Factors Contributing to Stress and Burnout among Elementary School Teachers in the United States and Germany

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Presentation Outline

- Rationale/significance of the research
- Method and findings
- Implications and future directions
- Visits to classrooms
Introduction

- Teacher stress and burnout is a world-wide phenomenon (Kyriacou, 2001)

- **Burnout**: a psychological syndrome and combination of emotional exhaustion, tendency to depersonalize others, and reduced sense of personal accomplishment (Maslach & Jackson, 1981)

- **Stress**: the degree to which work demands cause pressure (Gugliemi & Tatrow, 1998)
Introduction

- **United States**: high teacher turnover rate (25-33%) in first three years of teaching, national shortage of qualified teachers (NCES)

- **Germany**: 74% of all teachers retired early compared to 46% of early retirements in other professions (Schaarschmidt, 2005), often due to mental health issues; >50% of teachers exhibited work-related behaviors, putting them at risk for burnout
Significance

- Informs efforts in
  - increasing teachers’ coping skills to prevent burnout and attrition
  - promoting job satisfaction, teacher health and wellness
  - maximizing student achievement
  - understanding cross-cultural similarities and differences
Predictors of Stress and Burnout

- Cultural and societal factors
  - Educational systems
  - Educational leadership (Hancock & Müller, 2008)

- School-specific factors
  - Type of school, job demands and available resources
  - Interactions with students and parents

- Teacher-specific factors
Teacher-specific Factors

- **Demographic variables**
  - Gender, age, marital status (Körner, 2002)
  - Years of experience (Forlin, 2001)

- **Individual personality, characteristics, coping resources**
  - Locus of control (Byrne, 1999)
  - Self esteem (Greenberg et al., 1992)
  - Social support (Greenglass et al., 2003)
  - Self-efficacy (Brouwers & Tomic, 2000)
  - Self-acceptance (Lambert et al., 2008)
Research Purposes

- To replicate in Germany a study of teacher stress, coping, and burnout that was conducted in the U.S.
- To examine relationship of elementary teachers’ years of experience, perceived occupational stress, and preventive coping/self-acceptance to burnout symptoms in the United States and Germany.
- To explore which type of factors/predictors (teacher- or school-specific) are more strongly associated with burnout in both samples.
# Participants and Settings

## U.S. Sample
- 451 elementary teachers (grades K-5) from 13 schools within three adjacent counties in North Carolina
- Response rate: 77.62% (within school rates: 59.26% to 96.77%)

(McCarthy, Lambert, O’Donnell, & Melendres, 2009)

## German Sample
- 469 elementary teachers (grades 1-4) from 62 Baden-Württemberg schools in four districts (Freiburg, Karlsruhe, Stuttgart, Tübingen)
- Response rate: 60.56% (within school rates: 17.65% to 100.00%)
Survey Procedures

**U.S. Sample**
- Questionnaires were distributed during staff meetings
- Returned to school office
- Teachers offered incentives

**German Sample**
- Translation
- Principals were contacted by email
- Options: (a) Researcher administering during a staff meeting, (b) printing and postage reimbursement, (c) researcher provided questionnaires, envelopes, and postage, (d) individual summaries of results for their schools
Independent / Predictor Variables

- Perceptions of classroom demands
  - CARD measure (Lambert et al., 2001)

- CARD occupational stress score (D-R)

- Self-acceptance
  - PRI Self-Acceptance Scale (McCarthy & Lambert, 2001)

- Years of experience (number of years at current school, number of years in profession)
**Dependent Variable**

- **Burnout:** Measured by *Maslach Burnout Inventory - Educator Survey* (MBI-ES; Maslach, Jackson, & Leiter, 1996) and *MBI-D* (Enzmann & Kleiber, 1989; German version)
  - Emotional Exhaustion (EE): feeling of being overextended emotionally
  - Depersonalization (DP): a cynical stance towards others
  - Personal Accomplishment (PA): lowered feelings of competence
Measures

