

THE ICARUS EFFECT: EVIDENCE OF POSSIBLE OVER-COMMITMENT AND BURNOUT AMONG SPECIAL-EDUCATION TEACHER CANDIDATES

Fanni L. Coward, Ph.D.
Texas Tech University

Doug Hamman, Ph.D.
Texas Tech University

Deborah Brown, Ph.D.
West Chester University of Pennsylvania

DeAnn Lechtenberger, Ph.D.
Texas Tech University

Abstract

Burnout among special education teachers continues to plague the profession creating gaps in services to students and wasted resources by schools and districts. Using quantitative methods, researchers consistently point to well-known factors (e.g., emotional exhaustion depersonalization, job dissatisfaction), but fewer have delved into understanding the early experiences of teacher candidates that may precipitate burnout. This study provides initial evidence about a taxonomy of beliefs that teacher candidates hold about special education teaching and describes the possible links those beliefs may have to future burnout. Implications are considered for those involved with the preparation of special education teachers.

Keywords: teacher burnout, special education, teacher preparation, compassion fatigue

Icarus, the son of Daedalus, escaped imprisonment and flew away by means of artificial wings made of wax. Icarus ignored his father's instructions not to fly too close to the sun. Failing to heed his father's warning, the exuberant young Icarus flew higher and higher getting closer to the sun. As his father feared, the wax in his wings melted, and Icarus tumbled out of the sky and fell into the sea where he drowned (Greek Mythology).

Teacher burnout has long plagued the teaching profession and continues to do so (Billingsley & Bettini, 2019; Skaalvik & Skaalvik, 2017). Teacher burnout is the result of undergoing stress from teaching for a long period of time (Maslach, 2003). Special education teachers are at particularly high risk of burnout because they may experience on a daily basis many factors that are associated with the onset of burnout, including lack of administrative support, paperwork overload, challenging student behaviours, and role complexity (Brunsting, Sreckovic, & Lane, 2014; Gidden, 2005; Koenen, et al., 2019; Wasburn-Moses, 2009).

Although it is clear that these immediate factors contribute to burnout, there may be others that are more remote in time and place. For example, teacher educators may prepare candidates in such a way that perpetuates burnout. Findings from several research studies seem to suggest that some aspects of teacher preparation programs out of sync with the K-12 practices and policies (e.g., Greenberg, Putman, & Walsh, 2014; Kugelmass & Kupferberg, 2020; McLeskey & Brownell, 2015). For example, in her study on role expectations of teacher candidates, Wasburn-Moses (2009) found that even though special education teacher candidates' expectations are

relatively accurate, there are significant mismatches in several areas, particularly in regard to co-teaching and administrative support. Fewer researchers, however, have investigated the implications of this mismatch or pursued interventions aimed at alleviating burnout (Brunsting, Sreckovic, & Lane, 2014; Wasburn-Moses, 2009).

In addition, there is evidence that burnout-inducing stress may accumulate vicariously. Recently, researchers have documented the phenomenon of burnout contagion. This phenomenon involves feelings of emotional exhaustion from exposure to other teachers' negativity and exhaustion in the same school (Kim, Youngs, & Frank, 2017; Zimmerman, 2019). Kim et al. (2017) stated that early-career teachers are particularly susceptible to this burnout contagion. Additionally, in their review of the research in special education teacher burnout, Brunsting, Sreckovic, and Lane (2014) found that there is a negative correlation between teacher age and burnout. This underscores the vulnerability of early-career teacher to burnout and the importance of helping prevent burnout during the earliest experiences during teacher preparation.

If teacher preparation programs do not prepare their graduates for these types of individual or group-based stresses, or teach them how to cope with these issues, new special education teachers will continue to be at greater risk of suffering from the effects of burnout. The focus of this study is on the experience of teacher candidates who were in their last semester of student teaching and were seeking special education teacher certification. Our research question was whether special education teacher candidates might already hold beliefs that might predispose them to experience work stress more acutely and therefore be inclined from the outset toward burnout? Identifying these beliefs may be one way teacher educators can help guide the newest special educators away from professional dangers that appear to lead to an inescapable fall.

