

EMPIRICAL MANUSCRIPT

Job Satisfaction of Teachers of Students who are Deaf or Hard of Hearing

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Abstract

The pressure that educators are experiencing to educate more students, with more challenges, to higher levels of learning than any time in the past is significantly changing their working conditions. The purpose of this study was to examine the perceptions of a national sample of teachers of students who are deaf or hard of hearing to ascertain their overall job satisfaction as well as to identify the specific factors that positively and negatively affect their ability to do their jobs well. In addition, responses of different subsets of teachers (e.g., itinerant, elementary, and secondary) were compared. Responses from 495 deaf educators are reported. Collectively, 89% of participants stated that they were satisfied to very satisfied with their overall job. Specific aspects of the job that respondents indicated that they were most satisfied or most dissatisfied with are presented and suggestions for addressing some of the identified challenges as well as recommendations for future research are provided.

Job satisfaction refers to the sense of fulfillment and gratification individuals feel about their job in general or about specific aspects of their job (Locke, 1969). Typically, it refers to the evaluation that individuals make about whether or not their job-related needs are being met (Evans, 1997). Research on job satisfaction began in the early 1930s and was influenced by the economic and employment crises of the depression and by developments in attitude measurement (Weiss & Brief, 2001). Since then, there has been a generally accepted belief that workers perform better and are more motivated in their work, if they find satisfaction in their job (Judge, Thoresen, Bono, & Patton, 2001). In contrast, job dissatisfaction has been linked with employee issues such as reduced retention, as well as job outcomes such as diminished performance, lateness, and absenteeism (e.g., Cotton & Tuttle, 1986; Currivan, 2000; Tett & Meyer, 1993). Job dissatisfaction also has unfavorable effects on mental health in that individuals who are dissatisfied with their job may exhibit the damaging effects of burnout (i.e., emotional exhaustion, depersonalization, and lack of personal accomplishment) (Lee & Ashforth, 1996), anxiety, depression, and lack of self-esteem (Faragher, Cass, & Cooper, 2005). In addition, they may demonstrate increased

counterproductive work behaviors, such as actions that are intended to harm coworkers or the organization as a whole (Mount, Ilies, & Johnson, 2006).

Teacher Job Satisfaction

In the current educational climate, teachers are under a tremendous amount of public pressure because there seems to be an overall perception that there are serious problems with public education and that major structural changes are needed in order to fix these problems. As a result, there has been a strong education reform movement focusing on more academically challenging standards for graduation, new curriculum frameworks to guide instruction, and substantial reliance on assessments to test students' knowledge and make school administrators and teachers accountable for students' success or failure. These increased societal pressures, along with the requirement to educate more students, with more challenges, to higher levels of learning than any time in the past 100 years, are significantly changing the working conditions of all teachers

(Nichols & Berliner, 2007; Grissom, Nicholson-Crotty, & Harrington, 2014; Skaalvik & Skaalvik, 2011).

In the current educational climate, teachers are under a tremendous amount of public pressure because there seems to be an overall perception that there are serious problems with public education and that major structural changes are needed in order to fix these problems. As a result, there has been a strong education reform movement focusing on more academically challenging standards for graduation, new curriculum frameworks to guide instruction, and substantial reliance on assessments to test students' knowledge and make school administrators and teachers accountable for students' success or failure. These increased societal pressures, along with the requirement to educate more students, with more challenges, to higher levels of learning than any time in the past 100 years, are significantly changing the working conditions of all teachers (Grissom, Nicholson-Crotty, & Harrington, 2014; Nichols & Berliner, 2007; Skaalvik & Skaalvik, 2011). Another issue currently affecting teachers is how they are being evaluated. Some states have implemented educator evaluation systems that base as much as 50% of the weight of teacher evaluation decisions contingent upon students' scores on standardized tests (Lewis & Young, 2013). The fairness of this practice has been called into question because scores on standardized tests may be heavily influenced by socioeconomic factors such as parents' education, family resources, the home communication and literacy environment, family health, family mobility, influence of peers, and school demographics (Berliner, 2014).

When these ongoing contemporary workforce challenges are added to the regular persistent demands of the job, it is not surprising that some educators are becoming dissatisfied with the profession. The sentiment of many teachers was summarized by one teacher who created a YouTube video as part of her resignation from teaching. She stated, "Everything I loved about teaching is extinct. Curriculum is mandated. Minutes spent teaching subjects are audited. Schedules are dictated by administrators. The classroom teacher is no longer trusted or in control of what, when, or how she teaches" (Gates, 2013).

Teachers' sense of job satisfaction has been associated with their motivation (Barnabé & Burns, 1994), well-being (Vansteenkiste et al., 2007), and commitment to teaching (Feather & Rauter, 2004). Schools depend on teachers who are satisfied with their jobs and who work with one another to build a workplace community. Dissatisfied teachers may be less motivated to meet educational goals, and dissatisfaction with teaching conditions may lead to higher teacher absenteeism, stress, and turnover (Allensworth, Ponisciak, & Mazzeo, 2009; Grissom, 2012; Ingersoll, 2001; Ladd and Chiu, 2011; Loeb, Darling-Hammond, & Luczak, 2005; Perrachione, Rosser, & Peterson, 2008; Renzulli, Parrott, & Beattie, 2011). Another consequence of teacher job dissatisfaction is attrition (Billingsley, 2004; Boe, 2014). When teachers leave their positions, it adversely affects school districts as well as students. School districts spend thousands of dollars to replace each teacher that quits (Barnes, Crowe, & Schaefer, 2007). Students, particularly those in underperforming schools, experience barriers to quality instruction as their schools are constantly replacing staff (Barnes et al., 2007). Lack of qualified personnel interferes with school reform efforts as well as the implementation of instructional programs (McLeskey & Billingsley, 2008).

Teacher of students who are deaf or hard of hearing job satisfaction

Teaching students who are deaf or hard of hearing has always been challenging. So much so that Stewart and Kluwin (2001) wrote:

Deaf students arguably present the most complex challenge for teachers of any group of students in both the general and special education populations. Every corner of their educational process is multidimensional and each dimension has the potential to significantly impact their academic achievement (p. 14).