- Classroom Appraisal of Resources and Demands (CARD) – 84 items
  - Demographics and classroom characteristics, classroom demands (5-pt scale), helpfulness of resources (5-pt scale)
Instruments/Measures

- Maslach Burnout Inventory (MBI) – 22 items

- Preventive Resources Inventory (PRI)
  Self-acceptance – 16 items
  - Measures how well a respondent is able to accept personal weaknesses and strengths when faced with challenging life situations
Analyses

- Three level HLM measurement models
- Items responses within burnout construct, scale scores within teachers, teachers nested within their schools
- Overwhelming majority of variance in burnout scores was between teachers within schools, not between schools (< 1%) for both samples
## Findings – Burnout and Self-Acceptance

### Main Differences in Means

<table>
<thead>
<tr>
<th></th>
<th>U.S. Sample</th>
<th>German Sample</th>
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<tbody>
<tr>
<td><strong>Maslach Burnout Inventory (MBI)</strong></td>
<td></td>
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<tr>
<td>Emotional Exhaustion (EE)</td>
<td>20.56*</td>
<td>14.96</td>
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<tr>
<td>Depersonalization (DP)</td>
<td>4.46</td>
<td>3.90</td>
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<tr>
<td>Personal Accomplishment (PA)</td>
<td>13.28</td>
<td>13.68</td>
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<tr>
<td>Total Score</td>
<td>38.10*</td>
<td>32.51</td>
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<tr>
<td><strong>Self-acceptance</strong></td>
<td>4.01*</td>
<td>3.82</td>
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## Findings – Association between Burnout Symptoms and Predictor Variables

<table>
<thead>
<tr>
<th>Predictors</th>
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<tbody>
<tr>
<td>Years at current school</td>
<td>EE ↑</td>
<td>EE ↓</td>
</tr>
<tr>
<td>Years at current school</td>
<td>--</td>
<td>DP ↓</td>
</tr>
<tr>
<td>New to teaching (1-2 years)</td>
<td>--</td>
<td>EE ↓</td>
</tr>
<tr>
<td>Years of experience</td>
<td>--</td>
<td>DP ↑</td>
</tr>
<tr>
<td>Stress</td>
<td>EE ↑</td>
<td>--</td>
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<tr>
<td>Stress</td>
<td>DP ↑</td>
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<tr>
<td>Stress</td>
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<td>PA ↑</td>
</tr>
<tr>
<td>Stress</td>
<td>Burnout ↑</td>
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Findings – Association between Burnout Symptoms and Predictor Variables

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<tr>
<td>Self Acceptance</td>
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Summary of Findings

- Self-acceptance is the strongest predictor for burnout in both samples.
- Number of years in current school is strongly associated with level of burnout (U.S. sample ↑; German sample ↓).
- For teachers in German sample, higher stress level is associated with lower sense of personal accomplishment and self-acceptance.
Implications

- It is important to address individual teacher development (e.g., coping and teaching skills).

- It is beneficial to promote organizational improvement of schools (e.g., provision of resources, leadership development, social support).
Future Research

- Develop more complex models including school level variables, cultural work values, job satisfaction, intentions to leave education

- Examine different grade levels
Future Research

- Explore differences in teacher support and induction programs in both countries

- Collect observational data to explain differences found in the study regarding teachers’ coping skills and perceptions of resources and demands
Observations & Interviews in Baden-Württemberg

- We spent an entire school day in each classroom and conducted a follow-up interview with each teacher.

- We interviewed administrators when they were available.

- We visited schools in the following cities:
  - Endersbach
  - Ludwigsburg
  - Stuttgart
  - Radolzell
Acknowledgment

This project is partially supported by
- U.S. Department of Education
- Hogeschool Utrecht in the Netherlands
- UNC Charlotte Faculty Research Grant
- Department of Educational Leadership at UNC Charlotte