Exploring Factors Related to Burnout among Special Education Teachers in Specialized Schools

Dr. Oksana Huk
Iona College

Dr. Brian Cesario
Iona College

Abstract

The purpose of this initial exploratory research was to examine the extent to which burnout and turnover among special education teachers working within specialized schools were related to student maladaptive behavior (aggressive behaviors, self-injurious behaviors, and stereotypic behaviors), workplace support (from administration and colleagues), and teacher irrational beliefs. Correlational analyses indicated that all forms of student maladaptive behavior, administrative support, teacher irrational beliefs (low frustration tolerance and attitudes toward the school) were significantly related to burnout. Student self-injurious behavior and low frustration tolerance were significantly related to turnover. Teacher burnout and teacher turnover were also significantly positively correlated. Colleague support, self-downing, and authoritarian attitudes toward students were unrelated to burnout or turnover. Furthermore, no association was found between turnover and student aggression, student stereotypical behavior, and support from administration.

Keywords: special education, burnout, turnover, irrational beliefs, teachers

Correspondence of this article should be addressed to Oksana Huk, Psychology Department, Iona College, New Rochelle, NY, 10801.Contact: ohuk@iona.edu. Acknowledgments: We would thank Taryn Tyson, Anna Desiderio, and Lisa Gorman for their assistance with this project.

Exploring Factors Related to Burnout among Special Education Teachers in Specialized Schools

Teacher burnout and teacher turnover negatively impact students' academic, behavioral, and emotional needs (Irving, 2013; Klusmann, Richter, & Ludke, 2016; McGrew, 2013; Oberle & Reichl, 2016). Special education teachers experience higher levels of burnout and turnover than general education teachers (Grant, 2017; Williams & Dikes, 2015). Subsequently, students in special education are more likely to experience negative consequences than students in general education settings. Teacher burnout has been shown to be a significant predictor of whether students in special education classes meet their IEP goals (Ruble & McGrew, 2013) and more likely to experience stress themselves (Williams & Dikes, 2015). In turn, the students who need the most help and consistency may be taught by the teachers demonstrating greater levels of stress or turnover, yet are less likely to receive the quality of support they need.

To help these students, we must first understand factors related to burnout and turnover among teachers. Research has shown that teacher burnout and turnover are related to student

misbehavior (Aloe et al., 2014; McCormick & Barnett, 2011), workplace support (Cancio, Albrecht & Johns, 2013; Langher, Caputo, & Ricci, 2017), and teacher irrational beliefs (Bermejo-Torro & Prieto-Ursula, 2006; Bernard, 2016). Although some of this research has been on special education teachers (Aloe et al., 2014; Cancio, Albrecht, & Johns, 2013), very little research has been conducted on teachers who work in specialized schools (i.e., schools that only serve students who need significantly more intensive instruction than is offered in a public school).

Student misbehavior is likely to be higher and more difficult to directly modify in these settings than students in regular education settings. Similarly, teachers likely cannot directly increase the support they receive from their colleagues or administration. Further, not every teacher in each school experiences the same levels of stress or burnout. As such it seems a more logical and effective approach might be to understand teachers' perceptions about the student behavior or the degree of support they receive may influence their stress levels.

Burnout and Turnover

Occupational burnout can be conceptualized as feeling depleted emotionally and physically to the point that one finds ways to become detached from work and their job performance diminishes significantly (Maslach, Schaufeli, & Leiter, 2001). Maslach et al. (2001) demonstrated that burnout is comprised of three constructs: Emotional Exhaustion (fatigue), Depersonalization (cynicism), and Reduced Personal Accomplishment (lower self-efficacy). Kristensen, Borritz, Villadsen, and Christensen (2005) argue that depersonalization is most likely a coping mechanism to combat the fatigue, and that reduced personal accomplishment directly results from feeling fatigued. They posit that burnout should be conceptualized as its core component of fatigue and exhaustion along with whether the individual attributes this fatigue and exhaustion to their work and/or their clientele.

As such, Kristensen et al. (2005) conceptualize burnout as three concepts: personal burnout, work burnout, and client burnout. Personal burnout captures the core concept of exhaustion or fatigue and is most like emotional exhaustion put forth by Maslach et al. (2001). Work burnout refers to the degree to which respondents attribute this fatigue as being as a direct consequence of one's work, and client burnout refers to when respondents attribute the fatigue as being direct consequence from working with one's clients. Thus, according to Kristensen et al. (2005), teachers would be considered to be burned out when they first endorse feeling extremely fatigued coupled with subsequently attributing this fatigue as resulting from either their work tasks (e.g., work burnout), from working with the students (e.g., client burnout), or from a combination of both.

Burnout and Turnover among Teachers

Burnout has been related to greater physical illness among teachers (Aloe et al., 2014; Brunsting, 2014), absenteeism (Kyraicou, 2001), and turnover (Grant, 2017; Rudow, 1999). Not surprisingly, research has shown that individuals that experience burnout are more likely to leave their jobs (Wang et al., 2016). Special education teachers have been shown to have higher burnout and turnover rates than other general education teachers (Grant, 2017; Michell & Arnold, 2004; Williams & Dikes, 2015). The term turnover may refer to a teacher resigning from his or her school, or even from the profession altogether.

Special education teachers may feel more burned out as they often have a higher workload (Williams & Dikes, 2015), and that they experience failure more often than regular education teachers which may take an emotional toll (Lindmeier, 2013). They are also more likely to experience burnout when working with students classified as emotionally disturbed (Wisniewski & Gargiulo, 1997) and having autism (Brunsting, 2014).

Turnover is also a more pressing issue among special education teachers than regular education teachers. Grant (2017) has shown that when special education teachers have more turnover when they have a broader range of students with disabilities in their classes. One-third of new special education teachers are likely to leave the profession within the first 3 years of teaching (Dillon, 2007), and especially within the first year (Grant, 2017). As special education teachers working within specialized have more students with varying disabilities and more intense needs, they may experience burnout and turnover at even higher levels than special education teachers working in general education settings.

Teacher Burnout and Impact on Students

Teacher burnout has a direct and detrimental effect on student well-being. Teachers with who experience burnout are more likely to mismanage classrooms (Brouwers & Tomic, 2000; Jennings & Greenberg, 2009), are less attentive to students (Jennings & Greenberg, 2009), use more punitive measures (Osher et al., 2007; Piekarska, 2000). They are also less likely to form close relationships with students (Osher et al., 2007) and in general value their relationships with students less (Osher et al., 2007). Irving et al. (2013) report that special education teachers who taught children with Autism were less likely to use adult language when they were more stressed. Findings by Ruble and McGrew (2013) indicate that special education teachers are less likely to adhere to interventions for their students when they are more stressed. Students are placed in specialized settings when they require more intensive support than a general education setting can provide. To provide this level of support, teachers must be capable of being attentive and adhering to academic and behavioral intervention plans. This suggests that burnout among teachers in specialized settings may be more detrimental to students' well-being than in regular education settings.

Additionally, untreated teacher stress is thought to lead to teacher burnout (Rudow, 1999). Teacher stress also increases student stress. Oberle and Reichl (2016) note that higher teacher stress predicted higher levels of the stress hormone cortisol found in their students. Thus, students of stressed teachers experience greater physiological stress than students of non-stressed

teachers. Teacher stress has been shown to be related to lessened student academic achievement as well (Klusmann, Richter, & Ludke, 2016). Students of special education teachers experiencing burnout struggle more socially, emotionally, and meet their IEP goals less often than other teachers (Jennings & Greenberg, 2009; Ruble & McGrew, 2013). Accordingly, students are negatively affected when teachers are stressed more and, as such, it is important to understand what factors are related to teacher stress. Given the findings in the literature, t is reasonable to hypothesize that student misbehavior corresponds to the degree of stress they experience. Thus, if teacher stress leads to student stress, which then increases student misbehavior; teacher stress is exacerbated even further. If we may reduce or prevent teacher stress, we can then potentially help the students achieve more academically, emotionally, and behaviorally.