Literature Review

Stress vs. Burnout

Stress is related to the immediate influence of stressors on a person, whereas burnout is related to the enduring impact of stressors on a person (Brunsting, Sreckovic, & Lane, 2014; Wong, Ruble, Yu, & McGrew, 2017). Burnout appears to follow a predictable progression within the professional burnout experiences that first begins with stress, and the constant stress leads to strains, and finally ends with burnout (Gold & Roth, 1993; Maslach, 1982).

Even though at some points we all become stressed with our job, these experiences often do not persist and therefore are less likely to lead to burnout. Since the difference between stress and burnout can be a matter of degree, the earlier one recognizes the signs of stress and strains, and does something to address the symptoms, the more likely one will be able to avoid burnout. Nevertheless, if an individual, such as a special education teacher encounters these experiences of stress more acutely and frequently (Maslach & Leiter, 2016; Maslach, Schaufeli, & Leiter, 2001), then he or she may become more vulnerable to burnout. Without addressing these negative experiences, burnout seems to be inevitable.

Similar to stress, burnout is highly associated with physical symptoms like a cold, musculoskeletal pain, or even depression. However, these physical symptoms do not represent fully the construct of burnout. In a well-accepted definition of burnout, Maslach (2003) defined psychological symptoms of job burnout as experiencing emotional exhaustion (i.e., feeling of being overextended), depersonalization (negative attitude and cynicism about the work), and lack of personal accomplishment (i.e., feeling of ineffectiveness or negative evaluation of self regarding the work performance).

Researchers have found that emotional exhaustion is one of the strongest predictors of intention to leave the teaching profession (Hong 2010). Special education teachers face the additional challenge of working with students who present not only educational challenges, but also physical and or emotional challenges, and their results link all special education teachers with high risk for burnout, especially those who worked with students with emotional disturbance who are experiencing burnout at near "crisis proportions" (Wisniewski & Gargiulo, 1997).

Caring, Emotional Exhaustion, and Attrition

Our capacity to observe other's suffering and empathize with their experience is usually considered a desirable quality for human beings. Rarely do we see empathy as a natural impulse of human beings that needs to be controlled, and we certainly expect the qualities of caring, empathy and compassion from our teachers. The problem is that this desirable quality may contribute to emotional exhaustion and an intention to leave the teaching profession.

Special education teachers may also experience emotional fatigue. This fatigue bears a striking resemblance

to what nurses' experience as "compassion fatigue." Compassion fatigue may result from the emotional cost of caring when nurses vicariously experience themselves what their patients experience (Figley, 1995; Yoder, 2010). Experiencing challenging life situation is obviously a great source of individual stress, but that stress can be compounded when one has these vicarious experiences repeatedly and over a prolonged period of time. Those who have enormous capacity for feeling and expressing empathy tend to be more at risk of compassion stress, which eventually leads to compassion fatigue. Left untreated, compassion fatigue may lead to burnout and depression.

Previously, investigations of attrition among special educators have focused on a variety of factors, including workplace context, as predictors of attrition (Gersten et al., 2001; Miller, Brownell, & Smith, 1998). However, two powerful reports from a decade ago again brought to our attention the important role of more individual factors related to personality and identity (Castro, Kelly & Shih, 2010; Narayan, 2010) in teacher attrition. Just like the nurses, special education teachers who usually work with students with learning difficulties, physical pain, or emotional challenges may experience vicariously what their students are experiencing and do so on a daily basis and over a prolonged period of time. Also, like nurses, those teachers who have an enormous capacity for empathy and compassion would be particularly vulnerable for compassion stress, which is a precursor to burnout. The special educators' desire to serve children and have empathy for children are primary motivators for people to choose the profession of special education (Fish & Stephens, 2010). Ironically, the very exuberance that buoys teacher candidates' commitment to this field might incline them to "fly too high" making them vulnerable to emotional exhaustion and the likelihood of leaving the teaching profession.

