Transformational leadership, teacher commitment, and teacher efficacy

What is this research about?
This study examines the effects of collective teacher efficacy as a possible mediator of the leadership-teacher outcome relationship by evaluating and comparing two models (Model A and B) adopted from Bandura’s social cognitive theory.

Model A stipulates that teacher efficacy is a mediator between leadership and teacher outcomes relationship.

Model B stipulates that leadership has direct effects on teacher commitment and indirect effects through teacher efficacy.

What did the researchers do?
Ross and Gray (2006) conducted surveys with 3,074 teachers in 218 elementary schools in Ontario. Responses to items on the survey were measured using a 6-point Likert scale, with responses ranging from strongly disagree (1) to strongly agree (6). The researches adopted all items on the survey from past research.

What you need to know:
The study sought to identify the paths through leadership to teacher commitment by testing two Models of leadership-commitment relationships. Results suggest that collective teacher efficacy is a partial rather than a complete mediator of the effects of transformational leadership on teacher commitment to organizational values. This finding strongly supports Model B as oppose to Model A with the identification of new paths between transformational leadership and school mission and professional community.

Transformational leadership (TL) which describes teachers’ perceptions of their principals’ ability to raise the organizations capacity as well as member’s morale to
succumb and survive environmental changes, was represented by 12 items. Collective teacher efficacy was represented by 14 items. The researchers combined into a single scale, the seven items with the highest ranking on the perceptions of the task factor and the 7 items with the highest ranking on the perceptions of teaching competence factor. This combination resulted from a high degree of correlation observed between the two factors.

Three variables represented teacher commitment, commitment to school mission, commitment to the school as a professional community and commitment to school-community partnerships. These variables contained twelve, five and four items respectively, measuring different aspects of teacher commitment.

The researchers used structural equation modeling to test the two models under investigation. In order to improve on validity of the results, Ross and Gray employed a cross-validation strategy in which two groups were created by allocating all the schools within a district to each group. This resulted in 38 schools representing the smaller district and 71 schools representing the larger participating district of the study.

Next, they tested both models by evaluating for their fit indices and path coefficients but paid particular attention to two of five criteria for measuring goodness of fit; the Adjusted Goodness of Fit (AGFI) due to its potential to adjust to the sample size of the study and the Root Mean Square of Approximation (RMSEA) due to its potential to adjust to number of variables in the model. The first group representing the calibration sample was used to test and modify the models while the second group representing the replication sample was used to test the fit of the models without modification.

What did the researchers find?
The researchers found that:

- Transformational leadership has an impact on the collective teacher efficacy of the school.

Statistically, collective teacher efficacy correlated with transformational leadership (.45) and with the three measures of teacher commitment (commitment to school mission (.52), commitment to professional learning community (.41), and commitment to community partnerships (.81). This result indicates the paths through which
leadership influence teacher commitment and the researchers further suggest that this finding postulates an indispensable condition for the potential of teacher efficacy acting as a mediator between leadership and teacher commitment.

- Collective teacher efficacy is a partial rather than a complete mediator of the effects of transformation leadership on teacher commitment to organizational values.

Model B represented a better fit of this finding that Model A, despite the fact that all paths within Model A were positive and statistically significant. This is accounted for, by the fact that the fit of Model A was only established after modification by correlating the residual variances of three of the variables (leadership and mission, efficacy and professional community) in the model. Model B on its part, though not showing the same strong positive results as the highly modified Model A, was statistically significant, illustrating a new line of influence from TL to school mission and professional community. According to the researchers, this shows the partial mediating effect of collective teacher efficacy on the leadership-teacher commitment relationship, hence suggesting the possibility of other mediators.

- Collective teacher efficacy strongly predicted commitment to community partnerships.
- TL had direct effects on teacher commitment, independent of agency beliefs.
- The results of the study were robust due to similarities between the path analysis from the replication and calibration samples.

How can you use this research?
Findings of the study did not reveal specific strategies for principal influence on teacher efficacy (as it was not a focus of the study), but the researchers outline recommendations for specific practices that could enhance teacher efficacy. They also, strongly recommend the need for researchers to investigate into the different specific transformational practices that could improve on teachers’ perceptions of their capacity to improve student learning.

Still in line with implications for future research, the researchers recommend the examination of the kinds of community...
partnerships that are closely associated with teacher efficacy. And finally, a re-examination of the relationships between leadership and teacher commitment with detail description of the variables describing sets of beliefs and aligned under associated constructs.

**About the researchers**

**Dr John A. Ross** is Professor Emeritus of Curriculum, Teaching and Learning at the Ontario Institute for Studies in Education of the University of Toronto and head of the Institute’s field Centre in Peterborough, Ontario. His research interests are mathematics education, student assessment and program evaluation.

**Dr. Peter Gray** was a doctoral student at the time this research was conducted. His research interests are in student assessment and models of school change.

**References:**


**About this summary**

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This summary has been adapted from the ResearchSnapshot series developed by York University and ResearchImpact and has been developed according to writing and design principles unique to OERE. For more information about this summary or the OERE network please contact oere.knaer.oise@utoronto.ca.

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