a suitable site for accessing respondents who met the study's inclusion criteria. With permission from the programme organiser, paper questionnaires were distributed and completed on site. Second, to extend participation beyond a single training cohort, additional paper questionnaires were administered during in-person school visits, where teachers completed the survey face to face. This two-channel strategy was used to broaden coverage across localities and school settings within the practical constraints of field-based data collection.

Of the 375 questionnaires returned, 42 were excluded during screening because they showed straight-lining, meaning that the same response option was selected for all items. The final sample comprised 333 valid questionnaires. This sample size was adequate for structural equation modelling and mediation testing in applied social science research, particularly when the measurement model is clearly specified and indicators demonstrate acceptable quality (Hair et al., 2019; Kline, 2023).

3.2 Instrument

Data were gathered through a structured paper-based questionnaire consisting of two parts. Part I collected demographic information, such as gender, age, teaching experience, educational level, professional title, and school locale. Part II measured the three focal constructs—Work Environment for Transfer (WET), Motivation to Transfer (MT), and Transfer of Training (TOT)—using items adapted from established instruments and contextualised to teachers' recent professional development experience.

Participants were asked to respond with reference to their most recent professional development (PD) programme that met the study criteria (i.e., undertaken within the past three months and lasting at least one full day). The WET items were drawn mainly from the Learning Transfer System Inventory (Holton, et al., 2000) and prior work on opportunity to perform (Ford et al., 1992), and were adapted to fit the school context. The measure included three dimensions: Principal Support (5 items), Colleague Support (5 items), and Opportunity to Use (4 items), yielding 14 items in total.

Motivation to Transfer (MT) assessed teachers' willingness to apply what they learned in professional development to their classroom practice. In this study, MT was conceptualised as a multidimensional construct comprising expectancy for success, task value, and perceived cost. Items were adapted from Osman and Warner (2020), who measured teacher motivation using three parallel subscales (Expectancy, Value, and Cost), with three items per subscale. To better fit the province-level training transfer context and to capture additional aspects of expectancy and value relevant to classroom enactment, one expectancy item and one value item were added. The resulting MT scale comprised Expectancy for Success (4 items), Task Value (4 items), and Perceived Cost (3 items), totalling 11 items. In the present study, the cost items were phrased positively to reflect the extent to which implementation demands were perceived as manageable; therefore, no reverse coding was required.

Transfer of Training (TOT) captured the extent to which teachers generalised trained knowledge and skills to classroom practice and maintained such application over time, consistent with the generalisation–maintenance definition of transfer (Baldwin & Ford, 1988). Items were adapted from Tracey et al.(1995) and contextualised to teachers' post-training instructional work. The TOT scale comprised two dimensions: Generalisation (4 items) and Maintenance (5 items), yielding 9 items in total.

All items were measured on five-point scales. WET and MT used agreement responses ranging from 1 (strongly disagree) to 5 (strongly agree), whereas TOT used a frequency scale ranging from 1 (never) to 5 (always). Across the three focal constructs, the questionnaire included 34 substantive items covering eight first-order dimensions, all adapted from established instruments and contextualised to teachers' professional development experiences. Across the three scales, item wording was adapted to the school context by replacing generic workplace or training references with teacher-relevant expressions, such as principal, colleague, professional development, classroom practice, and post-training instructional

work, while retaining the intended meaning of the original items. The complete instrument is provided in the Appendix 1.

3.3 Data Analysis

Preliminary analyses were run in SPSS 29.0, including means, standard deviations, and Pearson correlation coefficients for the main variables. AMOS 31.0 was used for the measurement modelling. Reliability was judged from Cronbach's alpha, with .70 treated as the lower acceptable threshold (Cronbach, 1951).

The measurement model was examined in AMOS 31.0 through confirmatory factor analysis (CFA). Model adequacy was judged from a set of standard fit statistics, namely χ^2/df, CFI, TLI, RMSEA, and SRMR, and interpreted against established benchmarks (Hu & Bentler, 1999; Kline, 2023). Evidence of convergent validity came from CR and AVE values above .70 and .50, respectively (Hair et al., 2019; Kline, 2023). Discriminant validity was taken to be adequate when each construct's AVE square root was larger than its correlations with the other constructs, consistent with the Fornell–Larcker criterion (Hair et al., 2019).

Because all focal variables were measured through self-report, Harman's single-factor test was used in SPSS 29.0 as an initial check for common method bias (Podsakoff et al., 2003). Although this procedure cannot completely rule out common method variance, it provides a preliminary indication of whether a single factor accounts for most of the shared covariance among the measures.

