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BEYOND RESILIENCE: ARMING SPECIAL EDUCATION TEACHERS WITH "HOPE THEORY" IN THE FIGHT AGAINST BURNOUT

A MASTER'S THESIS

SUBMITTED TO THE FACULTY

OF BETHEL UNIVERSITY

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EDEN BUCHWALD-MCGLENNON

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BEYOND RESILIENCE: ARMING SPECIAL EDUCATION TEACHERS WITH "HOPE THEORY" IN THE FIGHT AGAINST BURNOUT

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MAY 2023

APPROVED

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I would like to dedicate my master's thesis to my incredible parents, Tim and Jane as well as my awe-inspiring grandparents, Henry and Emilie. Without their endless support, unconditional love, encouragement, knowledge, guidance, and their belief in me as a person I am not sure I would have finished this project. Thank you to my sister Rose for always making me laugh especially during the darkest of times. A very special thank you to my loving boyfriend Jason for always being there for me, cooking dinner on those late nights when I was writing, believing in me, supporting me and helping me stay motivated. Thank you to my thesis advisor Dr. Meghan Cavalier for supporting me through this entire process. Lastly, in loving memory of my beloved grandparents Jean and James who have passed on to the next dimension but are always with me in spirit. I hope I have made them proud and can continue to do so. In conclusion, this paper is dedicated to all of my amazing students and every extraordinary person that decides to be a special education teacher, thank you.

"The Talmud poses four self-challenges expressed as the following four questions of self-determination:

Have I lived honorably on a daily basis? Have I raised the next generation? Have I set aside time for study? Have I lived hopefully?" —H. Buchwald, Let Me Tell You a Story (2020)

Abstract

Teachers have been forced to face many new workplace challenges since the COVID-19 pandemic emerged in March 2020; this has resulted in increased job-related stress. Pre-pandemic, teacher stress levels were already much higher than other occupations and strongly linked to teacher attrition. The majority of research in the field of special education, identifies "burnout" as the leading predictor of teacher attrition. Indeed, burnout has been dubbed the "reward for overwork" and the end result is exhaustion, depersonalization, a sense of inefficacy and often a departure from the field of education. The following research explores the destructive nature and scope of teacher burnout, existing intervention and prevention strategies, and the complementary role Hope Theory may play in adding to the psychological armor of special education teachers in their fight against burnout.

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CHAPTER I: INTRODUCTION

This literature review explores the relationships between work stress and burnout in special education teachers, as well as the potential role Hope Theory (HT) may play in educator preparation programs for burnout prevention.

Research Rationale

Education is a field of great consequence, and one that is often chosen for altruistic reasons (König & Rothland, 2012). A particularly powerful source of motivation for aspiring teachers is the potential to touch and positively impact the lives of hundreds of children over the course of a career. However, teaching is also a highly demanding profession, and regardless of how sincere one's motives and dedication, teaching is extremely stressful work, a fact that most novice teachers do not seem to consider and for which they are not adequately prepared. Furthermore, when one adds to the equation the unique set of challenges that special education teachers face, it is not surprising that many of them succumb to burnout syndrome (Maslach, 1998). The chronic work-related stress driving burnout often causes teachers to lose their passion for teaching and their sense of hopefulness (Yu et al., 2014). This is extraordinarily disheartening, since the majority of teachers enter the profession with high hopes, excitement, and with great motivation to change lives for the better (Tsang et al., 2016).

A full 50% of all special education (SPED) teachers hired leave their position within the first five years (Donne & Lin, 2013). According to the Minnesota Teacher Supply and Demand Report published in 2017 (Cassellius, 2017), the recruitment of special education teachers will be an area of increasing difficulty for the foreseeable future. Even prior to the 2020 COVID-19

pandemic, the link between special education teachers attrition and burnout was well documented (Billingsley & Bettini, 2019). Post pandemic, things have only gotten worse. Anecdotally, the present researcher observed an increase in symptoms of burnout syndrome during the pandemic due to the extraordinary expenditure of emotional labor required to preserve the relationships fellow SPED teachers had built with their students and families. Symptoms were further exacerbated by endless problems associated with logistics, administration, heightened expectations, increased workload, frustrated parents, student regression, and the stress of navigating distance learning and hybrid learning with fidelity (Cormier et al., 2022). This experience has left SPED teachers completely drained emotionally, physically, mentally, and spiritually. Many teachers have questioned whether working as a SPED teacher was right for them. Discussions among colleagues have frequently centered around the remote likelihood of being able to survive in the field of special education long-term, or long enough to receive their pensions while maintaining their sanity.

The established relationship between burnout and attrition should be particularly alarming considering that there has been a perpetual shortage of SPED teachers over the last two decades. Clearly, the current methods of burnout prevention leave a lot to be desired. One of the most popular programs intended to help in the area of teacher burnout is known as resilience-building (Gouveia et al., 2020). Teacher resilience is commonly defined as the capacity to readily recover (i.e., to bounce back) from and adapt to stressful work conditions. The present researcher has been recognized as a "survivor" and a "resilient" individual in various domains of life; unfortunately resilience has its limitations. According to McCormick and Von Grey (2022, p. 23), resilience is rooted in a "reactive quality," evolved to withstand hardship and to adapt to status quo conditions more effectively; however, "it does not in itself inspire action to improve the work context" (McCormick & Von Grey, 2022, p. 23). The question then becomes, should every chronically stressful work context call for a resilience response on the part of the special education teacher? In some contexts, a resilience response may actually be detrimental to the long-term survival of the individual (Mahdiani & Ungar, 2021). Consequently, it would behoove the profession to search out new answers to the problems of stress, burnout, attrition and resilience in an attempt to facilitate SPED teachers' survival within the field and to help them rediscover their calling (Billingsley & Bettini, 2019).

In a class offered at Bethel University entitled "Resilience Isn't Enough" (McCormick & Von Grey, 2022), Professor McCormick posited that burnout indicates that an individual has limited resources (i.e. physical, psychological, and emotional), that chronic workplace stress depletes these resources, and that when these resources are depleted, resilience fails, and the teacher is no longer able to function effectively. This observation was disheartening due to the fact that many educational researchers have emphasized the need to address teacher stress and burnout amid COVID-19 through increased teacher resilience. However, resilience seems to be only part of the solution. Thus, there is a gap in the understanding with regard to SPED teachers' burnout and the effectiveness of resilience-building programs. Indeed, Dr. Michael Leiter (2018), a leading expert in teacher burnout, has intimated that resilience is a limited concept that has not been empirically defined and is not measurable; further, resilience is not a skill set, rather, it is an outcome, and it cannot be taught. Thus, it would seem that current resilience-focused burnout prevention/intervention programs for SPED teachers are insufficient and in need of modification.

In order to address this problem, Hope Theory has been advanced (McCormick & Von Grey, 2022).

Hope Theory (HT) is rooted in the realm of positive psychology, much like the cognitive-behavioral theories of mindfulness and gratitude. Hope is an alternative construct also potentially integral to coping with adversity and mitigating burnout. Although hope shares similarities with resilience, hope is both distinct and easier to understand and apply (Munoz et al., 2020). Further, while resilience has been identified as a non-cognitive capability, HT is based on a way of thinking that can be taught and measured (Snyder, 2002). Hope Theory provides a strong cognitive, motivation-based framework for pursuing goals. Moreover, in times of stress, those with "high hope" are better able to identify ways to address and overcome the situation. Indeed, the development of hope-based thinking may serve as a cognitive skill set that could potentially bolster a teacher's ability to move towards the utilization of resources that enable resiliency (Snyder, 2002). In this regard, HT may represent a complementary psychological tool capable of augmenting resilience training, thereby enabling SPED teachers to move beyond merely enduring workplace stress toward initiating action to improve the work context. By improving the work context, chronic job-related stressors can be minimized, and burnout potentially prevented. While researchers have addressed the relationships between the tenets of HT and burnout prevention within the context of multiple professions (e.g., athletics, nursing, social work, emergency medicine), the possible application of HT in educator preparation programs for burnout prevention in SPED teachers has not been fully explored. Responding to this knowledge gap, this literature review aims to summarize the extent of the evidence, framed around the guiding research question.

Definition of Terms

Important terminology incorporated throughout this paper is defined as follows.

Teacher Attrition: Attrition is defined as the phenomenon of abruptly leaving the education field altogether, either to take another job outside of teaching or to address personal concerns including, but not limited to, child rearing, mental and physical health problems, family moves, retirement, etcetera. Teacher attrition rate is calculated as the percentage of teachers exiting the education profession over the course of a given school year (Cooper & Alvarado, 2006, p. 18).

Resilience: Resilience is one of the core constructs of positive psychology and is defined as the ability of an individual to withstand, and "bounce back" from adversity. Increasingly, researchers have turned their attrition to "resilience-building" within the special education teacher community in the hope of mitigating burnout and other related mental health concerns plaguing the profession (Zhang et al., 2020).

Burnout Syndrome: Burnout syndrome is defined as a pathological syndrome resulting from chronic stress due to adverse working conditions, primarily antagonistic, emotion-ladened interpersonal interactions. It is operationalized by the components of Emotional Exhaustion (i.e., feelings of being emotionally overextended and exhausted by one's work), Depersonalization (i.e., unfeeling and impersonal response towards recipients of one's service, care, treatment, or instruction), and reduced Personal Accomplishment (i.e., lacking feelings of competence and successful achievement in one's work with people) (WHO, 2018). *Maslach Burnout Inventory:* The Maslach Burnout Inventory (MBI) is a Likert scale-based psychometric instrument comprised of twenty-two response items designed to measure the frequency with which the three components of burnout syndrome negatively impact on one's job performance. The Emotional Exhaustion (EE) subscale contains nine items; The Depersonalization (DP) subscale contains five items; The Personal Accomplishment (PA) subscale contains eight items. Respondents rate the items for each subscale on a 7-point frequency range from 0 (never) to 6 (daily). Higher scores on the EE and DP subscales, and a lower score on the personal accomplishment subscale, indicates greater burnout. The MBI scoring algorithm generates an overall burnout syndrome score and places respondents along a continuum from less to more "burned out." The Maslach Burnout Inventory-Educator Survey (MBI-ES) is an updated version of the MBI specifically for educators (Maslach et al., 1986).

Hope Theory: Hope Theory is a cognitive-behavioral theory of hope, wherein the construct of hope is defined as a positive motivational state that emanates from an interactively derived sense of successful goal-directed behavior (i.e., agency cognition) and strategic planning required to meet goals (i.e., pathways cognition) (Snyder, 1994). Accordingly, goals function as the cognitive component that anchors Hope Theory, and provide the targets of mental action sequences (Rand & Touza, 2016).

Guiding Research Question

How could the tenets of Hope Theory (HT) best be used to inform educator preparation programs for burnout prevention in SPED teachers? Upon researching this question, it is important to consider the following elements: 1) the mental health hazards of burnout in SPED teachers; 2) the current burnout prevention programs for special education teachers (e.g., resilience-building); and 3) the potential for HT to augment existing burnout prevention programs for SPED teachers.

CHAPTER II: LITERATURE REVIEW

Overview of the Research Process

The methods of research investigation for this thesis involved using available internet search engines with a focus on peer-reviewed journals. Articles from databases (ERIC [EBSCOhost], PubMED, PsycINFO, Taylor and Francis Online, Proquest, PsycArticles, PsycExtra, Education Research Complete, Dissertation Abstracts, and SPARK repository) were accessible through the Bethel University Library website. National survey sites sponsored by the National Education Association, RAND corporation, Gallup, the Bureau of Labor Statistics, and the Minnesota Teachers' Union were also accessed for relevant data. The primary literature search centered around the following key search terms: "burnout and special education," "teacher burnout," "attrition and special education," "mental health and special education," "burnout syndrome," "depression and special education," "Maslach Burnout Inventory," "teacher burnout interventions," "job demands," "personal resources," "positive psychology," "psychological capital," "resilience," "hope," "Hope Theory," "hopelessness," "resilience and special education," and "hope and special education."

This chapter reviews the literature on teacher stress and attrition, origins of burnout, the impact of burnout on SPED teachers, current intervention efforts, and the potential role Hope Theory may play in mitigating burnout and promoting overall mental and physical health in special education teachers.

Burnout

The chronic work-related stress driving burnout often causes SPED teachers to lose their passion for teaching and their sense of hopefulness. The established relationship between burnout and attrition should be particularly alarming considering that there has been a perpetual shortage of SPED teachers over several decades.

