

2018

## Job Satisfaction among Jordanian Speech-language Pathologists and Audiologists

Basem S. Marie

*Al-Ahliyya Amman University*, [bmaree@ammanu.edu.jo](mailto:bmaree@ammanu.edu.jo)

Follow this and additional works at: <https://digitalcommons.aaru.edu.jo/albalqa>

---

### Recommended Citation

Marie, Basem S. (2018) "Job Satisfaction among Jordanian Speech-language Pathologists and Audiologists," *Al-Balqa Journal for Research and Studies* **البلقاء للبحوث والدراسات**: Vol. 21 : Iss. 1 , Article 9.

Available at: <https://digitalcommons.aaru.edu.jo/albalqa/vol21/iss1/9>

This Article is brought to you for free and open access by Arab Journals Platform. It has been accepted for inclusion in Al-Balqa Journal for Research and Studies **البلقاء للبحوث والدراسات** by an authorized editor. The journal is hosted on [Digital Commons](#), an Elsevier platform. For more information, please contact [rakan@aarj.edu.jo](mailto:rakan@aarj.edu.jo), [marah@aarj.edu.jo](mailto:marah@aarj.edu.jo), [u.murad@aarj.edu.jo](mailto:u.murad@aarj.edu.jo).

## Job Satisfaction among Jordanian Speech-language Pathologists and Audiologists

### الرضى المهني لأخصائيي النطق واللسان وأخصائيي السمع الأردنيين

Dr. Basem S. Marie

Al-Ahliyya Amman University

bmaree@ammanu.edu.jo

#### Abstract

*Job satisfaction is an important factor that is correlated positively to enhanced job performance, high motivation, and positive factors and is correlated negatively to burn out and job attrition. This study aimed at studying demographics of Jordanian speech language pathologists and audiologists and measure their level of job satisfaction. 34 respondents participated in the study. Results show that Jordanian speech language pathologists and audiologists' satisfaction was insignificantly below average ( $p=.843$ ). Factors that significantly affected job satisfaction were: therapy outcomes ( $p=0.001$ ), income ( $p=0.012$ ), time management ( $p=0.028$ ), work pressure ( $p=0.003$ ), vacations ( $p=0.001$ ), and job security ( $p=0.021$ ). Demographics of Jordanian audiologists and speech language pathologists were also discussed in the study.*

**Keywords:** Public transport vehicles/1000 people; Public transport share; transport fare; operating cost; satisfaction index; investment; financing

تاريخ القبول: ٢٠١٥/٧/٢

تاريخ الاستلام: ٢٠١٥/٢/١٦

## الملخص

الرضا عن الوظيفة هو عامل مهم ومرتببط طردياً مع الأداء الأفضل في العمل بالإضافة إلى الدافعية العالية، ويتناسب عكسياً مع الاحباط وترك الوظيفة سريعاً. الدراسة الحالية تهدف إلى دراسة الخواص الديموغرافية لأخصائيي النطق واللغة وأخصائيي السمع في الأردن ومدى رضاهم الوظيفي حيث تمت دراسة اربع وثلاثين مشترك. أظهرت النتائج أن رضى أخصائيي النطق واللغة وأخصائيي السمع تحت المعدل العام ولكن بنسبة احصائية غير مؤثرة ( $p=0.843$ ). العوامل التي أثرت على الرضى الوظيفي اشتملت: نتائج العلاج المقدم للحالات ( $p=0.001$ )، الدخل المالي ( $p=0.012$ )، تنظيم الوقت ( $p=0.028$ )، ضغط العمل ( $p=0.003$ )، الإجازات ( $p=0.001$ )، والأمن الوظيفي ( $p=0.021$ ). بالإضافة إلى ذلك تمت مناقشة الخواص الديموغرافية للأخصائيين في الاردن في هذه الدراسة.

**الكلمات المفتاحية:** أخصائيو النطق واللغة، أخصائيو السمع، الرضى الوظيفي.

## Introduction

Job satisfaction is defined as an attitudinal variable measuring the degree to which employees like their jobs and the various aspects of their jobs (Spector, 1997; Stamps, 1997). It is one of the most researched topics in the areas of organizational behavior and education (Blood et al., 2002, Kalkhoff & Collins 2012, & Spector, 1997).