In addition to the contemporary workforce issues noted above, most teachers of students who are deaf or hard of hearing (ToDHH) are required to be able to communicate with students who use a variety of modes of communication, to effectively provide direct instruction to an increasingly culturally and linguistically diverse student body, to consult and collaborate with colleagues, administrators, families and community agencies, to write Individualized Education Programs (IEPs) that include goals and objectives that align with state standards and meet unique student needs, to conduct and support frequent progress monitoring, to stay updated on continuously changing hearing assistive technology, and to facilitate transition services. These activities occur along with limited planning time, and the expectation that teachers will complete due process compliance paperwork and attend compliance related meetings, often with a lack of administrative support (Bullard & Luckner, 2013). In the following section a brief review of the literature on teacher morale, teacher stress, teacher burnout and job satisfaction of ToDHH is presented. For a more comprehensive review, please see Luckner and Hanks (2003).

Meadow (1981) reported that 80% of a sample of ToDHH ($n = 240$) were satisfied with their jobs, but that they experienced significantly more "emotional exhaustion" than a sample of teachers of hearing students. Johnson (1983) examined the job stress of ToDHH ($n = 377$). She reported that 27% rated teaching as very stressful or extremely stressful and that the primary sources of stress were (1) paperwork, (2) developing IEPs, (3) planning and preparing materials for a wide range of abilities, (4) inappropriate and/or disruptive behavior of students, and (5) inadequate time for planning. Stedt and Palermo (1983) compared the morale of a group of teachers of deaf students with a group of teachers of deaf students who had additional disabilities. They reported that the teachers of students with additional disabilities had higher morale than the teachers of students without additional disabilities and higher than the norms for general education teachers. Moores (1991) reported that ToDHH ($n = 231$) were experiencing low morale due to the workload and pressure from community expectations. McNeill and Jordan (1993) compared ToDHH using an oral approach ($n = 31$) with ToDHH who used a total communication approach to teaching ($n = 93$) for stress and job satisfaction and reported that the two groups did not differ significantly and that neither group reported high stress. Most recently, Luckner and Hanks (2003) surveyed ToDHH ($n = 608$) and reported that overall, respondents were satisfied with their jobs. Of the 59 items in the survey, 51 were rated as satisfied or very satisfied by more than 50% of participants. In addition, subgroup (i.e., itinerant, elementary, secondary, and resource room teachers) responses were similar to those of the group as a whole. The items teachers reported being most satisfied with were (1) relationships with colleagues, (2) opportunity to use training and education, (3) importance and challenge (i.e., meaningful work and the drive to be successful), (4) structuring lessons to promote learning, and (5) job as a whole. The items they expressed the most dissatisfaction with were (1) amount of paperwork, (2) state assessment tests, (3) lack of family involvement, (4) time for nonteaching responsibilities, and (5) providing students with adult role models.

Working conditions can seriously affect teachers' morale, level of effort, and quality of their work. Negative responses to day-to-day work may lead teachers to leave the profession or

teachers may remain in their positions, but simply reduce their overall involvement and effort. In addition, teachers may lower their expectations for students, which can lead to a substandard quality of education for students who are deaf or hard of hearing. If students do not acquire the knowledge, skills, and strategies needed for adult functioning during their years in school, they are likely to experience decades of underachievement, frustration and dependence. In contrast, professionals who have favorable attitudes toward their jobs are more highly motivated to remain in and perform their jobs effectively. **The purpose of this study was to examine the perceptions of a national sample of ToDHH to examine the factors that positively and negatively affect their ability to do their jobs well. The research questions that guided the study were:**

1. **How satisfied or dissatisfied are teachers of students who are deaf or hard of hearing with their job in general and with particular aspects of their job specifically?**
2. **How satisfied or dissatisfied are different subsets of teachers of students who are deaf or hard of hearing with their job in general and with particular aspects of their job specifically?**

Method

Design of the Survey

To answer the above research questions, **we used the "Job Satisfaction of Teachers of Students who are Deaf or Hard of Hearing" questionnaire created by Luckner and Hanks (2003).** We made a few minor wording changes, added two additional items to the demographic portion of the survey and added a few job-related items to reflect current trends previously discussed. The survey consisted of four sections. Section one explained the purpose of the survey and provided the consent form for participants. Section two contained questions related to participants' personal and professional demographic information. The items in this section asked about years of teaching experience, gender, highest degree earned, job responsibilities, student services provided, and the type of program where teachers worked. Section three contained 65 items that focused on a variety of aspects of the job. Participants responded to each item using a four-point Likert-type scale ranging from "strongly agree" to "strongly disagree." The fourth section contained three open-ended questions that asked respondents to comment on the most challenging and the most enjoyable aspects of their job and to predict how long they thought they would continue working in the field. We used Qualtrics, a web based software, that enabled us to create the survey, establish a link for participants to access the survey and allowed us to conduct online data collection and analysis. Cronbach's coefficient alpha was calculated to determine an internal consistency estimation of reliability of the items on the survey. Cronbach's alpha was .84 suggesting that the items have relatively high internal consistency.

Distribution of the Survey

After receiving institutional review board approval from the university to conduct the study, we employed a four-step process to obtain a broad-based sample of ToDHH. First, we used the list of schools and programs printed in the April 2015 issue of the *American Annals of the Deaf* (Schools and Programs in the United States). Second, we used the website of OPTION Schools Inc., an international, non-profit organization comprised of listening and spoken language programs and schools for children who are deaf

or hard of hearing in the United States. The seven hundred and one addresses provided in the *Annals* and the forty emails from the OPTION Schools were entered into a database, and supervisors of each program for students who are deaf and hard of hearing were sent an email message asking them to share the information about the survey and the link for the survey with the teachers on their staff. One hundred and eighty email messages were returned as "undeliverable." A reminder email message was sent to the supervisors two weeks after the initial contact was made reminding them about the study. Third, an email message that included a description of the study and a direct link to the survey was distributed via the listserv of the Council for Exceptional Children's Division of Communicative Disabilities and Deafness (DCDD). Fourth, a message about the study was posted on a Facebook page for deaf education professionals as well as directly sent to 28 ToDHH known by the second author.

As noted by Garberoglio, Gobble, and Cawthon (2012) an available database on the number of ToDHH in the nation does not exist. Consequently, we do not know what percentage of the true population is captured in this study. Yet, comparable national studies conducting research with ToDHH have had smaller sample sizes than the present investigation (e.g., Cawthon, 2009; Johnson, 1983; Moores, 1991).

Participants

Four hundred ninety-five teachers completed the survey. An additional forty-six "administrators" participated in the survey, but were excluded from the analysis because the focus of this study was on teachers. Years of teaching experience ranged from one to forty-seven, with the mean being 16 years. Four hundred eighty-one were female (97%) and 14 were male (3%). Thirty-one (6%) described themselves as deaf, 34 (7%) as hard of hearing and 430 (87%) as hearing. Most had a master's degree ($n = 371$, 75%). Forty-one percent ($n = 204$) indicated that their primary job responsibility was as itinerant teachers, 19% ($n = 95$) were elementary teachers, 10% ($n = 51$) were secondary level teachers and 29% ($n = 145$) checked "other" and added the specifics of their position (e.g., preschool, resource room, home intervention, part-time itinerant part-time resource room, consultant, transition specialist, itinerant and birth-3, outreach consultant).