Pandemic Stress in the Teaching Profession

On January 30, 2020, the World Health Organization (WHO) declared the outbreak of the COVID-19 disease an international public health emergency. This has proven to be the case for individuals within the teaching profession. Teachers have had to face relentlessly demanding working conditions; COVID-19 specific stressors related to lockdown, isolation, physical distancing, and loss of income have emerged. The pandemic has also introduced significant challenges with regard to interpersonal relationships, the necessity to acquire new skills, and the need to achieve higher productivity. Simultaneously, researchers have found that teachers experienced increased stress levels during COVID-19 and have generally felt overworked (Kim et al., 2022).

Pressley (2021) studied the effects of implementing alternative teaching approaches (e.g., socially distanced classrooms, virtual instruction, hybrid teaching models) during the 2020-2021 school year. The study utilized a mixed-methods research design to answer the following research questions: 1) What factors predict teacher stress during virtual and hybrid instruction during COVID-19? 2) What are teachers' perceptions of stressors during COVID-19? Specifically, the researcher used survey data and qualitative narrative data to analyze variables

that might predict teacher stress. The research focused on elementary teacher stress one month into COVID-19 teaching requirement adaptations. Survey psychometric instruments included: the COVID Anxiety Scale (Lee, 2020), five one-item anxiety questions (Davey et al., 2007), and the Teacher Burnout Scale to assess elements of teacher stress and perceptions of administration support (Seidman & Zager, 1986).

Findings were based on response data from 312 elementary teachers from 16 states, including 208 completely virtual teachers and 104 hybrid teachers. Inclusion criteria required that survey participants currently teach at an elementary school in the United States. Demographics indicated 265 (84.9%) of the respondents were Caucasian/white. Pressley's (2021) results showed significant correlations between high stress levels and current anxiety, COVID-19 anxiety, anxiety communicating with parents, anxiety communicating with administrators, administrative support, anxiety using district technology, and anxiety providing virtual instruction. The regression model was significant and explained 40% of the variance in overall stress level. Four significant independent predictor variables for teacher stress were identified: current anxiety level (p<0.001), COVID-19 specific anxiety (p<0.001), increased anxiety due to communicating with parents (p<0.005), and low administrative support (p<0.005). Also, qualitative data revealed that teachers felt overly burdened with heavy workloads and unrealistic timelines to accomplish assigned tasks. A second major perceived factor leading to teacher stress included unrealistic expectations set by parents, school administrators, and districts.

Pressley (2021) concluded that hybrid and virtual elementary teachers faced abnormally high stress levels due to work overload one month into the 2020-2021 school year. District and school administrators failed to provide vital support and instructional guidance to teachers navigating the challenges of the pandemic.

Mental Health and Wellbeing

Other studies conducted throughout the pandemic saw increased reporting of mental health issues and a corresponding dramatic decrease in teacher wellbeing by the end of the 2020-2021 school year. In a study conducted by Walter and Fox (2021) that explored teacher wellbeing during COVID-19, the researchers used a long-term qualitative design that used recurring cross-sectional analysis to evaluate teacher wellbeing at two time points: June 2020 and March 2021. Walter and Fox (2021) sought answers to two primary research questions: (a) What do teachers identify as primary barriers to teacher wellbeing during the COVID-19 pandemic, and (b) How do perceptions of barriers to (and facilitators of) teacher wellbeing change over time? Study inclusion criteria required that all participants were at least 18 years old, were teaching full time, and taught in grades kindergarten through twelfth grade. A total of 49 teachers (96% female) were recruited into the qualitative study at time one; twenty-five of these teachers also participated at time two. The age of study participants ranged from 20 to 66, 68% of participants had been teaching for five or more years at the time of the study. Teachers (n = 49) responded to survey questions at time one. Open-ended survey items centered around factors that supported their wellbeing at the individual and school level during the pandemic. Specifically, teachers were asked about their perceptions of wellbeing, their capacity to provide

high quality instruction, their individual strategies to manage stress, school or district support related to teacher wellbeing, and what teachers thought their districts/schools could be doing more effectively. In addition, a subset of 16 teachers participated in virtual/recorded interviews (30-60 minutes) inquiring into their experiences related to wellbeing during the spring of 2020. At time two, researchers sent a more comprehensive survey regarding information about what was learned in the virtual interview process.

Data were analyzed using recurrent cross-sectional analysis in which themes at two time points were compared using a method of precision coding (Grossoehme & Lipstein, 2016). The results indicated that teachers consistently reported a number of barriers to their wellbeing while teaching during the COVID-19 pandemic at the individual level and the contextual level. Barriers at the individual level included: (1) a lack of boundaries; (2) disconnection or loss of purpose; (3) low efficacy; and (4) a general decline in physical and emotional wellbeing. Barriers at the contextual level (e.g., school/district) included: (1) heightened uncertainty; (2) unrealistic expectations; (3) limited teacher input; and (4) lack of flexibility and autonomy. Teachers also identified self-care strategies, dispositional wellbeing, support from peers, empathetic leadership, and adequate resources as facilitators of wellbeing. Walter and Fox (2021) concluded that teachers tended to feel less supported by their administrators and more worn down by the job as the pandemic wore on. They also observed that in rare cases where teachers indicated no effect of COVID-19 on wellbeing over time, high levels of school-based support including empathetic leaders, opportunities for input, and strong connections to other staff were reported.

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The stress of mandatory isolation and social distancing during the pandemic likely hit SPED teachers particularly hard (Langher et al., 2017). In a study by Cormier et al. (2022) investigating the mental health impact of COVID-19, the researchers conducted a nationwide survey of stress levels, burnout, anxiety, and depression in SPED teachers. A total of 468 participants across the United States were recruited for the study. All participants responded to the following Likert scale-based psychometric instruments: Maslach Burnout Inventory-Educators Survey (MBI-ES) (Maslach et al., 1986); Patient Health Questionnaire (PHQ-9: a tool for diagnosing and assessing major depressive disorder (MDD) (Kroenke et al., 2001); Generalized Anxiety Disorder scale (GAD-7) (Spitzer et al., 2006); Teacher Specific Stress Assessment (Bernard, 2016); and a generic COVID-19 impact questionnaire (Cormier et al., (2022). Cormier et al. (2022) found that a significantly large percentage of SPED teachers were experiencing clinically diagnosable symptoms of MDD and GAD relative to standard U.S. MDD prevalence rates after the start of COVID-19. Special education teachers also reported that COVID-19 had an extreme impact on their overall stress level (91%) and perceived emotional exhaustion (83%). Cormier et al. (2022) concluded that the wellbeing of many SPED teachers was in jeopardy and that they were a particularly vulnerable group of educators in need of mental health treatment for stress, anxiety, and depression.

An Ever More Stressful Occupation

Long before the onset of the COVID-19 pandemic, teaching had been consistently described as one of the most stressful occupations. Johnson et al. (2005) ranked 26 different occupations along three principal stress-based scales: 1) physical health (i.e., assessed with

questions associated with physical symptoms of stress), 2) psychological well-being (i.e., questions pertaining to clinical symptoms of stress-induced mental illness), and 3) job satisfaction (i.e., questions about sources of stress regarding the fundamental nature of the job itself). The results indicated that the three scale scores were highly intercorrelated, suggesting that as physical health deteriorates, so too does psychological wellbeing. Also, the researchers noted that as physical health and psychological wellbeing deteriorate, job satisfaction drops. Further, Johnson et al. (2005) ascertained the six occupations that had the highest average negative scores on each of the three principal stress indicators. In rank order, these occupations included: emergency medical technician (EMT) professionals, teachers, social services workers, customer service call center workers, prison officers, and police. Johnson et al. (2005) concluded with the observation that the most stressful jobs listed all involved emotional labor, which involves a tremendous level of interpersonal interaction while steadfastly maintaining a professionally expected (non-emotional) presentation and expression.

In another study investigating the relationship between teacher emotional labor and stress, Yilmaz et al. (2015) implemented a quantitative survey research design with 5,600 teachers working in the Kutahya province of Turkey during the 2013-2014 academic year. Four hundred and ten participants provided precise and comprehensive data for analysis. The demographics were: 43.7% female, 26.8% worked in elementary education schools, 34.6% in general high schools, 26.3% in vocational high schools, and 12.2% in traditional high schools. The time in service varied from one to 41 years, 56.1% had less than 10 years of service, 30.5% served for 10–19 years, and 13.4% for 20 years or more. The Likert-based psychometric

measures used to collect the data included the Emotional Labor Scale (ELS) (Diefendorff et al., 2005) and the Maslach Burnout Inventory (Maslach & Jackson, 1981).

The results indicated that teachers exhibited a low level of surface acting (faking the required emotions for the situation) in terms of emotional labor. This was accompanied by moderate levels of deep acting, and naturally felt emotions. Also, teachers scored highest on the emotional exhaustion scale, and somewhat lower on the personal accomplishment and depersonalization scales. Components of emotional labor differed significantly according to gender, marital status, responsibility, school type, and subject specialty. Male teachers engaged in surface acting more often than female teachers; married teachers more often than single teachers; and school administrators more often than teachers. Conversely, teachers were found to exhibit more natural emotions compared to school administrators and elementary teachers tended to exhibit more surface acting and deep acting than traditional high school teachers.

Stress levels of teachers did not differ according to gender, marital status, or position. Also, all dimensions of emotional labor demonstrated moderate, but significant, relationships with teachers' emotional exhaustion levels. Yilmaz et al. (2015) concluded that both surface acting and naturally felt emotions were significant independent predictors of high levels of emotional exhaustion and depersonalization, and reduced personal accomplishment and thus, subsequent burnout.

Emotional labor has only rarely been explicitly evaluated in SPED teachers specific to their job responsibilities. However, it is well-known that teachers engage in emotional labor when modeling appropriate, caring behavior to students (Isenbarger & Zembylas, 2006). There is the requirement of increased care and empathy within a special educator's responsibilities due to the uniqueness of the skills of students with disabilities (Gilmour & Wehby, 2020). This, in and of itself, significantly increases special educators' stress levels. In this regard, it is commonly assumed that SPED teachers often experience and report more stress than general education teachers, and there is research that considers the effects of job-related stress and burnout inherent in special education teaching.

In a relatively early study of special educators, Billingsley and Cross (1992) investigated why some teachers leave their SPED training behind but remain in the teaching profession. Using a quantitative survey design, the researchers collected questionnaire response data from 286 former special education teachers who chose to stay in teaching while leaving their SPED positions. Results indicated that the primary reasons cited for teachers' transferring from special to general education were due to the enormous stress and emotional labor involved in working with SPED students, and adverse administrative factors. Billingsley and Cross (1992) speculated that, on one hand, these teachers experienced intense frustration because of their strong desire to provide empathetic teaching to children with disabilities; and on the other hand, they perceived their failure to realize the level of success for which they had hoped.

In another comparative study, Stempien and Loeb (2002) assessed teachers of only general education students, special education teachers, and teachers who served both classifications of students; the research focused on ascertaining differences in job satisfaction, a proxy indicator of job stress. Significant differences in mean scores on the Brayfield-Rothe Job Satisfaction Index (1951) were found. General education teachers were significantly more satisfied with their jobs than SPED teachers and experienced less stress. Interestingly, this spectrum of mean scores suggests that as interaction time with special education students increased, job satisfaction decreased. Special education (SPED) teachers as a group also indicated that they were significantly more likely to have to force themselves to go to work most days, due to stress (Stempien & Loeb, 2002).

Kyriacou (2001) defined teacher stress as "the experience by a teacher of unpleasant, negative emotions, such as anger, tension, frustration, or depression, resulting from some aspect of work as a teacher" (p. 28). However, Kyriacou (2001) also put forth that other stress models including pressuring demands, teachers' coping ability, and teacher burnout must be carefully examined. He concluded that it is imperative to understand teacher stress as its impact on burnout-motivated attrition (Kyriacou, 2001).

The Stress-Burnout-Attrition Path

Special education shortages have existed in the United States ever since the Individuals with Disabilities Education Act (IDEA) was passed in 1975 (Leko & Smith, 2010). The U. S. Center for Education Statistics reported that: (a) 48 states and the District of Columbia lack sufficient SPED teachers, (b) special education teachers leave teaching at twice the rate of general education teachers, (c) more than 50% of all school districts are unable to hire well-qualified SPED teachers, 90% of high-poverty school districts struggle to staff qualified SPED teachers, and (d) as many as 29% of vacated special education teacher positions are due to attrition (U. S. Center for Education Statistics, 2021).