A Blind Spot Among Those Preparing Special Education Candidates

Researchers have underscored the importance of mentoring teacher candidates in regard to students with disabilities (Mullen, 2010) and pointed out the importance of addressing burnout during the teacher preparation process among general-education teacher candidates (Brunsting, Sreckovic, & Lane, 2014; Kim et al., 2017). This conversation has been largely missing; however, among those who prepare special-education teachers. For

example, researchers have investigated the extent to which a tendency toward burn out might be detectable among general-education teacher candidates (Fives, Hamman & Olivarez, 2007), but this work has not been extended to preparation of special-education teachers, nor have there been reports of program actions that might perpetuate or ameliorate tendencies toward burning out.

Researchers and practitioners in other high-stress teaching fields, however, have been successful in addressing the potential threat of burnout. Findings from numerous studies suggest that teacher preparation may play an important role in reducing attrition among new urban educators (e.g., Frankenberg, Taylor & Merseth, 2010; Freedman & Appleman, 2009; Zimmerman, 2019). Specifically, these authors reported that teacher candidates' commitment to teaching in urban settings was predictive of initial and longer-term job-setting choices, and that teacher-preparation program can be influential in fostering attitudes and beliefs associated with retention. Similar investigations in the context of special education seem to be urgently needed.

Focus of the Current Study

Our review of the literature highlights three important points. First, stress is a common and expected reality of teaching, but prolonged exposure to stressful circumstances, whether created by immediate conditions or inadequate preparation, will likely lead to emotional exhaustion, burnout, and teacher attrition. Second, individuals who seem to have greater capacity for empathy may put themselves at risk of compassion fatigue in the expression of care that is extended over a long period of time and in highly stressful interpersonal situations. Finally, teacher educators surely hope to instill in their candidates the highest and most noble values of teaching but may fail to also equip candidates with strategies for coping with the inevitable stressors associated with special-education teaching.

Our research question about beliefs held by special education teacher candidates is an attempt to show that non-productive beliefs may co-exist with those that are better suited to handling stressful working situations. We also hope to offer a glimpse into ways teacher educators might help those newest to the profession embrace more nuanced and sustaining beliefs about their chosen vocation so as to stem the loss of these critical educators.

Methods

In their reviews, Billingsley and colleagues (2019) found that most attrition studies used quantitative methodology to investigate the attrition issue, while only a few researchers used qualitative methods. Although these studies together provide important information about burnout, they do little to describe these factors or the critical moments that might lead to withdraw and attrition.

For the present study, we chose instead to use a multiple case study design (Merriam, 1998). This approach uses a qualitative design to produce rich descriptions of teacher candidates' experiences and permits the researcher to gain an in-depth understanding of the way participants interpret their experiences and examine the beliefs that may inform their perceptions (Patton, 2002). Specifically, our goal was to examine the beliefs of candidates who were preparing to be special education teachers, and to uncover, through discussions of experiences and reflection, those beliefs that might incline one to or be signs of burnout at the earliest stages of the profession.

Participants

Participants for this study were teacher candidates seeking state certification in Special Education. At the time of the study, all were completing their final, semester-long teaching practicum requirement at a large university in the southwestern United States. A total of 10 candidates were contacted, and 8 agreed to participate in our study (Female = 6; Male = 2).

Procedures

After the initial recruiting and information session, all participants were interviewed at three different times during their one semester of student teaching. The first round of interviews was held near the beginning of the student teaching semester, approximately 3 weeks after they started their first day in the classroom. The second round was completed in the middle of the semester, which is about 5 weeks after the first interview. Finally, the third round of interviews was completed right after candidates finished the student teaching assignment at the end of the semester.

Each interview lasted approximately 30 minutes and was audiotaped and then transcribed verbatim. There were three researchers involved in the interview process. Each followed the same assigned participants throughout the whole semester. The transcriptions were prepared by a professional transcriber who was not one of the researchers.