Regarding direct services to students, the majority ($n = 189$, 38%) had a caseload of between seven and 12 students, 135 (27%) worked with less than six students, 89 (18%) of teachers worked with between 13 and 18 students, and 82 teachers (17%) had more than 19 students on their caseload. In addition, they provided consultation services for one to six students ($n = 299$, 60%), seven to 12 students ($n = 89$, 18%), 13–18 students ($n = 45$, 9%) and more than 19 students ($n = 62$, 13%). Participants were also asked to report the different types of communication they use with students. They were encouraged to "check all that apply." Auditory/oral ($n = 325$, 66%) was the most often used, the second most frequently used communication approach was total communication ($n = 237$, 48%), the third was American Sign Language (ASL) ($n = 153$, 31%) and Cued Speech was used by seven respondents (1%). Additional demographic details about the participants are provided in Table 1.

Results

Scaled Items

The first research question asked: How satisfied or dissatisfied are ToDHH with their job in general and with particular aspects

Table 1 Demographic characteristics of participants

	Frequency	Percent
Highest degree earned		
B.A. or B.S.	76	15
M.A., M.S., M.Ed.	371	75
Ph.D. or Ed.D.	5	1
Specialist degree	14	3
Other	29	6
Current job responsibilities		
Itinerant	204	41
Elementary	95	19
Secondary	51	10
Other	145	29
Type of program		
Local public school	247	50
School for the Deaf/Hard of Hearing	110	22
Cooperative agency	72	15
Other	66	13

Table 2 Items participants identified most frequently as “satisfied” or “very satisfied”

Item	Percent
Importance and challenge	94
Explaining important vocabulary and concepts	93
Opportunity to use past training and education	91
Professional qualification of colleagues	91
Attending/contributing to IEP meetings	90
Working with a wide age range of students	90
School safety	89
Working with students from diverse cultures	87
Structuring lessons and experiences that promote learning	87
Being part of an educational team	87

of their job specifically? To answer the first part of the question we examined the responses to the final item of the survey, which asked participants to share their perceptions of “the job as a whole.” The majority of responses were “satisfied” ($n = 292$, 59%), many were “very satisfied” ($n = 150$, 30%), some were “dissatisfied” ($n = 41$, 8%) and a few were “very dissatisfied” ($n = 10$, 2%). Collectively, 89% of participants reported being satisfied to very satisfied with their overall job.

The second part of the first research question asked: How satisfied or dissatisfied are ToDHH with particular aspects of their job? To identify the positive and negative trends for the total group very dissatisfied and dissatisfied responses were combined, as were satisfied and very satisfied responses for the remaining 64 items. Overall, respondents were satisfied with most aspects of their jobs. The majority of items on the survey were scored as positive by more than 50% of respondents. The 10 aspects of the job that the group as a whole identified as being satisfied or very satisfied with are presented in Table 2. The 10 items reported as dissatisfied or very dissatisfied are listed in Table 3.

The second research question asked: How satisfied or dissatisfied are different subsets of ToDHH with their job in general and with particular aspects of their job specifically? The four categories of itinerant, elementary, secondary, and other were used because they represented the majority of the respondents. Table 4 displays the combined “satisfied” and “very satisfied” percentages by group and Table 5 shows the combined “dissatisfied” and “very dissatisfied” percentages by group. An analysis of variance was conducted to compare ratings for “job overall.”

Table 3 Items participants identified most frequently as “dissatisfied” or “very dissatisfied”

Item	Percent
State assessment tests for students	72
Providing students with deaf adult role models	61
Professional development related to deaf education	59
Amount of paperwork required	58
Time to collaborate with school staff	56
Family involvement	55
Availability of appropriate tests for students	54
Time for nonteaching responsibilities	51
Time to collaborate with families	47
Evaluation system	46

Table 4 Percentage of each group who reported being “satisfied” or “very satisfied” with the job overall

Job as a whole	All respondents	Itinerant	Elementary	Secondary	Other
	89%	89%	84%	86%	94%

Table 5 Percentage of each group who reported being “dissatisfied” or “very dissatisfied” with the job overall

Job as a whole	All respondents	Itinerant	Elementary	Secondary	Other
	10%	10%	16%	14%	6%

The analysis produced a result that was not statistically significant ($F(5, 489) = 0.647, p = .664$). The eta squared was .006567, indicating that the independent variable of job type explained only 0.66% of the variance in the dependent variable of “job overall” rating.

The second part of the second research question asked: How satisfied or dissatisfied are different subsets of ToDHH with particular aspects of their job specifically? As in Tables 4 and 5, the four categories of itinerant, elementary, secondary, and other were used. Table 6 compares the satisfied or very satisfied responses and Table 7 compares the dissatisfied or very dissatisfied items and percentages. Overall, the subsets of teachers responded in a similar manner, yet the elementary and secondary teachers were more dissatisfied with the state assessment tests and the lack of professional development related to deaf education.

Open-ended Questions and Comments

Qualitative analysis of open response questions in section four of the survey was conducted by the researchers to identify common themes. All responses were transcribed and grouped according to the individual prompts, (a) “What are the most challenging aspects of your job?” (b) “What are the most enjoyable aspects of your job?” and (c) “Additional comments.”

The second author conducted the initial analysis and verification for accuracy was done by the first author. The constant comparison method of data analysis was used to create the categories (Maxwell, 2005; Merriam, 2009). Each response was compared with every other response in order to look for similarities, differences, and consistency of meaning (Braun & Clarke, 2006; Lincoln & Guba, 1985). Themes were expanded as a new

Table 6 Comparison of items identified as “satisfied” or “very satisfied” by teachers’ job responsibilities

Item	All respondents	Itinerant	Elementary	Secondary	Other
Importance and challenge	94%	93%	95%	92%	96%
Explaining important vocabulary and concepts	93%	95%	94%	88%	92%
Opportunity to use past training and education	91%	87%	93%	94%	95%
Professional qualifications of colleagues	91%	92%	92%	86%	91%
Attending/contributing to IEP meetings	90%	91%	91%	86%	90%
Working with a wide range of students	90%	99%	80%	90%	83%
Safety	89%	92%	92%	82%	88%
Working with students from diverse cultures	87%	83%	91%	82%	92%
Structuring lessons/experiences that promote learning	87%	82%	95%	86%	90%
Being part of an educational team	87%	84%	88%	88%	90%