Every year, more than 200,000 new teachers are hired in the United States, and 12,000 are SPED teachers (Essien & McCarthy, 2019). Donne and Lin (2013) found that 50% of SPED teachers leave their position during the first five years. According to the Minnesota Teacher Supply and Demand Report, the expected feasibility of hiring SPED teachers within the foreseeable future was predicted to be an area of ever-increasing difficulty (Cassellius, 2017). Research indicated that a significant proportion of SPED professionals seek alternative employment opportunities because of the high stress associated with their positions, which is very often worsened by a lack of administrative support (Wong et al., 2017). As stated by Brunsting et al. (2014), lack of administrative support is one of the strongest school-level predictors of burnout and turnover in SPED teachers.

These findings were confirmed in a study conducted by Hestor et al. (2020) using a mixed-methods design. In addition to administering a Likert-style structured questionnaire, open-ended narrative response items were used to obtain the professional perceptions of 366 current SPED teachers from across the United States. Special education teachers were asked to describe work-related stressors and express their unique reasons and rationale for leaving the field of special education. Overall, results indicated that SPED teachers did not feel supported by their administrators and that, largely due to this factor, their profession had become a detriment to their overall quality of life due to stress and associated symptoms of burnout syndrome. Specifically, the majority of respondents (69%) reported that they planned to leave the field due to exceedingly burdensome workload, high paperwork demands and unrealistic deadlines, a

perceived lack of needed resources and administrative assistance in securing them, insufficient compensation, and limited professional development opportunities.

Perhaps the most sobering attrition-related fact characterizing the harsh effect that COVID-19 has had on the teaching profession is that there are now 567,000 fewer educators in America's public schools now than there were before the onset of the pandemic (Bureau of Labor Statistics, 2023). In January 2022, the National Education Association (NEA) sponsored an online survey of 3,621 nationally representative, non-retired NEA members (GBAO Strategies, 2022). Burnout was definitively identified as the most severe factor facing educators, with 67% reporting it as a very serious issue and 90% a very serious/somewhat serious issue. In a recent meta-analysis conducted by Park and Shin (2020), burnout syndrome was found to be the leading causative factor in SPED teachers leaving their chosen profession.

The Discovery of Burnout Syndrome

Confronted with increased job demands and reduced job resources during the pandemic, teachers have experienced a stress overload and associated burnout epidemic. Researchers have identified distinct negative trends in teachers' general sense of wellbeing, coping ability, overall health, and job satisfaction levels, all contributing to record levels of burnout syndrome (Ghasemi et al., 2023).

The modern idea of burnout syndrome was formulated in the mid-1970s primarily by two researchers, psychiatrist Herbert Freudenberger and social psychology professor Christina Maslach. Freudenberger first attempted to describe the teacher's stress-related occupational hazard in 1974 and noted that it was best characterized as: "to fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources" (Freudenberger, 1974, p. 161).

After Freudenberger introduced burnout in the clinical context, Maslach significantly advanced the study of burnout in terms of theory development, empirical research, and psychometric measurement (Maslach & Jackson, 1996). Upon studying how people responded to stress in emotionally-ladened jobs, Maslach identified a system of common cognitive/emotional/behavioral themes (Maslach, 1976). Service workers, including teachers, routinely reported emotional exhaustion and feelings of disdain for their clients, patients, or students. Furthermore, they frequently reported a diminished sense of professional accomplishment as a result of the emotional turmoil experienced over time (Maslach & Schaufeli, 1993).

Whereas Freundenberger's (YEAR) conceptualization of burnout focused purely on the psychology of the individual, Maslach looked at the interaction between individual and environmental factors (Leiter & Maslach, 2004). This orientation led Maslach and Jackson (1981) to hypothesize the existence of a specific syndrome of burnout, to create a psychometrically reliable and valid instrument to measure it (i.e., Maslach Burnout Inventory, [MBI]), and to investigate its causes and consequences. Maslach's work triggered a wave of scientific burnout research, with publications on the subject increasing exponentially (Kahill, 1988; McGeary C. & McGeary D., 2012).

The Syndrome: Conceptualization and Measurement

Over time, burnout has emerged as a pathological-psychological syndrome resulting from chronic stress due to adverse working conditions, primarily antagonistic, emotion-ladened interpersonal interactions. It is characterized by feelings of energy depletion or exhaustion, increased mental distance from one's job (or feelings of cynicism related to one's job), and reduced professional efficacy. This definition was advanced by the World Health Organization (WHO) when burnout syndrome was, after many years of debate, included in the International Classification of Diseases 11th Revision (ICD-11; WHO, 2018). Although several research groups have developed slightly different variations on the model, there is wide consensus regarding the three core dimensions of burnout syndrome originally proposed by Maslach (Maslach & Goldberg, 1998).

Notably, one of the first large cohorts studied by Maslach consisted of teachers (Maslach & Leiter, 1999). Teachers are still the most commonly studied subjects in the burnout syndrome literature (Maslach et al., 2017); this is largely due to consistent reports of high levels of fatigue and emotional exhaustion (Garcia-Garnica et al., 2022).

Emotional exhaustion (EE) is widely considered to be the primary factor in the development of burnout syndrome (Maslach, 1982). Emotional exhaustion manifests as feelings or sensations of exhaustion associated with stressful interpersonal interactions and the taxing psychological efforts made at work. It is characterized by weakening, weariness, tiredness, and fatigue. Depleted due to emotional over-involvement, people with EE lack sufficient emotional energy to cope with work tasks and thus show difficulties in successfully adapting to the work environment (Maslach, 1982). Emotional exhaustion has been consistently associated with

chronic work overload (Jackson et al., 1986). However, it is important to note that EE does not equate to simply being bodily fatigued due to strenuous physical activity. Rather, it is the systemic reaction to being emotionally drained and represents the basic stress dimension of burnout syndrome (Maslach & Goldberg, 1998). Numerous studies have also found links between EE and role conflict (Jackson et al., 1986).

Maslach (1982) described the depersonalization (DP) component of burnout syndrome as a fundamental attitude shift, defined by a cognitive-behavioral response of detachment, cynicism, and indifference towards the work itself and/or the people associated with the work. It is characterized by interpersonal avoidance, inappropriate attitudes and behaviors, irritability, and loss of idealism (Maslach, 1982). Depersonalization can result from a person's lack of perceived control over work outcomes, although it typically develops in direct response to the overload of emotional exhaustion. Depersonalization is considered self-protective at first, an emotional barrier of interpersonal detachment. Subsequently, negative feelings can turn inward and induce a growing sense of inadequacy for failing to relate empathetically to associates (Maslach, 1982). Jackson has suggested that DP carries an inherent risk in that the interpersonal detachment facet can develop into the dehumanization of others (Jackson et al., 1986). The DP component represents the interpersonal dimension of burnout syndrome (Maslach & Goldberg, 1998).

The final component of the burnout syndrome is reduced personal accomplishment (PA). According to Maslach (1982), this dimension is characterized by a self-doubting phase with regard to one's ability to perform a job effectively. Reduced PA typically translates into decreased productivity, low confidence in capabilities, low morale, and reduced work-related coping capacity. Reduced PA has been empirically linked to depression and found to be exacerbated by a lack of administrative support and professional development opportunities. Also, Maslach et al. (1996) defined lack of PA in relation to individuals feeling ineffective, unqualified, and hopeless. The personal accomplishment component reflects the self-evaluation dimension of burnout syndrome (Maslach & Goldberg, 1998).

Following substantial research using the Maslach Burnout Inventory (MBI), Leiter and Maslach (Leiter & Maslach, 1988) proposed a developmental sequence model for conceptualizing burnout syndrome. They postulated that the EE component would emerge first due to chronic excessive overwork inducing a depletion of an individual's emotional resources. In an attempt to conserve remaining energy, individuals would depersonalize (DP) and react by isolating themselves psychologically and severely limiting their interpersonal interactions. Consequently, the DP component of burnout syndrome has been described as a defense mechanism-like response secondary to EE. Finally, individuals enter the last stage of the burnout syndrome, reduced PA. This stage results from the individual's attempt to reconcile the original optimistic attitude they held for their job and their current state of EE and DP, thereby inducing feelings of inefficacy and incompetence in relating to people and performing their work (Leiter & Maslach, 1988).

Stimulated by the work of Maslach and Jackson (1981), the increased research focus on burnout syndrome in the 1980s dramatically shifted away from interview-based case study techniques toward quantitative empirical research using large-scale psychometric instrument-based methodology. Indeed, the most highly validated instrument driving this research was, and continues to be, the MBI (Maslach & Jackson, 1981). The MBI provides specific instrument variations for a variety of fields. For example, the MBI-Human Services Survey (MBI-HSS) was designed specifically for the human services and health care fields; also, the MBI-Educators Survey (MBI-ES) has been used in the assessment of burnout syndrome in teachers (Maslach et al., 1986). Therefore, the following section of the literature review concentrates primarily on research into burnout syndrome in SPED teachers as measured by the MBI-ES.

Burnout Syndrome in Special Education Teachers

Special education teachers carry a very high risk of burnout syndrome due to a unique set of stressors (Pearson et al., 2015). Teachers' burnout syndrome has been shown to undermine student motivation and negatively affect individualized education program (IEP) outcomes (Wong et al., 2017). Consequently, research on burnout syndrome in SPED teachers has become a major field of study. Stress and the resultant burnout syndrome among SPED teachers has been aggressively studied for more than three decades. Considering the sheer number of research papers written on the topic through time, a discussion of findings from existing systematic reviews on the topic seems warranted.

What the Research Reveals

Wisniewski and Gargiulo (1997) conducted the first systematic review (from 1969 to 1996) of occupational stress and burnout syndrome among SPED teachers. Overall findings revealed that SPED teachers generally were at high risk for burnout; however, SPED teachers

working specifically with students with emotional/behavioral disorder (EBD) were experiencing burnout syndrome at "crisis proportions" (Wisniewski & Gargiulo, 1997).

Brunsting et al. (2014) conducted a synthesis of special education teacher burnout syndrome studies from 1979 to 2013. Their goal was to update the knowledge base on burnout by reviewing all empirical studies examining one or more of the components of the burnout syndrome delineated by Maslach (i.e., emotional exhaustion [EE], depersonalization [DP], and lack of personal accomplishment [PA]) for SPED teachers in the United States. Studies that were included in the analysis had participants who were SPED teachers working in a public or private school setting; a total of 23 studies met inclusion criteria. The authors used Bronfenbrenner's ecological model (1977) as a framework to organize the results of their meta-analysis. Variables correlated to the burnout syndrome components of EE, DP, and PA were organized into the following categories: individual level, classroom level, school level, and state or district level (Brunsting et al., 2014).

At the individual level, Brunsting et al. (2014) reported that older teachers consistently experienced less EE and DP, but greater PA; also, gender made a significant contribution to DP, with males experiencing higher levels of DP as well as higher overall composite burnout scores. Teaching experience was negatively correlated with burnout syndrome: teacher age accounted for a significant amount of variance in EE, and a higher level of education was inversely correlated with EE and DP, and directly correlated with PA. Special educator's conflict avoidance correlated positively with burnout syndrome, however, mindful awareness and valued quality living were inversely correlated with burnout. Also, special education teachers who perceived their work outcomes to be controlled by others experienced a higher incidence of burnout syndrome.

When analyzing classroom level variables, Brunsting et al. (2014) reported that teachers of students aged 13–19 had the highest mean burnout composite scores, driven primarily by high DP and low PA levels. Also, increasing student age was found to directly correlate with increases in EE across all age groups. The proportion of students in a classroom with emotional/behavioral disorder (EBD) was predictive of high levels of DP in SPED teachers, indicating that educators became more callous and closed off when their classrooms contained high proportions of students with EBD. Further, as SPED teachers became more isolated and were denied necessary social support, levels of DP were exacerbated in classes serving students with varying special education needs. Interestingly, the number of different disability categories in a classroom did not correlate with any components of burnout syndrome.

At the school level, work hindrances such as workload and paperwork were associated with high EE levels, in addition, the number of parent conferences and extracurricular responsibilities were found to predict the presence of burnout syndrome in SPED teachers. The frequency of reported stress incidents experienced by teachers accounted for 14% of the variance in burnout intensity in first year SPED teachers, whereas role ambiguity accounted for 31% of the variance. Both role conflict and role ambiguity were found to be inversely correlated to PA and directly correlated with EE and DP. Administrative support was negatively correlated with burnout syndrome: specifically high-level administrator supports dramatically lowered perceived

EE. Support that SPED teachers received from fellow teachers, as well as from parents, also reduced likelihood of burnout syndrome.