The hypothesised relationships were then analysed using structural equation modelling (SEM) in AMOS 31.0. To test the mediating role of MT in the association between WET and TOT, bootstrapping with 5,000 resamples was used. Bias-corrected 95% confidence intervals were used to assess the indirect effects. Mediation was taken to be supported when the interval excluded zero (Hayes, 2017; Preacher & Hayes, 2008).

4. Results

The results are presented in sequence, beginning with descriptive statistics and correlations, followed by the measurement and structural model results.

4.1 Descriptive Statistics and Correlation Analysis

Descriptive statistics were computed for Work Environment for Transfer (WET), Motivation to Transfer (MT), and Transfer of Training (TOT) among junior secondary school teachers in Hubei Province. As shown in Table 1, all mean scores were above the scale midpoint (3), indicating generally positive perceptions of the transfer environment, motivation to transfer, and training transfer. WET had the highest mean ($M = 4.052$, $SD = 0.514$), followed by MT ($M = 3.989$, $SD = 0.507$) and TOT ($M = 3.857$, $SD = 0.542$).

Both skewness and kurtosis fell within commonly accepted ranges ($|\text{skewness}| < 3$; $|\text{kurtosis}| < 10$), suggesting that the data did not show any serious departure from normality (Hair et al., 2019; Kline, 2023). Taken together, these descriptive results suggest that respondents generally reported positive perceptions of the

transfer environment, motivation to transfer, and transfer of training, with WET showing the highest overall mean.

Pearson correlations indicated significant positive associations among the three constructs ($p < .001$). Specifically, WET was positively correlated with MT ($r = .751$) and TOT ($r = .618$), and MT was positively correlated with TOT ($r = .721$). These correlations were consistent with the hypothesised relationships and showed that WET, MT, and TOT were positively related (Table 1). WET was more strongly correlated with MT than with TOT, suggesting that the work environment may be more closely associated with teachers' transfer motivation than with transfer behaviour itself.

Table 1: Descriptive statistics summary table

Variables	M	SD	Skewness	Kurtosis	WET	MT	TOT
WET	4.052	0.514	-0.060	-0.262	1		
MT	3.989	0.507	-0.037	-0.043	.751***	1	
TOT	3.857	0.542	0.048	-0.343	.618***	.721***	1

Note. ***$p < .001$.

4.2 Reliability and Construct Validity

The next three subsections report how well the three scales performed in terms of internal consistency and construct validity.

4.2.1 Reliability

Cronbach's alpha coefficients were .937 for WET, .903 for MT, and .923 for TOT, indicating strong internal consistency across the three scales (Table 2). Each value exceeded the commonly used criterion of .70 , indicating that the items within each scale were sufficiently consistent to support subsequent validity testing and structural analysis.

4.2.2 Confirmatory Factor Analysis and Model Fit

The measurement properties of the three scales were examined through confirmatory factor analysis (CFA). Table 2 reports the fit statistics for each measurement model. Overall, the indices indicated acceptable to good model fit. All χ^2/df values were below 3 (WET = 2.801; MT = 1.826; TOT = 2.217). In addition, key fit indices (e.g., CFI, IFI, SRMR, RMSEA) met conventional guidelines, supporting the adequacy of the measurement models.

For the WET model, AGFI was 0.874, which falls slightly below the stricter .90 benchmark. Given the broader pattern of fit indices, the model was retained as acceptable for subsequent analyses.

Table 2: Model fit and reliability across various dimensions

Fit Category	Index	Criteria	WET Scale	MT Scale	TOT Scale	Fit Status
Absolute Fit Indices	χ^2/df	< 3.000	2.801	1.826	2.217	Fit
	GFI	> .900	0.911	0.962	0.962	Fit
	AGFI	> .900	0.874	0.939	0.935	Partial (WET)
	SRMR	< .080	0.036	0.039	0.033	Fit
	RMSEA	< .080	0.074	0.050	0.061	Fit
Incremental Fit Indices	NFI	> .900	0.932	0.966	0.969	Fit
	RFI	> .900	0.916	0.954	0.957	Fit
	CFI	> .900	0.955	0.984	0.983	Fit
	IFI	> .900	0.955	0.984	0.983	Fit
Parsimony Fit Indices	PNFI	> .500	0.758	0.720	0.700	Fit
	PGFI	> .500	0.642	0.598	0.556	Fit
Reliability Test	Cronbach's Alpha	> 0.700	0.937	0.903	0.923	Fit

Convergent validity at the first-order level was assessed from CR and AVE values. CR ranged from 0.814 to 0.908, and AVE ranged from 0.524 to 0.664. Since all values exceeded the usual thresholds(CR≥0.70; AVE≥0.50), the first-order dimensions showed acceptable convergent validity, meaning that the items within each dimension were sufficiently related to one another and captured the constructs they were intended to measure (Hair et al., 2019).

