Teacher Job Satisfaction in the Context of the Wisconsin Educator Effectiveness System

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Socially Responsible Evaluation in Education

Wisconsin Evaluation Collaborative

The Wisconsin education political context

- In 2011, Wisconsin passed Act 10, which, among other things, greatly diminished the collective bargaining rights and retirement benefits of teachers.
- As a consequence of Act 10, districts have experienced increases in teacher turnover through retirements and transfers, which has resulted in teacher shortages in some districts.
- In response to this, in 2015, the Wisconsin Legislature's Joint Finance Committee passed new rules that would have allowed individuals without teaching degree to become certified teachers.
- Although the new rules ultimately were not implemented, this was viewed by many as an attempt to deprofessionalize the teaching profession.

The Wisconsin Educator Effectiveness (EE) Process

- In 2011, Wisconsin also passed Act 166, which required Wisconsin schools to implement standardized performance-based teacher feedback systems.
- EE requires schools to provide ongoing, formal feedback to educators about their professional practice using standard teaching frameworks such as the Danielson Framework for Teaching (FfT) or the Stronge Teacher and Leader Effectiveness Performance System.
- DPI chose the FfT as the model that they would support, schools were given the option of choosing a framework of their own. About two-thirds of Wisconsin districts chose to use the FfT, which is the focus of this brief.

Evaluation Goals

- To document the conditions of schools and districts that promote the effective implementation of EE.
- To explore how the implementation of EE affects schools, teachers, and students.
- To provide schools, districts, and education agencies with data and information that informs and empowers their efforts to improve the effectiveness of EE implementation.

Evaluation Methods

- Analysis of ratings data
- Surveys of teachers, school administrators, district administrators
- Discussions with educators
- District case studies

Study of how EE implementation relates with Job Satisfaction

Methods – Survey Instruments

Job Satisfaction – Job satisfaction was measured using the Brief Index of Affective Job Satisfaction.

Thompson, E. R., & Phua, F. T. T. (2012).

School Climate – Four subscales of the 5Essentials Survey were used to measure Teacher – Teacher Trust, Teacher Collaboration, Teacher – Principal Trust, and Principal Leadership.

Feedback – The Examining Evaluator Feedback Survey was used to measure teacher perceptions of Feedback Quality, Evaluator Qualifications, Feedback Accuracy, Opportunity to Use Feedback, and Use of Feedback.

Cherasaro, T. L., Brodersen, R. M., Yanoski, D. C., Welp, L. C., & Reale, M. L. (2015).

Time/resources – Two additional questions, written for the evaluation were also used in this study to measure teacher perceptions of the time and resources they had available to them to do the steps of EE.

Methods – Survey distribution

- During the spring of 2016, surveys emailed to 35,000 teachers, across 1,067 schools, and 282 school districts.
- The current study only includes teachers in schools with at least 30% of teachers responding to the survey.
- This resulted in 8,654 teacher survey responses across 641 schools and 182 school districts.
- Within these schools, there were 19,752 full-time teachers. Thus, the overall response rate for these schools was estimated to be 43.8%.

Methods – Participant characteristics

The average responding teacher had been in their school 11.7 years (SD = 8.9) and had been an educator 14.4 years (SD = 9.4).

