Evaluating Teacher Wellness Professional Development: A Three-Year Study

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Abstract: *This study examines a three-year teacher wellness initiative in five Colorado, USA, school districts. It focuses on teacher professional development (PD) about self-care and burnout, the value participants attached to the training, and change in teachers' lifestyles, self-care practices, and burnout. Results reveal the value teachers attached to the PD and lifestyles do not show significant differences over time. Self-care practices and burnout show statistically significant improvement during the intervention years, although magnitudes of the differences are small, indicating negligible practical significance.*

Key Words: professional development, teacher wellness, teacher self-care, teacher burnout

INTRODUCTION

This study examines the results of a three-year teacher wellness initiative in five school districts in Colorado, USA. While there is much research related to academic achievement and the social and emotional needs of K-12 students in the U.S., there is comparably less research related to the health and wellbeing of the professionals who teach them. Teacher job stress is well documented (Gray et al., 2017; Montgomery & Rupp, 2005; Prilleltensky et al., 2016); however, less is known about the factors that help create and sustain teacher wellness. When examining stress associated with occupations, 46% of American teachers report high daily stress in their careers, which is similar to those in medical professions, i.e. nurses (46%) and physicians (45%) (Gallup, 2013). Some contributing factors to teacher job stress include overall workloads, limited resources, a lack of tools to manage student behavioral problems, changing demands related to academic standards and expectations, conflictual relationships with parents, and a lack of occupational autonomy (Daniels & Strauss, 2010; Gray et al., 2017; Herman et al., 2018; McCarthy, 2019; Resnicow et al., 1998; Schonert-Reichi, 2017).

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The health and wellbeing of teachers directly impacts the classroom climate teachers may create and sustain (Daniels & Strauss, 2010; Lever et al., 2017; Milkie & Warner, 2011). Thus, when teachers are struggling psychologically or emotionally with the demands of teaching, it directly impacts students and their learning outcomes (Jennings & Greenberg, 2009). Although teacher wellness should be a priority in teacher preparation and educational research, there is insufficient empirical literature related to school-wide or staff-wide interventions that may decrease teachers' levels of occupational stress or increase teacher reported "self-care" practices that contribute to stress mitigation and overall wellness. Therefore, we contribute results from a three-year study of a teacher wellness initiative to help inform this important topic.

LITERATURE REVIEW

American teachers face numerous occupational challenges. High stakes testing, low parental involvement, limited educational and support resources, increased class sizes, and increased social and emotional needs of students are some examples of the specific dynamics in which teachers maintain great responsibility for positive educational outcomes with little ability to change or improve the overall conditions (Schonert-Reichi, 2017). These responsibilities can be exacerbated by school organizations, communities, and/or district or governmental entities that "hand down" to teachers perpetual and sometimes conflicting requirements. These mandates often allow little opportunity for input and autonomy and have limited district and community support (Herman et al., 2018; Lever et al., 2017; McCarthy, 2019; Schonert-Reichi, 2017). Curry and O'Brien (2012) describe administrative woes and bureaucracy, poor student outcomes, and student retention as additional external stressors (Curry & O' Brien, 2012; Lever et al., 2017; McCarthy, 2019).

Teachers also cite a continuing increase in academic standards requirements (e.g., high stakes testing) and argue those making decisions on their behalf develop unsustainable mandates that distract from instructional time and quality engagement with students (Gallup, 2013; Kidger et al., 2010). All the while, students enter classrooms with social-emotional needs teachers often feel ill-equipped to meet due to a lack of confidence in their ability to adequately address student mental health concerns, an unfamiliarity with how to identify which students need help and when, and general discomfort when dealing with sensitive student issues for which they do not have sufficient training (Kidger et al., 2010). Additionally, when a teacher's own emotional health is not strong or stable, they may be unable or unwilling to assist students with similar emotional needs (Kidger et al., 2010).

In the face of such challenges, teachers may struggle with stress and feel unable to fulfill all occupational requirements. This can be intensified by lack of coping skills, burnout, low self-efficacy, compromised resilience (or capacity to bounce back from adversity), and a mismatch between occupational demands and teacher capabilities (Curry & O' Brien, 2012; Herman et al., 2018; McCarthy, 2019; Schonert-Reichi, 2017). The overall impact of teacher stress is largely connected to an overall career dissatisfaction among teaching professions. This can lead to high turnover rates and poor student learning outcomes, which, in turn, can lead to teacher shortages in schools and a lack of consistency within school systems (Brasfield et al., 2019; Curry & O' Brien, 2012; Lever et al., 2017; Maslach et al., 2001). As more teachers experience career dissatisfaction, greater attrition may be the consequence (Curry & O' Brien, 2012; Watson et al., 2010). A 2016 report from the New Teacher Center (NTC) indicates approximately 1 in 5 new teachers will leave the profession within the first three years (Goldrick, 2016). This attrition, or weakening, of the workforce in education can have detrimental impacts on other teachers, students, and budgets. The

National Commission on Teaching and America's Future (2007) estimates the cost for every teacher who leaves the profession ranges from $4,000-$17,000 per teacher, and in one school district alone, this amount totaled approximately $86 million dollars per year.

Given school-aged children spend most of their waking hours in school daily, understanding the relationship between the school environment and student health and achievement is important (Ansley et al., 2016; Kidger et al., 2010). Some studies have found as occupational stress in teachers increases, their ability to effectively teach is diminished, and 70% of teachers report being disengaged in the classroom (Gallup, 2013). Disengaged teachers are believed to lack the ability to build positive relationships with students and develop empathy to offer them support (Gallup, 2013). Likewise, students find it difficult to engage in a classroom with a disengaged teacher, which can have a negative impact on their achievement (Curry & O' Brien, 2012; Gallup, 2013; Herman et al., 2018).