Table 7 Comparison of items identified as “dissatisfied” or “very dissatisfied” by job

Item	All respondents	Itinerant	Elementary	Secondary	Other
State assessment tests for students	72%	72%	85%	84%	61%
Providing students with deaf adult role models	61%	71%	57%	47%	53%
Professional development related to deaf education	59%	54%	67%	76%	54%
Amount of paperwork required	58%	59%	63%	67%	50%
Time to collaborate with school staff	56%	68%	44%	51%	48%
Family involvement	55%	52%	65%	75%	47%
Availability of appropriate tests for students	54%	49%	67%	78%	45%
Time for nonteaching responsibilities	51%	48%	62%	61%	46%
Time to collaborate with families	47%	50%	47%	59%	37%
Evaluation system	46%	50%	42%	57%	37%
Amount of planning time provided	44%	47%	53%	41%	37%
Availability of resources	40%	37%	45%	53%	37%

concept appeared and similar items were clustered together into provisional categories. Statements were then recorded on a comprehensive list that organized all responses under each question.

Responses to the question about challenging aspects of the job were similar to those presented in Table 3. The most frequently reported issues in order of recurrence were paperwork, inadequate time, lack of family involvement, collaboration and consultation with other professionals, differentiating instruction to meet students’ needs, standardized tests, traveling to schools, and scheduling. Responses to the question about the most enjoyable aspects of the job were consistently focused on the gratification felt from working directly with students. Comments such as, “seeing students learn, grow and succeed” and “the aha moments when the light bulb goes on” were repeated continuously. Connections with colleagues and coworkers were also frequently mentioned as was relationships with families.

Responses to the open-ended question that asked for additional comments were minimal. Several individuals indicated that they love their job and enjoy the opportunity to be part of a team, and yet there is not enough time to do their job effectively. The final item on the survey asked respondents “Do you see yourself in this field in: 5, 10, 15, or more years?” Thirty-two percent reported that they would work up to five more years, another 32% indicated that they plan to be in the field more than 15 years, 17% stated that they plan to work 6–10 years more, and another 16% thought they would continue to work in deaf education for 11–15 years. The majority of participants reported that their primary reason for leaving the field was that they plan to retire. Teachers’ second most frequently stated

reason to leave the profession was because they do not like certain aspects of the job. The third reason offered was concern about whether or not they would continue to have a job due to shrinking caseloads.

Discussion

The purpose of this study was to examine the perceptions of a national sample of ToDHH to identify the factors that positively and negatively affect their ability to do their jobs well. Responses were analyzed from 495 teachers from across the United States. Eighty-nine percent of participants reported being satisfied to very satisfied with their overall job. In addition, of the 64 aspects of the job identified in the survey, 52 aspects were rated as satisfied or very satisfied by more than 50% of participants.

The impetus for this study was the changes occurring in schools. For example, general education trends such as more academically challenging standards, increased requirements to use evidence-based practices, the use of annual state-level assessments to test students’ knowledge and evaluate educators’ effectiveness, the increasing cultural and linguistic diversity of the student population, and the inclusion movement have altered how general education teachers do their job. In education of students who are deaf or hard of hearing specific trends, such as newborn hearing screening, early intervention, cochlear implants and improved hearing assistance technology, and greater acceptance of ASL have changed what ToDHH teach, where they teach, and the population of students they serve (Antia & Rivera, 2016; Foster & Cue, 2009; Lenihan, 2010; Miller, 2014; Mitchell & Karchmer, 2006). Additional evidence of the changes taking place in the field of deaf education can be seen

by examining the demographic characteristics of participants (see Table 1). Almost 30% of the ToDHH who participated in the study checked “other” and indicated that their job responsibilities were significantly different from working as a self-contained elementary or secondary classroom ToDHH (e.g., home intervention, outreach consultant, and transition specialist). Many respondents also reported that their job was a combination or two positions (e.g., part-time itinerant, part-time resource room, itinerant and birth-3). Finally, it is important to note that the majority of respondents (41%) were itinerant ToDHH. In the following section, possible options for attending to some of the difficulties identified by participants are provided.

Suggestions for Addressing Identified Challenges

A comparison of the results of this study with those of previously conducted research on job satisfaction, stress, and morale of ToDHH discussed above, indicates similarities over time. The primary aspects of the profession that teachers gain pleasure from are their relationships – with students, colleagues, and families. The major challenges they face include the state assessments, lack of role models who are deaf or hard of hearing, lack of professional development specific to the field of deaf education, paperwork, and the shortage of time to collaborate with other professionals and families.

State assessments

It is not surprising that state assessments continue to negatively impact the attitudes of ToDHH. As noted above, teachers enjoy seeing the students they serve apply themselves, learn, and succeed. They also are acutely aware that a hearing loss of any type or degree often has an adverse impact on the development of language, literacy, academic and social skills (Luckner, Slike, & Johnson, 2012). Consequently, it is understandable that teachers often feel frustrated because they are required to limit the curriculum and teach toward the state assessments, which does not allow them to address other necessary skills needed by students in order to become successful adults (e.g., self-advocacy, social-emotional skills, study skills, career development, and learning strategies). In addition, the pressure to raise student test scores, to the exclusion of other important goals, can dishearten good teachers and provoke them to leave the profession, while simultaneously discourage talented young professionals from entering the field.

Additional concerns often expressed about state assessments include: (a) the amount of time lost for instruction, (b) the additional time and work required to collect and analyze the data, (c) concern that students are being assessed at levels that they are not prepared to pass the assessments and the negative impact that has on the students' motivation, and (d) the limited value the assessments have for planning instruction. Hopefully, the Every Student Succeeds Act (ESSA, 2015) will provide a better balance between assessment that guides instruction and assessment used for accountability purposes.

Adult role models

The lack of adult role models who are deaf or hard of hearing continues to be a concern for ToDHH. While some states have established programs where d/Deaf adults work with families of young children who have a hearing loss (e.g., Abrams & Gallegos, 2011) or have access to the Hands & Voices Guide By Your Side program (<http://www.handsandvoices.org>), similar resources are often not available for school age students. However, given the significant increase in the number of high

schools and universities that currently accept ASL as a foreign language (Rosen, 2014) it is very likely that schools will see an increase in the number of d/Deaf adults who are hired to teach ASL. In the meantime, ToDHH will need to work together to find ways to involve d/Deaf adults in schools by (a) organizing a Deaf awareness week, (b) arranging career awareness fairs, and (c) asking d/Deaf adults and teens to read children's literature to students.