4.2.3 Discriminant Validity

The Fornell-Larcker approach was used to examine discriminant validity at the construct level. Table 3 reports correlations among the first-order dimensions (PS, CS, OU; EXP, VAL, COST; GEN, MAIN), with the square roots of AVE shown on the diagonal. Because WET, MT, and TOT were specified as second-order constructs, correlations among dimensions within the same higher-order construct (e.g., CS–OU within WET; GEN–MAIN within TOT) were relatively high. This pattern is theoretically plausible and reflects shared variance attributable to the higher-order factors. Table 3 is therefore presented to provide dimension-level transparency, while discriminant validity is interpreted primarily at the second-order construct level.

At the construct level, the square roots of AVE for WET (0.897), MT (0.809), and TOT (0.915) exceeded the correlations among WET, MT, and TOT (r = 0.618–0.751; Table 1), indicating satisfactory discriminant validity. Overall, these results suggest that the three constructs were empirically distinguishable and that the measurement model was adequate for subsequent structural equation modelling.

Table 3: Correlations and square roots of AVE among first-order dimensions

	PS	CS	OU	EXP	VAL	COST	GEN	MAIN
PS	**0.815**							
CS	0.781	**0.784**						
OU	0.779	0.849	**0.724**					
EXP	0.640	0.745	0.828	**0.806**				
VAL	0.652	0.714	0.770	0.800	**0.813**			
COST	0.523	0.422	0.510	0.531	0.530	**0.785**		
GEN	0.606	0.548	0.618	0.606	0.613	0.736	**0.796**	
MAIN	0.551	0.559	0.687	0.635	0.621	0.626	0.837	**0.788**

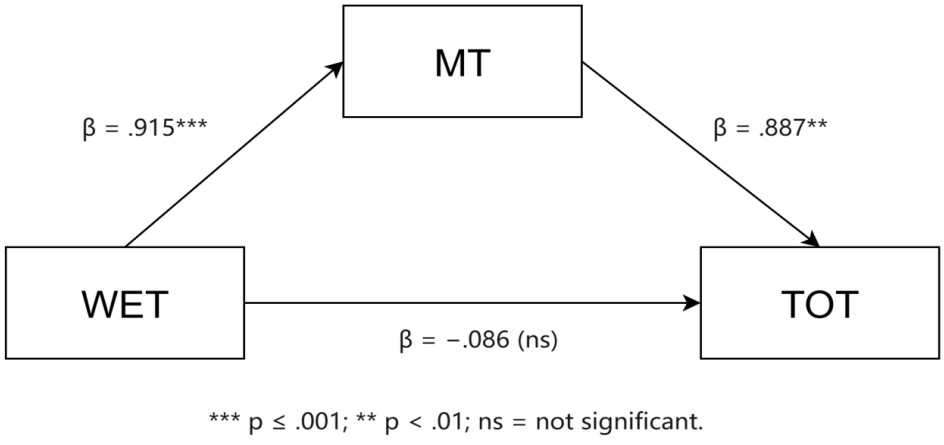
Note. Diagonal values are the square roots of AVE.

4.3 Analysis of Common Method Bias

As all focal variables came from self-reports, a Harman single-factor test was conducted as an initial diagnostic of common method bias. All items were analysed using an unrotated exploratory principal component analysis. The first factor accounted for 45.187% of the total variance, below the commonly used 50% threshold. This suggests that common method bias was unlikely to be substantial, although the result should be interpreted with caution rather than treated as conclusive (Podsakoff et al., 2003).

4.4 Model Path Analysis

The research hypotheses were tested using structural equation modelling (SEM) in AMOS 31.0. The structural model estimated the relationships among Work Environment for Transfer (WET), Motivation to Transfer (MT), and Transfer of Training (TOT). Overall, the hypothesised mediation model showed acceptable fit to the data: $\chi^2/df = 2.298$, RMSEA = 0.063 (90% CI [0.058, 0.067]), and SRMR = 0.0542. Incremental fit indices also supported an adequate fit (CFI = 0.915; TLI = 0.908; IFI = 0.916). These results indicated that the structural model fit the data sufficiently well to examine the proposed direct and mediating relationships among WET, MT, and TOT. Figure 1 presents the standardised structural model estimates.