However, after each transcription was completed, the researcher who did the interview reviewed the transcriptions to check for content consistency and accuracy.

During data collection, the researchers utilized a semi-structured interview protocol. In the interviews, researchers followed the wording and order of the interview questions, while at the same time establishing a conversational style, and asking follow-up and probing questions. Through this approach, we gathered the same type of information from each respondent and minimized variation due solely to having multiple interviewers (Matteson & Lincoln, 2009; Patton, 2002).

Data Sources and Analysis

Our data included twenty-four verbatim transcriptions of the interviews (i.e., 3 interviews of 8 candidates) and candidates' responses to the open-ended questionnaire about why the student chose to become a special education teacher. Using the constant comparative method of data analysis (Glasser & Strauss, 1967), this multiple case study (Merriam, 1998) involved two stages of analysis - the within-case analysis and the cross-case analysis. The members of the research team individually read, re-read, and coded each interview transcript using the constant comparative method to identify key points and categories from the data.

From the beginning of our analysis, two themes emerged as most promising. These themes are captured by belief statements reflecting a desire to (a) identifying with students receiving special education services (i.e., "I would definitely want to accomplish what they want to accomplish") and (b) wanting to "save" the students (i.e., "I would do anything for them"). These themes were prevalent not only within a single case, but also across the cases we analysed. Consequently, we directed our attention to this new belief that we at first called "the saviour syndrome". As we continued to further analyse the theme, finer distinctions between categories began to emerge such as "Champion with a Heart" and "Marine with Special Skills". It is these themes of "identifying" and "saving," however, that became our focus.

Results

We identified three categories along a continuum ranging from what we imagined as the most likely to burnout to those we imaged would likely remain in

teaching based on estimations of the extent to which the candidate might experience stress and emotional exhaustion (see Figure 1).

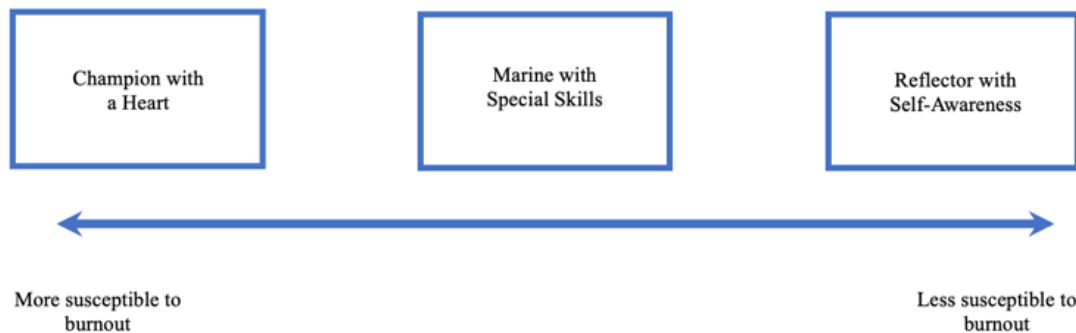
Champion with a Heart

This theme has to do with statements from the candidate that seemed to exhibit the desire to function as a “Champion” of the special education students, and a desire to see themselves differently from other teachers because they are ones who care and the ones who can “save” them. They often described themselves as “the one” who can do it and emphasize the “love” for their students. Statements like “I want to be the one to defend or help” or “my heart goes out for them” were mentioned often in the interviews. Statements from the teacher candidates that we placed in this category often were broad statements encompassing all children receiving services, not just the specific students with whom they worked.

I Am the One

Figure 1

Continuum of Beliefs about Special Education Teaching That May Incline Towards Burnout



“I’m a lot more of a champion for the kids, I think. Making sure they get what they need to learn, their accommodations and modifications and all.”

“My heart’s for those kids. I just know that I can help them, and I know that I have the ability to, and the patience to.”

Kathy continued to assert:

“I know how hard it is for them. And the general ed teachers, now with the value-added programs, their jobs are on the line to show growth. Right now, I’m more about the kids and helping them feel successful.”