Factors Related to Teacher Burnout and Turnover

Both school-based characteristics and teacher characteristics can influence teacher stress. Among school-based characteristics, student misbehavior has been shown to increase teacher burnout (Aloe et al., 2014), while perceptions of support from administration or colleagues has been shown to decrease burnout (Langher, Caputo, Ricci, 2017). Not every teacher in every school experiences the same level of stress; therefore, the role of teachers' personal characteristics also warrants further exploration.

Student Maladaptive Behavior

According to a meta-analysis by Aloe, Shisler, Norris, Nickerson, and Rinker (2014) higher levels of student misbehavior are related to higher levels of teacher burnout, but they also noted that the term 'student misbehavior' is frequently operationalized differently from study to study. McCormick and Barnett (2011) note that student misbehavior is most strongly related to burnout. According to Pepe and Addimando (2013), special education teachers are more likely to work with students who act aggressively. As such it is reasonable that students placed in more restrictive settings are more likely to show more aggressive and destructive behaviors than similar students in less restrictive settings. Interestingly, teachers' knowledge of classroom management mediates burnout and behavior (Tsouloupas et al. (2010), as cited in Brunsting, 2013), but teachers who are more burned out are less likely to effectively manage their classrooms (Brouwers & Tomic, 2000; Jennings & Greenberg, 2009). If teachers do not have the coping skills or resources to manage student maladaptive behaviors, then they are more likely to feel stressed. As teachers in specialized settings are more likely to witness maladaptive behaviors, they would likely need greater coping skills and resources.

Nistor (2013) examined the associations between both the intensity and frequency of maladaptive student behavior (student aggression, student self-injurious behavior, and student stereotypic behavior) with burnout among 20 teachers working within a specialized school in Romania. The type of behavior demonstrated by the students influenced what type of burnout the teachers experienced. Personal burnout (level of fatigue) was related to the severity of stereotypic behavior and the severity of aggressive behavior. Work burnout (attributing fatigue to one's work) was related to frequency and severity of aggression. Client burnout (attributing one's fatigue to the students) was related to the frequency and severity of self-injurious behavior. Interestingly, the more experienced teachers were less likely to believe that students had control over their own behavior which led to less burnout. In other words, teachers felt most fatigued

when faced with students that demonstrated very severe stereotypic behavior, like rocking, and very severe aggressive behaviors, like hitting others. The teachers attributed this fatigue to their job when they had students in their class that exhibited more frequent or more severe aggression. They were most likely to attribute this fatigue to working directly with the students when the students demonstrated a lot of self-injurious behavior, like self-scratching, and very severe self-injurious behavior. It would be helpful to explore these same student variables with the added variable of teacher irrational beliefs. Specifically, to what extent are teacher perceptions associated with teacher burnout levels compared to these student behaviors and teacher burnout?

Workplace Support

Within the extant literature, support from the administration is consistently negatively related to teacher stress (Langher, Caputo, & Ricci, 2017) particularly among special education teachers (Skaalvik & Skaalvik, 2007). Degree of administrative support strongly predicts employment resignation among special education teachers (Cancio, Albrecht, & Johns, 2013). However, the relationship between coworker support and burnout is inconsistent in the literature; sometimes it is helpful and other times not (Brunsting, 2014). Zabel and Zabel (2002) found that among 301 special education teachers, those that perceived their co-workers to be more supportive reported lower levels of emotional exhaustion and higher levels of personal accomplishment, but support from coworkers was unrelated to teacher depersonalization levels. As very little research has been done on teachers within specialized settings, it would be helpful to investigate the degree to which workplace support is related to these teachers' stress levels.

Irrational thinking

Lazarus and Folkman (1984) note that stress among teachers is not related to the stressors they have at work, but rather it is a result of a combination of their perceptions of those stressors coupled with their coping mechanisms. Rational Emotive Behavior Therapy (REBT) put forth by Ellis similarly suggests that situations do not lead to one's feelings, but rather one's thoughts about situations lead to their feelings (DiGiuseppe, Doyle, Dryden, & Backx, 2013). According to this theory, teachers do not experience higher levels of stress due to greater demands placed on them but as a result of their thoughts about these demands. For example, two different teachers may have the same number of students in their classes. One teacher may think that although they would *prefer* to have fewer students in their class that they can tolerate having more; whereas another teacher with the same number of students may think that it is awful that they have as many students in their class as they do and *cannot* tolerate so many students. According to this theory the first teacher may feel annoyed but may still be able to employ helpful behaviors. The second teacher, however, is likely to feel an unhealthy level of stress and may behave in self-defeating ways.

Bernard (1990) modified Ellis' irrational beliefs to construct a measure of irrationality in teachers: Teacher Irrational Belief Scale (TIBS). Included in the TIBS are the following beliefs: Self-downing (a belief that one's worth is contingent upon their ability at work and receiving approval from others), low frustration tolerance (a belief that teaching should be easier) authoritarian attitudes towards students (a belief that students should behave in a certain manner and should be punished if they do not) and attitudes to school organization a belief that teachers should be involved in running the school). Bernard found that among 792 primary and secondary teachers, that greater irrational beliefs teachers endorsed were related to greater levels of stress

among them. This finding was supported again on a sample of teachers in Australia in 2016 (Bernard, 2016). Bermejo-Torro and Prieto-Ursula (2006) used this scale to measure stress among teachers in Spain and found that low frustration tolerance and authoritarian attitudes toward students led to the most stress. Popov and Popov (2015) further found that low frustration tolerance was the strongest predictor of stress and that overall irrational beliefs partially mediated the relationship between work and stress. Therefore, it can reasonably be inferred that it is not necessarily the work environment that leads to teacher stress but rather their perceptions of the environment. Further, the more irrational beliefs they endorse the more likely they are to experience stress.

Purpose of This Study

The purpose of this initial exploratory study is to understand factors that relate to special education teacher burnout and turnover. There is evidence in the literature to substantiate the notion that burnout and turnover tend to be higher among special education teachers than general education teachers (Grant, 2017; Michell & Arnold, 2004; Williams & Dikes, 2015). When teacher burnout is high, students are less likely to meet IEP goals, are less likely to use sophisticated language, and are more likely to experience stress themselves (all of which may potentially exacerbate teacher stress too). Similarly, students clearly cannot learn from a teacher who has left the profession or school.

Factors that lead to teacher stress are often not easily amenable (e.g., student behavior, workplace support), and teachers may not be able to directly decrease student maladaptive behavior or directly increase support from their administration or co-workers. A teacher may not be able to directly change how a student behaves or how much support the administration provides, but a teacher *can* modify his or her thoughts about the students or administration. Additionally, it is likely that these factors are unpredictable on a day-to-day basis, and as a result, teachers may experience varying levels of stress dependent on what is happening around them.

While teachers may not be able to directly modify their environment, if given the proper tools they may learn how to modify their thinking thereby preventing their own stress regardless of how students, administration, or co-workers behave. This study is important, because if teachers' perceptions determine their stress levels, preventative measures can then be taken to teach teachers how to prevent their own stress. As a result, teachers would be more available to the students who would learn more.