Job satisfaction is correlated positively to enhanced job performance, positive work values, high motivation levels, and enhanced mental and physical health. On the other hand, it is negatively correlated to absenteeism, turnover, and burnout. (Begley & Czajka, 1993; Blood, 1969, 1973; Bluedorn, 1982; Bluen, Barling, & Burns, 1990; Chiu, 2000; Cordes & Dougherty, 1993; Petty, McGee, & Cavender, 1984; Tharenou, 1993). Because it is directly correlated to workers' performance and levels of retention, interest in studying job satisfaction and factors that affect satisfaction has increased. (Blood et al. 2002, Kalkhoff & Collins, 2012). Job satisfaction was one of the best predictors of persons choosing to leave their job (Griffeth, Hom and Gaertner 2000, & McLaughlen, 2008). Information about job

satisfaction may provide administrators with necessary knowledge they could use to recruit or retain workers (e.g. Speech Language Pathologists (SLPs).

SLPs are highly involved in the field of education as they deal with school children with communication disorders. Blood et al. (2002) detected some factors that lead to job satisfaction including, teacher attrition (Bobbitt, Leich, Whitener, & Lynch, 1994; Boe & Guilford, 1992; Ingersoll & Alsalam, 1996; Lee, Dedrick, & Smith, 1991; Russ, Chiang, Rylance, & Bongers, 2001), demographic variables (i.e. age, education, and gender) (Castillo, Conklin, & Cano, 1999; Eichinger, 2000; Ganser & Wham, 1998; Peterson & Custer, 1994), practice-related variables (i.e. salaries, credentialing, opportunities for promotion, supervision, recognition, student behavior, working conditions, and sense of autonomy) (Archbald & Porter, 1994; Dinham & Scott, 1998; Evans, 1997a, b, 1998; Pennington, 1991; Prelip, 2001; Reyes & Shin, 1995; Taylor & Tashakkori, 1995), and geographic location in rural, suburban, and urban areas (Bornfield, Hall, Hall, & Hoover, 1997; Burstein & Sears, 1998; Derlin & Schneider, 1994; Pearson, 1998). Job satisfaction in school personnel is also related to overall job productivity, motivation, and student learning outcomes (Ashton & Webb, 1986; Choy, et

al., 1993).

Blood et al. (2002) studied two thousand SLPs working in public schools in United States and found that majority of them were satisfied or highly satisfied. Factors that increased job satisfaction were greater number of years at work, and decreased case load. Factors such as geographic area of work did not make a difference in job satisfaction.

Lambert, Hogan and Barton (2001) studied 1095 workers from a range of industries across the USA. They found a significant relationship between job satisfaction and factors affecting the work environment (i.e. role conflict, task variety, financial rewards, relations with co-workers, and autonomy/participation).

Among speech language pathologists, the number of job satisfaction studies is limited (blood et al., 2002). Similar to other professions, these studies focused on factors leading to job satisfaction. Many authors assented that lower incomes, longer hours, larger caseloads, scheduling complexities, and professional isolation contribute to low levels of job satisfaction in rural settings (Condon, Simmons, & Simmons, 1986; Farmer, 1994; Foster & Harvey, 1996; Helge, 1992; Neely, Diebold, & Dickinson, 1994). Other factors affecting job satisfaction included the geographic location where SLPs provide services (Blood et al., 2002).

Mclaughlen (2008) interviewed eighteen speech language pathologists from Australia over the phone asking them about their perceptions of factors that increase and decrease their experience of job stress, their satisfaction with their jobs, and their opinions on why they leave their jobs. She found that SLPs see positive aspects in their jobs (e.g. variety and interesting nature of the work, flexibility, team work, and making a difference in patients' lives) and negative aspects (e.g. large case and workloads, limited efficacy, lack of respect, lack of autonomy, and increased paper work).

