Multilevel Examination of Burnout Among High School Staff: Importance of Staff and School Factors

Lindsey O'Brennan
University of South Florida

Elise Pas
Johns Hopkins University

Catherine Bradshaw
University of Virginia

Abstract. Previous studies have linked teacher burnout with job performance, satisfaction, and retention; however, there has been limited exploration of potential individual and school contextual factors that may influence burnout. The current study examined high school staff members' reports of burnout as they relate to staff demographics and perceptions of self-efficacy and connectedness, as well as school-level contextual variables (e.g., suspension rate and urbanicity). Data were collected from 3,225 high school staff (e.g., teachers and paraprofessionals) in 58 high schools (grades 9–12) across Maryland. Multilevel analyses indicated that perceptions of connectedness, safety, and self-efficacy as well as staff demographics were significantly related to experiences of work-related burnout. At the school level, only school-wide suspension rates were significantly related to higher burnout. These findings highlight the importance of staff perceptions of the school context as factors that can potentially promote or diminish professional burnout among high school staff.

Feelings of exhaustion related to one's job can result in low levels of job satisfaction, which contribute to higher rates of teacher burnout, turnover, and early retirement (Leithwood, Menzies, Jantzi, & Leithwood, 1999). In contrast, when staff feel supported and respected, they are able to thrive professionally, thus allowing them to better meet the needs of their students (Skaalvik & Skaalvik, 2011). With over 10% of public school teachers leaving the profession after 1 year and an additional 12% leaving after 2 years of teaching (Kaiser, 2011), there is a growing need to understand contributors to staff turnover, specifically feelings of professional burnout. Prior research suggests that burnout is not typically linked to a single event or interaction, but rather to a dynamic combination of the individual's perceptions of the people, behavior, resources, and safety of the school community (McCarthy, Lambert, Beard, & Dematatis, 2002). Yet few studies have taken into account staff perceptions of connectedness, efficacy, and safety in conjunction with the broader school context when studying staff burnout. The current study employed a multilevel approach to examine how staff-level variables (i.e., demographics, perceptions of efficacy, connectedness, and safety) and school-level contextual variables (i.e., student–teacher ratio, suspension rate, and location) relate to high school staff members' reports of burnout. The overarching goal of this study was to identify the most important staff- and school-level characteristics related to burnout within high schools. In turn, this information may help inform professional development and burnout prevention programming related to enhancing connectedness, efficacy, and feelings of safety.

Defining School Staff Burnout

Staff burnout is defined as the combination of emotional exhaustion, depersonalization, and reduced personal accomplishment that results from prolonged work-related stress (Kyriacou, 1987; Maslach & Jackson, 1981; Pas, Bradshaw, Hershfeldt, & Leaf, 2010). Much of the extant research has focused on the emotional exhaustion component, which occurs when a staff member is no longer physically or emotionally able to provide students with support (Maslach, Jackson, & Leiter, 1996). Burnout is a concern because it can result in one's inability to effectively perform one's job, and thus it has been investigated in a variety of work settings (Freudenberger, 1974), including schools (Maslach & Jackson, 1981). Specifically, when experiencing high levels of burnout, one is more likely to also experience physical and mental health problems (Huberman, 1993). Staff who report high levels of burnout also report having less control of their classrooms, lower commitment to the teaching profession, increased likelihood of quitting (Klassen & Chiu, 2011), and greater absenteeism (Schonfeld, 2001).

Potential Predictors of Burnout

The sections below review factors identified in current research as potential predictors of school staff reports of burnout. This includes teacher's self-efficacy for handling problems in the classroom; their level of connectedness to their school, students, and colleagues; perceptions of safety at school, as well as demographic characteristics.

Self-Efficacy

Across nearly all grade levels, studies have shown that the experience of burnout is related to low levels of self-efficacy to motivate, instruct, and discipline students (Martin, Sass, & Schmitt, 2012; Skaalvik & Skaalvik, 2010). Theoretical literature suggests that low self-efficacy precedes burnout, conceptualizing burnout as "a crisis in self-efficacy" (Leiter, 1992). Specifically, this process may occur among teachers who recognize the importance of competence, but lack confidence in their abilities (Brouwers & Tomic, 2000; Friedman & Farber, 1992; Leiter, 1992). Teachers with a low level of mastery may feel more stress than those with high mastery (and thus efficacy), which in turn leads to an increased likelihood of burnout (Chwalisz, Altmaier, & Russell, 1992; Friedman & Farber, 1992). Prior research indicates that teachers' self-efficacy is related to both their emotional exhaustion at the beginning of their careers and increased likelihood for burnout over time (Pas, Bradshaw, & Hershfeldt, 2012; Skaalvik & Skaalvik, 2010). In other words, staff members who feel prepared at the outset of their careers would be less likely to experience burnout over time.