Professional development

ToDHH expressed a concern that a lack of professional development specific to the field of deaf education currently exists. This is understandable when considering what has traditionally been considered professional development, that is a range of formal, structured activities in which educators are brought together, usually outside of the classroom, to further develop their teaching skills, learn new skills or content, and/or to familiarize themselves with new education policies that affect their teaching. These approaches typically have required release time during the school day, after school time, or in-service days in order for educators to participate.

Four factors have decreased the number of traditional professional development activities for all educators, including ToDHH. First, the financial recession that began in 2008 caused educational programs to make budget cuts, and professional development was one budget item that was significantly reduced. Second, research indicated that the workshop model was ineffective at achieving transfer of new pedagogy into classroom practice (e.g., Little, 1993; Showers, 1984). More specifically, the U.S. Department of Education's report titled *Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement* (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007) indicated that there is a paucity of valid and scientifically defensible evidence that demonstrates a relationship between professional development and an increase in student learning.

Third, there has been an increase in job-embedded professional development, which occurs in the context where one practices – schools and classrooms, and is most effective when it focuses on problems of practice identified by teachers (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Fullan, 2007). One prominent job-embedded professional development approach is the establishment of professional learning communities (PLC), where schools structure time to create collaborative arrangements for educators to learn from one another in the context of the school day (e.g., through teacher networks, mentor programs, coaching, and common planning time for teachers of the same subject or grade). Research reported by Glazerman et al. (2008) suggests that PLCs appear to be effective. Specifically, they reported that students of teachers who received coaching and feedback on their teaching scored higher than students of teachers who did not receive the services. In addition, teacher retention was higher among teachers who had an assigned mentor, received guidance in content areas, or engaged in content specific and pedagogical professional development. In addition, the trend toward school-based professional development is aligned with ESSA. The Act defined professional development as “sustained (not stand-alone, 1-day, or short-term workshops), intensive, collaborative, job-embedded, data-driven, and classroom-focused” (§8002 (42)).

The fourth factor that has affected traditional professional development is the proliferation of online resources that educators can access individually or collectively, whenever they have time. Examples of general education and special education resources include the Iris Center (<http://iris.peabody.vanderbilt.edu/>), and

the Institute of Education Sciences – What Works Clearinghouse (<http://ies.ed.gov/ncee/wwc/>). Examples in deaf education include Hands & Voices (<http://www.handsandvoices.org>), Central Institute for the Deaf (<https://cid.edu/professionals>), Clarke Schools for Hearing and Speech (<http://www.clarkeschools.org/for-professionals>), Gallaudet University Regional Centers (<http://www.gallaudet.edu/outreach-programs/regional-centers.html>) and National Deaf Center on Postsecondary Outcomes (<http://www.meadowscenter.org/projects/detail/national-deaf-center-on-postsecondary-outcomes>).

Paperwork

For more than 30 years ToDHH have been dissatisfied with the amount of paperwork that they are required to complete. Similar concerns have consistently been expressed by general special education professionals (Brunsting, Sreckovic, & Lane, 2014). **Although completing paperwork is tedious and time consuming, it is an essential component of teaching students with special needs.** Given the current emphasis on data-driven decision making and progress monitoring, this concern is not likely to wane in the near future.

Teacher preparation programs need to help preservice teachers understand that paperwork is a requirement of the position and provide them with strategies for efficiently completing paperwork, such as how to develop sample forms and letters that can be stored and saved on a jump drive or on an online data storage platform. Examples include: check mark or fill-in the blank notes to colleagues, response to parent/caregivers' notes, sending positive good news home, incident reports, itineraries for field trips, telephone conversation/email logs, student participation and homework logs, and upcoming events/meetings notes. In addition, teacher preparation programs and staff development trainers should expose ToDHH to online resources that provide a variety of tools that can save educators time and effort. Examples include Google Forms, which has a variety of formats for developing tests and quizzes, administrative forms, and templates for creating worksheets and independent practice activities and rubric websites that provide suggestions for constructing rubrics as well as sample rubrics that can be downloaded, adapted and used.

Consultation and collaboration

The U.S. Department of Education (2015) reports that approximately 87% of students who are deaf or hard of hearing attend general education classrooms for some portion of their school day. Most general education professionals have a limited understanding of the needs of students with a hearing loss and require ongoing collaboration with ToDHH in order to make appropriate adaptations so that students with a hearing loss have access to the academic content and social interactions (Bullard & Luckner, 2013). Simultaneously, between 90% and 95% of children with a hearing loss are born to hearing parents/caregivers (Mitchell & Karchmer, 2004). Because hearing loss is a low-incidence disability, most parents/caregivers have never knowingly come in contact with a person who is deaf or hard of hearing, and as a result, they have a limited understanding of what it is like to have a hearing loss. Consequently, similar to general education teachers, many families rely on collaboration and consultation from ToDHH to help them navigate the variety of challenges that do not occur for the parents/caregivers of typical children and youth, but do exist for them (e.g., communication decisions, services, placement, Individualized Family Service Plans, IEPs, and transition planning).

Collaboration and consultation take time (Friend & Cook, 2013). ToDHH reported that they do not have sufficient time to collaborate or consult with school staff and families. **It is important for supervisors of ToDHH to understand that in addition to providing direct services to students, ToDHH need time in their schedules for meeting with educators, administrators, and families (indirect service) so they can help these individuals increase their knowledge and skills about the needs of children and youth who are deaf or hard of hearing.** It is also critical that ToDHH have time in their schedules to observe general education classrooms in order to gather data about how well students with a hearing loss are functioning in that setting. Observation provides ToDHH with data that enables them to make student specific suggestions for adaptations so that students can participate and benefit from the time spent in the general education classroom. Finally, the substantial increase in the number of students who receive cochlear implants requires that ToDHH have time built into their schedules to collaborate and consult with cochlear implant teams, educational audiologists, and parent/caregivers of students.

Limitations

Potential limitations of the study include the following: First, the sample was voluntary. Consequently, there could have been a self-selection bias. Individuals who were not satisfied with their job may not have taken the time to complete the survey. Second, program supervisors were contacted and asked to share the information about the study with teachers on their staff. Supervisors may have either consciously or unconsciously selected teachers who had a positive attitude about their job. Third, the study was conducted in the fall. Different results may have been obtained if teachers were contacted later in the school year.