Gary and Rebecca expressed similar views when they indicated in their interviews that they were the only ones to extend themselves on behalf of special needs students.

Gary, for example, commented in the second interview:

“I’m the only one who walks around the playground, cuz you get to know what they’re talking about and know what’s affecting them. And it really helps.”

Likewise, Rebecca said in her first interview:

“Growing up, I had a child on my block that had autism. I was always the one that wanted to play with him.”

Having the Heart

All participants spoke of “having the heart” for special education. In the case of Kathy, who was herself diagnosed with a learning disability, explained in the second interview:

In her third interview, Rebecca, who had a brother with speech issues and another family member with a cognitive disability, spoke of her champion-like role in the following terms:

“As long as I support them and defend them, I can make sure they get everything they need to be successful. It’s not about me, it’s about serving them and making sure their needs are being met legally, no matter what’s going on.”

Linda, who also had a member of her family diagnosed with an exceptionality, spoke in her first interview of her role as a Champion for early testing for special needs designation:

“In the first week I kind of noticed all the kids that needed to be tested ... and before my teacher even told me. I was saying from the beginning, ‘How could you not have tested then long ago? I mean they’re in third grade and they can’t even read, write, or spell.’ One of them was almost on a 0-reading level. That’s not right.”

For most of these teacher candidates there was also the tendency to feel they had a personal connection to the lives of the special needs students. Often, this was found in statements in the questionnaire when they referenced having a family member who was diagnosed with special needs. They also spoke as if they experienced, on a daily basis, the difficulties experienced by the student with special need, both personally and emotionally.

With regard to this category, although expressed in numerous ways, seven of the eight participants showed ample evidence of this belief in the interview transcripts. We do not, in any way, disparage these views, but rather, we suspect that holding only these views could quickly lead to frustration, disillusionment, and possibly attrition from the field.

Marine with Special Skills

The reputation of the Marine branch of the United States Armed Services is one characterized by grit, determination, and courage. Marines are tough, with special skills and are disposed to getting the “job” done, even when others cannot. In the interviews with our participants, we heard statements reflective of a similar determination and a belief in the uniqueness of the skill resulting from their training that seemed to, in the mind of the participant, set them apart from general-education teachers.

Statements from participants reflecting this category of identity included an expression about their special abilities or a keener insight into recognizing problems compared to other teachers. Unlike the Champion view that was typically broadly stated, the Marine view was often evident in descriptions of very specific instances of success. Like the category described above, we do not disparage such a self-view, but wondered whether a time might come when this high standard might be unattainable in a specific circumstance. In such a situation, and with repeated exposure, we felt that such a view might also lead to frustration and possible attrition from the field.

A number of participants alluded to having a unique viewpoint and skill as a special educator. Linda spoke in the first interview in terms of a special education mindset:

“I think going into the classroom and having the mindset of knowing about these different kids and what they can have and just kinda, their background and what they don’t have, helps a lot. And not that these people aren’t great teachers, but I feel like they need more than one general class of just special ed.”

Ian expressed his desire to be a kind of special teacher in the following quote:

“I’d like to be that person that makes it, (so the student with disability would say) “I can do this””

Ian expressed his perceived importance as a male teacher in the second interview as follows:

“And to me as a guy, I feel like I can step in and be a father-figure or a male-figure or whatever. That’s a big reason I went into it, because I know I had a lot of friends growing up that didn’t have dads around. I really like seeing that.”

As indicated by his quote, in addition to being a special education teacher, Ian also saw himself as a father-figure for these students and being the one who cares for students in ways that may compensate for a lack of care by other teachers or parents who may be unable to provide a necessary level of care.

In the first interview Amy shared:

“I think we are as special education teachers, better prepared to be teachers in general. They might have the knowledge of the subjects and love kids, but what they teach us to do is reach the ones who are ‘unteachable’ and ‘unreachable’.”

