

Title

How Does the Relationship Between Teacher Collaboration and Job Satisfaction Differ?
-A Moderated Mediation Analysis Focusing on Employment Status and School Tenure Using TALIS 2024-

Research Overview (50 words)

This study examines how teacher collaboration influences job satisfaction through the mediating role of self-efficacy, with particular attention to differences between permanent and fixed-term teachers. Using TALIS 2024 data and a moderated mediation analysis, the results indicate that the mediating relationship is observed in both groups, while the moderating effect of school tenure varies by employment status.

Purpose

A substantial body of research has consistently demonstrated that teacher collaboration enhances self-efficacy and job satisfaction, both directly and indirectly. However, these relationships have rarely been examined with attention to structural differences by employment status. In recent years, as teacher shortages have intensified across countries and the use of fixed-term teachers has expanded, this omission has become increasingly problematic. Fixed-term teachers are often positioned peripherally within school organizations, with limited access to decision-making processes and professional development opportunities. Such organizational marginality may constrain the process through which professional collaboration fosters job satisfaction. Against this backdrop, the present study investigates the mechanism through which teacher collaboration influences job satisfaction via the mediating role of self-efficacy. Specifically, it examines whether and how this mediating structure differs between permanent and fixed-term teachers using multi-group structural equation modeling. In addition, school tenure is introduced as a moderator to assess how organizational embeddedness conditions these relationships. By re-examining the effects of teacher collaboration in relation to employment status, this study aims to clarify how the expansion of precarious employment in teaching reshapes teachers' professional development through mediating mechanisms.

Methods

This study uses Teaching and Learning International Survey 2024 (TALIS 2024). The analytical sample consists of full-time lower secondary teachers, including permanent teachers (N = 101,279) and fixed-term teachers (N = 26,682). A multi-group structural equation

modeling approach is employed to compare the two groups. Within each group, a mediation model is specified in which teacher collaboration influences job satisfaction through self-efficacy. Two types of collaboration are specified as independent variables: exchange of information and ideas among teachers (T4EXINF) and professional collaboration in lessons (T4COLES). Teacher self-efficacy (T4SELF) is included as the mediator, and job satisfaction (T4JOBSAT) as the outcome variable. All constructs are operationalized as composite scores based on their respective survey items. School tenure at the current school (T4TYEXPTS) is introduced as a moderator to capture organizational embeddedness. Interaction terms between each collaboration variable and school tenure are estimated for the paths predicting self-efficacy within each group. Total teaching experience (T4TYEXPTT) is included as a control variable. All continuous variables are mean-centered to facilitate the interpretation of interaction effects and to reduce multicollinearity. Moreover, given the hierarchical structure of the data (teachers nested within schools), cluster-robust standard errors at the school level are used to obtain robust estimates.

Results/Discussion.

The results indicate that, in both groups, professional collaboration is positively associated with self-efficacy, and self-efficacy is positively associated with job satisfaction. This mediating relationship is consistent with prior research and supports the view that collaborative relationships among colleagues are linked to the development of psychological resources. However, the direct path from instructional collaboration to job satisfaction is relatively smaller among fixed-term teachers ($\beta = 0.02$) compared to permanent teachers ($\beta = 0.08$), suggesting a weaker direct association in the former group. When school tenure is introduced as a moderator, distinct patterns emerge across employment status. Among permanent teachers, both information exchange and instructional collaboration show small but positive interaction effects with school tenure (both $\beta = 0.01$). In contrast, among fixed-term teachers, information exchange also exhibits a positive interaction ($\beta = 0.04$), whereas instructional collaboration shows a negative interaction ($\beta = -0.04$). These findings suggest that, for permanent teachers, professional collaboration may operate in conjunction with accumulated experience within the organization. For fixed-term teachers, however, the effects of collaboration appear to vary by type. In particular, the negative interaction for instructional collaboration implies that increased tenure does not necessarily reinforce the link between collaboration and self-efficacy. One possible interpretation is that fixed-term teachers' participation in instruction-related collaborative activities remains structurally constrained, limiting the extent to which such

experiences translate into enhanced self-efficacy. However, alternative explanations—such as selection effects or differences in role expectations—cannot be ruled out. Taken together, while the mediating structure is observed in both groups, its magnitude and conditional patterns differ by employment status. These results suggest that teacher collaboration should not be treated as a uniform resource; rather, its effects depend on how opportunities for participation are structured within schools and on teachers' organizational positioning.