When considering the state or district level factors associated with burnout syndrome, Brunsting et al. (Brunsting et al., 2014) found that the degree of financial support that state and/or district level provided significantly correlated with PA in SPED teachers. Based on the reviewed studies, the researchers identified the factors of role conflict, role ambiguity, and lack of administrative support as being particularly determinative in SPED teacher burnout. Brunsting et al. recommended that SPED teachers:

(a) be aware of the risks of burnout to their career, their health, and their students; (b) continue developing their classroom management skills and confidence in using them; (c) identify role conflict and ambiguity and problem-solve to alleviate issues; (d) seek support from colleagues and administrators: and (e) engage in self-care techniques to manage stress. (Brunsting et al., 2014, p. 701-702)

Following the Brunsting et al. (2014) systematic review, two subsequent peer-reviewed studies using the MBI-ES (Maslach et al., 1986) to investigate burnout syndrome were identified during the literature search. Garwood et al. (2018) provided further justification for the construct of role conflict to be considered a predictor of burnout syndrome in SPED teachers. Garwood and fellow researchers conducted a two-phase mixed-methods analysis of classroom management strategies in relation to specific role stressors and burnout syndrome. The first phase included 64 SPED teachers in three school districts across rural southeastern United States. Using a quantitative research design, a web-based survey including three measures was

administered. Psychometric instruments were the: 1) Role Conflict and Role Ambiguity Questionnaire (Rizzo et al., 1970), 2) Classroom Management Efficacy Scale from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), and 3) MBI-ES (Maslach et al., 1986). Next, follow-up focus group interviews (n=12) of rural SPED teachers were conducted to further explore relevant factors contributing to stress and burnout. Results indicated role conflict and role ambiguity were inversely related to PA and directly correlated with EE and DP; thus, the magnitude of role conflict and role ambiguity experienced by these SPED teachers significantly increased their exhaustion level and cynical detachment tendencies, and reduced their sense of personal efficacy. Garwood et al. (2018) also found that principal support provided clarity within role expectations, and when the administration offered specific feedback, SPED teachers reported greater levels of PA. Overall, Garwood and colleagues' (2018) research corroborated findings presented in Brunsting et al. (2014).

Williams and Dikes (2015) investigated the association between components of the burnout syndrome and 10 educator demographic variables. Using a quantitative research design, data was obtained using the MBI-ES (Maslach et al., 1986) in combination with an author-developed demographic questionnaire (Williams & Dikes, 2015). Surveys were sent to 215 SPED teachers and participation was on a voluntary basis (Williams & Dikes, 2015). The researchers surveyed SPED teachers (n=65) from the Alabama public school system and the survey packets were collected over a three-week period. Descriptive analyses indicated consistent significant associations between demographics and burnout syndrome components: Females (49%) were more prone to high EE than males (33%), males (33%) indicated a high DP compared to females (12%), a female subgroup indicated very low DP levels (76%), males and

females reported similar levels of workplace PA. Teachers 21-31 years old had the greatest percentage of low EE (57%), teachers 42-51 years old had the greatest percentage of high EE (59%) and the greatest percentage of high DP (23%); teachers 52-61 years old reported the greatest percentage of low DP (91%). With regard to degree attainment, teachers with a Specialist degree reported the greatest percentage of EE (75%), those with a Master's degree had the greatest number of individuals with a high sense of PA (64%) relative to those with Specialist degrees (25%). Teachers with less than 22 years of teaching experience reported the greatest amount of high EE (50%); those with 5-10 years of experience reported the lowest EE (36%), and 100% of teachers with 1-4 years of experience reported low DP, while those with 5-10 years teaching experience reported the largest percentage of high DP (23%). Teachers with 11-15 case files had the greatest percentage with low EE (33%); those with a caseload of less than 26 indicated the greatest percentage of high EE (67%); teachers with 21-30 students daily indicated the greatest percentage of high EE (66%). Those teaching less than 31 students daily reported the greatest percentage of high DP scores (25%), teachers with 11-20 students had the greatest percentage of low DP (83%). Those with 1-10 students reported the greatest percentage of low EE (35%), the second greatest percentage for low DP (70%), and 53% for a strong sense of PA.

Results also indicated that special education teachers who were single were also more prone to burnout syndrome. In addition, the more hours teachers spent on paperwork, the higher the incidence of burnout syndrome. Williams and Dikes (2015) concluded that administrators should closely monitor signs of exhaustion among veteran teachers and work vigilantly to ensure there is a manageable distribution of EBD cases among SPED teachers.
Burnout Syndrome Solutions for Special Education Teachers

Due to the impact of burnout on teacher health, student outcomes, and turnover, it is crucial to gain a better understanding of the mechanisms through which SPED teachers develop burnout syndrome, and to apply that understanding to developing effective programs to mitigate the problem. As recently as 2002, researchers proclaimed that "effective intervention strategies for SPED teacher burnout do not yet exist" (Hastings & Brown, 2002, p. 222), which suggests the question: In what direction have they been looking for solutions? As documented above, numerous studies have suggested that external factors strongly correlate with the components of burnout syndrome (e.g., role conflict, role ambiguity, administrative support); however, these factors have not been generally targeted in the burnout research with respect to SPED teachers. Instead, existing intervention and prevention studies primarily focus on coping strategies teachers can implement to help themselves better manage the typical stressful aspects of this profession.

Intervention Strategies

Biglan et al. (2013), the only study specific to SPED burnout intervention after the findings of Hastings and Brown (Hastings & Brown, 2002), conducted an evaluation of the effectiveness of the Acceptance and Commitment Therapy (ACT) in early childhood SPED teachers. The goal of ACT was to promote psychological flexibility under stress: ACT encouraged acceptance of unpleasant thoughts and feelings, encouraged mindfulness, and helped people clarify their values and take action to accomplish their goals (Hayes, 2016). Using a randomized wait-list controlled design, 42 participants were recruited to the study: 30 preschool

program staff and 12 family consultants. Biglan et al. (2013) measured cognitive coping processes and resulting perceived well-being. Psychometric instruments included: Acceptance and Action Questionnaire (AAQ) (Hayes et al., 2004), Five-Facet Mindfulness Questionnaire (FFMQ) (Baer et al., 2006), Valued Living Questionnaire (VLQ) (Wilson & Groom, 2002), Intrinsic Job Motivation Scale (JSS) (Warr et al., 1979); Job Satisfaction Scale (IJM) (Warr et al., 1979), and the MBI-ES (Maslach et al., 1986).

Data were scheduled to be collected across four time points. Interventions consisted of two 3.5-hour workshops held two weeks apart for the immediate group and three weeks apart for the delayed group. Latent growth modeling was used to assess workshop effects. Results of the study indicated ACT workshops have the potential to increase acceptance of stressors, self-efficacy, and positive work engagement (Biglan et al., 2013). Although many teachers reported feeling emotionally exhausted, most also reported having a sense of accomplishment in their job. Depression showed a direct correlation with EE and an inverse correlation with PA. Mindfulness was associated with lower levels of depression and higher levels of PA; the mindfulness/EE correlation approached significance. Nonreactivity to inner experience was associated with increased PA; results also indicated lower levels of emotional avoidance were mildly but not significantly correlated with higher PA. Similarly, valued living was not significantly correlated to increased levels of PA. Biglan et al. (2013) concluded that ACT can help to reduce the high levels of stress among special educators through workshops focused on increasing psychological flexibility, particularly by employing mindfulness and values-focused action.

The most recent and robust analysis of the effects of known interventions on the Maslach components of burnout syndrome in teachers comes from Iancu et al. (2018). The researchers performed a meta-analysis of intervention effects based on a literature search that yielded 513 unique results, with the final sample containing 23 controlled trials. Slightly more than half of the included studies were conducted in the USA. Iancu et al. (2018) identified six basic types of intervention strategies: cognitive behavioral therapy (CBT), mindfulness, social-emotional skills, psychoeducational approach, social support, and professional development; each was assessed in terms of its impact on the separate burnout syndrome components (i.e., EE, DP, and PA). From the 23 studies included in the analyses,19 studies covered EE, 11 provided measures of DP, and 13 assessed PA.

Results indicated two intervention strategies statistically significantly reduced levels of EE: CBT and mindfulness. The effect of the intervention on EE was moderated by teaching level (i.e., primary level, middle level, high school), time lag (i.e., time between the end of the intervention and the assessment of intervention efficacy), and intervention duration (i.e., length of time the intervention was applied). Teachers whose coping skills were augmented following an intervention that lasted between one to three months were able to reduce EE levels. Mindfulness and social support were found to have significant positive effects on PA; however, as with EE variation, the intervention effects on PA were moderated by teaching level, time lag, and intervention duration. While EE and PA were positively influenced by various burnout intervention strategies, this was not true for DP (i.e., depersonalization levels were not significantly improved by any of the regular burnout interventions).

Iancu et al. (2018) concluded that the overall mean effect sizes characterizing the impact of interventions on burnout syndrome components were small; existing strategies were found to be somewhat effective for the EE and PA. With regard to the DP component, the effectiveness of these interventions was essentially non-existent. The authors also stated that intervention effects, although minimal, varied in intensity at different time points, and intervention duration less than one month had the smallest effects. Generally, however, there was practically no difference in overall effectiveness between the six identified approaches.

The findings of Iancu et al. (2018) are similar to another meta-analytic study into the effectiveness of burnout interventions within the medical profession. West et al. (2016) lamented the general ineffectiveness of studied burnout interventions (i.e., mindfulness training, guided reflection, wellness days, art therapy, gratitude exercises), with all intervention studies analyzed achieving less than 10% reduction in burnout symptoms. The researchers emphasized the urgent need for the development of innovative approaches to reduce the rising rates of burnout syndrome. Maslach recommended prevention over intervention as the preferred approach to reducing burnout syndrome. She also identified the best proactive solutions to reduce the incidence of burnout syndrome as those that modify external factors. (Maslach, 2017). There are no prevention studies in the SPED burnout syndrome literature that have targeted external factors (e.g., administrator support or peer interactions) so far; however, internal factors (e.g., resilience) possessed by special education teachers are currently being studied.

Prevention Strategies

Despite the fact that environmental events can be stressful by themselves, some individuals are more vulnerable than others to develop burnout syndrome, depending on the individual's personal resources such as cognitive problem-solving strategies and other resistance/protective factors often linked to personality traits (Enslin, 2018). These individual traits (e.g., extraversion, dominance, frustration tolerance, self-efficacy, locus of control, optimism) exert tremendous influence on the threat assessment people make under stressful conditions. Since burnout syndrome reflects an individual's assessment and response to chronic stress, the personal resource of resilience has become a major educational research focus (Gu & Day, 2013) particularly in relationship to teacher retention (Doney, 2012).

According to Luthans, "resilience typically refers to the tendency to recharge or spring back from adversity, failure or even seemingly overwhelming positive changes such as increased responsibility" (Luthans, 2002, p. 702). Skaalvik and Skaalvik stated that, "When individual teachers experience stress and burnout, it often leads to a reduced sense of psychological well-being" (Skaalvik E. M. & Skaalvik S., 2016, p. 1,785). Pretsch and colleagues suggested that resilience is "a trait that actively fosters well-being" (Pretsch et al, 2012, p. 322). Many researchers have suggested that resilience is a necessary attribute for teachers to sustain their capacity to teach (Brunetti, 2006). Thus, resilience-building programs for teacher burnout prevention have become a central focus for education researchers, especially during and after COVID-19 (Xun et al., 2021). Possibly, the most widely known resilience-building initiative is the Building Resilience in Teacher Education (BRiTE) program (Mansfield et al., 2016); the BRiTE program was developed in Australia but is currently being applied internationally. Although there is evidence for the resiliency initiative, there are also questions surrounding its ability to address the problem of burnout syndrome in SPED teachers.

A recent study examining mental health in SPED teachers was conducted by Zhang et al. (2020). These researchers were interested in teacher resilience as a potential burnout prevention factor and a promoter of high levels of mental health in SPED teachers. The purpose of the study was to assess the potentially moderating effects of teaching barriers (i.e., poor teaching conditions, outdated textbooks, ineffective classroom organization and administrative management) on the relationship between resilience and mental health in SPED teachers. Using a quantitative survey research design, Zhang et al. collected online response data from a total of 681 teachers (response rate: 93.8%) (Zhang et al., 2020). All participants responded to the following Likert scale-based psychometric instruments: The Chinese Adult Resilience Scale (CARS) (Liang & Cheng, 2012), The Symptom Checklist (SCL-90) (Wang et al., 1999), and the Teaching Barriers to Special Education Teachers Questionnaire, an instrument developed by the authors specifically for that study (Zhang et al., 2020). The research hypothesis was that teaching barriers play a moderating role on resilience affecting SPED teachers' mental health.

