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ARTICLE



Examining the relationship between perceptions of teaching self-efficacy, school support and teacher and paraeducator burnout in a residential school setting

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ABSTRACT

Despite teacher self-efficacy and burnout's influence on student outcomes, little research has been conducted on teacher self-efficacy and burnout in residential treatment schools. This study attempts to fill this need by examining the self-efficacy and burnout of teachers and paraeducators in a residential treatment school in the United States. We explore the relationships between educators' perceptions of school supports and educators' sense of self-efficacy and burnout. Our results revealed that while educators' perceptions of school supports were not related to educators' sense of efficacy, there was a significant relationship between educators' perceptions of school supports and reported levels of burnout. Educators who reported lower levels of school supports had high levels of burnout. We discuss implications for larger studies on this topic and for supporting educator well-being in residential treatment schools.

KEYWORDS

Emotional and behavioural challenges; teacher well-being; paraprofessional well-being; school supports; residential treatment school

Examining the Relationship between Perceptions of Teaching Self-Efficacy, School Support and Teacher and Paraeducator Burnout in a Residential School Setting

Residential treatment facilities in the United States and around the world provide services to children and youth with severe mental health, emotional, and behavioural disorders (Denecheau 2011; Lieberman 2004; McLean 2015). The goal of these treatment programs is to provide a structured environment for children and youth, while also preparing them to succeed outside the facility (Hair 2005; McLean 2015; Stroul and Friedman 1986). To meet this goal, treatment facilities provide intensive therapeutic and educational services (Denecheau 2011; Hestbæk 2005; Seti 2008; Whittaker et al. 2016). In recent years, there has been conflicting evidence of residential treatment facilities' effectiveness in meeting the needs of children and youth that has resulted in these facilities being under scrutiny (Frensch and Cameron 2002; Hornby and Witte 2008; Lee and McMillen 2008; Lieberman 2004; Zimmerman et al. 2000). Hoagwood and colleagues (2001) indicated that only 25% of youth in the treatment facility had made positive progress and were discharged, while 63% made no or minimal progress and indicated that a number of youth had been discharged for behavioural reasons, and 11% were making progress but were still unable to be discharged. Other researchers, however, have noted improvements in symptomatology of children served in residential treatment facilities (Hair 2005; Helgerson et al. 2007; Nofle et al. 2011). Relatedly some studies have indicated that youths' symptomatology got worse after intake,

while others improved (Lyons et al. 2001; Wilmshurst 2002). In regard to academic outcomes for youth in residential treatment facilities, researchers have found that students who have emotional and behavioural challenges often perform lower academically regardless of setting, though Reid and colleagues (2004) found larger negative academic outcomes for those students served in residential treatment settings. Additionally, there have been a limited follow-up studies with adults who were once youth in a residential treatment facilities. However, among the available studies, there is evidence that youth in residential treatment facilities experience major challenges adjusting to adult life (Farrell and Polat 2003; Hornby and Witte 2008). For example, Hornby and Witte (2008) studied youth in New Zealand who had been discharged 10-14 years previously from a residential treatment facility for emotional and behavioural difficulties. The researchers found that 93% of the former students had left school without any qualifications, and at the time of the study only 50% of the former students were employed.

Among the possible causes of negative youth academic, emotional, and behaviour outcomes in residential treatment facilities are high rates of staff turnover including educator turnover (Adera and Bullock 2010; Barford and Whelton 2010; Connor et al. 2003; Lyons, McCulloch, and Hamilton 2006). This negative correlation between educator turnover and youth achievement has been demonstrated in many studies (Boyd et al. 2005; Guin 2004; Hanushek, Mayer, and Peterson 1999; Ronfeldt, Loeb, and Wyckoff 2013). Through exploration of ways to reduce staff turnover, researchers have made connections between educator well-being and retention (e.g., Parker et al. 2012; Pillay, Goddard, and Wilss 2005). Specifically, when educators feel supported in their schools and by their colleagues, they are less likely to leave the school (Hakanen, Bakker, and Schaufeli 2006; Harris and Rose 2002). Additionally, researchers have identified a positive correlation between teacher well-being and youth achievement (Koundorou 2012; Roffey 2012). Most studies on this topic, however, focus on general education settings with limited studies on special education populations and fewer on residential settings serving primarily students with emotional and behavioural challenges (e.g., Adera and Bullock 2010). To expand this area, we present findings from a study on educator (i.e., teachers and paraeducators) well-being (i.e., teaching self-efficacy and burnout) and its relationship to school and classroom supports in a residential treatment school for students with challenging behaviours.