Note. Standardised coefficients are reported. ns = not significant

Figure 1: Structural model results (standardized estimates)

As shown in Table 4, WET was a significant positive predictor of MT (B = 0.905, SE = 0.077, CR = 11.762, $p < .001$; $\beta = 0.915$), supporting H2. MT, in turn, positively predicted TOT (B = 0.899, SE = 0.227, CR = 3.969, $p < .001$; $\beta = 0.887$), supporting H3. In contrast, the direct effect of WET on TOT was not significant (B = −0.087, SE = 0.211, CR = −0.412, $p = .680$; $\beta = -0.086$); therefore, H1 was not supported.

This pattern suggested that a supportive work environment was more strongly linked to teachers' transfer motivation than to transfer behaviour itself, and that its influence on TOT did not remain direct once MT was taken into account. The model explained substantial variance in the endogenous constructs, with squared multiple correlations of 0.837 for MT and 0.654 for TOT, indicating that the model accounted for a large proportion of variance in both teachers' transfer motivation and transfer behaviour.

Table 4: Structural model path coefficients

Path	B (Unstd.)	SE	CR	p	β (Std.)	Hypothesis
WET → MT	0.905	0.077	11.762	<.001	0.915	H2 Supported
MT → TOT	0.899	0.227	3.969	<.001	0.887	H3 Supported
WET → TOT	-0.087	0.211	-0.412	0.68	-0.086	H1 Not supported

To test the mediating role of MT, bias-corrected bootstrapping with 5,000 resamples was performed (Hayes, 2017). Table 5 shows that the indirect path from WET to TOT through MT was significant (a×b = 0.814, BC 95% CI [0.345, 1.873], $p = .002$). In the mediation test, the direct effect of WET on TOT was not significant ($c' = -0.087$, BC 95% CI [−1.086, 0.423], $p = .767$), whereas the total effect was significant ($c = 0.727$, BC 95% CI [0.590, 0.869], $p < .001$). Together, these results supported H4 and pointed to a full mediation pattern, indicating that the effect of WET on TOT operated mainly through MT. In other words, workplace support appeared to influence transfer primarily by strengthening teachers' motivation to transfer, rather than by exerting a direct effect on transfer behaviour.

Table 5: Bootstrapping results for direct, indirect, and total effects

Effect	B (Unstd.)	BC 95% CI	p	Conclusion
Direct effect (c): WET → TOT	-0.087	[-1.086, 0.423]	0.767	Not significant
Indirect effect (a×b): WET → MT → TOT	0.814	[0.345, 1.873]	0.002	Significant
Total effect (c): WET → TOT	0.727	[0.590, 0.869]	<.001	Significant

5. Discussion

The findings indicated that Work Environment for Transfer (WET) was positively associated with Motivation to Transfer (MT), and that MT, in turn, significantly predicts Transfer of Training (TOT). This result reinforces the central role of motivational readiness in post-training enactment. When MT was introduced into the model, the direct path from WET to TOT was no longer significant, whereas

the indirect effect through MT remained significant, indicating a full mediation pattern. This suggests that workplace conditions do not translate into sustained transfer automatically; rather, their influence is carried mainly through teachers' motivation to apply what they learned. Such a result is consistent with transfer frameworks that treat the work environment as an important condition for transfer, while recognising that transfer outcomes depend on the psychological processes that drive application and maintenance (Baldwin & Ford, 1988; Burke & Hutchins, 2007).

Similar patterns have been reported in recent studies showing that contextual supports often work through motivational mechanisms when such pathways are modelled explicitly (Nafukho et al., 2023; Yaqub et al., 2024). This interpretation is also in line with recent evidence that social support and motivational processes jointly influence post-training transfer and related outcomes (Mehner et al., 2025). In the present teacher professional development context, the findings suggest that supportive school conditions mattered most when they helped teachers view implementation as feasible, worthwhile, and manageable in their daily work.

Transfer research has also repeatedly shown that motivational factors are among the most stable predictors of transfer, whereas contextual effects vary across training types, settings, and time points (Bhat et al., 2022; Diekmann & Pundt, 2025). In the policy-driven teacher professional development context examined here, the findings therefore suggest that the contribution of WET to sustained transfer is expressed primarily through teachers' motivation to transfer, rather than through a direct effect on TOT.

5.1 Work environment as an antecedent of motivation to transfer

The strong relationship between WET and MT indicated that teachers' motivation to apply training is closely tied to how their schools signal support and create workable conditions for implementation. This finding is consistent with transfer-climate research showing that when workplaces communicate clear expectations for use, provide encouragement, and reinforce attempts to apply learning, trainees are more likely to invest effort in transfer (Rouiller & Goldstein, 1993; Tracey et al., 1995). In educational settings, these signals are typically carried through school leadership practices and collegial norms—whether principals legitimise experimentation, whether colleagues provide assistance and feedback, and whether teachers have genuine chances to check what they learned within normal teaching routines.

