Organizational Climate and Burnout: A Structural Equation Modeling Approach

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Research Questions

• How does organizational climate influence worker burnout?
• How does worker’s sense of control on the job or supervisory relationship affect worker burnout?
• Does worker’s sense of control on the job or supervisory relationship mediate relations between organizational climate and burnout?
Prior Research

• Organizational theorists and researchers emphasize the importance of work environments that cultivate an empowered work force and promote effective interaction with clients (Corsun & Enz, 1999; Howard, Peterson & Speer, 2000)

• Work stress is related more to organizational aspects of the work environment rather than to personal attributes (Dollard et al., 2000)

• Burnout is a serious concern in social services considering its relation to job satisfaction, effectiveness of service delivery, and turnover rates (Arches, 1991)
Rationale for Study

- Despite the potential workplace benefits of empowerment, only a few studies have focused on empowerment within human service organizations (Foster-Fishman & Keys, 1997; Gutierrez, DeLois, & GlenMaye, 1995; Peterson & Speer, 2000)
- None among paraprofessionals in these settings (Wallach & Mueller, 2006)
- Empowerment is a relatively new variable waiting to be tested in the battle against burnout (Lee & Koh, 2001)
- An important task is for researchers to find the variables that might protect against burnout (Hochwälder, 2007)
Data Collection

• Part of the on-going evaluation of a child abuse prevention program
• 3 randomized study sites in 2002, 7 sites in 2005, and 10 sites in 2006 across New York State
• Site visits
• Return by mail
• Incentives
• Confidentiality
• Response rate: above 90%
• Final sample size: 179
Measures

• Socio-demographic characteristics
• Standardized instruments on:
  – Supervisory relationship
  – Perceived sense of control on the job
  – Organizational climate: organizational efficiency and work pressure
  – Worker burnout: feeling emotional exhaustion
Supervisory Relationship

• Supervisory support questionnaire (Shulman, 1982)
• Two questions measured:
  – General satisfaction with supervision (1 to 4)
  - How supervisor was helpful to them (0 to 2)
• In general, home visitors were satisfied with their supervisor (Cronbach’s alpha=.843)
Sense of Control on the Job

- Pearlin & Schooler’s mastery scale modified with “on the job” (Guterman & Jayarante, 1994)
  - Ex. I have little control over the things that happen to me on my job
  - 7 items, ranging 1 to 4
- Higher score indicates home visitor’s stronger sense of control on the job (Cronbach’s alpha=.771)
Organizational Climate

• Work Environment Scale (Moos, 1974, 2004)
• Consisted of 9 independent sub-scales, each consisting of 9 items
• Two sub-scales used:
  - Task and planning efficiency (range 0 to 9)
    - Example: People pay a lot of attention to getting work done
  - Work pressure (range 0 to 9)
    - Example: There is consistent pressure to keep working
Maslach Burnout Inventory

• Maslach & Jackson (1981)
• Emotional Exhaustion
  – Describe feelings of being emotionally overextended and exhausted by one’s work
  – 9 items: range of 0 to 6
• Higher score indicates feeling more emotional exhaustion (Cronbach’s alpha=.903)
Sample Characteristics

- Sample Size (N=179):
  - Round 1 (n=49) Round 2 (n=62) and Round 3 (n=68)
- Average age of home visitors: 38 years
- About half of home visitors finished at least two years of college
- Race:
  - Hispanic (n=55, 32%)
  - Black (n=42, 24%)
  - Non-Hispanic White (n=77, 44%)
Analytic Strategy

- Examine an additive model and a path model
- Multiple Regression Analysis
  - Four steps: 1) socio-demographic covariates only; 2) satisfaction with supervisor; 3) sense of control on the job; and 4) task and planning efficiency & work pressure added
- Path analysis using structural equation modeling
  - Hypothesized model: worker’s sense of control on the job or supervisory relationship mediates relations between organizational climate and worker burnout
Results from the Additive Model