Theoretical framework

To guide this investigation, we adopt a modified version of the prosocial classroom theoretical model described in the work of Jennings and Greenberg (2009) that emphasizes the importance of teacher social-emotional competence in the development of high quality classroom environments. Briefly, the prosocial classroom model emphasizes the significance of teachers' well-being as measured by their social-emotional competence in the development and maintenance of supportive teacher–student relationships, effective classroom management, and indicators of student health and improved student learning outcomes (Jennings and Greenberg 2009). These factors, as well as teachers' classroom management and instructional skills, facilitate the creation of a trusting, positive classroom climate that is conducive to learning and promotes improved behavioural and academic outcomes for all students (Jennings and Greenberg 2009). We add to this model by asserting that in classrooms with teachers and paraeducators, paraeducator well-being is also important to creating a quality classroom environment as paraeducators play an integral role in supporting classroom instruction, classroom management, and the social and emotional outcomes of students (Cipriano et al. 2016 ; Carnahan et al. 2009; Monzó and Rueda 2001; Weare 2015).

Additionally, Jennings and Greenberg's (2009) model discusses how teacher well-being can be positively developed by contextual factors such as a supportive school culture and collegial relationships. These factors have also been found to predict teachers' and paraeducators' efficacy and job satisfaction (Carnahan et al. 2009; Chang 2009; Nichols and Sosnowsky 2002). While

evidence from well-researched inclusive learning environments suggests that classrooms that promote educators' well-being provide benefits to educators at every grade level, most of this research takes place in the primary grades where children may spend the entire school day in one classroom (Jennings and Greenberg 2009; Spilt, Koomen, and Thijs 2011). Since students and educators in residential treatment classrooms similarly spend a majority of the school day in a single classroom with a consistent group of educators, we posit that individuals in this environment may see similar relationships between educator well-being, classroom quality, and student outcomes. Moreover, occupational demands and supports play a key role in supporting educator well-being and thus are included in our study (Hakanen, Bakker, and Schaufeli 2006).

Educator self-efficacy

Most research about educator well-being examines the relationships between teacher stress, self-efficacy, and burnout (Fleming, Mackrain, and LeBuffe 2013; Galand, Lecocq, and Philippot 2007; Maslach, Leiter, and Schaufeli 2008; Roffey 2012). Self-efficacy is defined as a 'teachers' beliefs in their ability to influence valued student outcomes' (Skaalvik and Skaalvik 2007, 612). Self-efficacy influences teacher attrition as teachers with lower self-efficacy are more likely to leave the teaching profession (Klassen and Chiu 2011). Moreover, teacher self-efficacy is related to teachers' ability to effectively handle problem behaviours, engage in effective classroom management and instruction, and establish positive student-teacher relationships (Muijs and Reynolds 2002; Zee and Koomen 2016). Though this relationship has not been thoroughly examined in paraeducators, research suggests that paraeducators face similar struggles with self-efficacy as teachers (Shyman 2010). Similarly, few studies focus on the self-efficacy of educators in residential treatment schools. Literature on self-efficacy of educators and staff who work with students with challenging behaviours suggests that low self-efficacy may result in increased staff vulnerability to experiencing negative emotional reactions to challenging student behaviours (Hastings and Brown 2002). This may be particularly problematic in settings where challenging behaviours are commonplace. In addition to the previously discussed relationships, low self-efficacy is also related to educator burnout (Aloe, Amo, and Shanahan 2014; Brouwers and Tomic 2000).

Educator burnout

According to Maslach (1982), burnout is defined as a 'syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do people work of some kind' (p. 3). The first component of burnout, emotional exhaustion, occurs when an educator's emotional energy is drained and the educator does not feel like he or she is emotionally capable to deal with a situation (Maslach, Schaufeli, and Leiter 2001). The second component of burnout, depersonalization, occurs when a person feels detached from his or her student(s) and acts in negative and dehumanizing ways (Maslach, Schaufeli, and Leiter 2001). And the third component of burnout, reduced personal accomplishment, occurs when educators feel like they cannot reach their work-related goals (Maslach, Schaufeli, and Leiter 2001). Research has indicated that burnout is very prevalent in the residential care field. Such that, Decker and colleagues (2002) studied residential childcare staff burnout and discovered that over 50% of the participants had at least one component of burnout. Burnout can lead to professionals being inflexible, cynical, negative, and rigid (Freudenberger 1977). Moreover, researchers have found that burnout can also lead to depressive symptoms (Shin et al. 2013; Steinhardt et al. 2011). Depressive symptoms in educators is related to negative student academic outcomes and lower quality classroom climates (McLean and Connor 2015; Weare 2015).