The opportunity-to-perform perspective further clarifies why work environment variables may be reflected most strongly in motivation. Transfer is facilitated when trainees can access authentic tasks, time, and resources that allow them to enact trained competencies (Ford et al., 1992). For teachers, this often means having space in the timetable to trial an approach, having collegial arrangements that support peer observation or lesson discussion, and having a school climate in which early attempts are treated as part of improvement rather than as risk. This interpretation is also in line with research on teachers' uptake of technology-enabled innovations, which shows that organisational arrangements and local social practices shape teachers' motivation by influencing whether

implementation is seen as doable and worth the effort (Stumbrienė et al., 2024). It is likewise consistent with findings from more demanding contexts showing that supervisor and peer support affects post-training outcomes partly through motivational channels, especially when trainees face constraints on time and resources (Junça Silva & Pinto, 2024). In the present study, the same pattern appears in a teacher professional development context, suggesting that WET builds transfer readiness mainly by strengthening MT rather than by functioning only as a direct resource.

5.2 Motivation to transfer as a proximal predictor of transfer outcomes

MT was strongly associated with TOT, suggesting that teachers were more likely to generalise and maintain trained practices when they expected successful implementation, valued the learned practices, and perceived the costs of implementation as manageable. This finding is consistent with recent evidence that transfer motivation is a proximal predictor of whether trained practices are generalised and maintained over time (Andoh et al., 2024; De Jong et al., 2023; Diekmann & Pundt, 2025). More recent work provides further support for MT as a proximal driver of transfer. Studies grounded in task-specific motivation approaches show that transfer motivation predicts later transfer reports and externally assessed transfer (De Jong et al., 2023).

Other recent studies also show that motivation to transfer remains an important predictor of transfer outcomes beyond the immediate post-training period (Andoh et al., 2024). Dynamic perspectives also suggest that transfer develops over time and that motivational factors are critical for sustaining enactment as teachers adapt learning to heterogeneous classroom conditions (Diekmann & Pundt, 2025). In addition, multidimensional conceptualisations of transfer motivation emphasise that expectancy, value, and cost capture qualitatively different aspects of teachers' motivational readiness, strengthening the case for moving beyond single-item intention measures (Gegenfurtner & Quesada-Pallares, 2022). Taken together, these studies are in line with the present findings and underline MT as a key predictor of both generalisation and maintenance.

5.3 Why motivation fully mediates the WET–TOT relationship in this study

A key finding was that the path from WET to TOT (WET → TOT) was not significant once MT was entered into the model, whereas the indirect effect through MT remained significant. This suggests that workplace conditions shape transfer mainly by influencing teachers' motivation to act on training, rather than by directly producing transfer behaviour. Similar mediation patterns have been reported in recent transfer studies, where contextual factors tend to work through intermediate mechanisms—such as training design and motivation—rather than operating as purely direct predictors (Nafukho et al., 2023). Motivation-based mediation has also been observed across settings although whether mediation is full or partial appears to depend on the predictor and the context (Andoh et al., 2024; Miiro et al., 2024; Yaqub et al., 2024).

In this study, the policy-driven character of teacher professional development offered a plausible explanation for full mediation. Participation is often mandatory, and teachers must fit implementation into heavy workload, fixed

timetables, and established routines. Under such constraints, support and opportunities may not translate into transfer automatically. This may be especially plausible in school settings where teachers face competing instructional demands, limited time, and uneven implementation opportunities after training, so that environmental support alone is not enough to ensure transfer. Transfer is more likely when teachers believe implementation is achievable, view it as worthwhile, and judge the costs as manageable, a pattern that is consistent with recent multidimensional models of transfer motivation (De Jong et al., 2023; Gegenfurtner & Quesada-Pallares, 2022). Evidence further suggests that transfer processes can differ between voluntary and mandatory training depending on programme characteristics, which may help explain why contextual effects vary across participation modes and training types (De Jong et al., 2025). In the present study, WET likewise appears to influence TOT primarily through MT.

5.4 Theoretical and practical implications

From a theoretical perspective, the findings indicated that workplace support was linked to sustained training transfer largely through teachers' motivation to transfer. This helps explain why direct work-environment effects are sometimes weak or unstable across studies: when motivational processes are not modelled, part of the contextual influence may remain "hidden" in the pathway from context to transfer behaviour (Baldwin & Ford, 1988; Blume et al., 2010). The results therefore add to recent discussions calling for more explicit, theory-guided specification of transfer models, particularly given the variability of contextual effects across settings and training conditions (Bhat et al., 2022).