Similarly, Saggars et al. (2001) interviewed and surveyed 544 allied health professionals including audiologists and SLPs. They found five main factors influencing recruitment and retention in their sample.

These factors were career structure, workload, quality of management and management structures, rural versus metropolitan location, and professional development opportunities.

Pezzei and Oratio (1991) reported on the job satisfaction of 281 SLPs working in the public schools. A factor analysis of the data revealed that supervision, workload, co-workers' support, SLPs' backgrounds, and specific job settings were the most predictive of job satisfaction.

Wisniewski and Gargiulo (1997) reviewed and critiqued the literature on occupational stress, attrition, job satisfaction, and burnout in special educators, including SLPs. They reported some general reasons that may contribute to job burnout and dissatisfaction including increased workplace demands that resulted from technological advances in the field, administrative responsibilities, increased paperwork, and interdisciplinary meetings. In particular to SLP. Factors like larger and oversized caseloads, greater time demands, and additional responsibilities increased burnout and dissatisfaction. Other factors related to job dissatisfaction were role ambiguity and conflict, inconsistent support from other school personnel, demands for excessive accountability and paperwork.

The Speech-Language Pathology Healthcare Survey in 2002 surveyed job satisfaction. Results show that factors predicted job satisfaction were volume of paper work, salary or benefits, caseload, and setting of working. However, Randolph (2005) had different results. She studied the most predictive extrinsic and extrinsic areas in job satisfaction among rehabilitation professionals including speech language pathologists using a survey for 328 participants and found that factors such as professional growth, recognition of accomplishments, and work environment agree with personal values predicted job satisfaction among these professionals more than factors such as payment and continuing education.

In Jordan, speech-language pathology and audiology are considered as new professions. People's aware-

ness of the importance of speech language pathology and audiology in addition to role of speech language pathologist in re/habilitation of people with communication disorders is still limited. Speech language pathologists are solely working in private or public clinics. Schools and hospitals are still behind in the field. Demographic information about workers in the field and their professional situations are vague. As a developing profession, it is needed to investigate demographic data, workers' job satisfaction, and the factors that lead to job satisfaction or dissatisfaction. Such knowledge will help employers, educators in the field, and decision makers to improve the professional aspects and to spread the profession in the country. In addition to demonstrating demographic characteristics of Jordanian audiologists and speech language pathologists and their corporate practices (e.g. professional training and experience, and types of services provided), the present study answers the following two questions: 1. What are the respondents' levels of career satisfaction in their current practice? 2. What are the factors affecting respondents' level of satisfaction?

## Methodology:

A list of Jordanian speech language pathologists and audiologists obtained from Jordanian Ministry of Health 60 copies of the survey were sent by email or handed personally to possible participants. 34 of them have completed the survey and sent it back. The survey included different parts. The first part is intended to obtain demographic data of the respondents (i.e. age, gender, number of work years, setting of work), in addition to other information such as their case load and amount of paper work they have to do.

The second part is intended to obtain information about different cases which the respondents deal with using a five-point scale starting from (1= never) for disorders that they never deal with and ending with (5= always) for disorders they deal with on daily basis. The third part is intended to obtain data about the respondents' perception of their experience in

various disorders they deal with using a 5 level scale starting from (1= No experience at all) for disorders they feel they lack the experience in and end with (5= very experienced) for disorders they think they are the most experienced in. The fourth part is intended to obtain data about the respondents' perception of their job satisfaction using a 7 point scale starting from (1= totally unsatisfied) and ending with (7= totally satisfied). Appendix 1 shows the survey used in the current study and table 1 shows participants demographics.

Value of 5 (i.e. somehow satisfied level) was determined as the cut off level of satisfaction. Respondents' overall satisfaction and the surveyed factors were statistically analyzed and compared to the value of 5 through one sample T test, using alpha level of 0.05.