Connectedness to School, Students, and Administrators

Recent school-based prevention research has focused on enhancing feelings of connectedness among staff members as a way to create a positive school climate, better engage students and staff, and prevent faculty turnover (Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). Studies have shown that the less personally connected staff feel to their students, the less satisfied they are with their jobs and the more likely they are to leave them (Martin et al., 2012). Further, teachers' relationships with their students are strongly related to their general commitment to the teaching profession, their desire to continue teaching, and their commitment to their current schools (i.e., referred to as *commitment* and a similar construct to what we define as *staff connectedness*; Collie, Shapka, & Perry, 2011). Staff reports of collaboration among teachers and administrators are also important to consider. A study of elementary school teachers found that higher burnout was inversely associated with affiliation with one another and perceptions of school leadership (Pas et al., 2012). When teachers and staff feel supported by their administration, the result tends to be higher levels of commitment, more collegiality, and, consequently, increased staff retention (Singh & Billingsley, 1998). In sum, these findings suggest that various forms of connectedness (among the school, students, and administrators) may be important predictors of high school staff burnout, as the lack of such relational support can serve as a job stressor that contributes to emotional exhaustion and disengagement from work (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

Personal Safety

A national study by the National Education Association (NEA) found that 18% of teachers and 14% of educational support professionals (ESPs) were bullied by someone at work, and about half of those incidents were perpetrated by another member of the staff (Bradshaw, Waasdorp, O'Brennan, & Gulemetova, 2013). Similarly, Gregory, Cornell, and Fan (2012) found that 15% of high school teachers experienced personal theft, 20% were threatened by a student, and 84% were spoken to in a rude or disrespectful manner; all of these experiences were negatively related to their perceptions of personal safety. Feeling unsafe may be indicative of larger school-wide discipline problems (e.g., lack of supervisory support) and poor school climate, which has been linked to burnout (Bradshaw, Waasdorp, Debnam, & Lindstrom Johnson, 2014; Fernet, Guay, Senécal, & Austin, 2012; Gregory et al., 2010; Skaalvik & Skaalvik, 2010). School staff members' perceptions of safety, assessing even broader experiences such as the presence of clear and consistent rules, have been closely related to faculty members' relationships with students and administrators (Bosworth, Ford, & Hernandaz, 2011). In sum, it is important to determine if high school staff perceptions of safety relate to feelings of burnout, while also accounting for their perceptions of connectedness and efficacy.

Staff Demographics

In addition to staff perceptions, it is important to consider individual demographic variables, as some staff may be more prone to experiencing professional burnout. For

example, research on burnout has shown that women are more likely to report emotional exhaustion and reduced personal accomplishment than men (Purvanova & Muros, 2010). Conversely, a study by Martin et al. (2012) found that male teachers reported higher stress related to student behavior, but only when controlling for instructional classroom management. Research on racial and ethnic differences has been inconclusive; some research has shown non-White staff report lower affiliation with their colleagues than White staff (Bevans, Bradshaw, Miech, & Leaf, 2007), which in turn could increase minority staff members' feelings of burnout. Other studies have revealed no differences between racial or ethnic groups with regard to burnout (Lent & Schwartz, 2012; Pas et al., 2012). There are likely varied sources of daily stressors that may also contribute to burnout, based on one's role in the school (teacher versus ESP). For instance, O'Brennan, Waasdorp, and Bradshaw (2014) found that teachers reported lower levels of school connectedness and increased exposure to school bullying compared to ESPs. Thus, we wanted to explore potential role differences in terms of burnout in the current study.

Related to staff members' roles, educational research has also suggested that reports of burnout shift over time depending on one's career phase (i.e., new versus tenured teachers). A longitudinal study by Hultell, Melin, and Gustavsson (2013) revealed there are different burnout trajectories for teaching staff (i.e., increasing, decreasing, or stable) and that low self-efficacy, poor mental and physical health, and young age were associated with increasing burnout. Studies have also shown that while new teachers tend to be more receptive to feedback and feel more committed to the profession, they also tend to feel less confident in their teaching skills and management of classroom behavior (Klassen & Chiu, 2011). This may explain findings by the Alliance for Excellent Education, which indicated that 40%–50% of new teachers leave the profession after 5 years, further highlighting the prevalence and significance of burnout among new teachers (Hayes, 2014). Given that the professional needs of new versus tenured school staff differ, research needs to better examine the relationship between one's job experience and burnout.

Burnout Within the Broader School Context

Social disorganization theory (Elliott et al., 1996) suggests that one's perception of the environment can be influenced by contextual variables suggestive of disorder (e.g., high student–teacher ratios and discipline problems). When viewed through the lens of the job resources–demands model, disorganized systems increase the demands or stressors on teachers, and increased stress can lead to burnout (Demerouti et al., 2001). Aspects of physical school disorder, such as the disorganization of the classrooms and hallways, inadequate lighting, and a poorly maintained school building are additional stressors that can lead to burnout and have been shown to influence teachers' abilities to efficiently manage student behavior (Bradshaw, Milam, Furr-Holden, & Lindstrom

Johnson, 2015). School location may similarly relate to feelings of burnout, with prior research showing that teachers in urban schools tend to report higher rates of disruptive and maladaptive behavior in their classrooms as compared to teachers in suburban and rural schools (Provansnik et al., 2007). Not surprisingly, schools with fewer student discipline problems (Cohen & Geier, 2010), less aggressive and violent behavior (Gregory et al., 2010), and fewer suspensions (Lee, Zhang, & Yin, 2011) tend to have staff who feel more supported and connected to their schools. The current study examined multiple school contextual factors (i.e., orderliness of the environment, student–teacher ratio, location, and the percentage of students receiving free and reduced-price meals) in relation to staff reports of burnout, with the goal of informing school-wide policies and interventions.