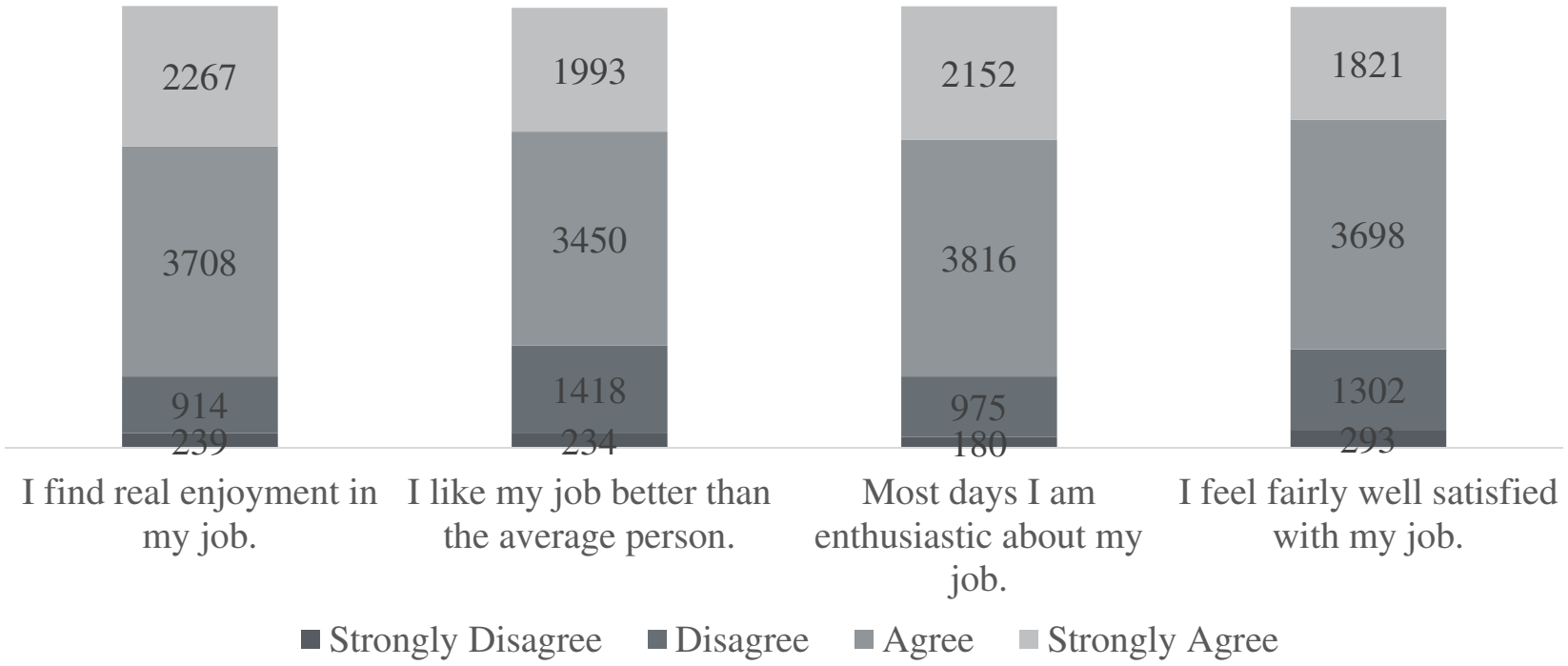
	Frequency	Percent
Gender		
Male	1843	21.3
Female	6811	78.7
Race/ethnicity		
White	8346	96.4
Black	47	0.5
Hispanic	130	1.5
Asian	71	0.8
Other	60	0.7
Education		
Bachelor's	3942	45.6
Master's	4647	53.7
Advanced	53	0.6