This study is also important as it examines burnout among teachers working within specialized schools. To date, little research has been done on stress levels within this population. It is likely that students in these schools may show more maladaptive behavior, leading the teachers to need more support that may not be possible. With greater student maladaptive behavior and less support, these teachers are more likely to experience more stress and require interventions.

Hypotheses

1. Student maladaptive behavior (student aggressive behavior, student self-injurious behavior, student stereotypic behavior) as measured by the BPI-S will be positively correlated with teacher burnout as measured by CBI and will be positively correlated with teacher turnover as measured by ITQ.

2. Perceived work-related support (administrative support and colleague support) as measured by JDWH will be negatively related with teacher burnout as measured by CBI and will be negatively related with teacher turnover as measured by ITQ.

3. Teacher irrational beliefs as measured by TIBS will be positively correlated with burnout as measured by CBI and will be positively correlated with teacher turnover as measured by ITQ.

4. Teacher burnout as measured by CBI will be positively correlated with teacher turnover as measured by ITQ.

Methods

Procedure

Special education teachers were recruited through 118 specialized schools dedicated to providing services to children with special needs in New York, New Jersey, and Connecticut. Special education teachers in specialized schools were chosen for this study because research has shown that special education teachers experience greater levels of burnout and turnover (Grant, 2017; Mitchell & Arnold, 2004; Williams & Dikes, 2015) than general education teachers, and as such stress among these teachers is important to understand. One hundred eighteen principals of out-of-district schools were forwarded a description of the study and a copy of the consent form that would eventually be given to teachers and were asked for permission to collect data within their schools, and 6 chose to participate. Starting in October of the school year, a recruitment email directed to the teachers was sent to principals of approved settings to forward to the teachers in their school. The study remained open until June of the same academic year. Additionally, schools were provided with a flyer to post in the teachers' lounge. Participants were provided with an opportunity to enter a raffle to win a $20 e-gift card to Amazon. One in 20 participants received the e-gift card. A brief write-up of the key study findings was sent to all participants as well.

Participants

All special education teachers within this sample worked within specialized schools dedicated to providing services to students with special needs. The majority of the sample was female (92.0%; n = 23) and was aged between 20 and 29 years (36.0%; n = 9). Most of the sample had a master's degree with less than 30 additional credits (52%; n=13), had 5 years or less of experience (44%; n=11). The number of students per class ranged from 6-12 and the average number of adults helping in their classes ranged from 1-10. Only 8% (n = 2) of the teachers reported having a homogenous class where all students had the same classification; the rest of the teachers listed multiple classifications for the students in their class. Similarly, 72% (n = 18) of the teachers reported working with children of only one age group, whereas the rest of teachers reported working with children within multiple age-ranges. The frequencies and percentages of the demographic variables are provided in Table 1.

Table 1.
Demographic Characteristics of Participants

Feature	*n*	%
Gender		
Male	2	8.0
Female	23	92.0
Age		
20-29	9	36.0
30-39	8	32.0
40-49	4	16.0
50-59	3	12.0
60-69	1	4.0
Education		
Bachelors degree with less than 30 additional credits	1	4.0
Masters degree with less than 30 additional credits	13	52.0
Masters degree with more than 30 additional credits	11	44.0
Special Ed Certificate	25	100.0

Table 1 (continued).

Years' Experience		
5 years or less	11	44.0
6-10 years	6	24.0
11-15 years	3	12.0
16-20 years	1	4.0
21 years or more	4	16.0
Students		
Autism	24	96.0
Deaf-blindness	5	20.0
Deafness	4	16
Dev delay	18	72
Emotional Disturbance	9	36
Hearing Impairment	9	36
Intellectual Disability	19	76
Multiple Disabilities	22	88
Orthopedic Impairment	9	36
Specific Learning Disability	6	24
Traumatic Brain Injury	5	20
Visual Impairment	11	44
Other heath impaired	13	52

Table 1 (continued).

Professional Focus		
Ages 5-11	10	40
Ages 11-14	10	40
Ages 14-18	7	28
Ages 18-21	6	24
Other	1	4

Sample Size and Missing Data

Although 27 teachers completed the surveys, two cases were excluded from the analyses as the respondents did not complete the items necessary for calculating the student behavior scales. Approximately 11% of the data were missing; Little MCAR test results suggest that the data were missing at random (X^2= 29.27; df = 35; p = .74). Median substitution was used for missing data.

Measures

Burnout. The Copenhagen Burnout Inventory was designed by Kristensen et al., (2005) to measure burnout among human service professionals. The measure consists of 19 items assessing the frequency or rate with which employees experience the statements on a five-point scale (1=Never/Almost Never; 5=Always) and (1=To a very low degree; 5 = To a very high degree) respectively. Burnout is measured by assessing three separate constructs: personal burnout, work burnout, and client burnout. Personal burnout refers to how fatigued and emotionally depleted an individual feels (Kristensen, 2005). Work burnout refers to the degree to which respondents attribute feeling fatigued and exhausted to their work, and client burnout refers to the degree to which respondents attribute feeling fatigued and exhausted to working with clients (Kristensen, 2005). Each subscale is measured by summing the responses with higher scores on each of the subscales reflect more severe burnout. According to a study by Nestor, A. (2013) on 20 special education teachers working within special education schools in Romania, internal consistency alphas ranged from .61-.88, and test-retest coefficients were between .80 and .85.

Turnover. The Intent to Quit Scale was designed by Bradley (2007) assessing the degree to which individuals think about leaving their school, their job, and their career. It consists of 3 items that assess intent to quit on a 5-point Likert scale (1= strongly disagree, 5= strongly agree). Responses on the items are summed to create one score in which higher scores reflect a greater intent to quit. Sass, Seal, and Martin (2011) achieved a Chronbach's alpha of .73.

Student Maladaptive Behavior. The Student Behavior Short Form was designed by Rojahn et al. (2001), measure the frequency and severity of maladaptive behaviors among an individual with special needs. The measure consists of 30 items assessing the frequency of a list of behaviors (1=Monthly; 4=Hourly) and the severity of the same behavior (1=Mild; 3=Severe). The measure consists of 5 subscales Self-Injurious Behavior – frequency, Self-Injurious Behavior- severity, Aggressive/Destructive Behavior – frequency, Aggressive/Destructive Behavior- severity, and Stereotypic Behavior - frequency. For the purposes of this study, teachers completed the measure for each of the students in their class. An average was calculated for each subscale based on the sum of the teachers' responses divided by how many students they

have in their class. Higher scores on each of the subscales reflect either more frequent or more severe demonstrations of the behavior. According to a study by Nistor (2013) Cronbach's alphas ranged from .82-.91.

Administrative and colleague support. The Job Demands Worker Health was designed by Caplan et al. (1975) to teacher perceptions of support from administration and colleagues. The measure consists of 8 items assessing the frequency with which employees experience the statements on a four-point scale (1 = Not at all; 4 = Very Much). Support is measured by assessing two separate constructs: Administrative Support and Colleague Support. Each scale is calculated by summing the responses where higher scores on each of the subscales reflect more perceived support. Sass, Seal, and Martin (2011) found Cronbach's alphas of .93 for both subscales.