Current Study

The purpose of the current study was to identify salient staff perceptions and school contextual factors that relate to staff reports of professional burnout. One aim was to identify staff-level variables that are significantly related to feelings of professional burnout, including high school staff demographics (i.e., gender, ethnicity, role within the school, and years at the current school) and staff perceptions of efficacy, school connectedness, and personal safety. We were also interested in simultaneously identifying school contextual factors (e.g., physical orderliness and suspension rate) that are significantly related to staff members' feelings of burnout and that may help explain variation in burnout across school settings. Regarding staff demographics, we hypothesized that female, minority, and tenured teachers (i.e., 4 or more years working at the school) would report higher levels of burnout. In addition, we hypothesized that school staff who reported low levels of connectedness to the school, their students, and their colleagues would report higher levels of burnout. Similarly, we hypothesized that teachers who reported lower efficacy to manage behavioral problems would also experience higher burnout, as has been previously shown (e.g., Skaalvik & Skaalvik, 2010). Lastly, based on the organizational theories presented earlier (e.g., Bradshaw, Sawyer, & O'Brennan, 2009; Demerouti et al., 2001), we predicted that burnout would be higher among staff working in more challenging or disordered schools, as characterized by a higher prevalence of suspensions, less physical orderliness, higher student–teacher ratios, and an urban setting or a setting serving more students of low socioeconomic status (SES).

METHOD

Data were collected in the spring of 2012 from 3,225 high school staff (i.e., teachers, paraprofessionals, and support staff) in 58 high schools (grades 9–12) across 12 of Maryland's 24 school districts. The majority of staff were White (82%) and female (67%), and held teaching positions at their schools (75%). Schools were involved in a large-scale study of school

climate and positive behavioral interventions and supports (PBIS), which is a school-wide strategy that focuses on the prevention of student behavioral problems and promotes a positive, collaborative school environment (Sugai & Horner, 2006). However, given that these data come from the first year of this study, PBIS status was not a variable of substantive interest in the current context. The participating schools included a diverse student population with an average minority rate of 48% ($SD = 25.34$) and varied by location (50% suburban, 28% rural, and 22% urban). On average, 72% of the students in these high schools scored in the advanced and proficient range in algebra, 70% in English, and 68% in biology. The mean student enrollment of these schools was 1,254 ($SD = 476.53$). School districts provide tenure for

eligible teachers within all study schools. Staff and school demographics are provided in Table 1.

Procedure

School staff completed the Maryland Safe and Supportive Schools (MDS3) School Climate Survey (Bradshaw et al., 2014) as part of a larger multiyear study of school climate in high schools. The staff version of the MDS3 School Climate Survey was adapted from two previously developed staff-report measures of school climate, for which there has been considerable prior research documenting their psychometric properties (e.g., Bradshaw, Sawyer, & O'Brennan, 2007; Bradshaw et al., 2013). All high schools

Table 1. Level-1 and Level-2 Descriptive Data

Staff and School Demographics	n (%)	
Level-1 Staff Demographics		
Female	2,161 (67%)	
White	2,644 (82%)	
Black	355 (11%)	
Teachers	2,419 (75%)	
Education Support Professionals (ESPs)	701 (22%)	
New Staff (0–3 yrs in school)	1,032 (32%)	
Level-2 School Demographics		
Urban Location	13 (22%)	
Suburban Location	29 (50%)	
Rural Location	16 (28%)	
Implementing PBIS	31 (53%)	
	M (SD)	Range
Level-1 Variables ($N = 3,225$)		
Burnout	2.45 (0.78)	1–4
Personal Connectedness	3.00 (0.58)	1–4
Student Connectedness	3.06 (0.44)	1–4
Administration Connectedness	3.00 (0.73)	1–4
Personal Efficacy	3.05 (0.54)	1–4
Safety	3.35 (0.65)	1–4
Level-2 Variables ($N = 58$)		
Student–Teacher Ratio	20.18 (3.15)	13.32–27.77
Suspension Rate	22.30 (11.11)	3.82–59.25
Free and Reduced-Price Meals Rate (%)	35.91 (17.07)	6.30–65.90
Student Mobility	17.86 (9.10)	5.00–47.10
School Physical Orderliness	2.85 (0.39)	2.02–3.68

Note. Teachers category is composed of general ($n = 1,810$), special education ($n = 302$), and resource ($n = 314$) teaching staff. ESPs include mental health professionals ($n = 197$), paraeducators ($n = 160$), office staff ($n = 115$), and other school staff ($n = 327$). Student–teacher ratio was calculated by dividing the total student enrollment by the number of teachers in the school.

participated in the collection of school climate data, and half of the schools were randomly assigned to receive training in PBIS. Since these data were collected during the first year of the study and PBIS effects were not a central focus of this study, we controlled for PBIS status in the analyses. The Maryland State Department of Education (MSDE) approached districts to become involved in the project; once districts enrolled, school principals were recruited and signed letters of commitment to participate in the study. Staff members were notified that they would have the opportunity to complete an anonymous survey regarding the school climate and their own experiences and perceptions. These data were collected through a secure, password-protected website and transmitted directly to the researchers' server. Staff provided passive consent since no identifiers were collected. Additionally, MSDE provided school-level data regarding suspensions and aggregate student demographics. The researchers' Institutional Research Board (IRB) approved this study.