## Results:

Respondents varied in their age, experience, and their academic backgrounds. Figure 1 shows a representation of respondents' demographic data. Results show that speech language pathologists' case load was variable with more emphasis on language disorders and phonological disorders while group therapy and resonance disorders were the least case load types. On the other hand, audiologists solely dealt with oral rehabilitation in their direct contact with patients. Figure 2 represents the distribution of various communication disorders in speech language pathologists' and audiologists' case load.

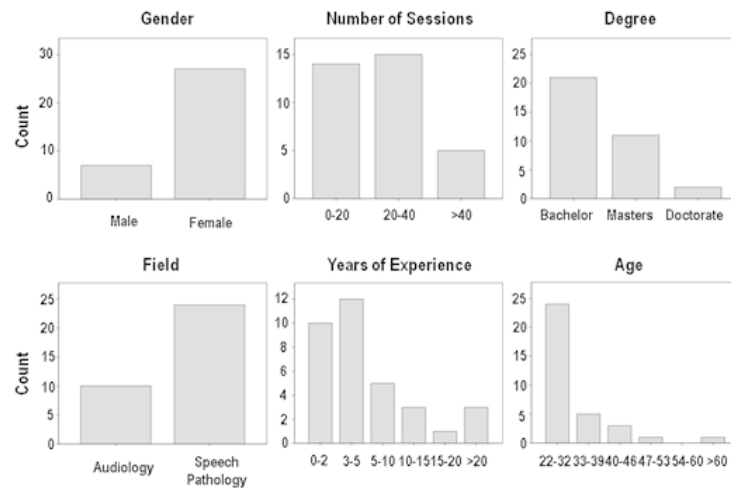


Figure 1: Demographic data

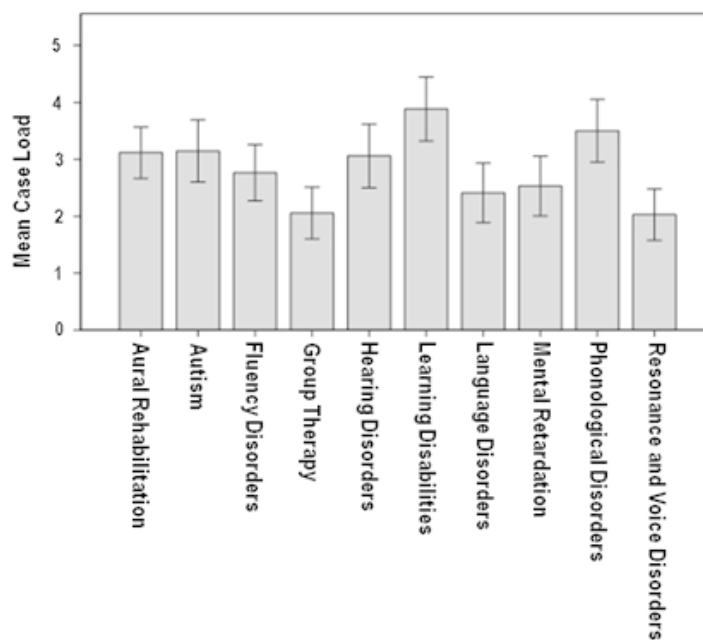
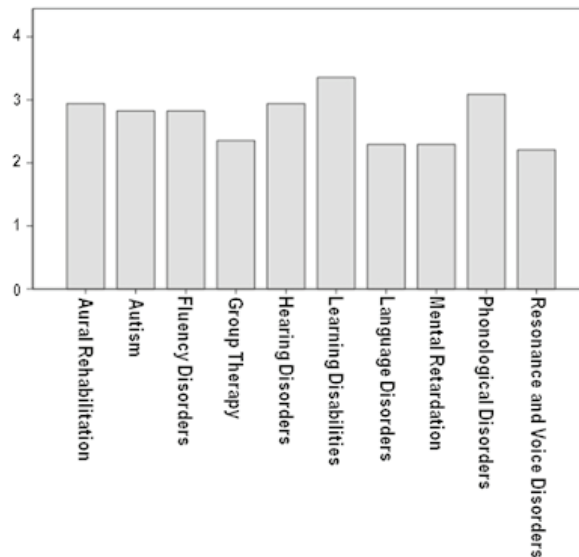


Figure 2: Participants' caseloads

Speech language pathologists and audiologists rated their experience as "good experience" in the fields they dealt with. Figure 3 gives a representation on respondents' rating of their experience in various communication disorders.