Results indicated significant negative correlations between each of the five factors of resilience and each of the nine mental health symptoms. Regression analysis showed that resilience had a significant negative predictive effect on total mental health symptoms experienced, suggesting that resilience maintains and/or improves mental health levels of SPED teachers. Correlation analyses also demonstrated significant positive correlations between teaching barriers and mental health symptoms, and significant negative correlations between

teaching barriers and resilience. Teaching barrier(s) was found to have a highly significant negative moderating effect on the relationship between resilience and mental health symptoms; thus, the research hypothesis was supported. Zhang et al. (2020) concluded that various teaching barriers in the practice of special education teaching negatively moderate and diminish the protective effect of resilience on SPED teachers' mental health. They went on to recommend resilience-building programs for strengthening SPED teachers' mental health and limiting burnout, as well as educator programs designed to encourage development of new strategies to improve overall teaching ability and conditions.

From a person-focused perspective, researchers typically have viewed resilience as an individual attribute and define it as a teacher quality and/or a capacity to endure stoically under stress. Others, however, view resilience as an outcome of productive energy usage in the face of stressful conditions (Patterson et al., 2004). However, whether it is considered a personal resource or an outcome variable, resilience seems to involve the use of psychic and/or physical energy and is therefore able to be depleted. Under constant stress, unpredictable conditions, or multiple teaching barriers, there can be a failure and/or loss of resilience. As researchers have questioned,

We have a lot of resilient special education teachers who have sustained meaningful relationships with their students and maintained a belief that their work is important and significant... but how long will they be able to endure the emotional toll of their work. (McCormick & Von Grey, 2022, p. 22)

Indeed, researchers have also argued that resilience can be ineffective in contexts where it hides vulnerability or prevents protective action against risk (Mahdiani & Ungar, 2021). Although resilience is still widely believed to be a vital component in successfully coping with stress, its all-encompassing, ever-changing description in literature has led to difficulty applying it. The main thought is that resilience may be necessary but not enough for individuals to flourish under constant high-stress conditions (Munoz et al., 2020).

Accordingly, it would seem that current resilience-focused burnout prevention/intervention programs for SPED teachers are insufficient and in need of modification. Further, the underlying ethical problem for an administration solely focused on resilience-building programs is that promoting resilience may be equivalent to asking teachers to remain overly tolerant of negative or even abusive workplace conditions. Resilience implies that SPED teachers must endure the excessive demands put upon them (McCormick & Von Grey, 2022). From this perspective, resilience functions mainly as a reactive force and does not derive energy from the desires and motives that fuel goal-directed behavior central to one's work (McCormick & Von Grey, 2022). Ultimately, under the person-centered resilience research paradigm, the danger is that teachers who manifest burnout syndrome may be seen as personally and professionally deficient. Thus, poor working conditions are more likely to be ignored by administrators in favor of blaming the victim of a negligent workplace (Leiter, 2018). As SPED teachers have been experiencing unprecedented levels of severe chronic work-related stress, and the recommended burnout intervention and prevention programs are obviously insufficient to address the problem, new cognitive-behavioral models and innovative approaches are

desperately needed in the fight against burnout syndrome. To this end, Hope Theory was advanced (McCormick & Von Grey, 2022).

Hope in the Teaching Profession

In order to thrive in their chosen profession, SPED teachers are required to be highly motivated and to possess character strengths such as empathy, resilience, self-awareness, optimism, humor, reflection, fairness, and hope (Chan, 2009). When SPED teachers enter their chosen field, they typically enter brimming with enthusiasm at the prospect of making a difference in the lives of the most vulnerable children. According to Birmingham (2009, p. 27), "they enter with a range of hope—from the lighthearted hope of potential to the activist militant kind of hope that arises, strengthens, and defies adversity." Educating has always been a vocation rooted in hopefulness; teachers live in hope, and living in hope implies, "there is a way out, even from the most dangerous and desperate situations" (Jacobs, 1997, p. 43).

According to Birmingham (2009), teaching rests on a foundation of hope: If it were not for hope, why teach? "We teach because we hope that the future for others will somehow be made better through our efforts" (Birmingham, 2009, p. 30). Unfortunately, the working conditions of SPED teachers often become suffocating and too desperate to maintain hopefulness, often leading to burnout syndrome. A teacher who has lost hope is subject to frustration, burnout, and attrition, and many SPED teachers "have felt that sustaining hope is simply too difficult and have chosen a lesser yet easier path" (Birmingham, 2009, p. 34). Levine (2013) has stated that teachers who have lost hope struggle to advocate for their students, and to successfully manage student academic and behavioral progression thus leading to lower student achievement.

Estola (2003, p. 199) described hope as "a driving force in life that enables one to keep his or her eyes on the future while in practice acting in the here and now," and, "a motivating power within uncertain and demanding situations." Due to the demanding nature of teaching, SPED teachers must hold hope not only in their students but in themselves. Special education teachers live with complexities that are not easily reconciled, such as uncertainty that their hard work will yield positive results, and awareness that what is hoped for may never come to pass (Elbaz, 1992). When teachers lose hope, they often have given up hope, not in their children, but in themselves. This largely results from the chronic stress of attacks on their personal effectiveness in promoting the flourishing of children due to bureaucratic challenges, role conflict and ambiguity, and inadequate system support from colleagues and administrators (Futernick, 2007). These are the same factors proven to contribute to burnout syndrome in SPED teachers. Thus, there is a relationship between loss of hope and burnout. Conversely, by increasing SPED teachers' hope level, one may see a reduction in the incidence of burnout syndrome. However, despite its importance in education, the idea of hope "remains largely unexplored, and our understanding of hope is intuitive rather than explicit" (Birmingham, 2009, p. 28).

Hope Theory: A Positive Path Forward

Positive psychology is the scientific study of an individual's positive traits and experiential states, and the social structures that help maintain and expand their development

(Seligman & Csikszentmihalyi, 2000). A major tenet of the philosophy is that these traits are strengths that can be changed and measured, and that they serve as protective psychological armor against stress and adversity. In their research, Peterson et al. (2007) identified 24 character strengths that have psychometrically validated measures that allow them to be studied: appreciation of beauty, bravery, creativity, curiosity, fairness, forgiveness, gratitude, honesty, hope, humility, humor, judgment, kindness, leadership, love, love of learning, perseverance, perspective, prudence, self-regulation, social intelligence, spirituality, teamwork, and zest. Empirical studies have identified hope as among the top predictors of wellbeing across the life span (Peterson & Seligman, 2007). Thus, a hope-based training approach may represent an innovation in the prevention of burnout syndrome in SPED teachers.

Cognitive Theory of Hope

Burnout is a cognitive syndrome reflecting an individual's prolonged response to chronic stressors on the job (Maslach & Goldberg, 1998). As such, resilience is necessary but insufficient to address burnout. Whereas a cognitively based solution is likely required to address a cognitive syndrome, resilience has been identified as a non-cognitive capability (Mansfield & Beltman, 2019). As the educational field considers possible psychological resources that can serve to help mitigate increased incidence of burnout syndrome from the extra stress of the pandemic, Hope Theory may offer a positive path forward. Snyder's cognitive theory of hope (i.e., Hope Theory [HT]), as noted, is rooted in the realm of positive psychology much like the cognitive-behavioral theories of mindfulness and gratitude (Snyder, 2002). This theory objectively outlines the primary cognitive and secondary affective components of hope in an explicit model. In HT, hope

is an alternative concept that is also integral to coping with stress. Although hope is similar to resilience, hope is both distinct and easier to understand and apply (Munoz et al., 2020). Further, while resilience is viewed as a non-cognitive capability, HT conceptualizes the hope construct as a way of thinking that can be taught and measured (Snyder, 2002).

Basic Tenets of Hope Theory

Snyder and colleagues (1991) defined hope as a cognitive construct composed of reciprocally related components, agentic thinking, and pathways thinking. Both agency and pathways are required for the successful accomplishment of goal-directed pursuits (Snyder et al., 1991).

Goal-Directed Behavior

In his article, "Hope theory: Rainbows in the mind," Snyder (2002, p. 249) described how in 1959, Karl Menninger (an American psychiatrist, July 22, 1893 – July 18, 1990) gave an address titled, "The Academic Lecture on Hope," and that it was Menninger who was the originator of placing thinking/cognition at the core of the hope construct rather than emotion. Snyder recognized that people typically held self-appraisals about their capabilities in goal pursuits: "That is to say, people had enduring, self-referential thoughts about their capacities to produce routes to goals, and their capacities to find the requisite motivations for those goal pursuits" (Snyder, 2002, p. 255). Snyder then postulated that one's goal-directed past history of success and failure creates trait-like styles of agentic and pathways thinking (Snyder, 2002). Snyder explained that due to the goal-directed nature of human behavior, the goal is the cognitive element that HT revolves around. Goals provide targets for the iterative activity of agentic and pathways cognition (Snyder, 2002). Goals can assume various forms (i.e., visual images, verbal descriptions) and can range from short to long term. Snyder identified two major types of goals: Type 1: positive goal outcome; Type 2: negative goal outcome. However, for further clarification, Snyder discussed goal types along four dimensions: 1) difficulty: high probability versus low probability, 2) valence: approach versus avoidance, 3) importance: maintenance versus enhancement, and 4) specificity: specific versus vague.

High probability goals were conceptualized as relatively easily accomplished, whereas low probability goals carry greater risk of failure; Snyder (2002) considered medium probability goals ideal for activating agency and pathways thinking. Approach goals were conceptualized as generally positive goals related to formulating a new goal, maintaining work toward a present goal, or expanding upon the reach of a goal where progress has already been made. In contrast, avoidance goals were directed toward forestalling, or preventing altogether, a negative goal outcome. Maintenance goals were conceptualized as goals that enable an individual to continue functioning normally, while enhancement goals were construed as augmenting the achieved desired conditions characterizing our lives (Snyder, 2002). Finally, specific, clearly defined goals were conceptualized as providing the opportunity for the development of clear pathways toward goal accomplishment, whereas vague or poorly defined goals were viewed as obstructive to strategic pathways thinking. Snyder further recommended that goals be highly focused, and of substantial value, to warrant sustained intentional hopeful thinking (Snyder, 2002).

According to HT, high hope individuals will be more successful in their goal-directed behavior because they set higher-quality goals (e.g., positive social focus with an approach orientation; goals of greater importance and difficulty) and are more able to identify pathways to reach them (Snyder, 2002). These qualities give them the confidence to pursue their goals even in high-stress conditions (Snyder, 2002).

Pathways Thinking

The ability to identify multiple pathways relevant to one's goals, and to compare the risks and benefits of each, promotes greater likelihood of goal attainment. According to Snyder (2002, p. 251), "goals remain but unanswered calls without the requisite means to reach them." He also postulated that particular goal pursuits are approached with thoughts of generating productive routes to success. Even though time is typically thought of as one-directional, goals are not so clear. To generate productive routes, one must be able to "think about how we can link our present to our imagined futures" (Snyder, 2002, p. 251). High-hope individuals are thought to generate more pathways of higher quality and to use them with greater decisiveness (Snyder et al., 1991; Synder, 2002, p. 251).

Pathways thinking in low-hope individuals is theorized to be more hesitant, and the selected route will tend to be limited in terms of specificity (Snyder, 2002). If the primary route to goal pursuit is blocked, the flexibility of thought in high-hope individuals allows them to be "very good at producing plausible alternative routes" (Snyder, 2002, p. 251). Even under stressful conditions, high-hope individuals are highly effective at generating alternative routes for goal attainment. For example, in a study by Peterson and Byron (2008), a sample of 76 management executives (i.e., three different samples of executives from different industries) were presented with a realistic novel work-related problem and were given a two-week deadline

to generate solutions. High-hope executives with greater pathways thinking ability generated significantly more solutions (p<.001) of higher quality (p<.001) than their less-hopeful peers. Further, regression analysis indicated that hope scale scores contributed significant additional unique variance, controlling for self-efficacy and cognitive ability scores, in the number of solutions and the quality of solutions generated (Peterson & Byron, 2008).