Future Research

As stated above, the purpose of this study was to examine the perceptions of a national sample of ToDHH to identify the factors that positively and negatively affect their ability to do their jobs well. A construct related to teacher job satisfaction is teacher self-efficacy. Teachers' self-efficacy refers to their belief of "their capacity to successfully organize and execute tasks required to have a positive impact on students and their achievement" (Garberoglio et al., 2012, p. 367, 368). Researchers have reported that teaching efficacy was a determinant of teachers' job satisfaction (e.g., Caprara, Barbaranelli, Borgogni, & Steca, 2003; Caprara, Barbaranelli, Steca, & Malone, 2006), and that both stress and teaching efficacy contributed to job satisfaction (Klassen, 2010). Additional research indicates that teachers with a strong sense of efficacy exhibit greater enthusiasm for teaching (Allinder, 1994) and are more likely to collaborate with other teachers (Chester & Beaudin, 1996). In addition, research suggests that teachers with a strong sense of self-efficacy have a positive impact on student achievement (Tschannen-Moran & Hoy, 2001), student motivation (Midgley, Feldlaufer, & Eccles, 1989), and student engagement (Good & Brophy, 2003). In contrast, teachers with low efficacy beliefs may feel that they lack the ability to improve students' achievement, give up easily, and blame extenuating circumstances for lack of student growth (Ashton & Webb, 1986). Future research with ToDHH should examine the connection between teacher self-efficacy and job satisfaction.

Another line of inquiry to consider are interventions for ToDHH that promote work-life balance. Given the multiple responsibilities of ToDHH, the heterogeneous population they serve and the slow progress that some students demonstrate, researchers may want to examine ways to increase educators' achievement, enjoyment, and psychological flexibility. For example, Acceptance and Commitment Training (ACT), which promotes the acceptance of unpleasant thoughts, feelings, and sensations, encourages mindful contact with the present moment, and helps individuals clarify and take action in the service of their values, has been demonstrated to have a positive impact on early childhood special education staff (Biglan, Layton, Jones, Hankins, & Rusby, 2013), drug and alcohol counselors (Varra, Hayes, Roget, & Fisher, 2008) and work organizations (Bond & Bunce, 2000). Additional research questions to consider are:

- Do the dispositions of preservice teachers' affect their job satisfaction and job performance?
- Does teachers' autonomy affect their job satisfaction?
- To what degree does students' academic success affect teacher job satisfaction?
- Does teacher job satisfaction affect student achievement?

Summary

There are multiple reasons for being concerned about the job satisfaction of ToDHH. First, when professionals feel unsatisfied and frustrated it impacts their ability to deliver quality services, which in turn, negatively influences the well-being and achievement levels of the students they teach. The importance of work attitudes has been reinforced by research from other fields connecting work attitudes to employee retention as well as job outcomes such as performance, lateness, and absenteeism (e.g., Cotton & Tuttle, 1986; Currivan, 2000; Tett & Meyer, 1993). Second, students who are deaf or hard of hearing are a heterogeneous population with unique special education needs. The majority of these students arrive at school with significant delays in acquiring a first language, which impacts their ability to learn to read, write, socialize and acquire knowledge about the world (Marschark, Shaver, Nagle, & Newman, 2015). As a result, students who are deaf or hard of hearing benefit from direct and indirect services from specially trained professionals who understand the potential impact of a hearing loss and who have the attitude, knowledge, and skills to improve the educational opportunities and outcomes for students who are deaf or hard of hearing.

Third, when the ongoing contemporary workforce challenges discussed previously are added to the regular persistent demands of the job, it is not surprising that some educators are becoming dissatisfied with their job. As a result, it is becoming increasingly difficult to attract and retain professionals into the field of education of students who are deaf or hard of hearing (Boe, 2014). The shortage of qualified ToDHH has been substantiated by Dolman (2010, 2008) who reported that the number of preparation programs as well as the number of students enrolled in deaf education teacher preparation programs have continually declined since the mid-1970s. Similarly, the American Association for Employment in Education (AAEE) also has consistently reported "considerable teacher shortages" in their publications titled the *Job Search Handbook for Educators for Special Education: Hearing Impaired* (e.g., 2002, 2007, 2010, 2017). Deaf education administrators (e.g., Bradfield & Seagrest, 2001) as well as leaders in the field of deaf education (e.g., Johnson, 2013; Jones & Ewing, 2002; LaSasso & Wilson, 2000) have also noted the critical

shortage of qualified teachers in the field of education of students who are deaf or hard of hearing.

The results of this study indicate that overall, ToDHH are satisfied with their job. As a group, they are most satisfied with the aspects of their job that relate to teaching and collaboration (e.g., importance and challenge, explaining vocabulary, colleagues), but dissatisfied with the aspects that surround the performance of their job (e.g., state assessments, lack of professional development, time for nonteaching responsibilities). Because teachers constitute the greatest cost and human capital resource of schools (Perie & Baker, 1997), improving teachers' sense of job satisfaction can help to reduce the consequences associated with high levels of teacher stress that include teacher absenteeism, teacher illness, and attrition. The results of this study provide teacher trainers, administrators, and ToDHH with information that can be used to accentuate the positive while simultaneously working toward overcoming the barriers that stand in the way of providing high-quality services to students who are deaf or hard of hearing and their families.

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Conflicts of Interest

No conflicts of interest were reported.

References

- Abrams, S., & Gallegos, R. (2011). Deaf role models: Making a critical difference in New Mexico. *Odyssey: New Directions in Deaf Education*, 12, 24–27.
- Allensworth, E., Ponisciak, S., & Mazzeo, C. (2009). *The schools teachers leave: Teacher mobility in Chicago Public Schools*. Chicago, IL: Consortium on Chicago School Research.
- Allinder, R. M. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants. *Teacher Education and Special Education*, 17, 86–95. doi:10.1177/088840649401700203.
- American Association for Employment in Education (2002). *Job search handbook for educators*. Columbus, OH: American Association for Employment in Education.
- American Association for Employment in Education (2007). *2007 Job search handbook for educators*. Evanston, IL: American Association for Employment in Education.
- American Association for Employment in Education (2010). *2010 Job search handbook for educators*. Evanston, IL: American Association for Employment in Education.
- American Association for Employment in Education (2017). *2017 Job search handbook for educators*. Slippery Rock, PA: American Association for Employment in Education.
- Antia, S. D., & Rivera, M. C. (2016). Instruction and service time decisions: Itinerant services to deaf and hard-of-hearing students. *Journal of Deaf Studies and Deaf Education*, 21, 293–302. doi:10.1093/deafed/enw032.
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. White Plains, NY: Longman.
- Barnabé, C., & Burns, M. (1994). Teachers' job characteristics and motivation. *Educational Research*, 36, 171–185. doi:10.1080/0013188940360206.