**Figure 3: Rates of satisfaction**

Results showed that respondents' overall satisfaction was insignificantly below average ( $p = .843$ ). Factor analysis shows that respondents' satisfaction in therapy outcome was significantly higher than the average ( $p = 0.001$ ). On the contrary, respondents were significantly unsatisfied with income ( $p = 0.012$ ), time management ( $p = 0.028$ ), work pressure ( $p = 0.003$ ), travel and vacations ( $p = 0.001$ ), and job security ( $p = 0.021$ ). Other factors showed trends of dissatisfaction (i.e. paper work ( $p = 0.081$ ) and creativity ( $p = .056$ )). On the other hand, factors such as work load ( $p = 0.107$ ), independency ( $p = 0.530$ ), and management flexibility ( $p = 0.723$ ) were not factors that affected satisfaction. Table 2 summarizes the statistical analysis for overall satisfaction and the studied factors that lead to satisfaction / dissatisfaction.

## Discussion:

This investigation shows that in Jordan speech language pathologists and audiologists are mainly working in schools and private clinics. It appears that the profession is still unrecognized in the health sector. Although its importance in rehabilitation, neonatal

hearing screening, assessment of cognitive and communicative abilities for neurological insult patients, as well as swallowing disorders are still behind in Jordan. It is important to raise the awareness of decision makers to the importance of this profession in secondary and tertiary health sectors (i.e. hospitals and rehabilitation centres). Also, the current investigation shows that number of audiologists and speech language pathologists (tens of audiologists and speech language pathologists are registered and able to work) is not adequate for the population of Jordan (7million). There are three undergraduate programs and one graduate program in Jordan in the field. It could be beneficial to expand these academic programs and improve training facilities to their graduates.

Generally, speech language pathologists and audiologists investigated in the current study were satisfied with their jobs, which agrees with Blood et al (2002), McLaughlen (2008), Saggars et al. (2001), Pezzeri and Oratio (1991), Kalkhoff & Collins, (2012). Predictors of job satisfaction among Jordanian speech-language pathologists and audiologists varied. One of the most important factors that lead to job satisfaction was therapy outcome, which was similar to results from McLaughlen (2008). On the other hand, major factors that lead to dissatisfaction were low income,

work pressure, and time management. These results are consistent with Blood et al (2002) McLaughlen (2008) Saggars et al. (2001) Pezzei and Oratio (1991) Wisniewski and Gargiulo (1997). However, the results of the present study do not agree with the previously mentioned studies in factors like independency, work load, and management flexibility. In the present study these factors did not predict job satisfaction among Jordanian speech language pathologists and audiologists.

As mentioned earlier, the profession is still developing in Jordan and there are fewer number of workers in the field than needed. Thus, availability of jobs in a suffering economy may be one positive aspect of the profession in Jordan. Besides, workers in the field usually have the possibility to choose among variety of job placements, which may explain why factors such as independency and management flexibility were not predicting factors for job satisfaction among Jordanian speech language pathologists and audiologists.

Although case load is usually an important predictor in other countries, it was not a factor that predicts job satisfaction / dissatisfaction among Jordanian speech language pathologists and audiologists. One reason for that could be the small number of cases assigned for professionals due to lack of awareness of the importance of this field. With increasing awareness of detecting children and adults with special needs in Jordan and caring of them, it is expected that in the coming years speech language pathologists and audiologists will have much bigger case load. At that time, this factor may become a major predictor for job satisfaction.

## Conclusion

Jordanian speech language pathologists and audiologists are somehow satisfied with their jobs. In order to improve the level of their satisfaction, institutions may work on time management, income, and job security in sections where speech language pathologists and audiologists work. Developers of the field need to increase Jordanians' awareness of it. There is a

need to have more speech language pathologists and audiologists in Jordan. In addition, there is a need to work on continuous education and training for working SLPs and audiologists.