Measures

Staff provided information regarding gender, race, position, and length of employment. Each of these data points were dichotomized such that gender was coded $1 = $ female, $0 = $ male; race was coded as $1 = $ White versus $0 = $ all other races (given the large White sample); role was coded $1 = $ teacher (e.g., general education, special education, or resource) versus $0 = $ education support professional (e.g., ESPs, mental health providers, paraeducators, or office staff); and length of employment at the school was coded $1 = 0$–3 years (new staff) and $0 = 4$ or more years (veteran staff). This cutoff was chosen because prior research has shown the first 3 years to be a period often associated with strain, and it has also been found to be a formative time for the development of work-related attitudes and behaviors (Hultell et al., 2013; National Commission on Teaching and America's Future, 2014). Staff demographics are provided in Table 1.

Staff Burnout

As part of the MDS3 School Climate Survey (Bradshaw et al., 2014), staff perceptions of burnout were assessed through four items ($\alpha = 0.90$). Items included "I feel burned out from my work," "I feel emotionally drained from my work," "I feel like I am at the end of my rope," and "I feel used up at the end of the work day," and were derived from the Maslach Burnout Inventory (MBI; Maslach et al., 1996). Response options were on a 4-point Likert rating scale from *strongly disagree* to *strongly agree*. The scale score was the average of the four item responses. Higher scores indicated more staff burnout.

Staff Efficacy

Staff reported their perceived ability to handle student behavior problems on four items ($\alpha = 0.83$). Items were adapted from the Teacher Efficacy Scale (TES; Hoy & Woolfolk, 1993) and included "At this school . . . I can effectively work with defiant or disruptive students" and ". . . I can manage almost any student behavior problems." Response

options were on a 4-point Likert rating scale from *strongly disagree* to *strongly agree*. The scale score was the average of the four item responses, with higher scores reflecting greater self-efficacy.

Staff–School Connectedness

Three aspects of connectedness were measured on the MDS3 School Climate Survey, including personal connectedness to the school, connectedness to students, and connectedness to the administration. *Personal connectedness to the school* was comprised of 10 items ($\alpha = 0.93$), derived from the Organizational Social Context measure (Glisson et al., 2008), that reflect staff school pride ("People who work here feel pride in the school"), belonging ("At this school, I feel like I belong"), esteem ("My ideas are used and listened to"), and overall job satisfaction ("I am satisfied with the recognition you get for doing a good job"). *Connectedness to students* was measured through four items ($\alpha = 0.79$), including "At this school . . . Students get along well with each other" and " . . . Adults care about students." *Connectedness to administration* was measured through six items ($\alpha = 0.93$), including "Principal at this school is friendly and approachable" and "School administration works collaboratively with staff to solve problems." These scales were based on the Organizational Health Inventory (OHI; Hoy & Woolfolk, 1993), the School Development Program's Student, Staff, and Parent School Climate Surveys (Haynes, Emmons, & Ben-Avie, 2001), and the Add Health school connectedness measure (Resnick et al., 1997). For all connectedness items, response options were on a 4-point Likert rating scale from *strongly disagree* to *strongly agree*, with higher scores indicating more connectedness. Again, item responses were averaged to create scale scores.

Personal Safety

Staff perceptions of safety were measured through one survey item, "I feel safe at this school" (Bradshaw et al., 2009). Response options were on a 4-point Likert rating scale from *strongly disagree* to *strongly agree*, such that higher scores corresponded to stronger feelings of safety.

School Environment

Staff reports of the school's physical environment were measured through six items ($\alpha = 0.95$). Items were created based on the work of Bradshaw et al. (2009) and Plank, Bradshaw, and Young (2009) and include "There are often broken windows, doors, or desks in this school" and "The school building is clean and well-maintained." Response options were on a 4-point Likert rating scale from *strongly disagree* to *strongly agree*. Items on this scale were averaged to generate staff-level scale scores, which were then averaged to create a school-level indicator of orderliness, with higher scores indicating a more organized school environment.

School Contextual Factors

School demographic data were collected from MSDE to assess the level of disorder and challenges potentially faced by school staff. Specifically, data were collected regarding

student–teacher ratio (i.e., total student enrollment divided by the number of teachers in the school), suspension rate (i.e., number of suspension events divided by student enrollment), and the percentage of students receiving free and reduced-price meals (FARMS rate) as an indicator of student poverty. Urbanicity was derived from the school's location and coded 1 = urban and 0 = suburban or rural. As noted above, about half of the schools were trained in PBIS and were within their first year of implementation; thus, we controlled for PBIS status in the analyses at the school level, but it was not a variable of interest (1 = PBIS, 0 = comparison).

Analyses

The purpose of the current study was to identify staff- and school-level factors related to reports of professional burnout. Two-level hierarchical linear modeling (HLM) was conducted in the HLM 7.1 software (Raudenbush et al., 2011). The HLM approach accounts for the shared variance between staff within the same school by accounting for the clustering of the individuals (i.e., staff) at Level-1 within schools at Level-2. The equations used for the two-level models were as follows.

