

# Socially distanced teaching: The mental health impact of the COVID-19 pandemic on special education teachers

Christopher J. Cormier<sup>1</sup>  | John McGrew<sup>2</sup>  | Lisa Ruble<sup>3</sup>  |  
Melanie Fischer<sup>2</sup> 

<sup>1</sup>Stanford University, Stanford, California, USA

<sup>2</sup>Indiana University-Purdue University Indianapolis, Indianapolis, Indiana, USA

<sup>3</sup>Ball State University, Muncie, Indiana, USA

## Correspondence

John McGrew, Psychology Department, School of Science, Indiana University-Purdue University Indianapolis, 402 N Blackford St., LD 124, Indianapolis, IN 46202, USA.  
Email: [jmcgrew@iupui.edu](mailto:jmcgrew@iupui.edu)

## Funding information

Institute of Education Sciences, Grant/Award Numbers: R324A200232, #R324A200232

## Abstract

Little is known about the impact of the COVID-19 pandemic on special education teachers. Of 468 surveyed across the United States, 38.4% met clinical criteria for generalized anxiety disorder, a rate 12.4 times greater than the U.S. population, and 37.6% for major depressive disorder, a rate 5.6 times greater than the population. Race/ethnicity, gender, or school funding was not related to mental health. The impact of the pandemic was moderate to extreme on stress (91%), depression (58%), anxiety (76%), and emotional exhaustion (83%).

## KEYWORDS

mental health of teachers, special education teachers, teachers and COVID-19

Special education teachers (SETs) are a vulnerable group in the United States (U.S.) because of national shortages, attrition rates as high as 25%, and turnover rates approaching 50% (Carver-Thomas & Darling-Hammond, 2017). Reasons for chronic stress and burnout include school factors (e.g., workload manageability), teacher background (e.g., experience), and student factors (e.g., externalizing behaviors) (Billingsley & Bettini, 2019). The extra, cumulative impact of the COVID pandemic on SETs stress, burnout, and mental health is unknown, as is the potential differential influence of race, ethnicity, gender, age, and school demographics such as if they work at a Title 1 school.

The purpose of our study was threefold: (1) provide a nationwide view of levels of stress, burnout, and mental health of SETs, (2) examine differences in stress, burnout, and mental health by race, ethnicity, gender, and school demographics of SETs, and (3) examine the increased impact of the pandemic on stress, burnout, and mental health overall of SETs.

## 1 | METHOD

We developed a survey using Qualtrics® with existing measures outlined below. A flyer was generated and distributed to personal and professional contacts, social media, school districts, and professional teacher organizations. Inclusion criteria were participants who were current SETs at public and charter schools in the U.S. The study data comes from the first wave of a three-wave longitudinal study and was collected during Fall 2020.

### 1.1 | Measures

*Maslach Burnout Inventory—Educators Survey (MBI-ES; Maslach et al., 1986)* measured SET burnout. The MBI-ES consists of three subscales: (a) emotional exhaustion (EE; 9 items), (b) depersonalization (5 items), and (c) personal accomplishment (8 items). The EE scale was used for the current study. Participants rated the frequency of feeling burned out on a 7-point Likert scale (0 = never; 6 = every day). Total scores were calculated, with higher scores indicating greater burnout. Sample internal consistency was 0.90.

*Patient Health Questionnaire (PHQ-9)* is a 9-item self-report screening tool for diagnosing and assessing the severity of depression (Spitzer et al., 2006). Items correspond to the nine DSM-IV criteria (American Psychiatric Association, 2000) for major depressive disorder (MDD) and are scored as “0” (not at all) to “3” (nearly every day). The sum of the items indicates symptom severity (0–36). A recommended cut-off score of 11 or greater was used to diagnose MDD and produces excellent sensitivity (0.89) and specificity (0.89).

*Generalized Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006)* is a 7-item self-report screening tool for diagnosing and assessing the severity of generalized anxiety. Items assess symptom frequency and are scored as “0” (not at all) to “3” (nearly every day). The sum indicates symptom severity (0–28). A recommended cut-off score of 11 or greater was used to diagnose GAD and produces good sensitivity (0.74) and specificity (0.83) (Plummer et al., 2016).