Irrational beliefs. The Teacher Irrational Belief Scale was designed by Bernard in 1990, and it assesses the degree to which teachers endorse irrational beliefs related to teaching. The scale consists of 22 items that use a 5-point Likert scale (1= Strongly Disagree; 5= Strongly Agree). Items correspond to 4 separate scales: Low Frustration Tolerance (a belief that teaching should be easier), Self-downing (a belief that one's worth is contingent upon their ability at work and receiving approval from others), Authoritarian Attitudes toward Students (a belief that students should behave in a certain manner and should be punished if they do not), and Attitude of Running the school (a belief that teachers should be involved in running the school). Items for each scale are summed, and the greater sums indicate a greater degree of irrational thinking. Research by Calvete and Villa (1999) using this scale resulted in Chronbach's alphas ranging from .71-.74 (as cited in Bermejo-Torro & Prieto-Ursúa, 2006).

Data Analysis

Pearson's r correlations were conducted to analyze the associations between teacher burnout and between teacher turnover with the following variables: student aggression, student self-injurious behavior, student stereotypic behavior, administrative support, colleague support, student, and teacher irrational beliefs. Pearson's r correlations were conducted to analyze the associations between burnout and turnover.

Results

All data were analyzed using the IBM SPSS Statistics, version 25. Descriptive information on measures are provided in Table 2.

Table 2
Psychometric Properties of Scales

				Range			
	M	*SD*	*a*	Potential	Actual	Skew	Kurtosis
CBI PB	54.33	17.57	.87	.00-600.00	12.50-87.50	-.35	.31

CBI WB	51.00	18.37	.88	.00-700.00	7.14-85.71	-.47	.90
CBI CB	28.33	16.40	.69	.00-600.00	.00-54.17	.01	-1.23
ITQ	8.67	3.09	.71	3.00-15.00	3.00-13.00	-.63	-.82
BPI SIB FREQ	2.56	2.18	-.27	.00-32.00	.00-9.00	1.28	1.63
BPI SIB SEV	1.61	1.29	-.20	.00-16.00	.00-4.29	.75	-.56
BPI AGG FREQ	4.99	4.56	.78	.00-40.00	.00-16.43	.98	.16
BPI AGG SEV	3.52	3.38	.82	.00-30.00	.25-13	1.39	1.52
BPI STER FREQ	4.17	2.73	.94	.00-12.00	.71-11.71	.95	.99
JDWH ADMIN	11.22	3.49	.92	4.00-16.00	5.00-16.00	.06	-1.29
JDWH CO	12.17	3.13	.88	4.00-16.00	5.00-16.00	-.71	-.35
TIBS: LFT	13.84	3.72	.77	.00-20.00	7.00-20.00	-.29	-.48
TIBS: SD	22.58	4.39	.67	.00-40.00	15.00-30.00	-.22	-.80
TIBS: Students	9.43	2.12	.44	.00-25.00	5.00-14.00	.27	.41
TIBS: Organization	18.64	3.67	.72	.00-25.00	11.00-25.00	-.17	-.49

Note: CBI = Copenhagen Burnout Inventory, ITQ = Intent to Quit, BPI = Behavior Problems Inventory –Short Form, JDWH = Job Demands Worker Health, TIBS = Teacher Irrational Beliefs Scale

The Copenhagen Burnout Inventory (CBI). The CBI (Kristensen et al., 2005) is a self-report measure of burnout among educators. The measure consists of three subscales: Personal Burnout, Work Burnout, and Client Burnout. There is no current normative information for this measure**;** however clinical levels of burnout are considered to be 50 points or more (Kristensen et al., 2005). Within this sample 76% of the clients experienced clinical levels of personal burnout, 60% reported clinical levels of work burnout, and 16% reported clinical levels of client burnout. These findings suggest that this sample seemed to have elevated stress related to their overall well-being and that they attributed to their job, but interestingly only a small portion perceived the stress to be related from working with the children. Overall the Copenhagen Burnout Inventory had Cronbach's alpha coefficients ranging from .69 -.87 indicating that it is a reliable measure.

The Intent to Quit Scale (ITQ). The ITQ (Bradley, 2007) is a self-report measure of turnover among employees. The measure consists of 1 scale in which higher scores reflect a greater desire

to quit their job. Overall the ITQ was fairly reliable with a Cronbach's alpha coefficient of .71. There is currently no normative information for this measure.

Behavior Problems Inventory- Short Form. The teachers completed the BPI-S on each student in their class. The teachers were asked how frequently the student demonstrated specific aggressive (e.g., hitting others), self-injurious (e.g., self-scratching), and stereotypic (e.g., rocking) behaviors as well as the how severe the same aggressive and self-injurious behaviors were. Response options ranged from (1=Never – 4= Hourly) for frequency-related questions and from (1= Mild- 3= Severe) for severity-related questions. Data on the severity of stereotypic behaviors was not collected. Subscales were created for the frequency of aggression, frequency of self-injurious behaviors, frequency of stereotypic behaviors, severity of aggressive behaviors, and severity of self-injurious behaviors. An average was calculated for each subscale based on the sum of the teachers' responses for each child divided by how many students they have in their class. Higher scores on each of the subscales reflect more frequent or more severe demonstrations of the behavior within a classroom. Cronbach's alphas ranged from .78-.94 for the aggression scales and stereotypic behaviors scale indicating that it is generally reliable, although alpha values in excess of .90 may indicate that some items are redundant. The self-injurious behaviors scale returned a Cronbach's alpha of -.27 and -.20 for the frequency and severity scales respectively. The negative alpha may be attributable to the small sample size and should therefore be interpreted with caution. There are currently no normative data on this measure.

The Job Demands Worker Health. The JDWH (Caplan et al., 1975) is a self-report measure of perceived support from administration and colleagues and represent two separate subscales. Each subscale is measured by summing the responses, and higher scores reflect greater perceived support. The internal consistencies for this sample were as follows: administrative support (α =.92), colleague support (α=.88). This is considered to be a reliable measure, although the high alpha values may indicate some item redundancy. There is currently no normative data on this measure.

Teacher Irrational Beliefs Scale (TIBS). The TIBS (Bernard, 1990) is a self-report measure used to assess teacher irrational thinking. Four separate subscales are measured: Low Frustration Tolerance, Authoritarian Attitudes Toward Students, Attitudes Toward School Organization, and Self Downing. Each subscale is measured by summing the responses provided for the items, and for each scale higher scores reflect higher irrational thinking. The Cronbach's alphas for this sample were as follows: Low Frustration Tolerance (α =.77), Authoritarian attitudes towards students (α =.44), attitudes toward school organization (α =.72), and Self Downing (α =.67).

Student Maladaptive Behavior, Teacher Burnout, **and Teacher Turnover**

Aggression and Teacher Burnout. Consistent with the hypothesis, both the frequency and severity student aggression were significantly and positively correlated with teacher fatigue and teacher's attribution of this fatigue of being related to their work: personal burnout (frequency: $r(25) = .47$, $p<.05$; severity: $r(25) = .53$, $p<.05$), and work burnout (frequency: $r(25) =.48$, $p<.01$; severity $r(25) =.43$, $p<.01$). Interestingly neither the frequency nor the severity of aggression were significantly related to client burnout ($r(25) = .22$, $p=.15$; $r(25) = .18$, $p=.19$, respectively). These results indicate that greater student aggression and more severe aggression is related to

greater teacher fatigue and a stronger likelihood of teachers attributing this fatigue to their work. The aggression is unrelated to teachers perceiving their fatigue as coming from the students. The correlation coefficients can be found in Table 3.