Agentic Thinking

Agentic thinking is "the perceived capacity to use one's pathways to reach desired goals-the motivational component of hope theory" (Snyder, 2002, p. 251); it includes the drive and determination required for individuals to initiate goal-directed behavior (Snyder et al., 1991; Snyder, 2002). Agency thinking provides energy for the setting of goals and directs motivation to pursue alternate pathways when required. Snyder (2002) considered the agentic thinking component, as being fundamentally comprised of self-recognition, the perception of oneself as the originator of actions, and the forming of goals. In essence, agentic thinking is proactive and "involves the mental energy to begin and continue using a pathway through all stages of the goal pursuit" (Snyder, 2002, p. 254); however, it is particularly important when intended primary pathways are obstructed. In such cases, "agency helps people to channel requisite motivation to the best alternate pathway" (Snyder, 2002, p. 254). High-hope individuals are theorized to be more effective at harnessing and using this type of mental energy when compared to their low-hope peers (Snyder, 2002). Relevant research has shown that agency thinking in high-hope individuals is significantly correlated with proactive career development behaviors (Hirschi, 2014) and rehabilitative behaviors in recovery from sports injury (Lu & Hsu, 2013).

Lu and Hsu (2013) conducted a study to explore the hypothesis that hope and/or social support would uniquely and/or jointly predict post-injury rehabilitation beliefs, rehabilitation behavior, and subjective well-being. Using a cross-sectional study design, the researchers assessed 224 injured Taiwanese collegiate athletes from four sports-injury rehabilitation centers of local universities in Taiwan. The primary outcome measures included the following psychometric instruments: the Trait Hope Scale (THS) (Snyder et al., 1991), the Sports Injury Rehabilitation Beliefs Survey (SIRBS) (Taylor et al., 1996), the Satisfaction with Life Scale (SWLS) (Diener et al., 1985), the Positive Affective and Negative Affective Scale (PANAS) (Watson et al., 1988), the Multidimensional Scale of Perceived Social Support (MSPSS) (Rees et al., 2000), and a standard demographic survey. The instruments were completed by the athletes after rehabilitation treatment. The results indicated that social support, as well as hope agency and hope pathways, scores predicted injured athletes' rehabilitation beliefs and subjective wellbeing. However, only hope agency significantly predicted proactive rehabilitation behavior. Also, hope total score and social support had an interactive effect on the prediction of subjective wellbeing. Lu and Hsu (2013) concluded that enhancing hope levels (particularly hope agency) and bolstering injured athletes' social support during rehabilitation were beneficial to rehabilitation behavior and subjective wellbeing.

Integration of Hope Pathways and Hope Agency

High-quality hopeful thinking necessitates a successful integration of pathways and agency cognition, as the two thought realms "feed each other" and "are iterative as well as additive over a given goal pursuit sequence" (Snyder, 2002, p. 252). Due to individual

differences in levels of hopeful thought, various degrees of strength emerge characterizing the two components of hope-based thinking: "The full high-hope person (i.e., high pathways and high agency) will have repeated pathway and agentic thought that is fluid and fast throughout the goal pursuit sequence. The full low-hope person (i.e., low pathways and low agency) will have an iterative pathway and agentic thought that is halting and slow (if at all operative) in the goal sequence" (Snyder, 2002, p. 252). This can become particularly problematic upon encountering challenges to goal pursuit. In these situations, HT hypothesizes that high-hope individuals will be quicker to re-energize and re-orient their goal-directed behavior than low-hope people. As a person "continues in a given goal pursuit and gains a stronger sense of the imperviousness of the barrier, the initial sense of stress is transformed into negative emotions" (Snyder, 2002, p. 252). Low-hope individuals will be far more "likely to construe the impediments as stressful" than high-hope individuals, whose "subsequent thoughts and actions may render the impediment as being less and less stressful" (Snyder, 2002, p. 252) due to a high-functioning pathways/agentic iterative thought process. Ultimately, according to Snyder (2002, p. 253), the low-hope individual "perceives that she or he is not going to reach the desired goal, and the resulting disruptive negative emotions cycle back to register on the person's dispositional and situational hopeful thinking." Conversely, a person with high quality hope-based thinking tends to perceive stressors as challenges that simply "may necessitate alternate pathways and rechanneling of agency to a new pathway" (Snyder, 2002, p. 253).

Evidence in Favor of Hope Theory

As noted above, with the emergence of Positive Psychology, much of the research on burnout syndrome has moved from a focus on negative behavior patterns and symptoms to a more positive focus: human resource strengths that are measurable and can be taught and nurtured. Seligman and Csikszentmihalyi (2000) have emphasized positive, subjective experiences and processes that include hope as a primary determinant of wellbeing. Relative to this line of reasoning, HT is one lens through which researchers may gain insight into how to stop the rising rates of burnout syndrome in SPED teachers (Snyder, 2002).

Using Snyder's (2002) definition, high-hope individuals have proven more successful at deriving beneficial outcomes in adversity and finding greater spiritual meaning in life (Affleck & Tennen, 1996; Feldman & Snyder, 2005). High-hope individuals have been found to be more effective at problem solving and adapting when required; they also tend to persevere when barriers arise (Kwon, 2002; Snyder, 2002; Snyder et al., 2005).

High-hope individuals have been shown to experience enhanced academic success (Snyder et al., 2005). A study of first-year law students demonstrated that initial hope levels predicted academic standing at semester's end, as well as level of life satisfaction (Rand et al., 2011). Using a longitudinal study design (n=86), Rand et al. (2011) examined relationships between initial levels of optimism and hope with subsequent academic performance and life satisfaction. Likert-type psychometric instruments included: the revised Life Orientation Test of dispositional optimism (LOT-R) (Scheier et al., 1994), and the Adult Hope Scale (AHS) (Snyder et al., 1991). While controlling Law School Admission Test scores and undergraduate GPA, path

analysis demonstrated that hope (but not optimism) predicted academic achievement. However, both hope and optimism uniquely predicted life satisfaction levels.

Several other studies have also demonstrated that hope not only is predictive of academic achievement but also coping capacity, life satisfaction, and overall adjustment (O'Sullivan, 2011). Furthermore, high-hope individuals have been reported to evince positive emotional mindsets linked to their histories of success in goal-directed behavior (Snyder et al., 2005). According to Snyder et al. (2005), students with higher levels of hope tend not to let challenging circumstances influence their self-perceptions; they glean vital knowledge not only from their successes, but also from failures. According to HT, high-hope individuals have developed the ability to invest sufficient effort and to identify effective strategies in order to succeed (Snyder, 2002). It would be most interesting to investigate if the above findings regarding hope-based thinking related to chronic academic challenges are able to be generalized to pre-service SPED teachers and beyond.

Hope-Based Thinking Mitigates Burnout Syndrome

The benefits of implementing the tenets of Hope Theory (HT) (i.e., goal-directed behavior informed by agentic and pathways thinking) in one's approach to life are numerous, as detailed above. Those who lack this orientation may be at a significant disadvantage. Although there is reason to believe that high quality hope-based thinking may help mitigate burnout syndrome, relatively few studies across professions have focused on the relationship between the components of HT and burnout syndrome. The literature appears even more limited with regard to the relationship between HT and burnout syndrome in the teaching profession, and essentially non-existent in special education. That being said, the possible application of HT in the prevention of burnout syndrome in SPED teachers can be explored by examining its application in fields with similar stress profiles and high emotional labor demands.

In one of the earliest studies examining the relationship between HT and burnout-syndrome, Sherwin et al. (1992), using Snyder's model of HT in the reality negotiation process, hypothesized that hope would be significantly predictive of all three separate components of Maslach's definition of burnout syndrome. The researchers recruited 81 nurses from chronic-care rehabilitation units in six different hospitals to complete the Trait Hope Scale (THS) (Snyder et al., 1991) and Maslach's Burnout Inventory (MBI) (Maslach, 1986). The researchers' hypothesis was confirmed: Results indicated that higher levels of hope-based thinking were significantly associated (p<0.01) with lower emotional EE and DP levels, and greater levels of PA. Sherwin et al. (1992, p. 137) concluded that the tenets of HT "have beneficial aspects for persons who have to endure long-term stressful situations that may not be necessarily perceived as threatening to the self." Further research on hope and burnout among a larger and more diverse sample was recommended.

In another study from within the nursing profession, Rushton et al. (2015) implemented a two-phase project to enhance nurses' resilience while improving retention by focusing on burnout mitigation. In phase one, a cross-sectional survey was used to assess the experiences of a high-stress nursing cohort. A total of 114 nurses in six high-intensity units completed the following Likert-type psychometric instruments: the State Hope Scale (SHS) (Snyder et al., 1996); the MBI-HS (Maslach, 1986); a moral distress scale (Corley et al., 2001); a perceived

stress scale (Cohen et al., 1988); a resilience scale (Connor & Davidson 2003); and a patient-care meaning scale (Geller et al., 2008). Results indicated that moral distress was a significant predictor of all three Maslach components of burnout syndrome, and the association between burnout level and resilience was highly significant (p<0.001). Greater resilience protected nurses from EE and significantly contributed to PA. Nurses with three to 10 years of experience had the highest mean scores on EE and DP. Spiritual well-being reduced EE and DP; physical wellbeing was associated with greater personal accomplishment (PA). Meaning in patient care and Snyder's total state hope score were significant independent predictors of burnout syndrome mitigation. State hope was significantly higher among nurses practicing less than three years relative to nurses practicing greater than ten years (p<0.005). Higher levels of state hope were associated with higher levels of resilience and reduced stress. Hope and resilience were significantly inversely correlated with EE and DP (p<0.01) but directly correlated with PA (p<0.05). Nurses with higher levels of state hope scored higher on PA, suggesting that hope may drive work satisfaction in this cohort.

Phase two regression models explained 40% of the variance in each component of burnout, providing strong evidence that an intervention to increase hope-based thinking and resilience in nurses in high-stress environments could prove highly effective in mitigating burnout syndrome. Among other recommendations, Rushton et al. (2015) concluded by stating that: 1) their results suggest that hope can reduce moral distress, enhance resilience, and protect against burnout, and 2) cultivating a nurse's capacity for hope-based thinking may offer an antidote to attrition related to burnout syndrome, 3) the relationship between hope-based thinking and burnout syndrome may be a particularly fruitful area of inquiry within the nursing profession.

Research from the closely related field of social work was conducted by Schwartz et al. (2007). Using a quantitative survey research design, the researchers looked at a national sample of 1, 200 social workers, in clinical practice at the time, to find out whether social work clinicians declined in trait hope, as measured by the Trait Hope Scale (THS) (Snyder et al., 1991), and/or experienced an increase in burnout levels, as measured by the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981) over the course of their careers. In this study, HT was interpreted in part as a therapist's intensity of focus on client success, and included the concepts of goals, agentic thinking, and pathways thinking (Schwartz et al., 2007). Additional research variables centered around age, number of years in practice, and practice setting. The results showed that among the 676 respondents with analyzable data, social workers' self-reported burnout level was inversely related to age. Also, practice setting was identified as a moderator in the significant relationship between years spent working in social work and the development of burnout syndrome. Notwithstanding the oldest category of social workers, those in private practice had higher hope-based thinking and less burnout, as well as significant positive correlations between client hope and social worker hope and social worker age and hope. In addition, burnout levels declined with increasing years in private practice, but not in public practice, suggesting the importance of hope-based thinking in this setting in particular. Schwartz et al. (2007) concluded with recommendations for social work administrators and

supervisors, specifically noting the importance of building a hope-based organizational culture and conducting regular hope-focused stakeholder audits.

In one of the most recent studies investigating the mitigating effects of hope-based thinking on burnout syndrome, Vetter et al. (2018), using a quantitative research design, surveyed members of the Society of Gynecologic Oncology (SGO). With the goal of corroborating and extending previous research that had shown a burnout rate of 32% in SGO members (Rath et al., 2015), the researchers sought to: 1) determine rates of burnout syndrome in this cohort, along with other psychosocial markers of distress (e.g., substance and/or alcohol abuse, 2) record baseline levels of positive psychology metrics (e.g., hope, resilience, flourishing), and 3) establish if individuals with higher levels of hope-based thinking, resilience, and flourishing were afforded protection against burnout syndrome. A total of 1745 SGO members were sent an electronic questionnaire with 82 items from scales measuring hope, resilience, flourishing, psychological well-being, depression, substance abuse, and burnout. The 82 item survey was comprised of the following psychometric instruments: the THS (Snyder et al., 1991), the Brief Resilience Scale (BRS) (Smith et al., 2008), the Flourishing Scale (FS) (Diener et al., 2010), the Personal Health Questionnaire (PHQ-9) (Kroenke et al., 2001), the Drug Abuse Screening Test (DAST) (Skinner, 1982), and the MBI (Maslach et al., 1981).