## Appendix1: Job satisfaction survey

### Job Satisfaction Survey

Welcome to the Job Satisfaction Survey! This survey aims at gathering information on four main domains. The first domain includes general demographic information, while the remaining three domains present questions regarding your field of work and job satisfaction. Information gleaned from this survey will be solely used for the purpose of research. Thank you in advance.

### Part 1: Demographic Variables

How to provide your response:

Please read the following information carefully and place an (X) next to the item that most strongly represents the attribute you are looking for. Whenever required, fill in written answers or numbers.



**Table 1**  
**PT Lines by Means of Transport and Province**

<b>Age:</b>	
<input type="checkbox"/> 25-32 years	<input type="checkbox"/> 33-39 years <input type="checkbox"/> 40-46 years <input type="checkbox"/> 47-53 years <input type="checkbox"/> 54-60 years <input type="checkbox"/> Over 60 years
<b>Gender:</b>	
<input type="checkbox"/> Male	<input type="checkbox"/> Female
<b>Academic Qualifications (in Speech &amp; Language Pathology/Audiology):</b>	
<input type="checkbox"/> Bachelor's Degree	<input type="checkbox"/> Master's Degree <input type="checkbox"/> Doctoral Degree
<b>Field of work:</b>	
<input type="checkbox"/> Speech & Language Therapy	<input type="checkbox"/> Audiology
<b>Employment hours:</b>	
<input type="checkbox"/> Part-time	<input type="checkbox"/> Full-time
<b>Job description:</b>	
<input type="checkbox"/> Teaching	<input type="checkbox"/> Training <input type="checkbox"/> Direct work with clients <input type="checkbox"/> Administrative
<b>Work Sector:</b>	
<input type="checkbox"/> Hospital	<input type="checkbox"/> School <input type="checkbox"/> Rehabilitation Center <input type="checkbox"/> University <input type="checkbox"/> Other
<b>Number of years since receiving most recent academic degree:</b>	
<b>Number of years working in speech-language therapy (part-time/full-time):</b>	
<b>Number of institutions you have worked in:</b>	
<b>Number of sessions you complete per week:</b>	
<b>Distance between your home and workplace (in kilometers):</b>	

Source of continuous information (professional):

<input type="checkbox"/> Books	<input type="checkbox"/> Scientific Articles	<input type="checkbox"/> Internet	<input type="checkbox"/> Periodicals
<input type="checkbox"/> Work colleagues	<input type="checkbox"/> Workshops	<input type="checkbox"/> Continuing education	<input type="checkbox"/> Other

Length of time spent (daily):

<b>Completing administrative work:</b>	
<b>Marketing and for public relations:</b>	
<b>Preparing for sessions:</b>	
<b>In sessions:</b>	
<b>For transportation:</b>	

Part 2: The following section contains a variety of disorders normally treated by Speech-Language Therapists. Place an (X) in the box that accurately describes the frequency with which you treat each disorder. Try to be as honest, precise, and objective as possible while completing this form.

Number	Disorder	Never	Rarely	Sometimes	Usually	Always
1	Articulation & phonological disorders					
2	Fluency disorders (Stuttering)					
3	Aural rehabilitation					
4	Group therapy					
5	Language disorders					
6	Voice & resonance disorders					
7	Learning disabilities					
8	Autism					
9	Intellectual disabilities					
10	Hearing impairment					

Part 3: The following section contains the different professional areas a Speech-Language Therapist works in. Place an (X) in the box that accurately describes the level of professional experience you have with regards to each area. Try to be as honest, precise, and objective as possible while completing this form.

No	Disorder	No experience	Some experience	Average experience	Rather experienced	Well experienced
1	Articulation & phonological disorders					
2	Fluency disorders (Stuttering)					
3	Aural rehabilitation					
4	Group therapy					

5	Language disorders					
6	Voice disorders					
7	Learning disabilities					
8	Autism					
9	Intellectual disabilities					
10	Hearing impairment					

Part 4: The following section contains a number of factors that describe Speech-Language Therapists' level of satisfaction with their job. Place an (X) in the box that most accurately describes the level of satisfaction you feel towards your job. Remember; try to be as honest, precise, and objective as possible while completing this form.