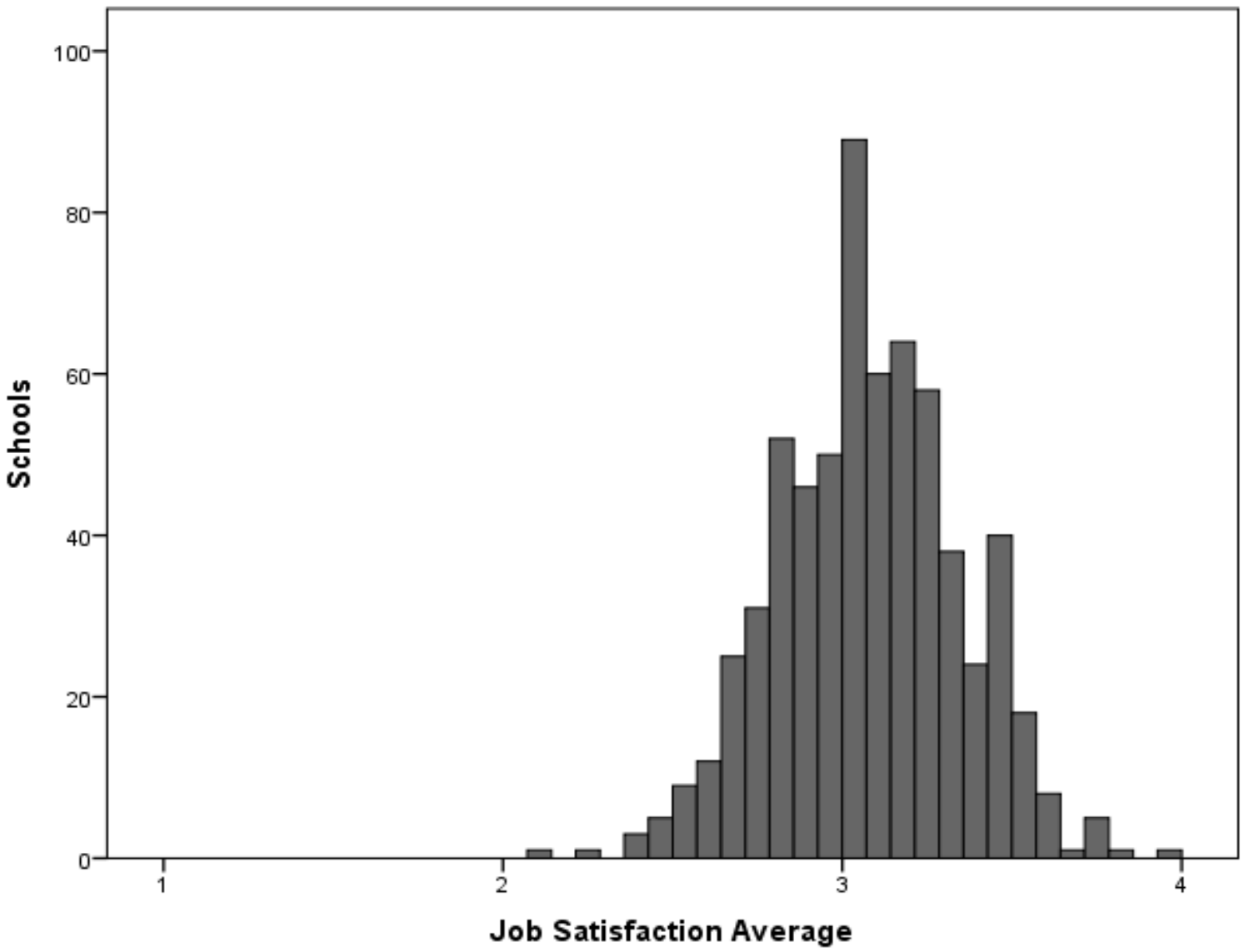
Methods – School characteristics

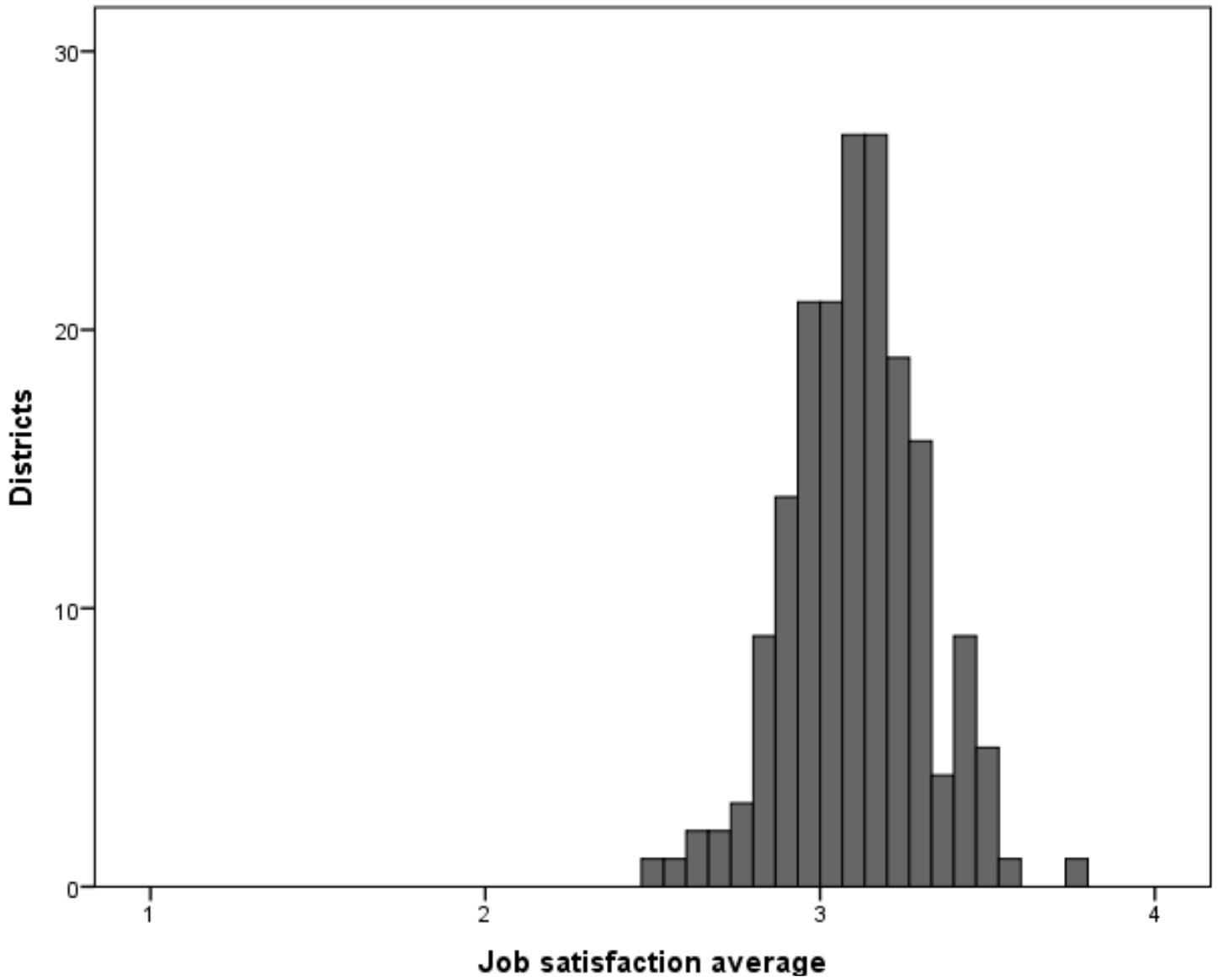
Of the 641 study schools, 358 (55.9%) were elementary schools, 124 (19.3%) were middle schools, and 159 (24.8%) were high schools.