- Barnes, G., Crowe, E., & Schaefer, B. (2007). *The cost of teacher turnover in five school districts: A pilot study*. Arlington, VA: National Commission on Teaching and America's Future.
- Berliner, D. C. (2014). Exogenous variables and value-added assessment: A fatal flaw. *Teachers College Record*, 116, 1–31.
- Biglan, A., Layton, G. L., Jones, L. B., Hankins, M., & Rusby, J. C. (2013). The value of workshops on psychological flexibility for early childhood special education staff. *Topics in Early Childhood Special Education*, 132, 196–210. doi:10.1177/027121411425191.
- Billingsley, B. S. (2004). Special education teacher retention and attrition a critical analysis of the research literature. *Journal of Special Education*, 38, 39–55. doi:10.1177/00224669040380010401.
- Boe, E. E. (2014). Teacher demand, supply, and shortage in special education: A national perspective. In: Sindelar P. T., McCay E. D., Brownell M. T., & Lignugaris/Kraft B. (Eds.), *Handbook of research on special education teacher preparation* (pp. 67–93). New York, NY: Routledge.
- Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology*, 5, 156–163. doi:10.1037//1076-8998.5.1.156.
- Bradfield, A., & Seagrest, R. (2001). *Deaf education teacher training issues*. Unpublished notes from the Deaf Education Supervisors' Workshop. San Antonio, TX.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101. doi:10.1191/1478088706qp0630a.
- Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 37, 681–712.
- Bullard, C., & Luckner, J. L. (2013). *The itinerant teacher handbook* (2nd Ed.). Hillsboro, OR: Butte Publications.
- Caprara, G. V., Barbaranelli, C., Borgogni, L., & Steca, P. (2003). Efficacy beliefs as determinants of teachers' job satisfaction. *Journal of Educational Psychology*, 95, 821–832. doi:10.1037/0022-0663.95.4.821.
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, 44, 473–490. doi:10.1016/j.jsp.2006.09.001.
- Cawthon, S. (2009). Professional development for teachers of students who are deaf or hard of hearing: Facing the assessment challenge. *American Annals of the Deaf*, 154, 50–61.
- Chester, M. D., & Beaudin, B. Q. (1996). Efficacy beliefs of newly hired teachers in urban schools. *American Educational Research Journal*, 33, 233–257. doi:10.3102/00028312033001233.
- Cotton, J. L., & Tuttle, J. M. (1986). Employee turn-over: A meta-analysis and review with implications for research. *Academy of Management Review*, 11, 55–70.
- Curran, D. B. (2000). The causal order of job satisfaction and organizational commitment in models of employee turn-over. *Human Resource Management Review*, 9, 495–524.
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Dallas, TX: National Staff Development Council.
- Dolman, D. (2008). College and university requirements for teachers of the deaf at the undergraduate level: A twenty-year comparison. *American Annals of the Deaf*, 153, 322–327.
- Dolman, D. (2010). Enrollment trends in deaf education teacher preparation programs, 1973–2009. *American Annals of the Deaf*, 155, 353–359.
- Evans, L. (1997). Understanding teacher morale and job satisfaction. *Teaching and Teacher Education*, 13, 831–845. doi:10.1016/S0742-051X(97)00027-9.
- ESSA. (2015). Every Student Succeeds Act of 2015, Pub. L. No. 114-95 § 114 Stat. 1177 (2015–2016).
- Faragher, E. B., Cass, M., & Cooper, C.L. (2005). The relationship between job satisfaction and health: A meta-analysis. *Occupational and Environmental Medicine*, 62, 105–112. doi.org/10.1136/oem.2002.006734..
- Feather, N. T., & Rauter, K. A. (2004). Organizational citizenship behaviors in relation to job status, job insecurity, organizational commitment and identification, job satisfaction, and work values. *Journal of Occupational and Organizational Psychology*, 77, 81–94. doi:10.1348/096317904322915928.
- Foster, S., & Cue, K. (2009). Roles and responsibilities of itinerant specialist teachers of deaf and hard of hearing students. *American Annals of the Deaf*, 153, 435–447.
- Friend, M., & Cook, L. S. (2013). *Interactions: Collaboration skills for school professionals* (7th Ed.). Upper Saddle River, NJ: Pearson/Merrill.
- Fullan, M. (2007). *The new meaning of educational change* (4th Ed.). New York, NY: Teachers College Press.
- Garberoglio, C. L., Gobble, M. E., & Cawthon, S. W. (2012). A national perspective on teachers' self-efficacy beliefs in deaf education. *Journal of Deaf Studies and Deaf Education*, 17, 367–383. doi:10.1093/deafed/ens014.
- Gates, S. (2013). Teacher resignation video: Ellie Rubenstein explains, "Everything I love about teaching is extinct" Huffington Post, May 23, 2013, http://www.huffingtonpost.com/2013/05/23/teacher-resignation-video-ellierubenstein_n_3328117.html.
- Glazerman, S., Dolfin, S., Bleeker, M., Johnson, A., Isenberg, E., Lugo-Gil, J., ... Briton, E. (2008). Impacts of comprehensive teacher induction: Results from the first year of a randomized controlled study (NCEE No. 2009-4034). Washington, DC: U.S. Department of Education, National Center for the Education Evaluation and Regional Assistance, Institute of Education Sciences.
- Good, T. L., & Brophy, J. E. (2003). *Looking in classrooms* (9th Ed.). Boston, MA: Allyn and Bacon.
- Grissom, J. A. (2012). Revisiting the impact of participative decision-making on public employee retention: The moderating influence of effective managers. *American Review of Public Administration*, 42, 1–19.
- Grissom, J. A., Nicholson-Crotty, S., & Harrington, J. R. (2014). Estimating the effects of No Child Left Behind on teachers' work environments and job attitudes. *Education Evaluation and Policy Analysis*, 36, 417–436. doi:10.3102/0162373714533817.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38, 499–534.
- Johnson, H. A. (2013). Initial and ongoing teacher preparation and support: Current problems and possible solutions. *American Annals of the Deaf*, 157, 439–49.
- Johnson, J. L. (1983). *Stress as perceived by teachers of hearing impaired children and youth* (Unpublished doctoral dissertation). Gallaudet University, Washington, DC.
- Jones, T. W., & Ewing, K. M. (2002). An analysis of teacher preparation in deaf education: Programs approved by the Council on Education of the Deaf. *American Annals of the Deaf*, 147, 71–78.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127, 376–407. doi:10.1037/0033-2909.127.3.376.