No	Factor	Completely unsatisfied	Mostly unsatisfied	Somewhat Unsatisfied	Neutral	Somewhat satisfied	Mostly satisfied	Completely satisfied
1	Independency							
2	Income							
3	Time management							
4	Paperwork							
5	Caseload							
6	Creativity							
7	Work pressure							
8	Managerial flexibility							
9	Patient improvement							
10	Travel & vacations							
11	Professional security							
12	Overall satisfaction							

## References

1. Archbald, D., and Porter, A. (1994). Curriculum control and teachers' perceptions of autonomy and satisfaction. *Educational evaluation and policy analysis*, 16, 21-39.
2. Ashton, P. T., & Webb, R. B. (1986). *Making a difference Teachers' sense of efficacy and student achievement*. New York: Longman.
3. Begley, T., and Czajka, J. (1993). Panel analysis of the moderating effects of commitment on job satisfaction, intent to quit, and health following organizational change. *Journal of applied psychology*, 78, 552-226.
4. Blood, M. (1969). Work values and job satisfaction. *Journal of applied psychology*, 53, 456-459.
5. Blood, M. (1973). Intergroup comparisons of interpersonal differences: rewards from the job. *Personnel psychology*, 26, 1-9.
6. Blood, G., Ridenour, J., Thomas, E., Qualls, C., and Hammer, C. (2002). Predicting job satisfaction among speech-language pathologists working in public schools. *Language, speech, and hearing services in schools*, 33, 282-290.
7. Bluedorn, A. (1982). A unified model of turnover from organizations. *Human relations*, 35, 135-153.
8. Bluen, S., Barling, J., and Burns, W. (1990). Predicting sales performance, job satisfaction, and depression by using the achievement strivings and impatience-irritability dimensions of type A behaviour. *Journal of applied psychology*, 75, 212-216.
9. Bobbitt, S., Leich, M., Whitener, S., and Lynch, H. (1994). Characteristics of stayers, movers, and leavers: Results from the teacher follow up survey (NCES 94-337). Washington, DC: U.S. Department of Education, office of educational research and improvement, national centre for education statistics.
10. Boe, E., and Guilford, D. (1992). *Teacher supply, demand, and quality*. National research council. Washington, DC: National Academy press.
11. Bornfield, G., Hall, N., Hall, P., & Hoover, J. H. (1997) Leaving rural special education positions: It's a matter of roots. *Rural Special Education Quarterly*, 16, 30-37.
12. Burstein, N. D., & Sears, S. (1998). Preparing on-the-job teachers for urban schools: Implications for teacher training. *Teacher Education and Special Education*, 21, 47-62.
13. Castillo, J., Conklin, E., and Cano, J. (1990). Job satisfaction of Ohio agricultural education teachers. *Journal of agricultural education*, 40, 19-27.
14. Chiu, R. (2000). Does perception of pay equity, pay satisfaction, and job satisfaction mediate the effect of positive affectivity on work motivation? *Social behaviour and personality*, 28, 177-184.
15. Choy, S. P., Bobbitt, S. A., Henke, R. R., Medrich, E. A., Horn, L. J., & Lieberman, J. (1993). *America's teachers: profile of a profession* (NCES 93-025). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.
16. Condon, M., Simmons, J., & Simmons, E. (1986). Rural school system recruitment and retention of speech language pathologists. *Rural Special Education Quarterly*, 7, 14-16.
17. Cordes, C., and Dougherty, T. (1993). A review and integration of research on job burnout. *Academy of management review*, 18, 621-655.
18. Derlin, R., & Schneider, G. T. (1994). Understanding job satisfaction: Principals and teachers, urban and suburban. *Urban Education*, 29, 63-88.
19. Dinham, S., and Scott, C. (1998). A three domain model of teacher and school