Level-1 (Staff)

$$\text{Burnout}_{ij} = \beta_{0j} + \beta_{1j} * (\text{Student Connectedness}_{ij})$$
$$+ \beta_{2j} * (\text{Personal Connectedness}_{ij})$$
$$+ \beta_{3j} * (\text{Personal Efficacy}_{ij})$$
$$+ \beta_{4j} * (\text{Administrator Connectedness}_{ij})$$
$$+ \beta_{5j} * (\text{Personal Safety}_{ij}) + \beta_{6j} * (\text{Gender}_{ij})$$
$$+ \beta_{7j} * (\text{Race}_{ij}) + \beta_{8j} * (\text{Role in School}_{ij})$$
$$+ \beta_{9j} * (\text{Years in Profession}_{ij}) + r_{ij}$$

Level-2 (School)

$$\beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Student−Teacher Ratio}_j)$$
$$+ \gamma_{02} * (\text{Suspension Rate}_j)$$
$$+ \gamma_{03} * (\text{Urbanicity}_j)$$
$$+ \gamma_{04} * (\text{FARMS Rate}_j)$$
$$+ \gamma_{05} * (\text{School Environment}_j)$$
$$+ \gamma_{06} * (\text{PBIS Status}_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10}$$
$$\beta_{2j} = \gamma_{20}$$
$$\beta_{3j} = \gamma_{30}$$
$$\beta_{4j} = \gamma_{40}$$
$$\beta_{5j} = \gamma_{50}$$
$$\beta_{6j} = \gamma_{60}$$
$$\beta_{7j} = \gamma_{70}$$
$$\beta_{8j} = \gamma_{80}$$
$$\beta_{9j} = \gamma_{90}$$

Staff ratings of personal connectedness, connectedness to students, connectedness to administration, efficacy, and feelings of safety were modeled at Level-1. Staff demographics were also modeled at Level-1 and included gender (1 = female, 0 = male), race (1 = White, 0 = minority), role at school (1 = teacher, 0 = nonteachers [e.g., mental health providers, and paraeducators]), and years working in the school (1 = 0–3 years for new staff, 0 = 4 or more years for veteran staff). Dichotomous variables (i.e., gender, race, role, and years in schools) were uncentered, whereas all other (continuous) variables were centered on the grand mean (Luke, 2004).

At Level-2, data collected about the school, including demographics (i.e., student–teacher ratio, suspension rate, FARMS rate, and urbanicity) and perceptions of school environment (i.e., average rating of orderliness) were modeled. As noted above, we also controlled for the school's PBIS status at the school level (i.e., 1 = PBIS, 0 = comparison). All continuous variables were grand-mean centered (Enders & Tofighi, 2007; Luke, 2004). Variance components (i.e., sigma-squared, tau, and the intraclass correlations) for the unconditional and conditional models were examined to determine whether the final model resulted in reductions in variance (Raudenbush et al., 2011). Prior to analyzing data in HLM, the covariates used were examined in SPSS to ensure that collinearity was not a concern (Tabachnick & Fidell, 2001). See Table 2 for correlations among the staff-level and school-level variables. Once in HLM, variables were added one at a time to ensure that changes in the direction of variable effects did not occur, which is another means for detecting collinearity (Raudenbush & Bryk, 2002). HLM handles missing data at the individual level through listwise deletion. Among staff who logged into the survey system, 91.6% had data available on all items and scales included in these analyses. Given the relatively low rate of missingness (8.4%) and the fact that missingness was generally not associated with covariates of interest (except for a small association with staff race [i.e., Black staff were more likely to report only demographic data]), statistical bias associated with missing data should not be of significant concern (Bennett, 2001). No school-level data were missing from the sample.

RESULTS

In line with HLM analyses, the results are organized by staff-level variables (Level 1), school contextual variables (Level 2), and finally the variance accounted for by the model.

Staff-Level Variables

In terms of staff demographics, staff members who were female ($\beta = 0.06$, $p < .05$), White ($\beta = 0.08$, $p < .05$), or in a teaching (versus support) role ($\beta = 0.36$, $p < .01$) reported greater burnout than male, minority, and mental health providers/paraeducators, respectively. Staff who had been

Table 2. Bivariate Correlations of Staff- and School-Level Variables

Staff-Level Variables	1	2	3	4	5	6
1. Burnout	—					
2. Personal Connectedness	.449	—				
3. Student Connectedness	.373	.665	—			
4. Administration Connectedness	.418	.756	.525	—		
5. Personal Efficacy	.279	.276	.326	.273	—	
6. Safety	.373	.491	.506	.473	.258	—

School-Level Variables	1	2	3	4	5	6
1. Student–Teacher Ratio	—					
2. Free and Reduced-Price Meals Rate	.509	—				
3. Urbanicity	.048	.256	—			
4. Suspension Rate	.366	.636	.158	—		
5. School Physical Orderliness	.021	.348	.392	.154	—	
6. PBIS School	.047	.396	.079	.415	.065	—

working at their schools for 3 or fewer years ($\beta = -0.05$, $p < .05$) reported less burnout than those who were there for 4 or more years. The three forms of connectedness were all negatively associated with burnout. Specifically, staff members reporting higher personal connectedness to their schools ($\beta = -0.31$, $p < .01$), to their students ($\beta = -0.10$, $p < .05$), and to their administration ($\beta = -0.10$, $p < .01$) reported lower levels of burnout. Lastly, staff who reported more efficacy in handling difficult behaviors ($\beta = -0.16$, $p < .01$) and those who felt safe at their schools ($\beta = -0.16$, $p < .01$) reported lower levels of burnout.