	Mean	SD
Disability %	13.16	4.37
F/R Lunch%	38.67	19.15
Hispanic %	9.40	10.28
Black %	4.96	8.38
Asian %	4.13	6.06
White %	76.54	19.96
ELL %	6.02	8.87
School size	477.46	344.89

Results - Teacher Job Satisfaction




Schools
100
80
60
40
20
0
1
2
3
4
Job Satisfaction Average


30
20
10
0
Districts
1
2
3
4
Job satisfaction average

Analytic approach

Three-level hierarchical linear models, with teachers nested within schools nested within school districts, building off of the following unconditional model:

$$Job\ Satisfaction_{ijk} = \gamma_{000} + r_{0jk} + u_{00k} + e_{ijk}$$

Whereby, the satisfaction of teacher *i* in school j and district k, is a function of school differences (r_{0jk}), school district differences (u_{00k}), and individual teacher differences (e_{ijk}).

The model was built incrementally to provide a clearer picture of how teacher and school characteristics related with teacher job satisfaction.

School demographic correlations with overall school job satisfaction

- School size (r = -.137)
- Free/reduced lunch eligibility % (r = -.089),
- Black student % (r = -.135),
- Asian student % (r = -.136),
- White student % (r = .152)
- Average teacher tenure (r = -.083)
- % of teachers with an advanced degree (r = -.058)

School climate correlations with overall school job satisfaction

- Trust between teachers and principal (r = .409)
- Trust between teachers (r = .284)
- Principal leadership (r = .350),
- Collaboration between teachers (r = .128)
- Time and resource capacity for EE (r = .332).

School EE feedback correlations with overall school job satisfaction

- Feedback Accuracy (r = .362)
- Feedback Quality (r = .326)
- Feedback Use (r = .214)
- Opportunity for Using Feedback (r = .328)
- Qualifications of Evaluator (r = .324)

Teacher demographic correlations with job satisfaction

- Female (r = .027)
- Years of experience in school (r = -.083)
- Total years as educator (r = -.067)
- Hispanic (r = .04)
- Master degree (r = -.058)

Teacher perceptions of school climate correlations with job satisfaction

- Trust between teachers and principal (r = .389)
- Trust between teachers (r = .279)
- Principal leadership (r = .358)
- Collaboration between teachers (r = .200)
- Time and resource capacity for EE (r = .276)