Other studies have concluded students with an effectively engaged teacher demonstrate fewer behavioral issues, which allows students to focus on coursework and diminishes teacher and student relational conflict. This has a reciprocal effect on student academic outcomes and teacher stress (Ansley et al., 2016; Durlak et al., 2011). Likewise, Martinsone et al. (2020) found positive changes in student academic success after a teacher wellness intervention was provided to allow teachers to gain more self-confidence and experience less stress. Kidger et al. (2010) concluded, "when teachers' emotional health is in jeopardy, it reduces their ability to support and respond to pupils appropriately, which creates further difficulties within the classroom and more emotional stress for pupils and teachers alike" (p. 929). What can be ascertained from these studies is that as interventions are provided, teacher wellness can improve, leading to greater student success.

A WELLNESS PARADIGM, SELF-CARE IN EDUCATION, AND INTERVENTIONS TO SUPPORT TEACHER WELLNESS

Studies related to teacher stress (Curry & O' Brien, 2012) and teaching the whole student (Dryfoos, 1994) identify the importance of focusing on comprehensive wellness to achieve optimal learning and wellbeing in schools. A particular focus is on teacher self-care. Self-care is defined as "taking proactive steps to enhance resilience and overall well-being" (Butler et al., 2019, p. 108). This notion of self-care is not unique to the teaching profession and is also studied in nursing, social work, and counseling (Crane & Ward, 2016; Evans & Payne, 2008; Lewis & King, 2019). Research related to self-care describes the protective practices that may help shield individuals from undue stress and increase resilience. Professionals in the human service industry—teachers included—who do not engage in routine self-care practices may become at risk for burn-out and compassion fatigue, particularly when working with individuals who have experienced trauma (Ansley et al., 2016; Brasfield et al., 2019). Specific to teachers, Prilleltensky, Neff, and Bessell (2016) write, "Teacher well-being can be enhanced not only by reducing risk factors, but also by increasing protective factors" (p. 107). When K-12 schools institute systemic wellness programming, including support for healthy teacher habits that increase coping and decrease the impact of stress, self-care practices become a protective factor.

Common interventions that involve teachers include trainings associated with psychological support interventions (McCarthy, 2019), behavior modifications (Baranowski et al., 1995), mindfulness training (Napoli, 2004; Roeser et al., 2012), and wellness programming (Curry & O' Brien, 2012; Schultz et al. 2019). These interventions are intended to allow teachers the opportunity to build self-efficacy and self-confidence, find support and coping mechanisms to improve their own occupational view of teaching, practice strategies that promote positive adaptation or acceptance of occupational challenges, and build and use skills that positively impact

the overall school climate. These interventions may also offer teachers healthy coping mechanisms to mitigate the adverse social and emotional demands of teaching (Herman et al., 2018; Prilleltensky et al., 2016). When teachers are offered opportunities and training to increase protective factors (e.g., mindfulness, acceptance, self-compassion, growth mindset, supportive relationships) to manage occupational stress, they are more likely to feel confident in their ability to perform all work duties associated with teaching, thus increasing their view of a positive workplace (Herman et al., 2018; McCarthy, 2019; Prilleltensky et al., 2016; Schonert-Reichi, 2017).

As examples of such interventions, Cultivating Awareness and Resilience in Education (CARE) and Stress Management and Relaxation Techniques (SMART) are programs that strive to help support teachers through the training and awareness of teacher wellness. CARE, a subprogram of CREATE (Creating Resilience for Educators) helps teachers find ways to handle stress, boost mental awareness and social-emotional functioning, and use knowledge of these skills within the classroom (CREATE for Education, 2020; Schussler et al., 2018; Schussler et al., 2016). SMART teaches mindfulness and resiliency as a wellbeing model by emphasizing compassion and forgiveness as a coping mechanism (Chesak et al., 2019). Chesak et al. (2019) found teachers using SMART as an intervention strategy believed their newly attained skills "positively affected interactions with students (77.2%)" and "helped to decrease their stress (63.9%)" (p. 36).

Teachers can also develop greater wellness by teaching such concepts to their students. Martisone, Ferreira, and Talic (2020), for example, examined how classroom teachers benefit from implementation of social and emotional curriculums. Three hundred and twelve teachers participating in an international project that uses classroom instruction to increase students' social and emotional skills were asked to report any personal changes or gains related to this new initiative after a four-month period. Through qualitative inquiry, most teachers (54%) reported they had achieved personal growth because of teaching the social and emotional curriculum and monitoring student skill development. Examples of self-reported personal growth in teachers included regulated emotional expression, increase in self-confidence and self-management, and positive changes in behavior and communication with others.

Although these studies of interventions are revealing, much more research is needed to understand the outcomes of other interventions, what features of interventions appear more efficacious than others, and how various outcomes are affected differently. To that end, we report below results from a study of a three-year teacher wellness intervention in 13 schools in five school districts in Colorado.

METHODS

Our quantitative study was guided by three research questions.
1. Is there significant growth in how teachers value PD about self-care and burnout?
2. Is there significant change in teachers' lifestyles related to self-care and burnout?
3. Is there significant growth in teacher self-care practices and burnout?

PD INTERVENTION

The intervention we studied took the form of professional development on wellness and self-care. It occurred as part of a larger program funded by Kaiser Permanente (KP), a large insurance corporation in the U.S. KP provided grants to the participating districts to implement professional development and other programming with the goal of improving teacher wellness and

self-care. The grants spanned school years 2017-18 through 2019-20. Districts were able to choose for themselves the type and amount of programming and professional development.