The response rate was 21.4% (n=374); 48.5% of respondents screened positive for depression; 17.0% screened positive for alcohol abuse, and 12.0% for substance abuse. In total, 24.0% of respondents scored above clinical cutoffs signifying the presence of burnout syndrome. Those suffering from burnout syndrome were more likely to be positive for depression and

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substance abuse. With regard to the overall cohort's positive psychology metrics, respondents not experiencing burnout demonstrated higher levels of hope, resilience, flourishing, and psychological well-being. Also, male respondents had higher levels of hope, resilience, and wellbeing. Vetter et al. (2018) concluded that their data suggested that novel positive psychology-designed strategies (e.g., those based on HT) for evidence-based interventions to mitigate burnout syndrome should be investigated.

In yet another study using a quantitative research design, Simmons et al. (2009) distributed surveys to 381 employees working in an assisted living center in an urban area of a Midwestern state. The survey package contained two surveys: one for them to complete and one for them to give to their supervisor (a 10-item survey assessing the employee's performance). The researchers were interested in investigating the following hope-related hypotheses: 1) There is a significant, positive relationship between secure attachment and hope, and 2) There is a significant, positive relationship between hope and individual task performance. The researchers stated that they incorporated burnout into their exploratory model in order to provide a more robust assessment of secure attachment, trust, and hope. Overall, 203 analyzable employee surveys were returned (response rate of 53%). The surveys incorporated the following Likert-response style psychometric instruments: the Self-Reliance Inventory (SRI) (Joplin et al., 1999), the (SHS) (Snyder et al., 1996), the Trust In Supervisor Scale (TISS) (Mayer et al., 1999), the Shirom-Melamed Burnout Measure (SMBM) (Shirom, 1989). Results indicated that all correlations were in the hypothesized direction, and the strongest correlations were between secure attachment and hope and secure attachment and burnout; a highly significant inverse relationship between hope-based thinking and burnout syndrome was demonstrated. Simmons et

al. (2009) concluded that secure individuals were better equipped to find ways to achieve valued goals with others, suggesting that a well-developed social support network encourages trust and hope-based thinking. Simmons et al. (2009) noted that due to the strength of the correlation between these variables, further investigation into the mitigating effects of a hope-based cognitive mindset on burnout syndrome was warranted.

Even within the field of sporting activity, the relationship between hope-based thinking and burnout syndrome has been investigated. Gustafsson et al. (2010) examined the relationship between hope and burnout among 178 competitive athletes aged 15 to 20 using a quantitative research design. Consistent with the tenets of HT, the researchers hypothesized that low-hope athletes may be susceptible to burnout syndrome because they are prone to experience goal blockage, frustration, and negative affect. The athletes were requested to respond to the THS (Snyder et al., 1991) and the MBI (Maslach, 1986). Total hope score was found to have a significant inverse correlation with all three components of burnout syndrome. Further, results of statistical analysis demonstrated that low-hope athletes scored significantly worse than mediumand high-hope athletes on all three burnout dimensions; this finding confirmed the correlation results. Most significantly, agency thinking was revealed to be the strongest independent predictor of all three components of burnout syndrome. It was speculated that a perceived lack of agency may result in frustration over unmet goals, both characteristics of low-hope athletes according to HT. Based on these results, Gustafsson et al. (2010) suggested that by promoting hope, particularly agentic thinking, it may be possible to reduce the likelihood of burnout syndrome.

Another study of the relationship between hope-based thinking and burnout syndrome was conducted by Yotsidi et al. (2018). Interestingly, the positive psychology construct of "flow" was also investigated in the research model. Using a quantitative pre-post research design, Yotsidi et al. (2018) surveyed 180 firefighters (97.2% male) who worked at the central Hellenic Fire Service located in Athens: 41.9% were between 25 to 34 years old, 44.1% between 35 to 44 years, and 14% were older than 45 years. Sixty-seven percent of the firemen had worked in the profession for less than ten years (67.2%). The participants were requested to respond to the following Likert-type psychometric instruments: the Maslach Burnout Inventory-General Survey (MBI-GS) (Maslach, 1986), the Adult Dispositional Hope Scale (ADHS) (Snyder et al., 1991), and the Dispositional Flow Scale-2 (DFS-2) (Kawabata et al., 2008).

As hypothesized, results showed that after a fire incident, firemen's hope scores decreased whereas burnout scores increased. Flow and dispositional hope scores were both directly correlated with PA level. Increases in hope pathways thinking were found to be positively associated with PA after the fire-related incident. Also, changes in DP were inversely and significantly related to positive changes in hope agency thinking and total hope scores. In addition, changes in hope pathways thinking were directly related to changes in PA. Flow dimensional scores after a fire event were found to be significantly correlated with levels of PA, hope pathways, hope agency, and total hope score. A fire incident caused changes in firefighters' burnout and hope levels: hope pathways thinking showed a considerable decrease, while their levels of EE and overall burnout scores were significantly raised. Significant differences were detected in flow and hope levels after a fire incident in relation to age, educational level, and family status. Yotsidi et al. (2018) concluded that burnout syndrome in fire fighters was directly

related to their overall levels of hope both prior to and after a fire-related incident. Also, multiple regression analysis demonstrated that the total hope score after a fire incident could be predicted from the firemen's pre-fire burnout level. Stable levels of dispositional hope were associated with increased flow after the fire incident. The researchers thought that their findings should have important practical implications in terms of empowering workers under high-stress conditions with an understanding of the intricate relationships that exist between flow, hope, and burnout syndrome.

The final study in the current literature review pertains directly to teaching, and tangentially to special education teachers. MacIntyre et al. (2022) examined the contribution of HT to understanding the stress reactions of language teachers during the early stages of the pandemic. The researchers implemented a quantitative survey research design. Study inclusion criteria required participants to be current language teachers of at least 18 years old (range: 18-65+). Seven hundred and sixty-five teachers were recruited at Time 1; 245 at Time 2, with over 40 countries represented (including the United States and Canada). The study sample was 73.5% female. The overarching research questions were: 1) What changed in stress levels, coping, and wellbeing as the pandemic went on, 2) What role does hope-based thinking play in language teacher adaptation and wellbeing under intense pandemic conditions, and 3) What are the strongest predictors of teacher hope? Instrumentation included: The Adult Hope Scale (AHS) (Snyder et al., 1991), Brief-Coping Orientation to Problems Experienced Inventory Scale (Brief-COPE) (Carver, 1997), Stress Index (SI) (MacIntyre et al., 2020), The Positive Emotion, Engagement, Relationships, Meaning, Accomplishment (PERMA-Profiler) (Butler & Kern, 2016), The World Health Organization-Five Index (WHO-5) (Topp et al., 2015), Resilience

Index (RI) (Amtmann et al., 2020), Growth Through Trauma Measure (GTTM) (Taku et al., 2008), State Anxiety Scale (SAS) (Marteau & Bekker, 1992), and the General Health Index (GHI) (Butler & Kern, 2016). Multivariate t-tests were used to assess changes in all variables measured at Time 1 and followed-up at Time 2. Given the levels of stress seen in the first wave of data collection, a measure of hope-based thinking (Snyder et al., 1991) was added to the second wave. Thus, the second set of analyses focused on associations between hope and overall stress, approach and avoidant coping strategies, negative emotion, well-being, resilience, PERMA subscales, and perceptions of current health.

Results indicated that, overall, stress reactions remained relatively high and constant throughout the initial months of the pandemic. Overall teacher hope level was significantly negatively correlated with both stress and avoidant coping, indicating a tendency in high-hope teachers to reject coping strategies such as denial, self-blame, and venting. Positive significant correlations were found between hope and approach coping strategies. Thus, teachers with high-quality hope-based thinking relied on strategies that address problems directly (e.g., increased planning, problem reframing, asking for assistance). Furthermore, hope was also significantly and strongly correlated with all facets of teacher well-being assessed. Finally, a regression model was generated to assess the effectiveness of each measure in the prediction of teacher hope level. Nineteen variables were entered into the regression analysis; the final model included six significant independent predictor variables (PERMA meaning in life, PERMA accomplishment, resilience, general health, post traumatic growth), accounting for 60% of the variance in teacher hope scores. Overall results suggested that in times of severe chronic stress,

teacher resilience bolsters hope levels and hope-based thinking has the potential to play a major role in the mitigation of burnout syndrome and the promotion of teacher wellbeing.

CHAPTER III: CONCLUSION

Results stemming from a 2022 exhaustive survey of SPED teachers across the United States indicated that mental health issues due to work-related stressors were the dominant drivers of attrition, with burnout at the top of the list. During the COVID-19 pandemic, Cormier et al. (2022) concluded that the well-being of many SPED teachers was in jeopardy and that they were a particularly vulnerable group of educators in need of mental health treatment for stress, anxiety, and depression. This observation, in large measure, refined the framework for the present literature review.

Summary of the Literature

Causes and Consequences of Burnout Syndrome

The present research was intended to provide insight into the causes and consequences of burnout, and the potential value that Hope Theory (HT) may contribute to the mitigation of burnout syndrome in SPED teachers. The majority of research on SPED teachers indicated that a complex combination of demographic, external, and internal factors resulted in burnout syndrome (Brunsting et al., 2014). Further, different factors were found to contribute differentially to each of the three separate components of Maslach's syndrome. The study by Yilmaz et al. (2015) pinpointed that the overwhelming exhaustion and hopelessness frequently found in SPED teachers could be explained by the enormous amount of emotional labor one faces working in the field. Billingsley and Cross' study (1991), corroborated Yilmaz et al. (2015) findings, when they identified stress associated with emotional labor as a primary reason for SPED teachers' transferring from special to general education. Billingsley and Bettini (2019) have stated that special educators not only serve highly emotionally challenging students, but also experience an increase in emotional labor burden when dealing with the emotional dissonance, and chronic stress from interactions with parents and administrators. Indeed, administrator support, or lack thereof, repeatedly appears throughout the SPED teacher burnout literature.

In the Brunsting et al. (2014) systematic review spanning nearly 35 years (1979-2013), lack of administrative support was one of the strongest external predictors of burnout-related turnover in SPED teachers. Hestor et al. (2020) reported that SPED teachers did not feel supported by their administrators and that, largely due to this factor, burnout from chronic stress was forcing them to leave the profession.

Although not every SPED teacher experienced the same level of stress and burnout during the pandemic, the present research suggested that the difference between SPED teachers who did and did not develop burnout syndrome (under similar conditions) was often due to demographics and internal/individual factors. Variables such as SPED teacher age, marital status, gender, level of education, and years of experience have been found to be associated with various components of burnout syndrome.

Brunsting et al. (2014) reported that age accounted for a significant amount of variance in emotional exhaustion (EE); teachers 42-51 years old were found to have the highest EE and depersonalization (DP) levels (Williams & Dikes, 2015). Further, teachers' caseloads were directly correlated with all components of burnout syndrome: teachers with 1-10 students reported the greatest percentage of low EE, the second greatest percentage for low DP, and the highest personal accomplishment (PA) levels. Conversely, teachers with the highest caseloads reported the greatest percentage of high EE, high DP, and low PA (Brunsting et al., 2014). The study by Williams and Dikes (2015) provided some of the most illuminating information with respect to the relationship between burnout and demographics: SPED teachers who were single were more prone to burnout syndrome in general, females on average were higher in EE than males; however, males were higher in DP, and PA levels were similar between genders. In addition, 100% of teachers with one to four years of teaching experience reported low DP while those with 5-10 years teaching experience reported higher levels of DP.

The present research also identified internal/individual factors, such as personality traits, as being associated with the development of burnout syndrome (e.g., type-A personality, resistance to change, neuroticism). Relatedly, resistance/protective traits (i.e., personal resources) such as extraversion, dominance, frustration tolerance, self-esteem, locus of control, optimism, and exert tremendous influence on the threat assessment people make under stressful conditions. The lack of these resources may predispose SPED teachers to the negative effects of chronic stress, while their presence may help prevent burnout syndrome. Since burnout syndrome reflects an individual's assessment and response to chronic stress, the personal resource of resilience has become a major research focus in occupations with high stress profiles (Mansfield et al., 2016; Rushton et al., 2015; Zhang et al., 2020).

In this literature search and review, one article in particular elucidated how a SPED teacher's resilience level can be subtly diminished over time. Zhang et al. (2020) examined teacher resilience as a potential burnout prevention factor and a promoter of high levels of mental health in SPED teachers. Their results showed that resilience level had a significant effect on total mental health symptoms, suggesting that resilience maintains and/or improves mental health in SPED teachers. However, Zhang et al. (2020) also found that various teaching barriers

in the practice of special education teaching negatively moderate the positive effects of resilience on teachers' mental health. It was this finding that crystallized the present researcher's belief in the underlying truth of the saying that, "resilience is not enough!" Although greater resilience has been found to protect against EE and significantly contribute to PA (Rushton et al., 2015), the inherent chronic stressors in SPED teaching have the potential to eventually exhaust and debilitate even the most resilient among us.