School Contextual Variables

At Level-2, suspension rate was the only school-level variable significantly related to burnout, such that staff in schools with higher suspension rates reported slightly higher levels of burnout ($\beta = 0.004$, $p < .01$). This suggests that for each percentage point difference in suspensions, there is a .004 change on the 4-point burnout outcome measure. While this may seem relatively small, the effect becomes more sizable when considering two schools with 10% or 20% differences in suspension rates. Student–teacher ratio, free and reduced-price meals, urbanicity, perceptions of school orderliness, and PBIS status were not significantly related to burnout.

Variance Accounted for by the Model

To determine the amount of variability explained in professional burnout across staff and between schools, intraclass correlations (ICCs) were calculated using both the fully unconditional model with no predictors at Level-1 or Level-2 and the full model with all predictors (Raudenbush & Bryk,

2002). The ICC in the fully unconditional model was 0.06, indicating that 6% of burnout variability was between schools. In the final model, the ICC was 0.01, leaving just 1% of between-school variability. The final model explained 27.14% of within-school variance (i.e., reduction in the Level-1 variance, or sigma-squared), which suggests that by adding staff demographics, perceptions of connectedness, efficacy, and safety, we were able to explain roughly one quarter of the variance between staff members' reports of burnout (see Table 3). The Akaike information criterion (AIC) and Bayesian information criterion (BIC) indices demonstrated better fit for the final conditional model than the unconditional model.

DISCUSSION

Schools, like any other organization, have their own unique managerial systems and practices that evolve from the interactions, relationships, and values between individuals in the environment (e.g., students, teachers, administrators, and parents). Accordingly, schools strive to be educational environments that promote positive interactions and help foster caring relationships, which can serve as a protective factor against the effects of high levels of demand placed on the staff (Bakker & Demerouti, 2007; Demerouti et al., 2001). Yet when school staff perceive a lack of support, poor sense of community, and lack of resources, they are more likely to experience job-related stress and burnout (Pietarinen, Pyhältö, Soini, & Salmela-Aro, 2013; Sharplin, O'Neill, & Chapman, 2011). The current study sheds light on the association between high school staff reports of burnout and staff perceptions and school contextual factors at play.

Table 3. Two-Level HLM Model for Staff Burnout

	β	SE	p-value
Intercept	2.070	0.047	<0.001*
School Staff Variables			
Gender	0.063	0.028	0.025*
Race	0.080	0.037	0.028*
Role in School	0.360	0.027	<0.001*
Years in Profession	−0.047	0.024	0.047*
Personal Connectedness	−0.312	0.038	<0.001*
Student Connectedness	−0.099	0.046	0.031*
Administration Connectedness	−0.096	0.026	<0.001*
Personal Efficacy	−0.155	0.027	<0.001*
Safety	−0.164	0.022	<0.001*
School Variables			
Student–Teacher Ratio	0.006	0.005	0.239
Free and Reduced-Price Meals Rate (%)	0.000	0.001	0.994
Urbanicity	0.012	0.040	0.754
Suspension Rate	0.004	0.001	0.006*
School Environment	0.031	0.046	0.495
PBIS School	0.006	0.030	0.852
Variance Components	Unconditional	Conditional	Reduction
Sigma-Squared	0.577	0.421	27%
Tau	0.034	0.006	84%
ICC	0.056	0.013	77%

Note. Modeling included 3,225 staff in 58 high schools. Dichotomous staff variables were coded gender (1 = female, 0 = male), race (1 = White, 0 = minority), role in school (1 = teacher, 0 = mental health providers and paraeducators), and years in the profession (1 = 0–3 years, 0 = 4 or more years). Dichotomous school variables were coded urbanicity (1 = urban, 0 = suburban or rural) and PBIS school (1 = PBIS and 0 = comparison). ICC = Intraclass correlation. *denotes a significant effect at $p < .05$.

Burnout and Staff Perceptions of Efficacy, Connectedness, and Safety

The data from the current study generally suggested that the staff tended to feel less burnout when they believed they had the skills needed to deal with behaviorally challenging students. If staff do not feel like they can handle student misconduct, which becomes increasingly dangerous at the high school level, they may feel overwhelmed and ill-prepared for a school crisis. Thus, it is likely that the experience of burnout is attributable at least in part to the culmination of self-efficacy for handling behavior problems and emotional disconnect from the students and other staff in the school community. Relatedly, perceptions of safety were also significantly related to burnout, implying that the conceptualization and addressing of school safety concerns needs broadening. Schools need to regularly assess staff perceptions of safety and identify ways to create environments where neither students nor staff worry about their physical or emotional safety and security. Building

on the current study's findings, future research should delve deeper into what contributes to staff perceptions of safety, such as one's experiences with bullying, exposure to violence on school campuses, and other personal safety threats.