- Klassen, R. M. (2010). Teacher stress: The mediating role of collective efficacy beliefs. *Journal of Educational Research*, 103, 342–350. doi:10.1080/00220670903383069.
- Ladd, H. F., & Chiu, M. M. (2011). Teachers' perceptions of their working conditions: How predictive of planned and actual teacher movement? *Educational Evaluation and Policy Analysis*, 33, 235–261.
- LaSasso, C., & Wilson, A. (2000). Results of two national surveys of leadership personnel needs in deaf education. *American Annals of the Deaf*, 145, 429–435.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123–133.
- Lenihan, S. (2010). Trends and challenges in teacher preparation in deaf education. *The Volta Review*, 110, 117–128.
- Lewis, W. D., & Young, T. V. (2013). The politics of accountability: Teacher education policy. *Educational Policy*, 27, 190–216. doi:10.1177/0895904812472725.
- Lincoln, Y., & Guba, E. (1985) *Naturalistic inquiry*. New York, NY: Sage.
- Little, J. W. (1993). Teachers' professional development opportunities. *Educational Evaluation and Policy Analysis*, 15, 129–151.
- Locke, E. (1969). What is job satisfaction? *Organizational Behavior & Human Performance*, 4, 309–336. doi:10.1016/0030-5073(69)90013-0.
- Loeb, S., Darling-Hammond, L., & Luczak, J. (2005). How teaching conditions predict teacher turn-over in California schools. *Peabody Journal of Education*, 80, 44–70.
- Luckner, J. L., & Hanks, J. A. (2003). Job satisfaction: Perceptions of a national sample of teachers of students who are deaf or hard of hearing. *American Annals of the Deaf*, 148, 5–17.
- Luckner, J. L., Slike, S., & Johnson, H. (2012). Helping students who are deaf or hard of hearing succeed. *Teaching Exceptional Children*, 44, 58–67.
- Marschark, M., Shaver, D. M., Nagle, K. M., & Newman, L. A. (2015). Predicting the academic achievement of deaf and hard-of-hearing students from individual, household, communication, and educational factors. *Exceptional Children*, 81, 350–369. doi:10.1177/0014402914563700.
- Maxwell, J. (2005) *Qualitative research design: An interactive approach* (2nd Ed.). Thousand Oaks, CA: Sage.
- McLeskey, J., & Billingsley, B. S. (2008). How does the quality and stability of the teaching force influence the research-to-practice gap? A perspective on the teacher shortage in special education. *Remedial and Special Education*, 29, 293–305.
- McNeill, J. H., & Jordan, L. J. (1993). Factors that contribute to stress as reported by teachers of deaf students at residential schools. *American Annals of the Deaf*, 138, 284–287.
- Meadow, K. D. (1981). Burnout in professionals working with deaf children. *American Annals of the Deaf*, 126, 13–22.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Midgley, C., Feldlaufer, H., & Eccles, J. (1989). Change in teacher efficacy and student self- and task-related beliefs in mathematics during the transition to junior high school. *Journal of Educational Psychology*, 81, 247–258.
- Miller, K. J. (2014). Trends impacting one public school program for students who are deaf or hard-of-hearing. *Communication Disorders Quarterly*, 36, 35–43.
- Mitchell, R. E., & Karchmer, M. A. (2004). Chasing the mythical ten percent: Parental hearing status of deaf and hard of hearing students in the United States. *Sign Language Studies*, 4, 138–163.
- Mitchell, R., & Karchmer, M. (2006). Demographics of deaf education: More students in more places. *American Annals of the Deaf*, 151, 95–104.
- Moore, D. F. (1991) Dissemination of a model to create least restrictive environments for deaf students. (OSERS Grant No. G008720128). Washington, DC: Gallaudet University, Center for Studies in Education and Human Development.
- Mount, M., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology*, 59, 591–622.
- Nichols, S. L., & Berliner, D. C. (2007) *Collateral damage: How high-stakes testing corrupts America's schools*. Cambridge: Harvard Education Press.
- Perie, M., & Baker, D. (1997) *Job satisfaction among America's teachers: Effects of workplace conditions, background characteristics, and teacher compensation*. Washington, DC: National Center for Education Statistics.
- Perrachione, B. A., Rosser, V. J., & Peterson, G. J. (2008). Why do they stay? Elementary teachers' perceptions of job satisfaction and retention. *The Professional Educator*, 32, 25–41.
- Renzulli, L., Parrott, H. M., & Beattie, I. R. (2011). Racial mismatch and school type: Teacher satisfaction and retention in charter and traditional public schools. *Sociology of Education*, 84, 23–48.
- Rosen, R. S. (2014). Between-learners' outside-of-classroom uses of American Sign Language as a foreign language. *Sign Language Studies*, 14, 360–381. doi:10.1353/sls.2014.0011.
- Showers, B. (1984) *Peer coaching: A strategy for facilitating transfer of training*. Eugene, OR: Centre for Educational Policy and Management.
- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27, 1029–1038.
- Stedt, J., & Palermo, D. (1983). The morale of teachers of multi-handicapped and nonhandicapped children in a residential school for the deaf. *American Annals of the Deaf*, 128, 383–387.
- Stewart, D. A., & Kluwin, T. N. (2001). *Teaching deaf and hard of hearing students: Content, strategies, and curriculum*. Boston: Allyn and Bacon.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259–293.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher self-efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783–805.
- U.S. Department of Education (2015) 37th Annual report to Congress on the implementation of the Individuals with Disabilities Act, 2015. Washington, DC: Office of Special Education Programs.
- Vansteenkiste, M., Neyrinck, B., Niemiec, C. P., Soenens, B., De Witte, H., & Van, D. B. (2007). On the relations among work value orientations, psychological need satisfaction and job outcomes: A self-determination theory approach. *Journal of Occupational & Organizational Psychology*, 80, 251–277.
- Varra, A. A., Hayes, S. C., Roget, N., & Fisher, G. (2008). A randomized control trial examining the effect of acceptance and commitment training on clinician willingness to use evidence-based pharmacotherapy. *Journal of Consulting and Clinical Psychology*, 76, 449–458. doi:10.1037/0022-006X.76.3.449.
- Weiss, H. M., & Brief, A. P. (2001). Affect at work: A historical perspective. In: Payne R. L., & Cooper C. L. (Eds.), *Emotions at work: Theory, research and applications for management* (pp. 133–171). New York: Wiley.
- Yoon, K. S., Duncan, T., Lee, S. W., Scarloss, B., & Shapley, K. L. (2007). *Reviewing the evidence on how teacher professional development affects student achievement*. Issue and Answers Report, REL 20007 – No. 033. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.

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