Later, Amy commented in the third interview:

“You can’t turn off the special education goggles. It’s like, see how you can differentiate instruction, see how you can reach these kids. And it is awesome.”

Both Linda (in the first interview) and Rebecca (in the second interview) referred to special abilities when it came to diagnosing the needs of student. In reference to her pinpointing that a little girl needed to be assessed for a potential hearing problem, Linda recounts a statement by her mentor teachers:

“That is a really good quality for you to just be able to come in and notice that right off the bat.”

Rebecca shared the following concern about the length of time needed to diagnose learning disabilities in reference to some of the third graders she worked with in her student teaching placement:

“How do they not get caught earlier cuz they write like a kindergartner, and they can’t read that well. I was trained to recognize this and it’s just frustrating.”

In terms of having a distinctive special educator identity, six of the eight participants manifested this, though in a variety of ways. Some of the distinctiveness they identified stemmed from possessing an intuitive grasp for working with special needs students as well as a specific set of diagnostic skills.

Reflector with Self-Awareness

The final category in the continuum signals what we felt might be most likely to incline a new teacher toward retention. The statements we coded in this category occurred less frequently which may reflect a developmental trajectory associated with these views. Like the Champion view, statements we coded as Self-Awareness did not necessarily involve references to actions, but rather encompassed the whole field of special education or all students receiving services. These statements seemed to belie a reflective tone wherein the participant learned something about her or himself. Cast in terms of self-awareness and self-reflection, we felt these statements exhibited a perspective most likely to incline a new teacher to remain vital and active as a special educator. Four of the eight participants interviews provided evidence of this self-awareness.

Some realizations pertained to participants’ perspectives about the extent to which they possessed certain characteristics of an effective teacher. As Linda shared in the third interview:

“I’m working on being firmer. I thought I was tough, but I’m actually a softy.”

Linda confided during the second interview:

“I’m not nearly as organized as I thought I was.”

During the third interview, Ian admitted:

“I only realized after student teaching how unprepared I was.”

Another self-realization was related to aspects of self-care during student teaching. Katie mentioned in the third interview:

“I’ve had to get more sleep, eat better, and buy more comfortable shoes.”

Likewise, Ian mentioned in third interview:

“I’ve found that taking a fifteen-minute walk at lunch can make a huge difference. It just gives me a second wind.”

Interestingly, one realization candidates expressed took the form of a participant revising her assessment about the respective roles of general education and special education teachers. During the third interview, Rebecca shared:

“I think I was pretty judgmental before because I didn’t think general education teachers cared about special education kids’ needs. It’s just as stressful and draining to get them to that point to receive services. I didn’t realize that the process was so tedious and drawn out.”

Discussion

From our analyses, we identified three categories of statements that seemed to capture candidates’ beliefs about the unique perspective of special education teachers. Two of the categories seemed to conceal a potential pattern of framing experiences that, left unchecked, might incline new special educators toward attrition. Represented as a continuum, these three categories provided evidence that examining beliefs can be a useful way to consider attrition among special education teachers.

The category of “Champion with a Heart” contained statements that seemed to indicate a greater degree of personal and emotional connection between student and teacher as manifest in identification and empathy with the daily challenges of their students. We believe that this may be very similar to how nurses experience what their patients experience, which can lead to “compassion fatigue” (Figley, 1995). It can be a great stress for an individual to experience challenging life situations, but it is even more challenging when one has these vicarious experiences repeatedly over a prolonged period of time. This experience seems ripe for the emotional exhaustion (Maslach, 2003).

Likewise of great concern is the category of “Marine with Special Skills” due to the inevitability of frustration when faced with students the novice teacher is unable to help despite their specialized skill set. The work of a special education teacher is complex and challenging. When new teachers have such high (and sometimes unrealistic) standards for themselves and others, the likelihood that they will experience in the future feelings of ineffectiveness is greater. As Maslach (2003) pointed out, feelings of ineffectiveness may lead to burnout as manifest in feelings of limited personal accomplishment.

