# **Abstract Title Page**

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Title: Promoting Teachers' Social and Emotional Competence: a Replication Study of the Cultivating Awareness and Resilience in Education (CARE) Program

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#### **Abstract Body**

Limit 4 pages single-spaced.

#### **Background / Context:**

Description of prior research and its intellectual context.

The present study is based upon the prosocial classroom theoretical model that emphasizes the significance of teachers' social and emotional competence (SEC) and well-being in the development and maintenance of supportive teacher-student relationships, effective classroom management, and social and emotional learning (SEL) program effectiveness (Jennings & Greenberg, 2009). These factors, as well as teachers' classroom management and instructional skills contribute to creating a classroom climate that is conducive to learning and that promotes positive developmental behavioral and academic outcomes among students (see Figure 1).

Successful implementation of social and emotional learning (SEL) curriculum depends upon the teacher's ability to serve as a positive role model, facilitate interpersonal problem solving, and create environments that are conducive to social and emotional learning. To do this, teachers must employ a high degree of social and emotional competence (SEC). However, most teacher preparation programs do not prepare teachers to manage these demands. The emotionally demanding events teachers typically face often involve interactions with children who are not well-regulated due to exposure to numerous risk factors and are in greatest need of a supportive relationship with their teacher to develop their social and emotional competencies.

There has been growing interest in applying mindfulness-based approaches to reducing stress and promoting SEC among teachers (Jennings & Greenberg, 2009; Jennings, Roeser & Lantieri, 2012; Roeser, Skinner, Beers & Jennings, 2012). "Mindfulness" refers to a particular kind of attention characterized by intentionally focusing on the present moment with a non-judgmental attitude (Kabat-Zinn, 1994). Research on the effects of mindfulness training with adults has shown numerous positive effects including reduced stress, increased self-awareness, empathy, and emotion regulation (Chiesa & Serretti, 2009).

Cultivating Awareness and Resilience in Education (CARE) is a mindfulness-based professional development program designed to reduce stress, promote SEC and improve teachers' performance and classroom learning environments (Jennings, 2011). A randomized controlled trial conducted in the second year of a two-year IES-funded development study examined program efficacy and acceptability among a sample of 50 teachers randomly assigned to CARE or waitlist control condition (Jennings, Frank, Snowberg, Coccia & Greenberg, 2013). Participants completed a battery of self-report measures at pre- and post-intervention to assess the impact of the CARE program on general well-being, efficacy, burnout/time pressure, and mindfulness. ANCOVAs were computed between the CARE group and control group for each outcome, and the pre-test scores served as a covariate. Participation in the CARE program resulted in significant improvements in dimensions of teacher well-being, efficacy, burnout/time-related stress, and mindfulness compared to controls.

# Purpose / Objective / Research Question / Focus of Study:

Description of the focus of the research.

The present study reports on research conducted to replicate the results of the previous study. Again we tested the hypotheses that compared to controls, teachers who received CARE would show improvements in measures of general well-being (including reductions in depressive and daily physical symptoms), efficacy, burnout/time pressure, and mindfulness.

#### **Setting:**

Description of the research location.

The present study took place in a high-poverty section of a large urban area of the northeastern United States.

#### **Population / Participants / Subjects:**

Description of the participants in the study: who, how many, key features, or characteristics.

From 8 elementary schools we recruited and consented 55 teachers (90.2% female, mean age = 39.41). We had relatively low attrition (7.2%) which was largely balanced across treatment and control conditions, resulting in a diverse sample of 51 teachers (53% white). All were regular lead teachers working in a self-contained classroom setting.

# **Intervention / Program / Practice:**

Description of the intervention, program, or practice, including details of administration and duration.

The Cultivating Awareness and Resilience in Education (CARE) professional development program combines emotion skills instruction, mindful awareness practices and compassion building activities to provide teachers with skills to reduce their emotional stress and to improve the social and emotional skills required to build supportive relationships with their students, manage challenging student behaviors, and to provide modeling and direct instruction for effective social and emotional learning. CARE is an intensive 30-hour program presented in four day-long sessions over 4–6 weeks, with intersession phone coaching and a booster held approximately two months later. The program was refined during the first year of the IES-funded development grant thorough an iterative process of presenting, assessing, and refining the program in response to teachers' feedback (Jennings, Snowberg, Coccia & Greenberg, 2011).

#### Research Design:

Description of the research design.