Teacher perceptions of EE feedback correlations with job satisfaction

- Feedback Accuracy (r = .285)
- Feedback Quality (r = .282)
- Feedback Use (r = .226)
- Opportunity for Using Feedback (r = .318)
- Qualifications of Evaluator (r = .304)

Unconditional model results of teacher Job Satisfaction

- 1.2% of the variance was explained by district
- 4.5% was explained by school
- 94.6% explained by within school variation

Model results of teacher Job Satisfaction – conditional on teacher and school demographics

$$\text{Job Satisfaction}_{ijk} = \gamma_{000} + \boldsymbol{\gamma_{010}}\text{*}\boldsymbol{\%\,White_{jk}} + \boldsymbol{\gamma_{020}}\text{*}\boldsymbol{School\ Size_{jk}} + \gamma_{030}\text{*Teacher Tenure}_{jk} + \gamma_{100}\text{*Female}_{ijk} + \boldsymbol{\gamma_{200}}\text{*}\boldsymbol{Teacher\ Tensure_{ijk}} + \boldsymbol{\gamma_{300}}\text{*}\boldsymbol{Bachelor\ Degree_{ijk}} + \boldsymbol{\gamma_{400}}\text{*}\boldsymbol{White_{ijk}} + r_{0jk} + u_{00k} + e_{ijk}$$

Fixed Effect	Coefficient	Standard error	t-ratio	Approx. d.f.	p-value
γ_{000}	3.0754680	0.012636	243.399	181	<0.001
γ_{010}	**0.0022770**	**0.000601**	**3.789**	**456**	**<0.001**
γ_{020}	**-0.0000670**	**0.000022**	**-3.083**	**456**	**0.002**
γ_{030}	-0.0023560	0.00375	-0.628	456	0.53
γ_{100}	0.0372460	0.022326	1.668	6917	0.095
γ_{200}	**-0.0044760**	**0.001046**	**-4.278**	**6917**	**<0.001**
γ_{300}	**0.0445130**	**0.019907**	**2.236**	**6917**	**0.025**
γ_{400}	**-0.2210490**	**0.038219**	**-5.784**	**6917**	**<0.001**

Demographic characteristics explained 41.6% of the differences in Job Satisfaction between school districts but did not explain a significant amount of school or teacher variance.

Model results of teacher Job Satisfaction – conditional on demographics and overall school climate

$$\text{Job Satisfaction}_{ijk} = \gamma_{000} + \gamma_{010}*\%\text{White}_{jk} + \gamma_{020}*\text{School Size}_{jk} + \mathbf{\gamma_{030}*\text{Teacher Principal Trust}_{jk}} + \mathbf{\gamma_{040}*\text{Teacher Teacher Trust}_{jk}} + \mathbf{\gamma_{050}*\text{Time/Resources}_{ejk}} + \gamma_{060}*\text{Teacher Tenure}_{jk} + \gamma_{100}*\text{Female}_{ijk} + \gamma_{200}*\text{Teacher Tenure}_{ijk} + \gamma_{300}*\text{Bachelor Degree}_{ijk} + \gamma_{400}*\text{White}_{ijk} + r_{0jk} + u_{00k} + e_{ijk}$$

Fixed Effect	Coefficient	Standard error	t-ratio	Approx. d.f.	p-value
γ_{030}	**0.168457**	**0.024508**	**6.874**	**453**	**<0.001**
γ_{040}	**0.1174**	**0.030269**	**3.879**	**453**	**<0.001**
γ_{050}	**0.126559**	**0.024588**	**5.147**	**453**	**<0.001**

The addition of school climate (Trust and Time) explained 67.7% of the differences in Job Satisfaction between schools.

Model results of teacher Job Satisfaction – conditional on demographics and teacher school climate

Job Satisfaction$_{ijk}$ = γ_{000} + γ010*%White$_{jk}$ + γ_{020}*School Size$_{jk}$ + γ_{030}*Teacher Principal Trust$_{jk}$+ γ_{040}*Teacher Teacher Trust $_{jk}$ + γ050*Time/Resources$_{jk}$ + γ_{060}*Teacher Tenure$_{jk}$ + γ_{100}* Female$_{ijk}$ + γ_{200}*Teacher Tenure$_{jk}$ + **γ_{300}*Time/Resources$_{ijk}$ + γ_{400}*Teacher Principal Trust$_{ijk}$ + γ_{500}*Teacher Teacher Trust$_{ijk}$**+ γ_{600}*Bachelor Degree$_{ijk}$ + γ_{700}*White$_{ijk}$ + r_{0jk} + r_{4jk}*Teacher Principal Trust$_{ijk}$+ r_{5jk} *Teacher Teacher Trust$_{ijk}$+ u_{00k} + e_{ijk}