Relationship with Supervisor

• Among covariates, age is the only significant predictor for worker burnout in the first step model

• Satisfaction with supervisor negatively affects worker burnout ($\beta = -0.221$, Sig. = .004)

(Changes in $R^2$ = .046, Sig. F Changes = .004)
Results from the Additive Model

Worker’s sense of control on the job

- Worker’s sense of control on the job had substantially negative impacts on worker burnout ($\beta = -0.404, \text{Sig.}=0.000$)
- Covariates and satisfaction with supervisor did not significantly influence on worker burnout at all when worker’s sense of control on the job was added

(3rd step model: $R^2 = 0.234$, \text{Sig.}=0.000; Changes in $R^2 = 0.137$, \text{Sig. F Changes} = 0.000)
Results from the Additive Model

Organizational Climate variables

• Organizational climate measured by work pressure and task and planning efficiency were found as the strongest predictors for worker burnout ($\beta=.451, \text{Sig.}=.000$ & $\beta=-.233, \text{Sig.}=.001$)

• Worker’s sense of control on the job had negative impacts on worker burnout while satisfaction with supervisor was still not significant

(Final model: $R^2=.387, \text{Sig.}=.000$; Changes in $R^2=.153, \text{Sig. F Changes}=.000$)
Results from SEM

• Overall Measurement Model indicates acceptable fit to the data:
  – Minimum Fit Function $x^2(177)=303.032$, $p < .001$; Root Mean Square Error of Approximation (RMSEA) = .0593; 90% confidence interval for RMSEA (0.0465; 0.0715); and Comparative Fit Index (CFI) = 0.966

• Exogenous variables: age and task planning and efficiency & work pressure

• Endogenous variables:
  - Outcome variable: worker burnout
  - Mediating endogenous latent variables: worker’s sense of control on the job and supervisory relationship
SEM Results: Standardized Parameter Estimates

- Age
- Task Planning Efficiency
- Work Pressure
- Sense of Control on the Job
- Supervisory Relationship
- Burnout

Parameter Estimates:
- Age to Task Planning Efficiency: 0.31
- Task Planning Efficiency to Sense of Control on the Job: 0.20
- Sense of Control on the Job to Burnout: 0.34
- Supervisory Relationship to Burnout: 0.16
- Work Pressure to Supervisory Relationship: -0.23
- Work Pressure to Burnout: 0.37
- Other relationships with parameter estimates of 0.17 and -0.16

Note: The diagram represents the relationships and parameter estimates between the variables.
Results from SEM

- Among mediating endogenous variables as well as exogenous variables, organizational climate variables indicated the strongest effects on worker burnout.

- Predicting worker burnout:
  - Work pressure: TE=.52, DE=.37, IE=.15
  - Task planning and efficiency: TE= -.29, DE= -.16, IE= -.12
  - Sense of control on the job: TE=DE= -.29
  - Age: TE= -.23, DE= -.16, IE= -.07
  - Supervisory relationship: TE=DE= -.07
Results from SEM

- Among mediating endogenous variables, worker’s sense of control on the job directly reduced worker burnout (St. = -0.29), while supervisory relationship did not directly significant impact on burnout (St. = -0.07, ns)
- Supervisory relationship was substantially correlated with worker’s sense of control on the job (r = 0.34)
- Supervisory relationship might influence worker burnout through relationship with sense of control on the job
Conclusion

• Two constructs of organizational climate, organizational efficiency and work pressure, were better predictors for worker burnout than supervisory relationship

• Organizational climate eliminates previously existing relationship between supervisory relationship and worker burnout

• Worker’s perceived sense of control on the job was an important predictor for worker burnout, and mediates the impact of organizational climate on burnout; supervisory relationship does not
To Empower Workers

• Create work settings that provide participatory management and allow workers to make independent decisions

• Provide advanced training and support for actualizing special interests and talents of workers
To Improve Organizational Climate

- Create work settings that emphasize advanced planning and getting work done efficiently
- Focus on results but with reasonable workload demands