The results reported here are from an IES-funded 4-year efficacy and replication study of CARE. The data are from the teacher self-report collected from the first year cohort of the cluster randomized controlled trial. After the teachers completed self-reports they were randomly assigned within schools to receive the CARE intervention or to a wait-list control group. After the treatment group received the CARE program, the same self-report battery was administered to both groups.

# **Data Collection and Analysis:**

Description of the methods for collecting and analyzing data.

Participants completed a battery of self-report measures at pre- and post-intervention to assess the impact of the CARE program on well-being, efficacy, burnout/time pressure/emotion regulation, and mindfulness. Measures of well-being included the General Anxiety Disorder 7-Item Scale (GAD-7; Spitzer, Kroenke, Williams & Lowe, 2006), the Patient Health Questionnaire measure of depressive symptoms (PHQ-9; Kroenke & Spitzer, 2002), the Daily Physical Symptoms Checklist (DPS; Larsen & Kasimatis, 1991), the Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988), the 4-item version of the Sleep Disturbance Questionnaire (SDQ; Buysse et al., 2010), the Perceived Stress Scale (PSS-4; Cohen, Kamarck & Mermelstein, 1983) and the Distress Tolerance Scale (DTS; Simons & Gaher, 2005). To assess efficacy we used the Teachers' Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk Hoy, 2001). To assess time pressure/burnout and emotion regulation we used the Time Urgency Scale (TUS; Landy, Rastegary, Thayer, & Colvin, 1991), the Maslach Burnout Inventory – Educators' Survey (MBI; Maslach, Jackson, & Leiter, 1997) and the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003). To assess mindfulness we used the Interpersonal Mindfulness in Teaching Scale (IMTS; Greenberg, Jennings, & Goodman, 2010) and the Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). ANCOVAs were computed between the CARE group and control group for each outcome, and the pre-test scores served as a covariate. Effect sizes (Cohen, 1992) were calculated for each variable.

### **Findings / Results:**

Description of the main findings with specific details.

Due to the small sample size, we report significant effects at p < .10. Compared to teachers assigned to the control group, CARE participants showed improvements in well-being. They were significantly less anxious (p = .01, d = -.77), reported fewer depressive symptoms (p = .09, d = -.77), had fewer gastrointestinal symptoms (p = .13, d = -.43) and cardiovascular symptoms (p = .13, d = -.41), reported increased positive affect (p = .12, d = .26), and improvements in sleep (p = .13, d = .55). They also showed reductions in the task related hurry subscale of the TUS (p = .02, d = .78) and increases in the re-appraisal subscale of the ERQ (p = .04, d = .77). CARE teachers reported increases in the interpersonal mindfulness subscale of the IMTS (p = .05, d = .77) and increases in the observe (p = .04, d = .46) and non-react (p = .11, d = .77) subscales of the Five Facet Mindfulness Questionnaire. We found no intervention effects on perceived stress, distress tolerance or efficacy.

In some ways these results are consistent with the previous study. Both studies found that CARE reduced physical symptoms and both studies found effects on the observe and non-react subscales of the FFMQ. There were some minor differences on some measures. While both studies found effects on time-related stress, the first study found an effect on the general hurry subscale of the TUS while the present study found an effect on the task related hurry subscale. The previous study found that CARE teachers reported reductions in suppression and increases in reappraisal on the ERQ compared to controls while in the present study effects were found only on the reappraisal subscale. There were also some major differences. In the previous study, teachers reported significant improvements in instructional efficacy and efficacy in student

engagement compared to controls. However, similar effects were not found in the present study. In the present study there was an effect on positive affect that was not found in the previous study. The previous study found intervention effects on the personal accomplishment subscale of the MBI, while the present study did not. Finally, the present study found intervention effects on depression that were not found in the previous study, using a different measure (the Center for Epidemiologic Studies Depression Scale; CES-D-20; Radloff, 1977). Anxiety, sleep and interpersonal mindfulness were not assessed in the first study.

#### **Conclusions:**

Description of conclusions, recommendations, and limitations based on findings.

While there were some differences between the results of the two studies, the present study did replicate many of the findings from the previous study. However, further research with a larger sample needs to be conducted to confirm these findings. The results of both studies suggest that CARE fills an important professional development need long ignored by education research. The program may reduce burnout, alleviating school district personnel health care costs, absenteeism and early resignation; CARE emphasizes the teacher's own development which needs further attention in educational policy and research; and CARE may help teachers establish supportive relationships with students at risk of school failure, thereby promoting school attachment and school climate. Finally, CARE may improve classroom climate which may result in improvements in students' academic achievement, thus supporting initiatives and policy aimed at these outcomes.