From a practical perspective, because WET influenced TOT primarily through MT rather than through a stable direct pathway, providing resources or opportunities alone may not be sufficient if teachers still doubt they can implement successfully, question the value of implementation, or anticipate high costs. Transfer-support strategies are therefore likely to be more effective when they directly address these appraisals by strengthening expectancy for success, reinforcing the value of implementation, and reducing perceived implementation costs.

Prior intervention research points to workable options. Goal-setting approaches can shape key antecedents of transfer motivation, although effects may differ by training type (De Jong et al., 2025). Implementation-intention strategies may also help by prompting teachers to specify when, where, and how new practices will be applied, which can facilitate enactment (Greenan, 2023). Finally, clearer definition and assessment of observable transfer outcomes can strengthen evaluation and feedback loops and may be particularly important for supporting maintenance over time (O'Neill & Cleary, 2023).

6. Conclusion

This study focused on how Work Environment for Transfer (WET), Motivation to Transfer (MT), and Transfer of Training (TOT) were related among lower secondary school teachers in Hubei Province, China. In relation to the first research question, the findings showed that WET positively predicted MT and that MT, in turn, predicted TOT. Although WET and TOT were positively related

at the descriptive level, the direct effect of WET on TOT was not significant once MT was included in the structural model. In relation to the second research question, the findings showed that MT significantly mediated the relationship between WET and TOT.

Overall, the results suggest that workplace support does not automatically translate into transfer behaviour. Rather, supportive conditions appear to matter most when they strengthen teachers' confidence in implementation, reinforce the value of applying what was learned, and reduce the perceived costs of doing so. In this sense, motivation to transfer functions as the main pathway through which work-environment support is converted into the generalisation and maintenance of trained practices.

From a practical perspective, the findings suggest that teacher professional development systems should go beyond training delivery itself and pay greater attention to the post-training conditions that shape teachers' willingness to act on what they have learned. Support from school leaders and colleagues, realistic opportunities to use newly learned practices, and simple motivation-focused follow-up strategies may all help strengthen sustained transfer in school settings.

7. Limitations and Future Research

This study examined the contextual–motivational mechanism of teacher training transfer among lower secondary school teachers in Hubei Province. Several limitations should be acknowledged. The sample was collected through an offline convenience-based field procedure that combined a province-level training programme with school visits. Although this approach was appropriate for accessing teachers with recent professional development experience, it reflects a specific regional and institutional context and therefore limits the broader generalisability of the findings.

The model was tested using cross-sectional questionnaire data. This design was appropriate for examining the proposed relationships, but it does not allow strong causal interpretation or capture how transfer develops across different post-training stages. In addition, all focal variables were measured through self-reported responses from the same participants. Although diagnostic checks were conducted, the possibility of common method bias cannot be fully ruled out. This study also relied solely on quantitative self-report data, so no qualitative or multi-source evidence was available to triangulate the findings.

Future studies could extend this research by validating the model with broader samples across provinces, school types, and training formats. Longitudinal or follow-up designs would help clarify how transfer motivation and transfer outcomes evolve after professional development. Mixed-method approaches, including interviews, classroom-based evidence, and lesson artefacts, could also offer a richer understanding of how workplace support is carried into sustained instructional practice.

Conflict of Interest
The authors report no conflicts of interest in relation to this study.

8. Acknowledgements

The authors acknowledge the use of DeepL and Grammarly to assist with English language editing and grammar refinement. The tool was used to improve clarity and readability only. The authors take full responsibility for the content of the manuscript.

9. References

Andoh, R. P. K., Annan-Prah, E. C., Boampong, G. N., Jehu-Appiah, J., Korsah, A. M., & Owusu, E. A. (2024). Examination of the influence of transfer opportunity, assimilation of training content and motivation to transfer in the training transfer process. *European Journal of Training and Development*, *48*(3/4), 281–297. https://doi.org/10.1108/EJTD-09-2022-0100

Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, *41*(1), 63–105. https://doi.org/10.1111/j.1744-6570.1988.tb00632.x

Bhat, Z. H., Mir, R. A., Rameez, R., & Rainayee, R. A. (2022). The influence of learner characteristics, instructional design and work environment on the transfer of training. *Industrial and Commercial Training*, *54*(4), 566–588. https://doi.org/10.1108/ICT-03-2022-0014

Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2010). Transfer of training: A meta-analytic review. *Journal of Management*, *36*(4), 1065–1105. https://doi.org/10.1177/0149206309352880

Blume, B. D., Ford, J. K., Surface, E. A., & Olenick, J. (2019). A dynamic model of training transfer. *Human Resource Management Review*, *29*(2), 270–283. https://doi.org/10.1016/j.hrmr.2017.11.004

Blume, B. D., Huang, J. L., Wang, Z., & Ford, J. K. (2023). Promoting transfer of hybrid training: Interaction of task-contingent conscientiousness and supervisor support. *Human Resource Development Quarterly*, *34*(3), 265–287. https://doi.org/10.1002/hrdq.21473

Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, *33*(8), 3–15. https://doi.org/10.3102/0013189X033008003

Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human Resource Development Review*, *6*(3), 263–296. https://doi.org/10.1177/1534484307303035

Colquitt, J. A., LePine, J. A., & Noe, R. A. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology*, *85*(5), 678–707. https://doi.org/10.1037/0021-9010.85.5.678

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297–334. https://doi.org/10.1007/BF02310555

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. *Learning Policy Institute*. https://eric.ed.gov/?id=ED606743

De Jong, B., Jansen In De Wal, J., & Cornelissen, F. (2025). The effects of voluntary and mandatory training participation on the dynamics of transfer of training for different training types. *International Journal of Training and Development*, *29*(4), 419–432. https://doi.org/10.1111/ijtd.12371

De Jong, B., Jansen In De Wal, J., Cornelissen, F., Van Der Lans, R., & Peetsma, T. (2023). How to predict transfer of training? Investigating the application of the unified model of task-specific motivation. *International Journal of Training and Development*, *27*(2), 242–262. https://doi.org/10.1111/ijtd.12297

Deci, E. L., & Ryan, R. M. (2013). *Intrinsic motivation and self-determination in human behavior*. Springer.Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, *38*(3), 181–199. https://doi.org/10.3102/0013189X08331140

Diekmann, C. S., & Pundt, A. (2025). Dynamic training transfer in leadership development: How subjective evaluations, motivation to transfer, and social support drive changes in leaders' early transfer behaviours. *International Journal of Training and Development*, ijtd.70016. https://doi.org/10.1111/ijtd.70016

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, *53*(1), 109–132. https://doi.org/10.1146/annurev.psych.53.100901.135153

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*(3), 500–507. https://doi.org/10.1037/0021-9010.71.3.500

Fauth, F., & González-Martínez, J. (2023). The work environment and its influence on learning transfer in virtual in-service ICT training for teachers and university professors. *Education Sciences*, *13*(4), 330. https://doi.org/10.3390/educsci13040330

Ford, J. K., Quiñones, M. A., Sego, D. J., & Sorra, J. S. (1992). Factors affecting the opportunity to perform trained tasks on the job. *Personnel Psychology*, *45*(3), 511–527. https://doi.org/10.1111/j.1744-6570.1992.tb00858.x

Gegenfurtner, A., & Quesada-Pallares, C. (2022). Toward a multidimensional conceptualization of motivation to transfer training: Validation of the transfer motivation questionnaire from a self-determination theory perspective using bifactor-ESEM. *Studies in Educational Evaluation*, *73*, 101116. https://doi.org/10.1016/j.stueduc.2021.101116

Greenan, P. (2023). The impact of implementation intentions on the transfer of training from a management development program. *Human Resource Development International*, *26*(5), 577–602. https://doi.org/10.1080/13678868.2023.2174976

Grossman, R., & Salas, E. (2011). The transfer of training: What really matters. *International Journal of Training and Development*, *15*(2), 103–120. https://doi.org/10.1111/j.1468-2419.2011.00373.x

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching*, *8*(3), 381–391. https://doi.org/10.1080/135406002100000512

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (2nd ed.)*. Guilford Publications.

Holton, E. F., III, Bates, R. A., & Ruona, W. E. A. (2000). Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, *11*(4), 333–360. https://doi.org/10.1002/1532-1096(200024)11:4%3C333::AID-HRDQ2%3E3.0.CO;2-P

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Junça Silva, A., & Pinto, D. (2024). Training under an extreme context: The role of organizational support and adaptability on the motivation transfer and performance after training. *Personnel Review*, *53*(3), 743–770. https://doi.org/10.1108/PR-09-2022-0629

Kauffeld, S., Decius, J., & Graßmann, C. (2025). Learning and transfer in organisations: How it works and can be supported. *European Journal of Work and Organizational Psychology*, *34*(2), 161–174. https://doi.org/10.1080/1359432X.2025.2463799

Kline, R. B. (2023). *Principles and practice of structural equation modeling (5th ed.)*. Guilford Publications.