Table 3
Correlation Coefficients between Student Maladaptive Behavior, Work-Place Support, Irrational Beliefs with Teacher Burnout

	CBI PB	CBI WB	CBI CB
Student Maladaptive Behavior			
Self-Injurious Behavior - Frequency	.41**	.37**	.28
Self-Injurious Behavior – Severity	.46**	.42**	.13
Aggressive Behavior - Frequency	.47*	.48**	.22
Aggressive Behavior - Severity	.53**	.43**	.18
Stereotypic Behavior - Frequency	.54*	.42**	.10
Work Place Support			
Administrative Support	-.50**	-.56**	-.35*
Colleague Support	-.12	-.07	-.05
Teacher Irrational Beliefs			
Self-Downing	.28	.23	.20
LFT	.53**	.50**	.48*
Attitude to School	.34*	.25	.34*
Authoritarian Attitude	-.08	-.10	.32

*p <.05, **p<.01 *Note: CBI = Copenhagen Burnout Inventory*

Aggression and Teacher Turnover. Inconsistent with the hypothesis, neither the frequency of aggression nor the severity of aggression were found to be related to turnover (frequency: $r(25)$ = .27, p = .20; severity: $r(25)$ = .22, p =.30). These results indicate that the amount or severity of aggression demonstrated by students is unrelated to whether or not teachers think about leaving their job. The correlation coefficients can be found in Table 4.

Table 4
Correlation Coefficients between Student Maladaptive Behavior, Work-Place Support, Irrational Beliefs with Teacher Turnover

Scale	ITQ
Student Maladaptive Behavior	
Self-Injurious Behavior - Frequency	.47*
Self-Injurious Behavior – Severity	.49*
Aggressive Behavior - Frequency	.27
Aggressive Behavior - Severity	.20
Stereotypic Behavior - Frequency	.15
Workplace Support	
Administrative Support	-.40
Colleague Support	-.19
Irrational Beliefs	
Self-Downing	.21
LFT	.48**

Attitude to School	.34
Authoritarian Attitude	-.01

**p <.05, **p<.01. Note: ITQ – Intent to Quit*

Student Self-Injurious Behaviors and Teacher Burnout. Consistent with the hypothesis, both the frequency and severity of student self-injurious behavior were significantly and positively correlated with personal burnout [frequency: $r(25) = .41$, $p<.01$, severity: $r(25) = .46$, $p<.01$] and work burnout [frequency: $r(25) =.37$, $p<.01$, severity: $r(25) =.42$, $p<.01$]. Interestingly neither the frequency nor the severity of self-injurious behavior were related to client burnout ($r(25) = .28$, $p=.09$, $r(25) = .13$, $p=.27$, respectively). These results indicate that more frequent and more severe self-injurious behaviors are associated with greater fatigue experienced by the teachers and the greater likelihood that teachers will attribute this fatigue to their work. The correlation coefficients can be found in Table 3.

Student Self-Injurious Behaviors and Teacher Turnover. Consistent with the hypothesis, both the frequency and severity of student self-injurious behavior were significantly and positively correlated with turnover [frequency: $r(25) = .47$, $p<.05$, severity: $r(25) = .49$, $p<.05$].These results indicate that greater and more severe self-injurious behaviors are associated with a greater desire for teachers to leave their job. The correlation coefficients can be found in Table 4.

Student Stereotyped Behavior and Teacher Burnout. Consistent with the hypothesis, stereotyped behavior was positively associated with teacher stress. The frequency of student stereotyped behavior was significantly positively associated with personal burnout: $r(25) = .54$, $p<.05$ and work burnout: $r(25) =.42$, $p<.01$. Once again the frequency of self-injurious behavior were not associated with client burnout ($r(25) = .10$, $p=.31$). These results indicate that the more often students demonstrate stereotypical behavior is associated with greater fatigue experienced by the teacher as well as to greater attribution of this fatigue to their work. The correlation coefficients can be found in Table 3.

Student Stereotyped Behavior and Teacher Turnover. Inconsistent with the hypothesis, stereotyped behavior was not associated with turnover ($r(25) = .15$, $p=.50$). This result indicates that the more often students demonstrate stereotypical behavior is not associated with a teachers' desire to leave their job. The correlation coefficients can be found in Table 4.

Exploratory Analyses. For each maladaptive behavior, frequency and severity, the maximum responses for each item in each scale were averaged together. Correlational analyses were conducted with burnout and turnover, and with the exception of frequency of stereotypic behavior, the same results were found. The maximum frequency average stereotypic behavior was not associated with any burnout or turnover measure (Personal Burnout: $r(25) = .28$, $p=.01$; Work Burnout: $r(25) = .12$, $p=.29$; Client Burnout: $r(25) = .15$, $p=.24$; Turnover: $r(25) = .14$, $p=.26$. Taken together, these findings indicate that the number of students who exhibit frequent or severe self-injurious behavior is impertinent in determining teacher burnout. Contrary, teachers with a few students with very frequent stereotypic behavior is less likely to be associated with burnout than if the teachers have a group of students with frequent stereotypic behavior. These results can be seen in Table 5.

Table 5
Correlation Coefficients between Student Maximum Maladaptive Behavior, Teacher Burnout Teacher Turnover

Maximum Average Student Maladaptive Behavior	CBI PB	CBI WB	CB CB	ITQ
Self-Injurious Behavior - Frequency	.47**	.43*	.13	.49**
Self-Injurious Behavior – Severity	.49**	.44*	-.03	.48**
Aggressive Behavior - Frequency	.40*	.44*	.20	.23
Aggressive Behavior - Severity	.45*	.46*	.11	.14
Stereotypic Behavior - Frequency	.28	.29	.15	.14

Workplace Support, Burnout, and Turnover

Administrative Support and Teacher Burnout. A Pearson r correlation was calculated to examine the association between administrative with teacher burnout. Consistent with the hypothesis, administrative support was significantly negatively associated with teacher stress (personal burnout: $r(25) = -.50$, $p<.01$, work burnout, $r(25) = -.56$, $p<.01$, and client burnout, $r(25)= -.35$, $p<.05$.) These results indicate that greater perceived support from the administration is associated with lower teacher fatigue. Interestingly greater perceived support from the administration is also associated with less of a likelihood that teachers will attribute this fatigue to either their work or their work with students. The correlation coefficients can be found in Table 3.

Administrative Support and Teacher Turnover. A Pearson r correlation was calculated to examine the association between perceived support from administration with teacher turnover. Inconsistent with the hypothesis, administrative support was not associated with teacher turnover ($r(25) = -.40$, $p=.06$). This result indicates that greater perceived support from the administration is not associated with teachers' desire to leave their job. The correlation coefficients can be found in Table 4.

Colleague Support and Teacher Burnout. A Pearson r correlation was calculated to examine the association between colleague support with teacher burnout. Contrary with the hypothesis, however, colleague support was not associated with any form of teacher burnout ($p=.33$, personal burnout: $r(25) = -.12$, $p=.28$, work burnout, $r(25) = -.07$, $p=.37$, and client burnout, $r(25)= -.05$, $p=.413$.) These results indicate that the degree of support perceived from colleagues is not associated with teacher burnout. The correlation coefficients can be found in Table 3.

Colleague Support and Teacher Turnover. A Pearson r correlation was calculated to examine the association between perceived support from colleagues with teacher turnover. Inconsistent with the hypothesis, colleague support was not associated with teacher turnover ($r(25) = -.19$, $p=.37$). This result indicates that greater perceived support from the colleagues is not associated with teachers' desire to leave their job. The correlation coefficients can be found in Table 4.