Together, these two categories seem to reflect beliefs of the individual that they possess some extra-ordinary skill or capability (e.g., being “the one,” having great heart and love, possessing special diagnostic skills), and that these out-of-the-ordinary characteristics will enable the teacher candidate to become extra-ordinary teacher. As we have stated repeatedly, strong commitment and empathy to serve students who receive special education services is admirable, but we fear like the father who warned Icarus, these candidates might take on too much, fly too high, in their expectation of their work as special educators. Metaphorically, the very wings – in this case, deep empathy with high standards and special skill - that allowed Icarus to escape his imprisonment are also what disintegrated when he failed to heed his father’s warning. Less poetically, these beliefs, without proper framing, may leave the new special education teachers susceptible to professional burnout in ways that others with more realistic expectations might be immune.

In terms of future research, our findings from one of the categories seems to hold potential to provide the teacher candidates with the emotional and professional resiliency to thrive in a special education setting (i.e., self-awareness) and avoid Icarus’ fate. Perhaps the most interesting finding of all, however, was that the teacher candidates we interviewed seemed to hold a mix of all three belief-types.

It might be instructive to better understand what events or experiences give rise to these beliefs, and how the balance of those beliefs might change over time.

We imagine that a better understanding of what prompts teacher candidates to have greater self-awareness could hold potential for improving the preparation of special education teachers. Specifically, teacher education programs would do well to help new teacher candidates better understand the emotional consequences of blurred personal boundaries especially given the findings from Soini et al. (2019) showing that early, inadequate experiences of new special education teachers were predictive of their dissatisfaction and burnout levels over five years later. Overall, though, our results suggest that whether explicit or not, the formation of beliefs about teaching is complex, ongoing, and may be consequential for the long-term success of the new teacher.

The implications for our findings are, of course, tentative given the small sample size and the limited time over which the study was conducted. We do feel that use of these belief categories might be helpful in aiding new candidates to catalogue and evaluate their own self-views. Cast in terms of future, self-relevant outcomes, current beliefs should provide an engaging way for new teachers to think about their career trajectory. Of course, much more work is needed to confirm the extent to which these categories characterize larger samples of teacher candidates and novice teachers and to establish, through longitudinal studies, if indeed these categories are predictive of retention and attrition as hypothesized here.

Acknowledgement

This work was conducted as part of Project IDEAL (projectidealonline.org), which is supported through a grant from the Texas Council for Developmental Disabilities.