Educator burnout is also related to high turnover rates which presents a challenge to forming positive educator-student relationships. Teacher turnover is highest for special education teachers

working with students with emotional and behaviour disorders compared to other special education teachers (Billingsley 2004; Boe et al. 1997; Kaff 2004), and special education teachers have higher turnover rates than general educators (Boe, Cook, and Sunderland 2008; McLeskey, Tyler, and Saunders Flippin 2004; Payne 2005). Consequently, children and youth in residential treatment facilities are subjected to frequent changes to their environment. For example, in one residential treatment facility, during a three and a half year time frame, 46.1% of the staff members left the facility, demonstrating a high staff turnover rate (Connor et al. 2003). This high turnover rate has been supported by previous research which indicates turnover rates from 32% to 72% over the last 40 years (Ben-Dror 1994; Lakin et al. 1982; Ronfeldt, Loeb, and Wyckoff 2013).

Purpose and research questions

Despite the fact that teacher well-being is influential for student outcomes and performance, little research has been conducted on supporting teacher well-being in residential treatment schools. The majority of the research in residential treatment facilities has focused on well-being of child-care workers and other staff members, without considering the well-being of residential treatment school educators. The only known study about teacher well-being in residential treatment was conducted by Connor and colleagues (2003), and the researchers examined factors that affect teacher turnover. The researchers found that among residential staff, client care workers and teachers were among those who had the highest turnover rates in the facility.

This study addresses the need for research that examines the well-being of teachers and paraeducators in a residential treatment school. Our research questions are:

- (1) In what ways are educators' perceptions of school supports related to their teaching self-efficacy?
- (2) In what ways are educators' perceptions of their school support related to their levels of burnout?

In this paper, we discuss the results of our study and provide implications for larger studies on this topic and implications for supporting teacher and paraeducator well-being in residential treatment schools serving students with challenging behaviours.

Methods

Institutional review board approval for this project was received prior to participant recruitment. To conduct this study, we partnered with a residential school district in New York State that employs 75 teachers and paraeducators to serve the needs of approximately 350 students with challenging behaviours. We were contacted by the district to provide support to their special education student population initially and we expressed an interest in working with the school staff. The educators in this study included individuals who worked at the participating district at the primary or secondary level. A recruitment email was sent to all teachers and paraeducators and they were asked to complete the survey within two weeks. Surveys were collected through and housed on the Qualtrics site. Participants were asked to complete consent before beginning the survey and were asked to include their email addresses to allow for dissemination of the survey incentive (\$20 gift card). Identifying information was then removed from all surveys and participants were assigned a random number.

We had a response rate of 63 participants (84% response rate; 41 teachers and 22 paraeducators), of which 39 provided complete data. Teacher participants had an average of 11 years working in their current school and paraeducators had worked at their current school for an average of 6 years. [Table 1](#) presents descriptive statistics on the educator's years of experience, degrees, and certifications.

Table 1. Descriptive statistics.

	M	SD	N	%
Teachers	-	-	41	59.40
Paraeducators	-	-	22	31.90
Teachers' Years of Teaching	15.68	10.01	-	-
Paraeducators' Years of Teaching	9.40	9.76	-	-
Teachers' Years at School	11.32	9.67	-	-
Paraeducators' Years at School	5.87	8.27	-	-
Teachers' Degree Level	-	-	31*	44.90*
Paraeducators' Degree Level	-	-	14*	20.20*
Teachers' Certification Level	-	-	31*	44.90*
Paraeducators' Certification Level	-	-	6*	8.60*

* at least some college experience and a provisional certificate or higher

Measures

All consenting educators completed a series of self-report measures. We report all measures that were used as part of the presented analyses. To measure and evaluate participant's perceptions of school supports, educators self-reported on a battery of survey questions previously developed and piloted by members of the research team as part of a larger evaluation of classroom quality. The *Classroom Observation Research Extension* (CORE; Authors, working paper) examines educator perceptions of personnel supports (7 items), expectations and support services (4 items), barriers to effective service delivery (4 items), collaboration between special and general education (5 items), and mindset (5 items), on a 4-point Likert scale from 1 (*strongly agree*) to 4 (*do not agree*). In this paper, we focus on the personal supports subscale of the tool ($\alpha = .89$). Within this subscale, participants respond to statements such as 'This school provides a positive working environment' and 'This school offers adequate support to ensure my physical and psychological well-being'.