Two of the participating districts created their own wellness training programs, one purchased a formal training program, one both created its own training and purchased a formal training program, and the fifth continued pre-existing wellness training with no additional programming. In general, the training programs were designed to facilitate greater self-care and wellness by teaching teachers and staff about strategies to promote resilience and mindfulness.

Resilience is defined as the ability to assess adverse situations, recognize and use options for coping, and arrive at effective resolutions (Fletcher & Sarkar, 2013). Resources may include personal characteristics, such as problem-solving skills and prior experiences, or environmental factors, such as supportive colleagues and positive family experiences. When resilience is not an inherent trait, to become resilient, individuals must learn to adjust to negative conditions with the aid of their resources, which can inform their perspectives and decision-making. Learning from past experiences increases available resources and thus improves one's resilience for dealing with future circumstances (Bobek, 2002; Muller et al., 2011). Mindfulness has been defined as a process of "bringing one's complete attention to the present experience on a moment-to-moment basis" (Marlatt & Kristeller, 1999, p. 68) and as "paying attention in a particular way, on purpose, in the present moment, and nonjudgmentally" (Kabat-Zinn, 1994, p. 4).

To promote wellness and self-care, districts provided professional development through a combination of formal classroom presentations; experiential, hands-on activities; and group team-building experiences. The frequency of such training and experiences, however, was not always robust. A common approach was to require teachers to attend one all-school PD session at the beginning of a school year and then allow teachers to opt-in to professional learning communities or other similar structures. The frequency of the latter ranged from once or twice a year to quarterly.

Additionally, several districts promoted staff wellness activities outside of PD opportunities. One district developed a staff wellness room where staff could take breaks during the day to relax and step away from the classroom; they also had a teacher-organized walking group. Another district reported the creation of wellness groups where staff completed wellness activities as part of a school-wide incentive program.

SAMPLE

All teachers (n = 925) in participating schools received survey invitations in 2017 (the year prior to the intervention) and each of the three years of the intervention. The number of responses varied by year but always exceed 500 in each wave (2017 = 573, 2018 = 601, 2019 = 566, 2020 = 617). Participating schools included 13 schools in five school districts in Colorado. School grade-level groups included elementary (n = 8), middle (n = 3), high (n = 1), and middle-high (n = 1).

Table 1 includes descriptive statistics about school characteristics. The top part of the table reports on student body characteristics across all schools, where FRL = percentage of students qualifying for Free/Reduced Lunch, SPED = percentage of students with an IEP, and ELL = percentage of students who were English language learners. The middle part of the table indicates the settings for each school. The bottom part of the table indicates the median accountability rating across all participating schools. This variable will be described more fully below, but a median of 2 indicates participating schools had, on average, an accountability rating of 2 on a 0-3 point scale. We were unable to collect demographic information from survey participants; thus, we do not report descriptive statistics for respondents.

DATA

Study data came from an annual, online survey of teachers. Surveys were administered late spring each year. The survey measured four primary constructs: the value teachers placed in such PD, the extent PD changed their lifestyles, perceptions of self-care, and perceptions of burnout. Value and lifestyle change were measured on a 10-point scale, where 1 = absolute disagreement and 10 = absolute agreement. The value question asked, "I value the professional development I have participated in related to teacher self-care and how to avoid burnout." The lifestyle question asked, "The professional development I have completed on self-care and burnout has changed my lifestyle."

Table 1
School Characteristics

	Mean	sd
Enrolled	1,044.94	781.23
% FRL	0.49	0.24
% Female	0.48	0.02
% White	0.50	0.21
% SPED	0.13	0.04
% ELL	0.17	0.15
	Freq.	%
Setting		
Town	3	0.23
Suburban	6	0.46
Urban	4	0.31
	Median	
SPF	2	

Perceptions of self-care and perceptions of burnout were each multi-item constructs to which participants indicated their agreement with the aforementioned 10-point agreement scale. Self-care was constructed from four items, an example of which was, "I take care of myself and value my health." Burnout was constructed from 21 items, an example of which was, "I feel worn out because of my work as a teacher." The items were a mixture of positively and negatively phrased, therefore all items were recoded so construct scores were positively scaled (i.e., a higher number is more positive). Survey items for teacher wellness/self-care and burnout were developed upon reviewing pre-existing instruments such as Global Check Set, Professional Quality of Life (ProQOL), Index of Clinical Stress, and Silencing Response Scale (SRS) (Abell, 1991; Baranowsky, 2011; Baranowsky & Gentry, 2012; Hudnall-Stamm, 2009). A complete list of items is available from the authors upon request.

To the survey data we added the school-level data discussed above (enrollment, %FRL, etc.). We collected these from the Colorado Department of Education website. Although most are self-explanatory, one—SPF—would benefit from further description. SPF (School Performance Framework) is a measure of school performance. The SPF rating is reported each year as part of Colorado's accountability system (Colorado Department of Education, n. d.). SPF is an annual assessment of school (and district) performance in student achievement and postsecondary and workforce readiness. Based on their performance, schools are rated on a four-point scale indicating their status: 0 = turnaround, 1 = priority improvement, 2 = improvement plan, 3 = performance

plan. Turnaround schools are identified as among the lowest performing schools in the state. These schools are identified as not meeting or only approaching expectations on most performance metrics. Priority improvement schools are identified as low performing and are also not meeting or are only approaching expectations on most performance metrics. Improvement plan schools are identified as lower performing. These schools may be meeting expectations on some performance metrics, but they are not meeting or are only approaching expectations on many metrics. Finally, schools with a Performance Plan are meeting expectations on most performance metrics.