Our analyses also revealed that all three forms of connectedness (personal, student, and administration) were negatively associated with burnout. More specifically, staff who felt a sense of belonging in their school communities and felt connected to their students and principals tended to feel less professional burnout. This finding is consistent with previous research on school climate, suggesting that a positive learning environment is beyond the physical appearance of a school—it is the relationships inside the building that matter most (cf. Plank et al., 2009). Related research by Johnson, Kraft, and Papay (2011) found that a higher level of teacher satisfaction was associated with reports of collaborative working relationships with colleagues, strong principal leadership, and a school culture focused on trust and respect. Conversely, lack of support from peers and administrators, in combination with

frequent student discipline problems, has been found to contribute to increased burnout (Stoeber & Rennert, 2008). Moreover, strong working relationships among staff and administration are often forged through shared leadership on school-wide policies and interventions, and these relationships become essential for future program success (Bradshaw, Reinke, Brown, Bevans, & Leaf, 2008). These findings suggest that the enhancement of relationships within schools may positively impact a variety of outcomes, including burnout as well as overall school functionality. This in turn may translate into improved student outcomes.

Staff Demographics and Burnout

Our two-level HLM model also revealed the importance of several staff demographics (i.e., gender, race, role at school, and years at current school) in relation to staff burnout. In terms of staff demographics, White and female staff reported higher levels of burnout than minority and male staff. These findings are largely consistent with prior studies of burnout, as illustrated by a meta-analysis of burnout research which reported that women are more prone to report emotional exhaustion (Purvanova & Muros, 2010). On the other hand, there have been inconsistent findings regarding racial differences in burnout (e.g., Pas et al., 2012). However, our study revealed that White staff reported higher levels of burnout. It should be noted that our sample was largely White (82%); therefore, future studies of more diverse school staff should further explore these differences across and within racial/ethnic groups. Qualitative data would be needed to determine why such racial and ethnic differences may emerge.

Teachers tended to report significantly greater burnout than ESPs (e.g., mental health professionals, paraeducators, and office staff). This finding is consistent with previous connectedness research showing that teachers, as compared to ESPs, report lower levels of connectedness to students, administrators, and their colleagues (Bradshaw et al., 2013). It is possible that the ongoing direct contact and interactions with students may result in higher levels of burnout. Moreover, research indicates that teachers interact with significantly more students than ESPs (Bradshaw et al., 2013), which may result is more emotional exhaustion. Future research should further examine the multitude of factors that may be increasing the likelihood of burnout, particularly emotional exhaustion among teachers relative to ESPs.

The current results also revealed that school staff who have worked at their schools for 4 or more years (tenured staff) were more likely to report burnout. This supports research by Klassen and Chiu (2011), which showed that practicing teachers (i.e., those in the profession for an average of 13 years) reported more overall stress, less occupational commitment, and stronger intentions to leave the teaching profession than preservice teachers. This study suggests that the differences may emerge quite early on (i.e., after 4 years in a school). Prior research has also shown that burnout typically increases over time, making it possible that this

phenomenon accounts for the higher ratings of burnout of later-career teachers (Pas et al., 2012). This suggests a need for ongoing professional development and support for teaching staff as they continue to teach, across the elementary and high school levels. School districts often provide additional support to new teaching staff, but there are fewer support opportunities offered to tenured staff members who may feel overwhelmed with their workloads. Moreover, future studies could examine different models of support (e.g., coaching) with relation to staff members' experience levels and the subsequent impact of these support programs on staff's commitment to their schools and the profession.

School Context and Staff Burnout

The majority of school-level variables included (i.e., student–teacher ratio, percentage free and reduced-price meals, student mobility, and school orderliness) were nonsignificant. This could result from the relatively low between-school variability found on the burnout measure (i.e., less than 6%) and also suggests that, while these factors can influence school staff members' perceptions of the climate and student behavior (Bradshaw et al., 2009, 2015; O'Brennan, Bradshaw, & Furlong, 2014), they may not have an evident direct effect on staff reports of burnout. Only the school-level suspension rate was significantly related to reports of burnout. The prevalence of suspensions may be an indicator of a more pervasive problem with student behavior school-wide. It also may suggest that problem behavior is not being adequately addressed in a proactive fashion, but instead in a reactive and exclusionary manner, which can lead to a chaotic working environment for school staff. This finding is consistent with the inverse association between staff-level efficacy for handling difficult behavior and burnout. Based on these findings, schools are encouraged to examine school-wide trends in behavior disciplinary infractions (e.g., suspensions and office discipline referrals) as a first step in determining how best to address behavior problems from a preventive standpoint. By establishing clear behavioral expectations for students and staff, schools can set standards for how all staff should interact with students and each other, thus enhancing relationships, reducing safety concerns, and helping safeguard against staff burnout and high turnover rates (Bradshaw et al., 2010).

Limitations

It is important to consider some limitations of the current study when interpreting these findings. These data represent just one point in time, as teachers provided data anonymously (to enhance teacher response rates to the survey) and thus cannot be linked across time points; therefore, changes in burnout over time could not be examined and are an area for future research. In addition, these data only come from high school staff; although this fills a gap in the literature that typically has not been extensively studied (e.g., Pas et al., 2012), it is possible that these results will not generalize to the other school levels. For example, the issue of relationships and

connectedness may be inherently different in high schools, given their departmental nature and large size compared to primary settings. Yet the relatively large size of the sample (i.e., 3,225 staff across 58 schools) is a strength of this study.