To examine educator efficacy, educators self-reported on the *Teachers' Sense of Efficacy Scale* (TSES; Tschannen-Moran and Hoy 2001), a 23-item measure of three dimensions of teaching efficacy: efficacy in using instructional strategies ($\alpha = .89$), efficacy in classroom management ($\alpha = .92$), and efficacy for student engagement ($\alpha = .88$), and total efficacy score ($\alpha = .95$). Teachers are asked to indicate, 'How much they can do' in response to various classroom and instructional challenges such as 'How much can you use a variety of assessment strategies?', 'How well can you keep a few problem students from ruining an entire lesson?', and, 'How much can you do to foster student creativity?' Participants were asked to respond to the questions using a 6-point Likert scale from 1 (*nothing*) to 9 (*a great deal*).

The *Maslach Burnout Inventory- Educators' Survey* (MBI-ES; Maslach, Jackson, and Leiter 1996) was used to assess teacher and paraeducator burnout. The MBI-ES is a 22-item measure designed to assess burnout syndrome in teachers, as characterized by high levels of emotional exhaustion ($\alpha = .89$) and depersonalization ($\alpha = .70$) and low levels of personal accomplishment ($\alpha = .79$). Sample items include, 'I feel emotionally drained from my work', 'In my opinion, I am good at my job', and 'I doubt the significance of my work.' Participants were asked to respond using a 7-point Likert scale from 0 (*never*) to 6 (*everyday*).

Analysis

To examine the relationship between educator perceptions of school and classroom supports and educator self-efficacy and burnout we examined linear regression models for questions 1 and 2 with school supports serving as the independent variable and burnout and self-efficacy serving as dependent variables. Linear regression analysis allowed us to examine whether the perceived school support variable predicted educator scores for the independent variables. Our sample size for this study is small, as a result, we were unable to use models such as multiple regression, path

analysis, and structural equation modelling that would have allowed for examination of all variables of interest within one model (Field 2009). We instead used linear regression for our analyses as our data meets suggestions for minimum sample sizes for these models (Austin and Steyerberg 2015; VanVoorhis and Morgan 2007).

Results

Prior to conducting analyses, data were inspected and no significant departures from linear regression assumptions were detected. Listwise deletion was used to address missing data. Linear regression analyses were conducted to examine the relationship between perceived school supports and teaching self-efficacy and burnout. Table 2 provides the standardized regression coefficients for the relationships of interest. The set of independent variables significantly predicted educator burnout ($F(1, 32) = 7.15, p < .05, R^2 = .18$) while results for teacher self-efficacy was not significant. Specifically, results revealed that educators who reported higher levels of school supports were those that reported less burnout ($\beta = .42, p < .05$).

Discussion

The purpose of this study was to examine the relationship between educator perceptions of their school supports and educator self-efficacy and burnout in a residential treatment school for students with challenging behaviours. Our results revealed that educators who viewed their school as providing greater supports were those that reported less burnout. This finding makes sense within the current teacher burnout literature which suggests that organizational variables are related to employee burnout in residential treatment centres and among special and general education teachers (Betoret & Artiga 2010; Lakin, Leon, and Miller 2008; Male and May 1997). For special educators, Zabel and Zabel (2002) found that burnout was negatively correlated with perceptions of support from school administrators. Our study builds on these findings because we provide data specifically on educators in residential treatment schools which is a different population than previously studied (i.e., special education teachers in general education settings or personnel in residential treatment centres who may or may not be teachers). Moreover, Zabel and Zabel (2002) explored how support from administrators was related to burnout with teachers while we examined school supports more broadly and included organizational supports such as work climate, employee benefits, resources, training, and access to technology. Moreover, our research study is unique in that it also included data from paraeducators who are important but sometimes overlooked in literature on educator well-being.

We did not find a significant relationship between educators' teaching self-efficacy and their perceived school supports. Within the teacher well-being literature, some researchers have found that self-efficacy serves as a mediation variable between school supports and demands and teacher burnout (Schwarzer and Hallum 2008). However, this literature focuses more on school demands than support (Betoret 2006; Schwarzer and Hallum 2008). Among those researchers that have examined the relationship between school supports and self-efficacy, the focus was primarily on social supports which was often not defined (Nabavi et al. 2017; Shen 2009). As stated earlier, our examination of school supports expanded beyond social support (i.e., relationships with coworkers and administration) to include other forms of support. This difference in support may explain why

Table 2. Standardized regression coefficients predicting (1) educator self- efficacy and (2) educator burnout.