Fixed Effect	Coefficient	Standard error	t-ratio	Approx. d.f.	p-value
γ300	**0.117349**	**0.010007**	**11.727**	**5634**	**<0.001**
γ400	**0.275701**	**0.013377**	**20.61**	**451**	**<0.001**
γ500	**0.136985**	**0.015573**	**8.796**	**451**	**<0.001**

The addition of random effects of teacher perceptions of school climate explained 22.9% of the differences in Job Satisfaction between teachers.

Model results of teacher Job Satisfaction – conditional on demographics and teacher school climate

- The relationships of time/resource availability and Teacher Principal Trust with Job Satisfaction were found to vary across schools.
- Correlations between random terms suggest that the relationships between Time/Resource Availability and Teacher Principal Trust with Job Satisfaction is much stronger in schools with lower overall Job Satisfaction.

INTRCPT1,π_0	1.000	-0.671	-0.499
Time/Resources Available,π_3	-0.671	1.000	-0.277
Teacher Principal Trust,π_4	-0.499	-0.277	1.000

Model results of teacher Job Satisfaction – conditional on demographics, school climate, and EE Feedback

$$\text{Job Satisfaction}_{ijk} = \gamma_{000} + \gamma_{010}*\%\text{White}_{jk} + \gamma_{020}*\text{School Size}_{jk} + \gamma_{030}*\text{Teacher Principal Trust}_{jk} + \gamma_{040}*\text{Teacher Teacher Trust}_{jk} + \gamma_{050}*\text{Teacher Tenure}_{jk} + \gamma_{060}*\text{Teacher Tenure}_{jk} + \gamma_{100}*\text{ Female}_{ijk} + \gamma_{200}*\text{Teacher Tenure}_{ijk} + \gamma_{300}*\text{Time/Resources}_{ijk} + \mathbf{\gamma_{400}*Feedback\ Use_{ijk}} + \mathbf{\gamma_{500}*Opportunity\ to\ Use\ Feedback_{ijk}} + \mathbf{\gamma_{600}*Feedback\ Accuracy_{ijk}} + \gamma_{700}*\text{Teacher Principal Trust}_{ijk} + \gamma_{800}*\text{Teacher Teacher Trust}_{ijk} + \gamma_{900}*\text{Bachelor Degree}_{ijk} + \gamma_{1000}*\text{White}_{ijk} + r_{0jk} + r_{7jk}*\text{Teacher Principal Trust}_{ijk} + r_{8jk}*\text{Teacher Teacher Trust}_{ijk} + u_{00k} + e_{ijk}$$

Fixed Effect	Coefficient	Standard error	t-ratio	Approx. d.f.	p-value
γ_{400}	**0.023575**	**0.008656**	**2.723**	**5631**	**0.006**
γ_{500}	**0.078259**	**0.011141**	**7.024**	**5631**	**<0.001**
γ_{600}	**0.02704**	**0.009824**	**2.752**	**5631**	**0.006**

The addition of individual perceptions of EE Feedback explained an additional 1% of the differences in Job Satisfaction between teachers.

Conclusions

- Our previous evaluations of Wisconsin EE suggested that EE was viewed by some teachers as having a negative impact on the educational environment within schools and was a contributing factor for teachers retiring, leaving the profession, or moving.
- The results of this study suggest that implementing the EE feedback process well may actually improve the satisfaction of teachers with their jobs.
- The potential negative consequences of EE are a risk when teachers are provided inaccurate feedback or are not provided the opportunity to use feedback to improve.

Next steps

- This year our evaluation of EE will include all districts across the state.
- Our teacher survey includes additional job-related questions such as their intent to stay in their job and satisfaction with salary and time demands.
- We are able to link survey responses to HR and employment data to explore how EE implementation relates with actual teacher mobility.
- We are building a website where individual school results can be provided directly to schools and districts.
- The DPI and Cooperative Educational Service Agencies (CESAs) are leveraging the results from the evaluation in their work with districts and schools across the state.

Contact information

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