#### **Appendices**

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#### Appendix A. References

References are to be in APA version 6 format.

- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13, 27-45.
- Buysse, D.J., Yu, L., Moul, D.E., Germain, A., Stover, A., Dodds, N.E. & Pilkonis, P.A. (2010).

  Development and validation of patient-reported outcome measures for sleep disturbance and sleep-related impairments. *Sleep*, *33*, 781–792.
- Chiesa, A. & Serretti, A. (2009). Mindfulness-based stress reduction for stress management in healthy people: a review and meta-analysis. *Journal of Alternative and Complement Medicine*, 15, 593-600. doi: 10.1089/acm.2008.0495.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 386-396.
- Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.
- Greenberg, M.T., Jennings, P.A. & Goodman, B. (2010). The Interpersonal Mindfulness in Teaching Scale. University Park, PA: Pennsylvania State University.
- Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. Journal of Personality and Social Psychology, 85, 348-362.
- Jennings, P. A. & Greenberg, M. (2009). The Prosocial Classroom: Teacher social and emotional competence in relation to child and classroom outcomes. *Review of Educational Research*, 79, 491–525.

- Jennings, P. A. (2011). Promoting teachers' social and emotional competencies to support performance and reduce burnout. In A. Cohan & A. Honigsfeld (Eds.) *Breaking the Mold of Pre-service and In-service Teacher Education: Innovative and Successful Practices for the 21st Century*. New York: Rowman and Littlefield.
- Jennings, P. A., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2011). Improving classroom learning environments by Cultivating Awareness and Resilience in Education (CARE): Results of two pilot studies. *Journal of Classroom Interactions*. 46, 27-48.
- Jennings, P. A., Roeser, R., & Lantieri, L. (2012). Supporting educational goals through cultivating mindfulness: Approaches for teachers and students. In A. Higgins-D'Alessandro,
  M. Corrigan, & P. M. Brown (Eds.) *The Handbook of Prosocial Education*. New York:
  Rowman and Littlefield.
- Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2013).

  Improving classroom learning environments by Cultivating Awareness and Resilience in

  Education (CARE): Results of a randomized controlled trial. *School Psychology Quarterly*.

  Advance online publication. doi: 10.1037/spq0000035.
- Kabat-Zinn, J. (1994). Wherever you go, there you are: Mindfulness meditation in everyday life.

  New York, NY: Hyperion.
- Kroenke, K. & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals*, *32*, 1-7.
- Landy, F. J., Rastegary, H., Thayer, J., & Colvin, C. (1991). Time urgency: The construct and its measurement. *Journal of Applied Psychology*, 76, 644–657.
- Larsen, R. J., & Kasimatis, M (1991). Day-to-day physical symptoms: Individual differences in the occurrence, duration, and emotional concomitants of minor daily illnesses. Journal of

- Personality, 59, 387-423.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach Burnout Inventory. In C. P.Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 191–218).Lanham, MD: Scarecrow Education.
- Radloff, L. S. (1977). The CES-D scale: A self report depression scale for research in the general population. Applied Psychological Measurement, 1, 385–401.
- Roeser, R. W., Skinner, E., Beers, J., & Jennings, P. A. (2012). Mindfulness training and teachers' professional development: An emerging area of research and practice. Child Development Perspectives, 6, 167-173.
- Simons, J., & Gaher, R. (2005). The distress tolerance scale: Development & validation of a self-report measure. Motivation & Emotion, 29, 83-102
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Lowe, B. (2006). A brief measure for assessing generalized anxiety disorder. *Archives of Internal Medicine*, *166*, 1092-1097.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing and elusive construct. Teaching and Teacher Education, 17, 783-805.
- Watson, D., Clark, L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. Journal of Personality and Social Psychology, 54(6), 1063-1070).

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# The Prosocial Classroom Model

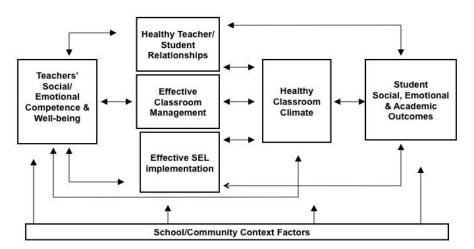


Figure 1. The Prosocial Classroom: A Model of Teacher Well-Being and Social and Emotional Competence, Support, and Classroom and Student Outcomes

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