	Model 1			Model 2		
	B	SE	β	B	SE	β
Perceived School Supports	-.45	.30	-.25	5.76*	2.16	.42

* values significant at $p < .05$.

our finding differed from those of researchers who explored school social support and found significant relationships between school social support and self-efficacy. Moreover, in their 2007 article, Tschannen-Moran and Hoy found that factors such as school supports were more likely to influence novice teachers' self-efficacy than those that had been teaching 4 or more years. The educators in this sample taught for an average of 15 years with over half of the educators (76%) reporting 4 or more years of experience as a teacher or paraeducator. Thus, contextual factors like school supports may not be a significant factor in self-efficacy beliefs as most of these educators were experienced. It is possible that supports were related to efficacy in some subscales but not others. Moreover, our limited sample size may also be related to our findings. Future research should explore this relationship with a larger sample of educators.

Implications for practice

Examining educator burnout and self-efficacy can provide important clues into ways to reduce teacher and paraeducator attrition, especially in settings like residential treatment schools where attrition rates are high (Ben-Dror 1994; Lakin et al. 1982; Ronfeldt, Loeb, and Wyckoff 2013). Our study suggests that school supports such as a positive work climate, opportunities for professional development, and adequate compensation and benefits serve as a protective factor against burnout for educators. Thus, we encourage administrators and school personnel to discuss ways that these supports can be bolstered at the school level. Other efforts to reduce attrition should include the identification of job stressors that specifically impact residential treatment educators' teaching practices, workplace environment, and ultimately their decisions to stay within the field. Programs need to be proactive and address job stressors in order to prevent these conditions and create support systems to address the needs of educators (Adera and Bullock 2010). In-service workshops would be one avenue to support educators by allowing them to voice their needs and concerns, and create solutions to meet their needs. The organization of the program affects the overall school climate and workplace stress. Studies suggest that having shared responsibilities or encouraging teamwork between educators helps to alleviate the stress associated with working with students with emotional and behavioural challenges. The school climate has a direct influence on effective teamwork and should include respectful relationships throughout the different organizational levels of the school, good interpersonal relationships with colleagues, open communication about behaviour management, and availability and presence of colleagues within the classroom (Park, Henkin, Egley, 2005). All of these components could be discussed and encouraged to further ensure the school climate is supportive of effective teamwork and help to reduce workplace stress and increase better student outcomes.

Limitations & future research

Though this research adds to the limited literature on teacher and paraeducator well-being in residential treatment facilities, it is not without limitations. A major limitation of this study is the small sample of participants, all of whom were employed in the same residential school. With too small a sample, the model may overfit the data, meaning that it fits the sample data well, but does not generalize to the entire population. Likewise, generalization of our findings are limited because this study took place in one residential treatment facility. Additionally, we did not collect demographic information from our sample, though based on our observations and discussion with administration, the sample is similar to what is reported nationally in the United States (e.g., a predominately white female teacher population and a relatively more diverse paraeducator population; Genzok 1997). Moreover, we chose to use listwise deletion in our analyses. Limitations with this approach to missing data are that it assumes that missing data are missing at random and that it has reduced the power in our already small sample size to 39 participants. We encourage future research in the area of educator well-being in

residential school settings to build upon our study with a larger more robust sample. The results presented in this study examine the relationships between variables of interest but do not speak to the causal relationships between variables. Due to the small sample of participants, we could not employ advanced statistics to examine the directions of the relationships we have found and thus we cannot speak to which variables cause which outcomes. We chose to report on the overall score for the TSES (self-efficacy) and MBI (burnout) measures instead of examining the individual subscales. We encourage future research that examines specific subscales as there may be significant relationships between subscales of these measures and perceived supports.

Conclusion

There is limited data available regarding self-efficacy and burnout of educators in residential treatment classrooms supporting students in classrooms for students with emotional and behavioural challenges. By capturing this important contextual data, researchers have the potential to impact local and state policy regarding educator professional development and supports at the school level. Moreover, these findings inform research in the interest of developing ecologically valid interventions to support teaching and learning in residential educational settings. As a field, we must find ways to support the educators that in turn support our students with some of the most challenging needs.

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