References

- Billingsley, B. S., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 89(5), 697-744.
- Brunsting, N., Sreckovic, M., & Lane, K. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 37(4), 681-712.
- Castro, A. J., Kelly, J., & Shih, M. (2010). Resilience strategies for new teachers in high-needs areas. *Teaching and Teacher Education*, 26, 622-629.
- Figley, C. R. (1995). Compassion fatigue as a secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1-20). New York: Brunner-Routledge.
- Fish, W. W., & Stephens, T. L. (2010). Special education: A career choice. *Remedial and Special Education*, 31(5), 400-407.
- Frankenberg, E., Taylor, A., & Merseth, K. (2010). Walking the walk: Teacher candidates' professed commitment to urban teaching and their subsequent career decisions. *Urban Education*, 45(3), 312-346.
- Freedman, S. W., & Appleman, D. (2009). In it for the long haul: How teacher education can contribute to teacher retention in high-poverty, urban schools. *Journal of Teacher Education*, 60(3), 323-337.
- Fives, H., Hamman, D., & Olivárez, A. (2007). Does burnout begin during student teaching? Analyzing efficacy, burnout, and support during the student teaching semester. *Teaching and Teacher Education*, 23(4), 916-934.
- Gersten, R., Keating, T., Yavanoff, P., & Harniss, M. K. (2001). Working in special education: Factors that enhance special educators' intention to stay. *Exceptional Children*, 67(4), 549-567.
- Giddens, E. N. (2005). Stress factors in a comparative study between special educators and regular educators (Doctoral dissertation, Capella University, 2005). Dissertation Abstracts International, 66(06), 3408
- Gold, Y., & Roth, R. (1993). *Teachers managing stress and preventing burnout: The professional health solution*. Washington, DC: The Falmer Press.
- Greenberg, J., Putman, H., & Walsh, K. (2014). *Training our future teachers: Classroom management*. National Council on Teacher Quality Report.
- Hong, J. Y. (2010). Preservice and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and Teacher Education*, 26(8), 1530 – 1543. DOI: 10.1016/j.tate.2010.06.003
- Kim, J., Youngs, P., & Frank, K. (2017). Burnout contagion: Is it due to early career teachers' social networks or organizational exposure. *Teaching and Teacher Education*, 66(2), 250-260.
- Koenen, A. K., Vervoort, E., Kelchtermans, G., Verschueren, K., & Split, J. L. (2019). Teachers' daily negative emotions in interactions with individual students in special education. *Journal of Emotional and Behavioral Disorder*, 27(1), 37-51.
- Kugelmass, D. S., & Kupferberg, I. (2020). Experienced mainstream teachers and student teachers position themselves explicitly and implicitly in relation to inclusive classrooms: global and local implications. *Journal of Education for Teaching* 46: Published online. DOI: [10.1080/02607476.2020.1756692](https://doi.org/10.1080/02607476.2020.1756692)
- Maslach, C. (1982). *Burnout: The cost of caring*. New Jersey: Prentice-Hall.
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science*, 12, 189-192.
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103-111.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422. DOI: 10.1146/annurev.psych.52.1.397.
- McLeskey, J. & Brownell, M. (2015). High-Leverage practices and teacher preparation in special education (Document No.PR-1). Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website: <http://ceedar.education.ufl.edu/tools/best-practices-review/>
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Publishers.
- Miller, M. D., Brownell, M. T., & Smith, S. W. (1998). Factors predicting teachers staying in, leaving, or transferring from the special education classroom. *Exceptional Children*, 65(2), 201-218.
- Mullen, C. A. (2010). Disabilities and the pre-service teacher: A blueprint of a mentoring intervention. *Journal of Education for Teaching*, 27(1), 39-61. DOI:10.1080/02607470120042537
- Naraian, S. (2010). General, special and inclusive: Refiguring professional identities in a collaboratively taught classroom. *Teaching and Teacher Education*, 26(8), 1677-1686.
- Patton, M. (2002). *Qualitative research and evaluation methods*. London, UK: Sage.
- Skaalvic, E. M., & Skaalvic, S. (2017). Teacher stress and teacher self-efficacy: Relations and consequences." In T. McIntyre, S. McIntyre, D. Francis (Eds.), *Educator stress: Aligning perspectives on health, safety, and well-being*. (pp.101-125). Cham, Switzerland: Springer.
- Soini, T., Pietarinen, J., Pyhalto, K., Haverinen, K., Jindal-Snape, D., & Kontu, E. (2019). Special education teachers' experienced burnout and perceived fit with the professional community: A 5-year follow-up study. *British Educational Research Journal*, 45(3), 622-639.
- Wasburn-Moses, L. (2009). An exploration of pre-service teachers' expectations for their future roles. *Teacher Education and Special Education*, 32 (1), 5-16.

Wisniewski, L., & Gargiulo, R. M. (1997). Occupational stress and burnout among special educators: A review of the literature. *Journal of Special Education*, 31(3), 325-346.

Wong, V.W., Ruble, L. A., Yu, Y., & McGrew, J. (2017). Too stressed to teach? Teaching quality, student engagement, and IEP outcomes. *Exceptional Children*, 83(4): 412-427.

Yoder, E. A. (2010). Compassion fatigue in nurses. *Applied Nursing Research*, 23(4), 191-197.

Zimmerman, A. (2019). Expanding the scope of teacher education in an attempt to prevent burnout contagion. *Mid-Western Educational Researcher*, 30(3), 160-166.