The Effectiveness of Current Intervention and Prevention Strategies

One of the most distressing findings of the current literature review was that as recently as 2002, researchers had proclaimed effective intervention strategies for SPED teacher burnout were non-existent (Hastings & Brown, 2002). What made this so distressing was the fact that burnout in relation to SPED teachers had been considered a major national problem for decades prior to the work of Hastings and Brown (2002). Additionally, the present research revealed that since 1983, three waves of government-legislated school reforms were implemented and subsequently found to have exacerbated teacher burnout levels (Dworkin, 2001).

The first positive study specific to SPED teacher burnout intervention since the comments of Hastings and Brown (2002) was conducted by Biglan et al. (2013). The researchers demonstrated a relationship between high levels of teacher EE and depression; they also found that training in mindfulness reduced levels of depression and thus EE. Biglan et al. (2013) concluded that Acceptance and Commitment Therapy (ACT) can help reduce the high levels of stress and emotional exhaustion among SPED teachers with mindfulness-based and values-focused intervention techniques. These results were partially corroborated by a robust meta-analysis of the effects of known interventions on components of burnout syndrome in

teachers. Iancu et al. (2017) reported three principal findings: (a) the intervention strategies of mindfulness and CBT statistically significantly reduced levels of EE, (b) mindfulness and social support were found to significantly increase PA levels, and (c) DP levels were not significantly improved by any of the commonly applied teacher burnout interventions. In another study, West et al. (2016) contended that all intervention studies analyzed thus far have achieved less than a 10% reduction in burnout symptoms. This contention serves to magnify the urgent need for the development of innovative approaches to reduce the rising rates of burnout syndrome. Additionally, it helped to galvanize the present researcher's interest in exploring the possible application of Hope Theory in the work lives of SPED teachers.

Maslach (2017) recommended prevention over intervention as the preferred approach to burnout syndrome mitigation. There were no prevention studies located in the current SPED burnout syndrome literature search that targeted external factors; however, internal factors possessed by SPED teachers have been studied in preventative designs, with resilience leading the way. Indeed, educational researchers have provided essential understandings of teacher resilience and how a teacher's natural level may be supported; however, less emphasis has been given to the problem of how teacher resilience may be developed. While the present research did reveal that resilience is a vital component in supporting SPED mental health (Zhang et al., 2020), many scholars have questioned whether it can be taught and whether it is sufficient, in and of itself, to address the overwhelming problem of teacher burnout (Leiter, 2018; Mahdiani & Ungar, 2021; Munoz et al., 2020). At this point, there are no published intervention or prevention studies within the SPED research literature demonstrating efficacy across all three components of burnout.

Hope Theory: A Cognitively-Based Solution to Address a Cognitive Syndrome

One of the most interesting facts unearthed during the literature search was that burnout is a cognitive syndrome characterized by impairments in cognition, perception, attitude, and emotion in response to chronic workplace stress. As such, resilience may be necessary but insufficient to address burnout. Resilience has been identified as a non-cognitive capability (Mansfield & Beltman, 2019), while it is likely that a cognitively-based solution is required to address a cognitive syndrome. In this regard, Hope Theory (HT) may offer a positive path forward for SPED teachers. As a goal-directed cognitive therapy, the construct of hope has been linked to psychological adjustment and higher levels of well-being, accelerated medical recovery, increased life expectancy, strategic thinking ability, better problem solving, and perseverance under challenging conditions (Affleck & Tennen, 1996; Feldman & Snyder, 2005). Perhaps most importantly, with respect to increasingly threatened mental health within the SPED teacher community, the literature search on HT revealed empirical evidence indicating that higher levels of hope-based thinking are associated with reduced incidence of burnout syndrome, as well as reduced anxiety and depression symptoms (Cheavens et al., 2006). Also, the research confirming the efficacy of hope-based thinking on reducing the incidence of burnout syndrome spanned the occupational spectrum of high-stress jobs, ranging from social workers to firefighters, nurses to competitive athletes, and from surgeons to language teachers. Importantly, the research also provided meta-analytic evidence that the tenets of HT could be effectively taught, developed, and applied in clinics and community settings of diverse groups and age levels (Schwartz et al., 2007).

Finally, the current literature review provided support for the idea that HT may represent a complementary cognitive-based tool kit capable of augmenting resilience training, thereby enabling SPED teachers to move beyond merely enduring workplace stress toward initiating action to improve the work context. Hope and resilience were shown to be distinct yet highly correlated constructs; hope-based thinking demonstrated significant positive relationships with multiple variables associated with resilience under stress (MacIntyre et al., 2022; Munoz et al., 2020; Rushton et al., 2015). In consideration of the research discussed herein, the integration of Hope Theory within a resilience-building framework may prove invaluable to SPED professionals facing the occupational challenges that drive burnout syndrome.

Professional Application

The literature supports the need for extensive progressive change in the administrative and organizational framework of the national education system in order to halt the growing incidence of burnout syndrome in SPED teachers. However, the requisite systemic changes seem unlikely to materialize in the near future, and there is a very low probability that SPED teachers will be able to effect such substantive organizational-structural changes any time soon. Nevertheless, SPED teachers need powerful, ready-to-implement solutions for combating burnout syndrome. While external and demographic variables are more or less fixed, internal factors still allow for a hopeful solution. One such solution may be found in the construct of hope, and the tenets of HT (McCormick & Von Grey; Snyder, 2002).

The significance of the present research rests primarily in the identification and potential application of an additional construct, beyond resilience, that may help to inform the development of novel preventive strategies to reduce burnout syndrome in SPED teachers. The
research shows that hope-based thinking is inversely related to burnout syndrome (MacIntyre et al., 2022; Rushton et al., 2015; Sherwin et al., 1992). In fact, Snyder first considered burnout to be the absence of hope (Snyder, 1994). Thus, judging from the rising rates of burnout syndrome, SPED teachers appear to have lost hope on a wide-scale basis. Fortuitously, the research also suggests that hope-based training strategies may provide protection against all three components of burnout syndrome (Rushton et al., 2015; Sherwin et al., 1992), something that no SPED teacher prevention or intervention modality has been able to accomplish.

The tenets of Snyder's (2002) HT provide a strong cognitive, motivation-based framework for pursuing goals. Goals have been defined as mental targets, which include those focused on sustaining or increasing positive outcomes and those that prevent negative outcomes (Snyder, 2002). Ideally, the tenets of HT would first be introduced to new SPED teachers within the context of educator preparation programs. Since burnout is most likely to occur in the first years of teaching, proactive steps should be taken during teacher preparation training to help future SPED teachers deal more effectively with the stressors they will most certainly encounter. One of the main reasons for the high incidence of SPED teacher burnout in the disconnect between a new teacher's hopes/expectations and the realities of the SPED teacher's job is that new teachers are just not prepared for the degree of stress, the varied sources of stress, and the overwhelming amount of the emotional labor involved. Special education teachers do not have the necessary tools required to thrive, let alone survive, within the field. Teaching HT to new SPED teachers can significantly help with these issues. Agency and pathways thinking can assist in both the formulation of realistic job expectations (goals), and the development and implementation of strategies (goals) to protect against burnout syndrome. For example, Snyder

(2002) suggested that when teachers grounded in hope-based thinking encounter barriers, they are better able to reconnoiter and re-energize, and to continue onward toward goal accomplishment. Further, their selected cognitive-behavior responses serve to neutralize stressful situations. The end result is an increased sense of personal efficacy and the experience of positive emotions which serve to combat burnout and feed the goal pursuit cycle by "reinforcing their dispositional and situational hopeful thinking" (Snyder, 2002, p. 255).

It seems natural for educator preparation programs' curriculum to focus on academic content and instructional pedagogy, while neglecting to address the overall well-being of future teachers. When these critical aspects of a teacher's education are overlooked, new teachers can be easily overwhelmed by the social, emotional, and cognitive demands placed on them on a daily basis. At least since 1992, some SPED teacher education preparation programs have advocated for stress reduction as part of the curriculum with the goal of preventing burnout before it starts (Greer & Greer, 1992). Importantly, resilience-building training curriculum grew out of these initial preemptive efforts and have been used to great effect (Mansfield et al., 2016); however, the current research suggests that a blending of resilience-building and HT may magnify the beneficial effects of each. Southwick et al. (2014) have suggested that hope-based thinking serves as a determinant of resilience, and that resilience transforms into a conscious process of successful adaptation in the presence of hope. The literature supports the view that hope and resilience are correlated, and that both hope and resilience are important players in the mitigation of burnout syndrome.

Limitations of the Research

The reviewed literature was primarily limited by a focus on research that used the two most well-known and validated instruments in their respective fields: the Maslach Burnout Inventory (Maslach, 1981), and the Trait Hope Scale (Synder, 1991). This was done in order to facilitate relative comparisons of primary outcome variables between studies. Although there is a rich narrative supportive of hope as a foundational component in education, the role of hope-based thinking in teaching has drawn limited attention and remains largely unexplored. Generally, SPED teacher burnout literature, in relation to the literature on hope-based thinking in SPED teachers, is limited by quantity, quality, and methodology. The vast majority of the corroborative research included in this review was correlational in nature and based on self-report data gathered via surveys. These data may reflect consequences of personal bias, exaggeration, attribution, or selective memory. Although an attempt was made to limit included research articles to those using highly validated psychometric instrumentation, the measures are still presumptive in that they are based on individual perceptions. Correlating one such perception-based measure with another has the potential to compound the problems mentioned above. Thus, the findings presented herein should be considered limited and preliminary, but may be of value in the generation of future research hypotheses.

The present researcher expected to find more recent studies examining innovative burnout intervention and prevention strategies, particularly in light of rising rates of burnout syndrome in SPED teachers. Further, the available prevention strategies were primarily limited to targeting symptoms and coping with stress, rather than focusing on the root causes of burnout syndrome. Finally, the research did not identify any published intervention or prevention studies within the SPED research literature demonstrating efficacy across all three components of burnout syndrome.

Implications for Future Research

In this literature review, data was collected on the dynamic relationship between burnout syndrome and the tenets of HT. Consistent corroborative data emerged across a wide spectrum of high-stress occupations: hope-based thinking positively impacts all three components of burnout syndrome (i.e., emotional exhaustion, depersonalization, and reduced personal accomplishment). However, when studying burnout, hope-based thinking has been profoundly ignored by organizational and educational researchers relative to other positive psychology constructs such as resilience. Future in-depth quantitative research is needed to fully explicate the relationships between the tenets of HT and components of burnout syndrome in SPED teachers. One such scenario could be initiated in an established educator preparation program module focusing on resilience-building. Hope is a mindset, a particular style of thinking. Thus, hope can be taught. Specific strategies for teaching hope-based thinking have been extensively described by Snyder (Snyder, 1994). Further, it can be hypothesized that since hope-based thinking and resilience are dynamically interrelated, resilience can be supported and enhanced by the addition of HT to the resilience-building curriculum. This proposed strategy suggests that efforts to increase SPED teachers' levels of hope-based thinking and resilience simultaneously may promote optimal functioning in multiple life domains-including the classroom. Ideally, this hypothesis could be tested using a longitudinal randomized controlled study design, with the control group receiving the standard resilience-building program and the experimental group receiving the integrated hope/resilience intervention.

Conclusion

In conclusion, burnout syndrome in SPED teachers is complicated and emerges from a combination of external and internal factors (Brunsting, 2014). The mental health hazards of burnout syndrome in SPED teachers are profound. As of yet, there are no published intervention or prevention studies within the SPED research literature demonstrating efficacy across all three components of burnout syndrome (Iancu, 2018). Conversely, the construct of hope, and the tenets of Hope Theory, have been associated with the mitigation of burnout syndrome in workers from a variety of occupations with inherent stress levels comparable to SPED teachers. Hope-based thinking has been shown to positively impact on all three components of burnout syndrome. Although resilience-building is necessary for preparing SPED teachers to cope with high stress levels, it has proven to be insufficient to restrain the rising burnout rates within the SPED community (Zhang et al., 2020). Thus, an integrated hope/resilience-based educator preparation program may represent a much-needed innovation with regard to the mitigation of burnout syndrome and other mental health issues specific to SPED teachers in the aftermath of the pandemic. The current research suggests that hope-based thinking has the potential to enable SPED teachers to move beyond merely enduring workplace stress toward initiating strategic action to improve the work context. By improving the work context, chronic job-related stressors can be minimized or alleviated, and burnout syndrome potentially prevented.

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