Qualitative Analyses Administration. Participants were asked to complete the following sentences: "*I feel most supported by my administration when they…"* and "*I would feel more supported by my administration if they…*" A series of patterns emerged that demonstrated a need for professional validation and guidance. Teachers wrote that they feel most supported when their administration provides strategies on how to perform their job better (35%; $n=7$) and then to

acknowledge their hard work (25%, *n*=5). Teachers also suggested that they feel most supported when their administration comes to their classroom (20%, *n*=4), implements strategies that staff suggests (20%, *n*=4), and follows through on tasks or responds to emails and requests (20%, *n*=4). Teachers demonstrated a preference for administration to come to their classrooms more (35%, *n*=6), provide more communication, specifically positive communication (29%, *n*=5), and validate their hard work (18%, *n*=3). These results can be seen in Table 6.

Table 6
Qualitative Responses to Questions on Administrative Support

Item/Response	*n*	*%*
What does your administration do that leads you to feel supported?		
Provide feedback on how to do things better/professional development	*7*	*35%*
Acknowledge/validate hard work	*5*	*25%*
Be in the classroom more/active/present	*4*	*20%*
Follow through on tasks/ respond to requests/emails	*4*	*20%*
Listen to staff and implement strategies suggested	*4*	*20%*
Back them up	*3*	*15%*
Communicate with parents	*1*	*5%*
Extend deadlines	*1*	*5%*
What do you wish your administration would do to help you to feel more supported?		
Come in classroom/more direct contact	*6*	*35%*
More communication/more positive communication	*5*	*29%*
Show empathy/recognize hard work	*3*	*18%*
Money	*2*	*12%*
Ask how they can help/for input	*2*	*12%*
Professional development	*1*	*6%*
Limit challenges/Provide resources	*1*	*6%*
Follow through	*1*	*6%*

Qualitative Findings. Participants responded to open-ended questions about their co-workers. Teachers wrote that they felt most supported by their co-workers when tasks were completed on time and correctly without having to ask (57%, *n*=12), and when their feelings were validated (48%, *n*=10). Similarly, when asked what their coworkers could do to help them feel supported, teachers reported that they would like them to understand what needs to be done (27%, *n*=3), be more positive and open to new ideas (27%, *n*=3), and be willing to work together (18%, *n*=2). These findings can be seen in Table 7.

Table 7
Qualitative Responses to Questions on Colleague Support

Item/Response	*n*	*%*
What do your co-workers do that lead you to feel supported?		
Do what needs to be done/without being asked/follow through on tasks/ Run class the way I like	12	57%
Listen/Validate feelings	10	48%

What do you wish your co-workers would do to help you to feel more supported?		
Be more positive/open to new ideas	3	27%
Understand what needs to be done	3	27%
Be more willing to work together	2	18%
Age divide	1	9%
"less work stress"	1	9%

Irrational Beliefs, Burnout, and Turnover

Teacher Irrational Beliefs and Teacher Burnout. A Pearson r correlation was calculated to examine the association between teacher irrational beliefs with teacher burnout. Low Frustration Tolerance was significantly positively related with all forms of burnout as well: personal burnout, r (25) = .53, p<.01, work burnout, r (25)= .50, p<.01, and client burnout r(25) = .48, p<.05. Attitudes toward the organization was significantly positively associated with personal burnout, r (25) = .34, p<.05, client burnout, r (25)= .34, p<.05, but not work burnout (r(25) = .25, p=.11). Self-downing was not associated with personal burnout, r (25) = .28, p=.09, work burnout, r (25)= .23, p=.13, and client burnout (r(25) = .20, p=.17). Authoritarian attitudes towards students were not associated with personal burnout, r (25)=-.08, p=.34, client burnout r (25)=.32, p=.06, or work burnout, r(25)=-.10, p=.31. Thus, lower frustration tolerance among teachers is associated with greater teacher fatigue, and it is associated with a greater likelihood of a teacher attributing this fatigue to either work or to work with students. The more a teacher believes that the school should operate in a certain way, the greater the fatigue experienced by the teacher and the greater the likelihood that the teacher will attribute this fatigue to working with students. Interestingly the greater demands teachers place on either themselves or students is not associated with the teacher fatigue or attributions for fatigue. The correlation coefficients for these analyses can be found in Table 3.

Teacher Irrational Beliefs and Teacher Turnover. A Pearson r correlation was calculated to examine the association between teacher irrational beliefs with teacher turnover. Low Frustration Tolerance was significantly positively related with teacher turnover (r (25) = .48, p<.01). All other beliefs were not associated with to turnover (Attitudes toward the organization: r(25)= .34, p=.11; authoritarian attitudes towards students: r (25) = -.01, p=.96; self-downing: r (25) = .21, p=.33.These results indicate that the greater low frustration tolerance a teacher endorses is associated with a greater desire to leave one's job. However, the greater expectations teachers place upon students, organization, or themselves is not associated with their desire to leave their job. The correlation coefficients can be found in Table 4.

Teacher Burnout and Teacher Turnover

A Pearson r correlation was calculated to examine the association between teacher burnout and teacher turnover. Consistent with the hypothesis all forms of burnout were significantly positively associated with teacher turnover [personal burnout r(25) = .55, p<.01; work burnout: r(25) =.55, p<.01; client burnout: r(25) =.45, p<.05. These results indicate that the greater fatigue and exhaustion a teacher experiences are associated with a greater desire to leave one's job. Similarly, the greater a teacher attributes this fatigue to be a result of their job or of working with

students are both associated with a greater desire to leave one's job. The correlation coefficients can be found in Table 8.

Table 8
Correlation Coefficients between Teacher Burnout with Teacher Turnover

Scale	Turnover
Personal Burnout	.55**
Work Burnout	.55**
Client Burnout	.45*

*p <.05, **p<.01

Discussion

The purpose of this study was to examine factors associated with teacher burnout and teacher turnover among special education teachers working in specialized schools. As expected, student behavior (self-injurious behavior, aggressive behavior, and stereotypic behavior), administrative support, and teacher irrational beliefs were all associated with both burnout and turnover. Support from colleagues was not associated with burnout or turnover.

Discussion of Sample and Review of Measures

Although 118 principals of out-of-district schools in New York, New Jersey, and Connecticut were contacted, only principals from 6 schools chose to participate. As the participants were recruited specifically from specialized schools, all teachers had their bachelor's degree and special education certificate, and 96% earned master's degrees. Only 8% (n=2) teachers taught homogenous classes where all students had the same classification; whereas most of the participants' students had a wide range of classifications.

Most measures could be considered reliable as they had internal consistencies equal or greater to .71. Scale scores that should be interpreted with caution include self-downing (α = .67) and authoritarian attitudes toward students' belief (α =.44). Scales that should be interpreted with extreme caution include frequency of self-injury (α =-.27) and severity of self-injury (α =-.20) scales. These lower internal consistencies were most likely a result of the small sample size. Additionally, these scales were measured at the ordinal level, thereby rendering Cronbach's alpha a less accurate indicator of reliability. In future research with larger sample sizes, we plan to evaluate the reliability of these scales via categorical principal components analysis (CATPCA), which will yield Cohen's weighted kappa (Fleiss & Cohen, 1973; Fleiss, Levin, & Paik, 2003).

Discussion of Hypotheses

Student Maladaptive Behavior, Teacher Burnout, and Teacher Turnover. All forms of student maladaptive behavior (i.e., self-injurious behavior, aggressive behavior, and stereotypic behavior) were associated with greater levels of fatigue experienced by the teachers. Similarly, these behaviors were more likely to be associated with teachers believing that the fatigue they were experiencing was a direct result from their work in general. These findings are consistent

with previous research that showed that student maladaptive behavior was associated with greater burnout among teachers (Aloe et al., 2014).