ANALYSES

We describe the analyses by research question(s).

1. Is there significant growth in how teachers value PD about self-care and burnout?
2. Is there significant change in teachers' lifestyles related to self-care and burnout?

These questions were analyzed using OLS regression, where the model took the form:

Value PD or Lifestyle = $\beta_0 + \beta_1(2018) + \beta_2(2019) + \beta_3(2020) + \beta_4(enrollment) + \beta_5(sex) + \beta_6(FRL) + \beta_7(race) + \beta_8(ELL) + \beta_9(setting) + \beta_{10}(SPF) + \beta_{11}(grade) + e$

We ran two versions of this model—one using 2017 data and one without. The year dummy variables were the primary focus as the measure of change.

3. Is there significant growth in teacher self-care practices and burnout?

We analyzed this question several different ways. First, we used OLS regression in the following model.

Burnout or Self-care = $\beta_0 + \beta_1(2018) + \beta_2(2019) + \beta_3(2020) + \beta_4(enrollment) + \beta_5(sex) + \beta_6(FRL) + \beta_7(race) + \beta_8(ELL) + \beta_9(setting) + \beta_{10}(SPF) + \beta_{11}(grade) + \beta_{12}(PD\ in\ 2018) + \beta_{13}(PD\ in\ 2019) + \beta_{14}(PD\ in\ 2020) + \beta_{15}(PD\ in\ 2018\ and\ 2019) + \beta_{16}(PD\ in\ 2019\ and\ 2020) + \beta_{17}(PD\ in\ 2018\ and\ 2020) + \beta_{18}(PD\ 2018\ through\ 2020) + e$

This model is similar to those for Questions 1 and 2, but here we control for the year(s) in which participants received PD. If, for example, a school did not offer PD until the final year of the intervention, respondents in that school would not be expected to report much or any growth in the outcome variables. We control for that using terms 12 through 18 in the equation. As before, we ran the model including and then omitting 2017 data.

Finally, we completed a difference-in-differences (DiD) analysis, comparing (possible) changes in the outcome between those who completed wellness PD during the intervention period and those who did not. This model took the form:

Burnout or Self-care = $\beta_0 + \beta_1(2020) + \beta_2(PD) + \beta_3(PD*2020) + \beta_4(enrollment) + \beta_5(sex) + \beta_6(FRL) + \beta_7(race) + \beta_8(ELL) + \beta_9(setting) + \beta_{10}(SPF) + \beta_{11}(grade) + e$

This model included only two years of data—2017 and 2020. It also limited the sample only to those who reported no wellness PD in 2017; doing so provides the cleanest identification of the effect of the intervention. This method also provides the strongest estimate of the effect of the intervention, since results from DiD approximate causal effects (Wooldridge, 2009). In this model, the term of interest is PD*2020; this indicates whether the difference in growth between PD participants is statistically significant. Examining the difference between 2017 and 2020 provides the greatest chance of finding any effect from the intervention.

Given the sample included teachers in 13 schools across 5 districts, the data are clearly nested or clustered. To account for this, all analyses were completed using the SPSS complex samples procedure (IBM, 2021), which accommodates samples with complex designs—clustering, in our case—and incorporates the design specifications into the data analysis. In clustered data,

there are commonly greater similarities between units within one cluster as compared to independently selected units. Consequently, standard errors are artificially small. The SPSS complex samples procedure adjusts the standard errors to account for the clustering.

LIMITATIONS

Like any study, ours is not without limitations. First, the data come from survey self-reports. As with many surveys, there is inevitably a difference between actual and reported behaviors. Second, although the number of people in the sample is large, the sample of schools and especially districts is small. This limits generalizability. Third, and related to the second, the data come from participants all in one state in the USA. Although that state is larger in land mass and population than many countries in Europe, it is, nonetheless, comparatively culturally distinct, which also limits generalizability. Finally, the final few months of data collection and professional development were affected by school closures and shifts to remote learning due to COVID-19 (Carpenter & Dunn, 2021). It is reasonable to expect perceptions of wellness and professional development were affected (i.e., depressed) as a result.

RESULTS

As with the description of analyses above, we organize the results by research question.

1. Is there significant growth in how teachers value PD about self-care and burnout?

Participants in wellness and self-care PD tended to value the training (Figure 1). The level of agreement with the statement was at least seven on a 10-point scale. The value attached to PD also appeared to grow slightly over time, although not monotonically.