*Teacher Specific Stress* (Bernard, 2016) was assessed using seven items corresponding to sources of stress: (a) classroom management; (b) poor student academic performance; (c) lack of student motivation/interest; (d) helping students with special needs; (e) time and workload pressures, (f) problems with school administration; and (g) changes. Items were rated on a 5-point Likert scale (1 = *not stressful* to 5 = *extremely stressful*) and summed to create overall scores. Higher scores indicated greater feelings of stress. Scale internal consistency for the current sample was 0.66.

#### 1.1.1 | COVID-19 impact questionnaire

We generated four questions on the impact of the COVID-19 pandemic on teacher mental health, that is, stress, depression, anxiety, and EE. Questions were rated using a 5-point Likert scale (1 = *not at all* to 5 = *extremely*).

## 2 | RESULTS

A total of 468 participants completed the survey, most were women (88.7%) and White (85.5%), with 6.2% Latino/a and 9% Black. The average age was 43.1 ( $SD = 11.4$ ). Table 1 displays means and standard deviations for the anxiety (GAD-7), depression (PHQ-9), EE, and stress measures separately by gender, race, ethnicity, and whether the teacher worked in a Title 1 school. Except in two instances, there were no significant group differences for any measure.

Compared to non-Black SETs, Black SETs reported significantly less emotional exhaustion ( $M = 3.2, SD = 1.4$  vs.  $M = 3.6, SD = 1.2, t(466) = -2.1, p = 0.037$ ) and teacher stress ( $M = 3.0, SD = 0.9$  vs.  $M = 3.2, SD = 0.7$ ;

**TABLE 1** Sample means and standard deviations for the anxiety (GAD-7), depression (PHQ-9), burnout (emotional exhaustion), and stress

	GAD-7	PHQ-9	Emotional exhaustion (avg)	Teacher stress (avg)
Men	7.8 (5.4)	9.6 (6.7)	3.3 (1.2)	3.0 (.8)
Women	8.6 (5.9)	9.3 (6.4)	3.6 (1.2)	3.2 (.7)
Stats	$t(461) = -0.95,$ $p = 0.341$	$t(465) = 0.32,$ $p = 0.751$	$t(465) = -1.40,$ $p = 0.163$	$t(389) = -1.94,$ $p = 0.053$
Title 1	8.5 (5.9)	9.1 (6.6)	3.5 (1.2)	3.2 (.7)
Non-Title 1	8.5 (5.6)	9.9 (5.9)	3.7 (1.2)	3.2 (.6)
Stats	$t(432) = 0.08,$ $p = 0.935$	$t(427) = 1.08,$ $p = 0.168$	$t(427) = 0.90,$ $p = 0.367$	$t(354) = 0.30,$ $p = 0.764$
White	8.6 (5.7)	9.3 (6.3)	3.6 (1.2)	3.2 (.7)
Non-White	7.9 (6.7)	9.5 (7.4)	3.3 (1.3)	3.1 (.8)
Stats	$t(462) = -0.99,$ $p = 0.324$	$t(466) = 0.26,$ $p = 0.793$	$t(466) = -1.69,$ $p = 0.092$	$t(390) = -0.99,$ $p = 0.322$
Latino/a	7.5 (6.8)	8.0 (7.1)	3.4 (1.3)	3.3 (.7)
Non-Latino/a	8.6 (5.8)	9.4 (6.4)	3.6 (1.2)	3.2 (.7)
Stats	$t(462) = -0.96,$ $p = 0.336$	$t(466) = -1.1,$ $p = 0.265$	$t(466) = -0.59,$ $p = 0.557$	$t(390) = 0.23,$ $p = 0.816$
Black	7.2 (6.7)	9.1 (7.7)	3.2 (1.4)	3.0 (0.9)
Non-Black	8.7 (5.7)	9.3 (6.3)	3.6 (1.2)	3.2 (0.7)
Stats	$t(462) = -1.59,$ $p = 0.133$	$t(466) = -.21,$ $p = 0.834$	$t(466) = -2.1,$ $p = 0.037$	$t(390) = -2.06,$ $p = 0.040$

Abbreviations: GAD-7, Generalized Anxiety Disorder Scale; PHQ-9, Patient Health Questionnaire.