All of the teacher-level variables were collected via the same online survey and therefore may have shared method variance; however, the best way to collect data on constructs such as efficacy and connectedness is to ask the teachers directly. It is possible that social desirability or other personal biases may have influenced teachers' ratings. Future studies should seek to incorporate a wider array of data sources (e.g., observational data and peer nominations) to address these potential limitations. Moreover, additional research is needed using longer multidimensional scales to measure various aspects of teacher burnout (e.g., instructional skill, emotional exhaustion, and mental health), as the range of scores on this scale could have possibly been restricting. Similarly, the remaining variability at Level-1 suggests there are unmeasured individual factors that need to be further explored; perhaps more personal measures (e.g., personality type and disposition) may further our understanding of the individuals most at risk for burnout.

Although a recent study by Fisher, Matthews, and Gibbons (2016) suggested that single-item self-report measures are a valid and reliable approach for assessing staff perceptions of organizational factors, the reliance on relatively short measures is noted as a methodological limitation. Because of the scale and scope of the study, we were unable to administer lengthy assessments, and thus relied on relatively brief but previously tested and validated self-reported items (e.g., Bradshaw et al., 2007, 2013). Further, although our missing data was limited enough in scope to not have caused significant concern (Bennett, 2001), it is possible listwise deletion allowed for some bias in the parameters and may hinder generalizability. Additional replication research is needed. Finally, the current study was not designed to test the impact of PBIS, but given that this was a known school-level factor, this variable was included in the analyses as a control. Although PBIS schools had higher levels of implementation than non-PBIS schools, there was variability in implementation among PBIS schools during the first year (Bradshaw, Pas, Debnam, & Lindstrom Johnson, 2015). Further, it is likely some of these schools were implementing other programs that were not systematically tracked within the study; thus, caution should be taken when interpreting this variable.

Conclusions and Implications for School Psychologists

The findings of this study highlighted the multidimensional nature of school systems by examining how personal characteristics of staff members, connectedness to others in the school community, perceptions of safety, personal efficacy, and school contextual factors can promote or diminish school staff reports of professional burnout in a high school setting. Our analyses showed that staff members tended to feel

less overwhelmed when they felt connected to their school communities and believed they had the skills to completely meet students' behavioral needs. This information can help school psychologists develop school-wide staff training and professional development workshops. Specifically, professional development training can integrate relationship enhancement and skill building among multidisciplinary school teams (including school psychologists, teachers, counselors, educational support professionals, and principals). These school-wide teams can help build relationships across grade levels and develop plans for improving conditions for learning by diminishing the disconnect among school professionals. This is especially salient at the secondary level, where staff may not feel as strong a sense of belonging because of the existence of multiple subsystems within the school (Curtis & Stollar, 2002). Likewise, school psychologists' knowledge of data-based decision making can help with assessing and analyzing available data related to teachers' perceptions of connectedness and safety, as well as behavioral discipline records, archival data, annual student and staff surveys, and qualitative information from staff. School-wide data can help inform how best to address burnout and who is best suited for burnout prevention. The demographic findings suggest that some staff (i.e., female, White, and tenured teachers) may need particular attention when addressing burnout.

To help teachers who are struggling with concerns regarding management of student behavior, some schools are adopting teacher coaching models to improve teachers' practices. One such model is the Classroom Check-Up (Reinke, Herman, & Sprick, 2011), a classroom coaching model designed to increase teachers' motivation to sustain the use of classroom management practices that are already successful in their classrooms while supporting the improvement of weaker skills. This approach aims to minimize the fidelity problems common to school-based consultation efforts (Reinke, Lewis-Palmer, & Merrell, 2008) by focusing on data-driven teacher assessments and solution-focused coaching sessions. A model such as this could be used by school psychologists to enhance teachers' skills, efficacy, and perhaps feelings of safety. In turn, this may also reduce teacher burnout. Future research should not only examine whether intervention supports provided to staff (e.g., coaching) can be effective at improving burnout, but whether specific subgroups would most benefit from such efforts. While there is not a quick solution for eliminating staff burnout, there are systemic efforts school psychologists can take, such as teacher coaching, prevention programming, and professional development, to address the school community as a whole and help enhance staff connectedness.

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AUTHOR BIOGRAPHICAL STATEMENTS

Lindsey O'Brennan, PhD, is a postdoctoral fellow and adjunct professor at University of South Florida, School Psychology Program. Her research focuses on the development and implementation of school-based prevention and intervention programs targeting school connectedness, coping skills, and emotional well-being.

Elise Pas, PhD, is an Assistant Scientist at the Johns Hopkins University, Bloomberg School of Public Health. Her research focuses on the importance of the classroom and school contexts and interventions (e.g., coaching) that improve teacher practices and, in turn, teacher and student outcomes.

Catherine Bradshaw, PhD, is a Professor and Associate Dean for Research and Faculty Development at University of Virginia's Curry School of Education. Her research focus on the development of aggressive and problem behaviors, effects of exposure to violence, peer victimization, and environmental stress on children. She presently collaborates on federally supported randomized trials of school-based prevention programs, including positive behavioral interventions and supports (PBIS) and social–emotional learning curricula.