Interestingly, student maladaptive behavior of any kind was not associated with teachers' perceptions that their fatigue was a result of working with students. That is teachers did not believe feeling fatigued was a result of working directly with the students. Perhaps this finding is unique to the sample of teachers that choose to work within specialized schools. Nistor (2013) found that years of teaching experience was significantly negatively correlated with believing that the students had control over their behavior and as a result experienced less burnout. Thus, the more experience teachers had was negatively correlated with believing that the student can control his or her behavior, and as such, they were less likely to experience burnout. It is possible that teachers who choose to work with students with significant challenges are generally less likely to attribute the cause of their negative feelings to working with the students and instead to the work in general.

Among student maladaptive behavior, only self-injurious behavior was associated with teachers' desires to leave their job; neither aggression nor stereotypic behavior were associated with turnover. Further research would be warranted to first replicate this finding and second explore the reasons for why this might be. It is likely that this finding is the result of a very small sample size or perhaps the specificity of the sample. It might be possible that different types of student maladaptive behavior elicit different emotions in teachers, and that self-injurious behaviors elicit an emotion that subsequently evokes a greater desire to leave the position. Future research should explore this association.

Workplace Support, Teacher Burnout, and Teacher Turnover. Greater perceived support from the administration was associated with less fatigue endorsed by the teachers. This support from the administration was also associated with less likelihood that any fatigue experienced was a result of their job or also from working with the students. That is, teachers who believed their administration provided them with more support were less likely to feel fatigued, and they were less likely to believe that their fatigue was a result of their job or from working with the students. These findings are consistent with previous research that indicate that support from the administration serves as protection from stress (Skaalvik & Skaalvik, 2007).

Contrary to the hypotheses, support from the administration was unassociated with whether teachers considered leaving their job. This could be a result of having a very small sample size. Also, it is possible that teachers working within specialized settings feel a greater attachment to the students and as a result less likely to want to leave their position.

Perceived support from colleagues was not associated with either burnout or turnover. Research on teacher stress and turnover as it relates to colleague support has been inconsistent (Brunsting, 2014). This finding is similar to research that found that contrary to what one might expect support from colleagues was not associated with depersonalization (Zabel & Zabel, 2002), or it could be a result of a very small sample size.

It should be noted that burnout is not uncommon among early career teaching professionals (e.g., Goddard & Goddard, 2006; Goddard, O'Brien, & Goddard, 2006; Schaefer, Long, & Clandinin,

2012). However, the sample itself was unique in that the teachers surveyed were generally quite young (most were under 30). This represents a unique segment of the population as some literature suggests that young adults may be more prone to job burnout than older employees (e.g., Luyckx, Duriez, Klimstra, & De Witte, 2010). Therefore, the findings of this research should be considered within the context of the sample used.

Teacher Irrational Beliefs, Teacher Burnout, and Teacher Turnover. Among teacher irrational beliefs, low frustration tolerance was most associated with both burnout and turnover. That is, teachers who were more likely to think that they "cannot stand it" when faced with an aversive stressor were more likely to endorse feelings of fatigue and attribute this fatigue to their work in general and also their work with students. Teachers who were more likely to think along these lines way also were more likely to consider leaving their job. The association between teacher low frustration tolerance and stress is supported by previous research (Bermejo-Torro & Prieto-Ursula, 2006; Bernard, 2016; Popov & Popov, 2015).

Teachers who placed a greater expectation of how the school should operate were also more likely to feel fatigued and interestingly attribute this fatigue directly to their work with students rather than their work in general. Perhaps, these teachers believed that if the school operated in a different manner, the students would behave differently, and as a result they would feel less fatigued.

Teachers that placed higher expectations of themselves or the students were no more likely to be burned out or consider leaving their job. This finding could be particular to the sample. Perhaps teachers who choose to work in specialized settings are less demanding that students should behave a certain way. They may instead have a greater understanding of the students' limitations and capabilities. Similarly, perhaps this sample views themselves as doing the best job they can, and therefore are less likely to place significant expectations on themselves.

Teacher Burnout and Teacher Turnover. Not surprisingly, teacher burnout was consistently associated with teacher turnover. Teachers that endorsed more fatigue were more likely to endorse greater feelings of wanting to leave their job. Similarly, teachers that attributed this fatigue to either their work in general or their working with students also were more likely to consider leaving their job. This finding is consistent with previous research that indicates that that greater burnout among teachers is associated with greater intent to leave their job (Grant, 2017; Rudow, 1999).

Limitations

There are some limitations associated with this research that should be taken into consideration. First, when attempting to study teacher stress, those teachers who experience the most stress may be less likely to take time to complete a survey, thereby leading to a somewhat biased sample. These teachers may feel too exhausted to take on an extra task of completing a survey, or the survey itself may be too emotionally difficult to confront as it may feel very familiar. Second, this sample size was rather small, owing primarily to the specialized population of interest and the narrow geographic area within which recruitment took place. With a greater number of participants, the sample would be more representative of special education teachers. Finally,

many of the measures lacked normative data, and one measure even returned a negative Cronbach's alpha, likely attributable to the small sample size.

Future Research

Future research should continue to look at what variables are associated with teacher burnout and turnover, particularly for special education teachers. Furthermore, research should examine these roles among teachers in specialized settings. By understanding what leads to burnout and turnover among this population, interventions can then be tailored to help teachers who have a desire to help these students.

Future research should also attempt to understand what constitutes support from administration. According to Brunsting (2013), administrative support is not defined consistently in the research. As such, it would be important to understand what exactly the administration must do for teachers to feel supported.

Student maladaptive behavior and teachers' belief that they can no longer tolerate aversive situations were both found to be associated with burnout and turnover. Student maladaptive behavior may be seen as aversive by teachers working with them. Thus, it would be worth exploring if perhaps administrative support might moderate either student maladaptive behavior or teachers' level of tolerance. Perhaps when administration provides appropriate resources that lessen student maladaptive behavior (e.g., classroom management training for the teachers, supportive paraprofessionals), teachers then feel that they can handle the behavior more.

The correlation between teachers' believing that they, as teachers, should somehow be running the school with higher levels of burnout provides background for this rationale. Perhaps teachers believe that if they were running the school better, there would be less student maladaptive behavior. One suggestion is to conduct interviews of teachers asking them what they believe helps a school run more smoothly.

Similarly, research should look at what strategies exist to decrease Low Frustration Tolerance among teachers. Low frustration tolerance was found to be associated with both burnout and turnover, and this finding is consistent with previous research (Bermejo-Torro & Prieto-Ursula, 2006; Bernard, 2016; Popov & Popov, 2015). Perhaps in-service training tailored to teaching teachers' coping mechanisms for reducing their low frustration tolerance may help prevent burnout and turnover among special education teachers.

References

Aloe, A. M., Shisler, S. M., Norris, B. D., Nickerson, A. B., & Rinker, T. W. (2014). A multivariate meta-analysis of student misbehavior and teacher burnout. *Educational Research Review, 12,* 30-44.

Bermejo-Toro, L., & Prieto-Ursúa, M. (2006). Teachers' irrational beliefs and their relationship to distress in the profession. *Psychology in Spain, 10,* 88-96.

Bernard, M.E. (1990). *Taking the stress out of teaching*. Melbourne, Australia: Collins Dove.