$t(390) = -2.06, p = 0.040$ ). In addition, mean scores for the PHQ-9 ( $M = 9.33$ ) and GAD-7 ( $M = 8.51$ ) were non-significantly higher when compared against large national samples of public school teachers for both the PHQ-9 ( $M = 8.82$ ) (Schonfeld & Bianchi, 2016) and GAD-7 ( $M = 8.36$ ) (Schonfeld et al., 2019). Descriptively, scores for both measures were midway between suggested cut-offs for mild and moderate levels of anxiety/depression. There is no burnout cut-off score for the MBI (Maslach et al., 1986). However, our sample EE score ( $M = 32.0$ ) was much higher than the normative mean educator EE score reported by Maslach et al. (1986) ( $M = 21.25$ ). Our teacher stress score ( $M = 3.2$ ) was slightly higher than that reported by Bernard (2016) ( $M = 2.75$ ) in his sample of U.S. public school teachers.

Table 2 displays the percent diagnosed with MDD and GAD, disaggregated by gender, race, ethnicity, and teaching in a Title 1 school. Diagnoses were made using GAD-7 and PHQ-9 cut-off scores. Because a range of cut-off scores was acceptable, we chose the cut-off score producing the highest specificity (i.e., the smallest likelihood of a false positive).

There were no diagnostic differences based on demographic variables. However, SETs were at a much higher risk of MDD and GAD. The U.S. 12-month prevalence rates are 6.7% for MDD and 3.1% for GAD (Kessler et al., 2005). The prevalence rates in our sample were 37.5% for MDD and 38.4% for GAD, a relative increased risk of 5.6 for MDD and 12.4 for GAD.

Finally, SETs reported that COVID had an extreme impact on their stress (91%), depression (58%), anxiety (76%), and EE (83%).

**TABLE 2** Percent diagnosed with MDD and GAD, disaggregated by gender, race, ethnicity, and teaching in a Title 1 school

	MDD	No MDD	$\chi^2$	GAD	No GAD	$\chi^2$
Total	175 (37.5%)	292 (62.5%)		178 (38.4%)	285 (61.6%)	
Men	19 (4.1%)	33 (7.1%)		16 (3.4%)	35 (7.6%)	
Woman	156 (33.4%)	259 (55.4%)	$\chi^2 = 0.022; p = 0.88$	162 (35.0%)	250 (54.0%)	$\chi^2 = 1.21; p = 0.27$
Latino/a	9 (1.9%)	20 (4.3%)		10 (4.3%)	19 (4.1%)	
Non-Latino/a	167 (35.7%)	272 (58.1%)	$\chi^2 = 0.57; p = 0.45$	169 (36.4%)	266 (57.3%)	$\chi^2 = 0.22; p = 0.64$
Title 1	112 (26.1%)	193 (45.0%)		115 (27.1%)	186 (43.8%)	
Non-Title 1	51 (11.9%)	73 (17.0%)	$\chi^2 = 0.73; p = 0.39$	48 (11.3%)	76 (17.9%)	$\chi^2 = 0.01; p = 0.92$
White	150 (32.1%)	250 (53.4%)		154 (33.2%)	242 (52.2%)	
Non-White	26 (5.6%)	42 (9.0%)	$\chi^2 = 0.013; p = 0.91$	25 (5.4%)	43 (9.3%)	$\chi^2 = 0.11; p = 0.74$
Black	15 (3.2%)	27 (5.8%)	$\chi^2 = 0.70; p = 0.79$	14 (3.0%)	28 (6.0%)	$\chi^2 = 0.54; p = 0.46$
Non-Black	161 (34.4%)	265 (56.6%)		165 (35.6%)	257 (55.4%)	

Abbreviations: GAD, Generalized Anxiety Disorder Scale; MDD, major depressive disorder.