Figure 1

The Extent to Which Teachers Value Wellness PD
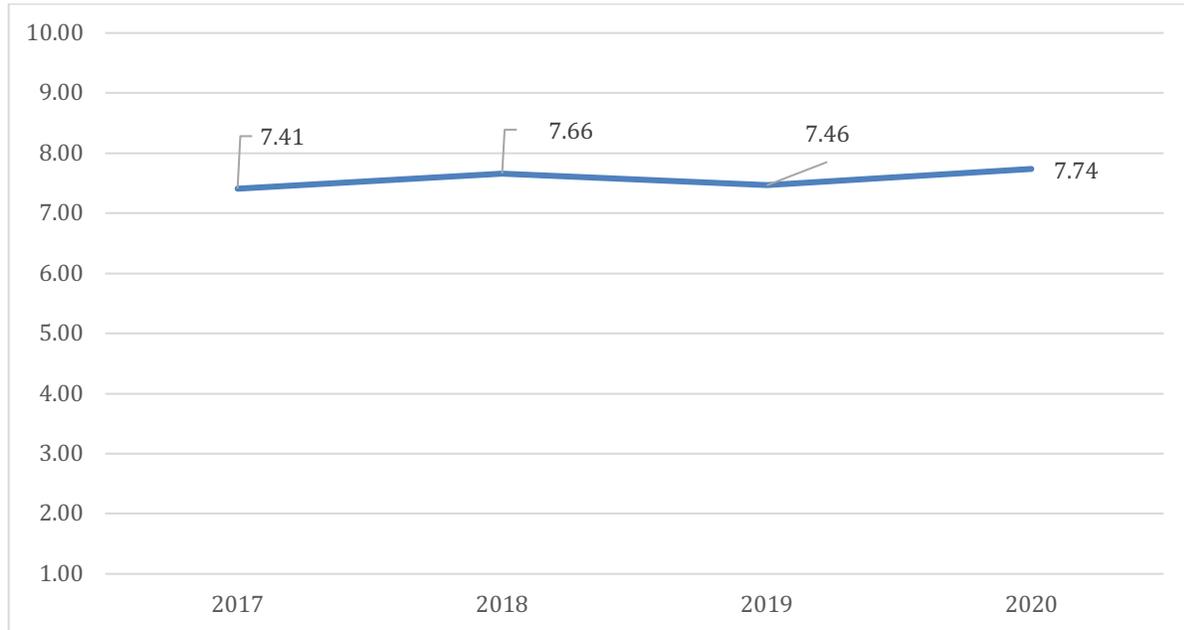
We say "slightly" because, as Table 2 indicates, differences between 2017 and two of the subsequent years were significant (Model 1), but during the intervention period specifically, growth in value was not significant (Model 2).

2. Is there significant change in teachers' lifestyles related to self-care and burnout?

Of course, valuing PD and changing one's practice—lifestyle in this case—are two different things. As Figure 2 illustrates, agreement was considerably lower to the prompt about PD changing lifestyle, as compared to the value attached to the PD. There was, however, growth over time in agreement with the change in lifestyle prompt.

Table 2
Regression Results for Value of PD

	Model 1			Model 2		
	Coeff.	se	p	Coeff.	se	p
(Intercept)	8.046	4.142	0.053	6.079	5.815	0.297
y2018	0.742	0.318	0.020			
y2019	0.491	0.296	0.098	-0.170	0.229	0.458
y2020	0.789	0.359	0.028	0.075	0.285	0.793
Enrolled	0.001	0.001	0.108	0.001	0.001	0.268
FRL	2.758	2.110	0.192	0.724	2.702	0.789
Female	-7.691	6.016	0.202	-4.283	7.121	0.548
White	7.709	2.869	0.007	7.997	3.638	0.029
SPED	-12.083	4.863	0.013	-10.843	4.968	0.030
EL	0.656	2.641	0.804	5.209	5.638	0.356
SPF	-0.393	0.218	0.072	-0.329	0.235	0.163
Suburban	-1.392	0.957	0.147	0.297	2.020	0.883
Urban	-2.103	0.916	0.022	-0.874	1.469	0.552
Middle	0.238	0.592	0.688	-0.077	0.700	0.912
High	-1.472	1.251	0.240	-1.438	1.703	0.399
Mid-high	1.278	0.968	0.187	1.162	1.105	0.294

Figure 2
Extent to Which Wellness PD Changed Participants' Lifestyles
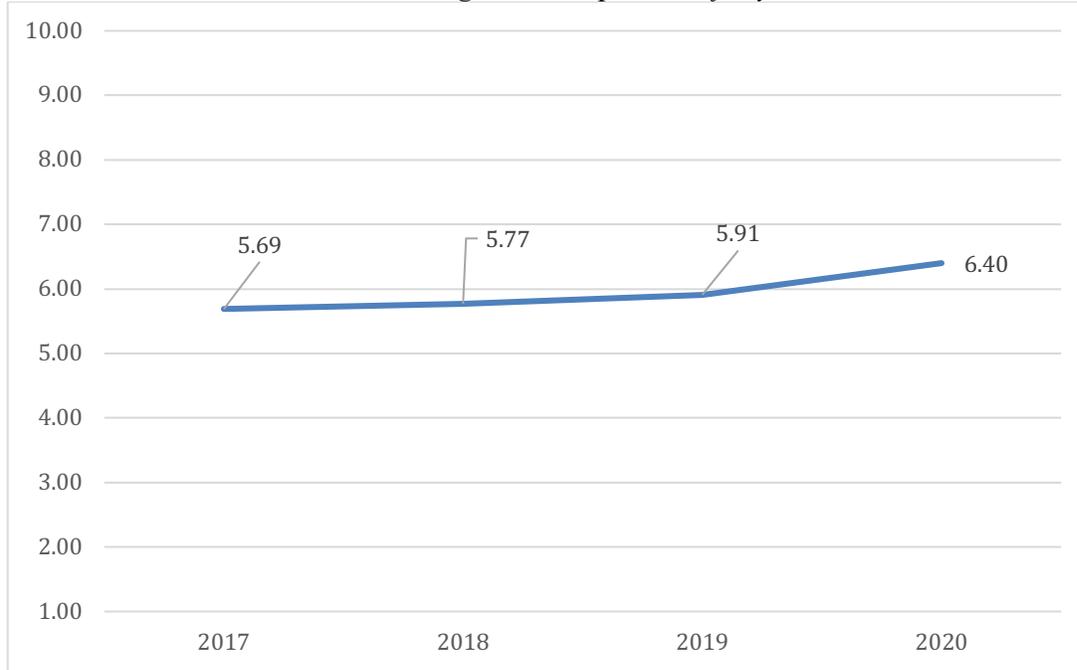
Yet, as Table 3 indicates, that growth generally did not appear to be statistically significant. In Model 1, only the difference between 2017 and 2020 was significant, and in Model 2, none of the differences between years specifically during the intervention was significant.