Bernard, M.E. (2016). Teacher Beliefs and Stress. *Journal of Rational Emotive and Cognitive Behavior Therapy. 34,* 209–224.

Bora, C., Bernard, M. E., Trip, S., Decsei-Radu, A., & Chereji, S. (2009). Teacher Irrational Belief Scale – Preliminary norms for Romanian population. *Journal of Cognitive and Behavioral Psychotherapies, 9,* 211-220.

Bradley, G. (2007). Job tenure as a moderator of stressor-strain relations: a comparison of experienced and new-start teachers. *Work and Stress, 21,* 48-64.

Brouwers, A., Evers, W., & Tomic, W. (2001). Self-efficacy in eliciting social support and burnout among secondary-school teachers. *Journal of Applied Social Psychology, 31,* 1474-1491.

Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and treatment of children, 37,* 681-711.

Cancio, E.J., Albrecht, S.F. and Johns, B.H. (2013). Defining administrative support and its relationship to the attrition of teachers of students with emotional and behavioral disorders. *Education and Treatment of Children, 36,* 71-94.

Caplan, R.D., Cobb, S., French, J.R.P., Van Harrison, R. and Pinnaeu, S.R. (1975). *Job Demands and Worker Health,* Institute for Social Research: University of Michigan/National Institute of Occupational Safety and Health, Washington, DC.

Chang, M. L. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review, 21,*193-218.

DiGiuseppe, R., Doyle, K., Dryden, W., & Backx, W. (2013). *A practitioner's guide to rational-emotive therapy, Third Ed.* New York, NY US: Oxford University Press.

Dillon, S. (2007). With turnover high, schools fight for teachers. *The New York Times,* 27-30.

Fleiss, J. L. & Cohen, J. (1973). The equivalence of weighted kappa and the intraclass correlation coefficient as measure of reliability. *Educational and Psychological Measurement, 33,* 613-619.

Fleiss, J. L., Levin, B., & Paik, M. C. (2003). *Statistical methods for rates and proportions, 3rd ed.* New York: Wiley.

Goddard, R., & Goddard, M. (2006). Beginning teacher burnout in Queensland schools: Associations with serious intentions to leave. *The Australian Educational Researcher, 33,* 61-75.

Goddard, R., O'Brien, P., & Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal, 32,* 857-874.

Grant, M. C. (2017). A Case Study of Factors That Influenced the Attrition or Retention of Two First-Year Special Education Teachers. *Journal of the American Academy of Special Education Professionals, 77,* 84-101.

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of educational research, 79,* 491-525.

Irvin, D. W., Hume, K., Boyd, B. A., McBee, M. T., & Odom, S. L. (2013). Child and classroom characteristics associated with the adult language provided to preschoolers with autism spectrum disorder. *Research in Autism Spectrum Disorders, 7,* 947-955.

Klusmann, U., Richter, D., & Lüdtke, O. (2016). Teachers' emotional exhaustion is negatively related to students' achievement: Evidence from a large-scale assessment study. *Journal of Educational Psychology, 108,* 1193-1203.

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, *19*, 192-207.

Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational review*, *53*, 27-35.

Langher, V., Caputo, A., & Ricci, M. E. (2017). The potential role of perceived support for reduction of special education teachers' burnout. *International Journal of Educational Psychology*, *6*, 120-147.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Luyckx, K., Duriez, B., Klimstra, T. A., & De Witte, H. (2010). Identity statuses in young adult employees: Prospective relations with work engagement and burnout. *Journal of Vocational Behavior*, *77*, 339-349.

Maslach, C., Schaufeli, W., & Leiter, M. (2001). Job burnout. *Annual Review of Psychology*, *52*, 397-422.

McCormick, J., & Barnett, K. (2011). Teachers' attributions for stress and their relationships with burnout. *International Journal of Educational Management*, *25*, 278-293.

National Commission on Teaching and America's Future. (2007). *Policy brief: The high cost of teacher turnover*. Washington, D.C: Author.

Mitchell, A., & Arnold, M. (2004). Behavior management skills as predictors of retention among south Texas special educators. *Journal of instructional Psychology*, *31*, 214-220.

Nistor, A. A. (2013). Mediators of the relationship between challenging behaviors and burnout in Romanian special education teachers. *Scientific Journal of Humanistic Studies*, *5*, 128-134.

Oberle, E., & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science & Medicine*, *159*, 30-37.

Osher, D., Bear, G. G., Sprague, J. R., & Doyle, W. (2010). How can we improve school discipline?. *Educational Researcher*, *39*, 48-58.

Pepe, A., & Addimando, L. (2013). Comparison of Occupational Stress in Response to Challenging Behaviours between General and Special Education Primary Teachers in Northern Italy. *International Journal of Special Education*, *13*, 11-23.

Piekarska, A. (2000). School stress, teachers' abusive behaviors, and children's coping strategies. *Child Abuse and Neglect*, *24*, 1443-1449.

Popov, S., & Popov, S. (2015). The role of stressors at work and irrational beliefs in the prediction of teacher stress. *Primenjena Psihologija*, *8*, 5–23.

Rojahn, J., Matson, J. L., Lott, D., Esbensen, A. J., & Smalls, Y. (2001). The Behavior Problems Inventory: An instrument for the assessment of self-injury, stereotyped behavior, and aggression/destruction in individuals with developmental disabilities. *Journal of Autism and Developmental Disorders*, *31*, 577-588.

Ruble, L. A., & McGrew, J. H. (2013). Teacher and child predictors of achieving IEP goals of children with autism. *Journal of Autism and Developmental Disorders*, *43*, 2748-2763.

Rudow (1999). *Understanding and preventing teacher burnout: A sourcebook of international research and practice*. New York, NY US: Cambridge University Press.

Sass, D. A., Seal, A. K., & Martin, N. K. (2011). Predicting teacher retention using stress and support variables. *Journal of Educational Administration*, *49*, 200-215.

Schaefer, L., Long, J. S., & Clandinin, D. J. (2012). Questioning the research on early career teacher attrition and retention. *Alberta Journal of Educational Research, 58*, 106-121.

Skaalvik, E.M. and Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology*, *99*, 611-625

Wang, C.K.J., Pyun, D.Y., Koh, K.T., & Kwon, H.H. (2017). Teacher Burnout and Teaching Effectiveness in Singapore. (NIE Research Brief Series No. 16-013). Singapore: National Institute of Education.

Wasburn-Moses, L. (2005). How to keep your special education teachers. *Principal Leadership, 5*, 35-38.

Williams, J., & Dikes, C. (2015). The implications of demographic variables as related to burnout among a sample of special education teachers. *Education, 135*, 337-345.

Wisniewski, L., & Gargiulo, R. M. (1997). Occupational stress and burnout among special educators: A review of the literature. *The Journal of Special Education, 31*, 325-346.

Zabel, R. H., & Zabel, M. K. (2002). Burnout among special education teachers and perceptions of support. *Journal of Special Education Leadership, 15*, 67–73.

About the Authors

Dr. Oksana Huk is an Assistant Professor of psychology at Iona College, where he teaches graduate courses related to school psychology. She earned her doctoral degree from St. Johns University in 2012, and she has a research focus on resiliency, burnout, and practical applications of Rational Emotive Behavior Therapy. Dr. Oksana Huk

Dr. Brian Cesario is an Assistant Professor of psychology at Iona College, where he teaches graduate courses in statistics, research methods, and professional issues and ethics. He also supervises student researchers. He received his PhD in Industrial-Organizational Psychology from Northcentral University in 2013. He has research interests in workplace deviance, survey construction, and translational research methods.