Lau, P. Y., Ng, M. R. H., & McLean, G. N. (2026). Experiencing adverse transfer motivation in soft skills training in Malaysia. *Human Resource Development International*, 1–21. https://doi.org/10.1080/13678868.2026.2622067

Mehner, L., Rothenbusch, S., & Kauffeld, S. (2025). How to maximize the impact of workplace training: A mixed-method analysis of social support, training transfer and knowledge sharing. *European Journal of Work and Organizational Psychology*, *34*(2), 201–217. https://doi.org/10.1080/1359432X.2024.2319082

Miiro, R., Kiwanuka, J., Matsiko, F., & Ugen, M. (2024). Performance self-efficacy and training transfer: The mediating effects of training design and motivation to transfer among farmer trainees in Uganda. *The Journal of Agricultural Education and Extension*, *30*(5), 797–814. https://doi.org/10.1080/1389224X.2023.2271465

Muduli, A., & Raval, D. (2018). Examining the role of work context, transfer design and transfer motivation on training transfer: Perspective from an Indian insurance industry. *European Journal of Training and Development*, *42*(3/4), 266–282. https://doi.org/10.1108/EJTD-09-2017-0078

Nafukho, F. M., Irby, B. J., Pashmforoosh, R., Lara-Alecio, R., Tong, F., Lockhart, M. E., El Mansour, W., Tang, S., Etchells, M., & Wang, Z. (2023). Training design in mediating the relationship of participants' motivation, work environment, and transfer of learning. *European Journal of Training and Development*, *47*(10), 112–132. https://doi.org/10.1108/EJTD-06-2022-0070

Noe, R. A. (1986). Trainees' attributes and attitudes: Neglected influences on training effectiveness. *Academy of Management Review*, *11*(4), 736–749. https://doi.org/10.2307/258393

O'Neill, A., & Cleary, Y. (2023). Measuring transfer of training using five-component objectives. *2023 IEEE International Professional Communication Conference (ProComm)*, 100–103. https://doi.org/10.1109/ProComm57838.2023.00029

Osman, D. J., & Warner, J. R. (2020). Measuring teacher motivation: The missing link between professional development and practice. *Teaching and Teacher Education*, *92*, 103064. https://doi.org/10.1016/j.tate.2020.103064

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879–891. https://doi.org/10.3758/BRM.40.3.879

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, *87*(4), 698–714. https://doi.org/10.1037/0021-9010.87.4.698

Rouiller, J. Z., & Goldstein, I. L. (1993). The relationship between organizational transfer climate and positive transfer of training. *Human Resource Development Quarterly*, *4*(4), 377–390. https://doi.org/10.1002/hrdq.3920040408

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Sasson, I., & Miedijensky, S. (2023). Transfer skills in teacher training programs: The question of assessment. *Professional Development in Education*, *49*(2), 243–256. https://doi.org/10.1080/19415257.2020.1839783

Sharif, S., Braimah, M., & Dogbey, A. E. (2023). Academic supports, motivation to learn, motivation to transfer and transfer of training: A comparative analysis of public and private universities. *European Journal of Training and Development*, *47*(5/6), 507–532. https://doi.org/10.1108/EJTD-05-2021-0068

Stumbrienė, D., Jevsikova, T., & Kontvainė, V. (2024). Key factors influencing teachers' motivation to transfer technology-enabled educational innovation. *Education and Information Technologies*, *29*(2), 1697–1731. https://doi.org/10.1007/s10639-023-11891-6

Tracey, J. B., Tannenbaum, S. I., & Kavanagh, M. J. (1995). Applying trained skills on the job: The importance of the work environment. *Journal of Applied Psychology*, *80*(2), 239–252. https://doi.org/10.1037/0021-9010.80.2.239

Trang, P. T. (2024). Training and continuous improvement: The moderation effect of transfer climate and the mediation influence of self-efficacy. *The TQM Journal*, *36*(4), 1212–1234. https://doi.org/10.1108/TQM-02-2023-0066

Wang, Y., & Fan, Z. (2025). The impact of communities of practice on professional development among Chinese teachers: A mixed-methods longitudinal study. *SAGE Open*, *15*(3), 21582440251359824. https://doi.org/10.1177/21582440251359824

Yaqub, Y., Dutta, T., & Dhir, S. (2024). A moderated-mediation model of training transfer from leadership intervention. *International Journal of Educational Management*, *38*(3), 639–659. https://doi.org/10.1108/IJEM-06-2023-0281