3. Is there significant growth in teacher self-care practices and burnout?

If teachers reported comparably lower agreement with the prompt about changing their lifestyles as a result of PD, that may be because they often reported positive self-care practices. As Figure 3 illustrates, agreement with the self-care construct exceeded seven on the 10-point scale during each year, and 2017—the pre/baseline year—saw almost the greatest amount of agreement.

Table 3
Regression Results for Changes in Lifestyle

	Model 1			Model 2		
	Coeff.	se	p	Coeff.	se	p
(Intercept)	11.901	4.653	0.011	10.117	6.920	0.145
y2018	0.577	0.309	0.063			
y2019	0.597	0.312	0.057	0.029	0.262	0.912
y2020	1.153	0.389	0.003	0.606	0.330	0.067
Enrolled	0.002	0.001	0.018	0.002	0.001	0.029
FRL	2.383	2.020	0.239	1.548	2.818	0.583
Female	-14.887	6.516	0.023	-11.998	7.826	0.126
White	6.872	2.936	0.020	6.631	4.018	0.100
SPED	-16.352	4.750	0.001	-15.588	4.788	0.001
EL	-3.951	2.830	0.163	-2.333	7.160	0.745
SPF	-0.639	0.213	0.003	-0.498	0.246	0.044
Suburban	-1.730	0.975	0.077	-0.980	2.524	0.698
Urban	-2.817	0.925	0.002	-2.240	1.744	0.200
Middle	0.739	0.587	0.208	0.934	0.674	0.167
High	-2.567	1.327	0.054	-2.846	1.824	0.120
Mid-high	1.967	1.129	0.082	2.422	1.267	0.057

Figure 3
Trend in Teacher Self-Care Practices
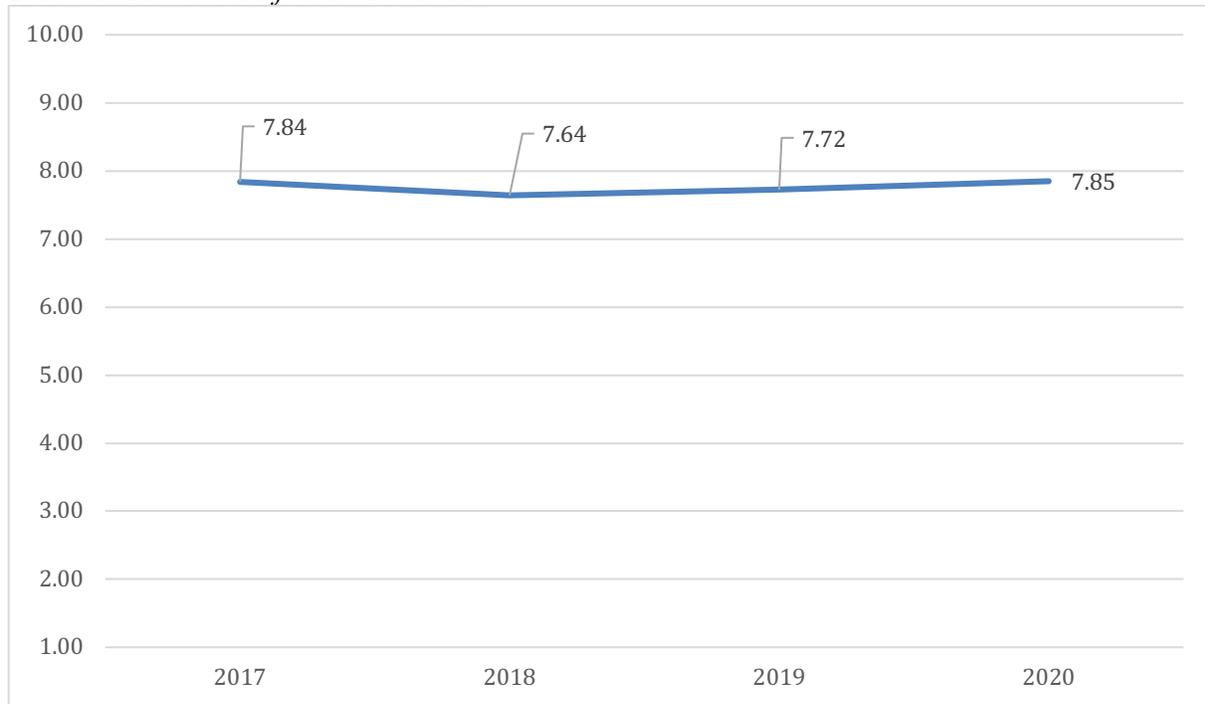
The trend in Figure 3 was confirmed in the regression results in Table 4. Compared to 2017, none of the differences by year were significant (Model 1). When looking only at the years in the

intervention, however, there was a significant difference in self-care between 2018 and 2020 (Model 2).