### 3 | DISCUSSION

We explored the impact of the COVID-19 pandemic on SETs. Although all teachers have had to deal with the increased demands of transitioning to virtual environments, SETs face these challenges at increased rates (Hester et al., 2020). Overall, we found a strikingly large percentage of SETs are experiencing clinically diagnosable symptoms of GAD and major depression, much larger than the normative U.S. prevalence rates. These findings indicate a need for mental health services for this vulnerable group of educators who, pre-COVID-19, were already more likely to leave the profession. Further work is needed to understand the reduced teacher stress and emotional exhaustion reported by Black SETs.

#### ACKNOWLEDGMENTS

The authors wish to thank Jordan Findley and Lindsey Ogle for their assistance with data collection. The study is funded by the Institute of Education Sciences grant #R324A200232 awarded to second and third authors.

#### DATA AVAILABILITY STATEMENT

The data that supports the findings of this study are available in the supplementary material of this article.

#### ORCID

Christopher J. Cormier  <http://orcid.org/0000-0002-2187-8475>

John McGrew  <http://orcid.org/0000-0003-2874-3896>

Lisa Ruble  <http://orcid.org/0000-0003-4419-2406>

Melanie Fischer  <http://orcid.org/0000-0003-3913-4906>

#### PEER REVIEW

The peer review history for this article is available at <https://publons.com/publon/10.1002/jcop.22736>

## REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed). American Psychiatric Association.
- Bernard, M. E. (2016). Teacher beliefs and stress. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 34(3), 209–224. <https://doi.org/10.1007/s10942-016-0238-y>
- Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 89(5), 697–744. <https://doi.org/10.3102/0034654319862495>
- Carver-Thomas, D., & Darling-Hammond, L. (2017). *Teacher turnover: Why it matters and what we can do about it*. Learning Policy Institute. [https://learningpolicyinstitute.org/sites/default/files/productfiles/Teacher\\_Turnover\\_REPORT.pdf](https://learningpolicyinstitute.org/sites/default/files/productfiles/Teacher_Turnover_REPORT.pdf)
- Hester, O. R., Bridges, S. A., & Rollins, L. H. (2020). 'Overworked and underappreciated': special education teachers describe stress and attrition. *Teacher Development*, 24(3), 348–365. <https://doi.org/10.1080/13664530.2020.1767189>
- Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 617–627. <https://doi.org/10.1001/archpsyc.62.6.617>
- Maslach, C., Jackson, S. E., Leiter, M. P., Schaufeli, W. B., & Schwab, R. L. (1986). *Maslach burnout inventory*. Consulting Psychologists Press.
- Plummer, F., Manea, L., Trepel, D., & McMillan, D. (2016). Screening for anxiety disorders with the GAD-7 and GAD-2: A systematic review and diagnostic metaanalysis. *General Hospital Psychiatry*, 39, 24–31. <https://doi.org/10.1016/j.genhosppsych.2015.11.005>
- Schonfeld, I. S., & Bianchi, R. (2016). Burnout and depression: Two entities or one? *Journal of Clinical Psychology*, 72(1), 22–37. <https://doi.org/10.1002/jclp.22229>
- Schonfeld, I. S., Verkuilen, J., & Bianchi, R. (2019). An exploratory structural equation modeling bi-factor analytic approach to uncovering what burnout, depression, and anxiety scales measure. *Psychological Assessment*, 31(8), 1073–1079. <https://doi.org/10.1037/pas0000721>
- Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine*, 166(10), 1092–1097. <https://doi.org/10.1001/archinte.166.10.1092>

**How to cite this article:** Cormier, C. J., McGrew, J., Ruble, L., & Fischer, M. (2022). Socially distanced teaching: The mental health impact of the COVID-19 pandemic on special education teachers. *J Community Psychol*, 50, 1768–1772. <https://doi.org/10.1002/jcop.22736>