Table 4
Regression Results for Self-Care

	Model 1			Model 2		
	Coeff.	se	p	Coeff.	se	p
(Intercept)	7.705	2.074	0.000	3.987	2.532	0.116
y2018	-0.136	0.122	0.265			
y2019	0.010	0.130	0.939	0.195	0.105	0.065
y2020	0.123	0.151	0.416	0.284	0.126	0.025
Enrolled	0.000	0.001	0.415	0.000	0.001	0.717
FRL	0.448	1.244	0.719	-1.170	1.599	0.465
Female	1.046	3.058	0.733	1.202	2.937	0.682
White	-0.295	1.542	0.848	2.278	1.898	0.231
SPED	-3.722	2.451	0.130	-4.299	2.447	0.080
EL	0.636	1.048	0.544	6.960	3.315	0.036
SPF	0.038	0.092	0.680	0.126	0.098	0.202
Suburban	-0.103	0.511	0.840	2.125	1.318	0.108
Urban	-0.190	0.550	0.730	1.115	0.970	0.251
Middle	0.438	0.351	0.213	0.261	0.389	0.503
High	1.297	0.915	0.157	-0.058	0.989	0.953
Mid-high	0.246	0.537	0.647	0.328	0.519	0.527
PD 2019	-0.171	0.204	0.402	-0.124	0.196	0.528
PD 2018/2019	-0.052	0.217	0.811	-0.049	0.222	0.827
PD 2020	0.154	0.267	0.566	0.173	0.263	0.512
PD 2018/2020	0.042	0.277	0.879	-0.049	0.281	0.861
PD 2019/2020	0.179	0.338	0.596	0.165	0.331	0.619
PD 2018 to 2020	-0.279	0.268	0.299	-0.279	0.277	0.314

Although not as sharp, the trend was similar for the burnout construct. As Figure 4 illustrates, the trend decreased from 2017 to 2018, with the high point in 2020. Moreover, the overall agreement with the burnout construct is comparably high. Recall the items were (re)coded in the positive direction, meaning an increase in agreement can be interpreted as improvement.

Regression results in Table 5 indicate annual differences compared to 2017 were not significant (Model 1), but when looking only at the intervention years, there was statistically significant improvement on indicators of burnout (Model 2). Of course, the magnitudes of the differences were not particularly large—0.17 points (out of 10) between 2018 and 2019 and 0.33 points between 2018 and 2020.
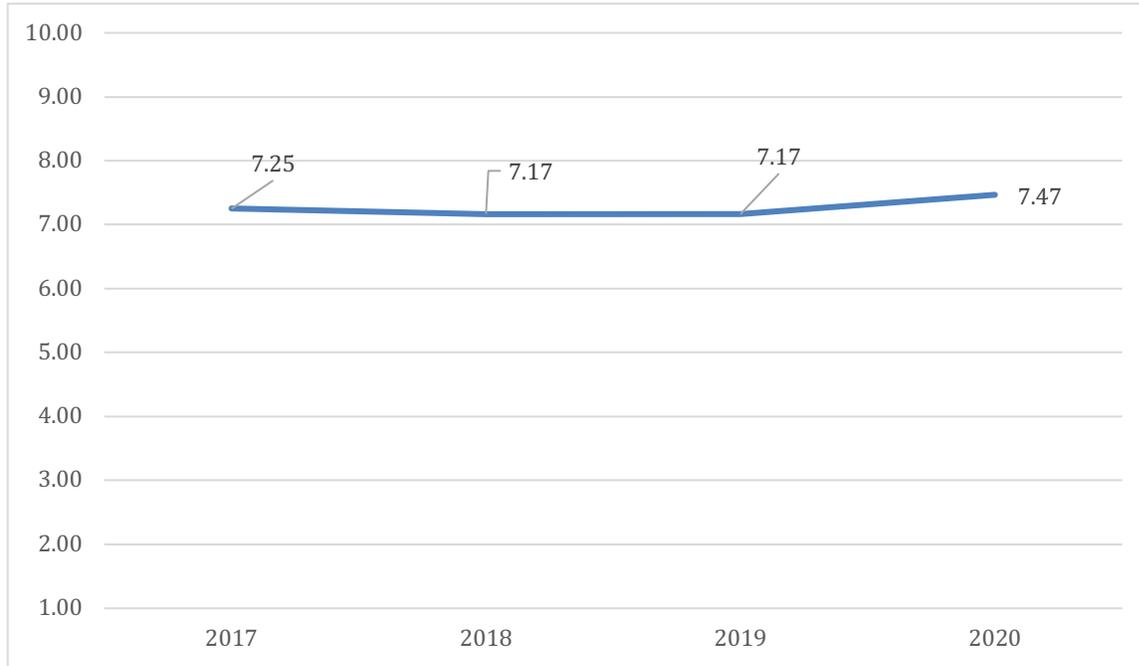
Figure 4
Trend in Teacher Burnout

Table 5
Regression Results for Burnout

	Model 1			Model 2		
	Coeff.	se	p	Coeff.	se	p
(Intercept)	7.858	1.558	0.000	4.430	1.836	0.016
y2018	-0.114	0.099	0.248			
y2019	0.012	0.105	0.906	0.172	0.085	0.043
y2020	0.199	0.124	0.108	0.329	0.095	0.001
Enrolled	0.000	0.000	0.298	0.001	0.000	0.064
FRL	0.420	0.792	0.596	-1.039	1.099	0.345
Female	-2.398	2.149	0.265	-2.810	2.173	0.197
White	2.267	1.077	0.036	5.089	1.401	0.000
SPED	-2.401	2.178	0.271	-3.409	2.189	0.120
EL	0.729	0.865	0.400	7.449	2.517	0.003
SPF	-0.154	0.076	0.043	-0.160	0.085	0.061
Suburban	-0.534	0.371	0.150	1.740	0.953	0.069
Urban	-0.622	0.392	0.113	0.738	0.688	0.284
Middle	-0.387	0.258	0.135	-0.202	0.270	0.455
High	-0.813	0.723	0.261	-1.517	0.832	0.069
Mid-high	0.065	0.377	0.863	-0.054	0.378	0.887
PD 2019	0.120	0.163	0.464	0.158	0.166	0.341
PD 2018/2019	0.081	0.184	0.659	0.050	0.191	0.794
PD 2020	0.277	0.219	0.207	0.271	0.223	0.225
PD 2018/2020	0.126	0.209	0.547	0.062	0.222	0.780
PD 2019/2020	-0.188	0.374	0.616	-0.044	0.341	0.898
PD 2018 to 2020	0.155	0.202	0.442	0.185	0.203	0.362

DISCUSSION

This study examined the results of a three-year teacher wellness initiative in five school districts in Colorado. It focused on the value participants attached to training about self-care and burnout and change in teachers' lifestyles, self-care practices, and burnout. Results revealed the value teachers attached to the PD and lifestyles did not show significant differences over time. Self-care practices and burnout showed statistically significant improvement during the intervention years, although the magnitudes of the differences were small, indicating negligible practical significance.

Together, the results suggest the intervention was not particularly efficacious. This likely reflects, at least in part, the limited scope of the districts' wellness interventions. The professional development was infrequently offered, did not appear particularly innovative, and had little to no accountability. This contrasts with characteristics of effective professional development that include, among other things, active learning, collaboration, rich content, modelling, coaching and expert support, feedback and reflection, and sustained duration (Darling-Hammond et al., 2017).

Of course, a central goal of wellness and self-care training is behavioral change. As Madsen (2003) writes, behavior change generally is difficult, and it is particularly so with respect to

wellness. At a minimum, programs designed to facilitate successful behavior change require evaluating motivation for change and teaching participants about goal setting, action planning, problem solving, navigating obstacles/barriers to goals, finding resources, self-monitoring, and building self-efficacy (Wolever et al., 2013) and then, perhaps most important, holding them accountable. A common accountability method in wellness programs is coaching (Wolever et al., 2013), but other methods that have shown promise include group wellness initiatives (Axten et al., 2017) and smart phone apps that support health-related behavior change by recording and tracking behavior and goals and providing advice and information (Dennison et al., 2013).

Indeed, we interviewed teachers about the wellness initiatives in their schools, and accountability was frequently mentioned. Consistent with literature on the importance of school principals in effective professional development (Young & King, 2002), teachers specifically discussed the importance of school principals in modeling wellness, motivating staff, and facilitating accountability. In so doing, school leaders signify to staff the importance and priority of the initiative. Conversely, in schools where principals choose not to "buy in," it is not at all surprising teacher participation would be lackluster.

This may be particularly so when teachers face demands from competing initiatives, which is common in K-12 schools (Fairman, In press). During our interviews, teachers described how they attempt to differentiate what initiatives may be long lasting (and signify permanent change or shift in culture) versus what may be another "annual" initiative that may be ignored during the next school year. Even in a three-year grant, teachers made ongoing choices about how to focus their time and personal resources. For their own professional self-preservation, teachers naturally try to differentiate the initiatives that can consume less of their focus and energy. Of course, it is important to note, again, these wellness programs were affected by COVID-19. Many, if not most schools operated from a perspective of crisis during the uncertainty of the pandemic and the constantly changing operating procedures. Therefore, a focus on wellness may have seemed less relevant when schools were focused on day-to-day functioning.

For schools interested in implementing successful wellness programs or professional development, our findings suggest business-as-usual professional development will not suffice. And for funders interested in incentivizing such programming, building in strategies to ensure fidelity of implementation will be critical. In the effort we studied, school districts could choose their own programming with little oversight by the funder. It is telling that in a second round of grants, the funder changed its approach and required all participating districts to pursue the same teacher wellness related programming.

Finally, our results lead to a question that seems seldom asked (out loud): How serious are school districts about facilitating greater staff wellness? This is not a question of accusation, but of reflection. As we discuss in the literature review above, there is a clear relationship between teacher wellness and student and school performance (Lever et al., 2017). Curry and O'Brien (2012) conclude, "infusing a wellness paradigm in teacher training programs may be just as critical as keeping teachers in the field" (p. 184). A simple search of the internet results in thousands of resources on staff wellness. At least a dozen states in the USA have adopted policies to address school employee wellness (Lang, 2019). And, when districts are given grant money specifically to improve teacher wellness, results appear lackluster. This all suggests need, resources, and policies may not be enough to implement substantive, efficacious wellness programs that result in meaningful change. It seems, just like promoting wellness among staff, changing behavior of school districts requires systemic commitment and accountability.

According to the teachers we interviewed, this would require districts to promote not only personal wellness but also organizational wellness (Bennett et al., 2003; Lever et al., 2017; Young

& Lambie, 2007). For, as teachers noted, if the school system is not healthy itself, can it be a source for wellness? This would make for a useful research question in future studies. Indeed, future research could examine schools or districts that have successfully implemented programs resulting in meaningful change among staff and discern, among other things, the relationship between personal and organizational wellness. Understanding the process, procedures, and accountability systems such schools used could provide invaluable lessons to be applied elsewhere. Future research could also examine the efficacy of organic, homegrown wellness programs versus off-the-shelf programs (Isaac & Flynn, 2001). As Wolever (2013) describes, successful wellness programs should, among other things, be built on input from those who will presumably benefit from it. This suggests a more homegrown approach, but as our findings suggest, developing effective wellness programming requires a level of resource and time commitment many schools simply may not have. It would be beneficial, then, to understand the extent to which off-the-shelf programs can be implemented with fidelity in schools. Alternatively, it would potentially prove revealing to understand what is required to create a truly efficacious homegrown wellness program in educational settings.

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