- executive career satisfaction. *Journal of educational administration*, 36, 362-378.
20. Eichinger, J. (2000). Job stress and satisfaction among special education teachers: Effects of gender and social role orientation. *International journal of disability, development, and education*, 47, 397-412.
  21. Evans, L. (1997a). Addressing problems of conceptualization and construct validity in researching teachers' job satisfaction. *Educational Research*, 39, 319-331.
  22. Evans, L. (1997b). Understanding teacher morale and job satisfaction. *Teaching and Teacher Education*, 13, 831-845
  23. Farmer, S. S. (1994). The collaborative career adjustment project (CCAP): A model to recruit and retain speech language pathologists in rural communities. *Rural Special Education Quarterly*, 13, 18-21.
  24. Foster, F., & Harvey, B. (1996). Retention of rural speech pathologists. *Rural Special Education Quarterly*, 15, 10-19.
  25. Ganser, T., and Wham, M. (1998). Voices of cooperating teachers: Professional contributions and personal satisfaction. *Teacher education quarterly*, 25, 43-52.
  26. Griffeth, R., Hom, P., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26, 463 - 488.
  27. Helge, D. (1992). Special education. In M. W. Galbraith (Ed.), *Education in the rural American community* (pp. 107-135). Malabar, FL: Krieger.
  28. Ingersoll, R., and Alsalam, N. (1996). The effects of professionalization on teacher: A multilevel analysis. Washington, DC: U.S. Department of Education, office of educational research and improvement, National centre for education statistics.
  29. Kalkhoff, N., and Collins, D. (2012). Speech-language pathologist job satisfaction in school versus medical settings. *Language, speech, and hearing services in schools*, 43, 164-175.
  30. Lambert, E., Hogan, N., & Barton, S. (2001). The impact of job satisfaction on turnover intent: A test of a structural measurement model using a national sample of workers. *The Social Science Journal*, 38, 233 - 250.
  31. Lee, V., Dedrick, R., and Smith, J. (1991). The effect of the social organization of schools on teacher's efficacy and satisfaction. *Sociology of education*, 64, 190-208.
  32. McLaughlin, E., Lincoln, M., and Adamson, B. (2008). Speech-language pathologists' views on attrition from the profession. *International journal of speech-language pathology*, 10 (3), 156-168.
  33. Neely, R. A., Diebold, M. H., & Dickinson, G. (1994). Factors influencing the employment and retention of speech-language pathologists in rural public schools. *Rural Special Education Quarterly*, 13, 3-11.
  34. Pennington, M. (1991). Work satisfaction and the ESL profession. *Language, Culture, and Curriculum*, 4, 59-86.
  35. Prelip, M. (2001). Job satisfaction in health education and the value of added credentialing. *American Journal of Health Education*, 32, 26-30.
  36. Peterson, N., and Custer, R. (1994). Personality styles, job satisfaction, and retention of teachers of vocational subjectc. *Journal of technology studies*, 20, 21-28.
  37. Pearson, L. C. (1998). The prediction of teacher autonomy. *Educational Research Quarterly*, 22, 33-46.
  38. Petty, McGee, G., and Cavender, J. (1984). A meta-analysis of the relationships between individual job satisfaction and individual performance. *Academy of management review*, 9, 712-721.
  39. Pezzeri, C., & Oratio, A. (1991). A multi-

- variate analysis of the job satisfaction of public school speech-language pathologists. *Language, Speech, and Hearing Services in Schools*, 22,139–146.
40. Randolph, D. (2005). Predicting the effect of extrinsic and intrinsic job satisfaction factors on recruitment and retention of rehabilitation professionals. *Journal of healthcare management*. 50 (1), 49-60.
41. Reyes, P., and Shin, H. (1995). Teacher commitment and job satisfaction: A causal analysis. *Journal of School Leadership*, 5,22–39.
42. Russ, S., Chiang, B., Rylance, B., and Bongers, J. (2001). Caseload in special education: An integration of research findings. *Exceptional children*, 67, 161-172.
43. Saggars, S., Wildy, H., Gray, J., Paskevicius, A., Tilley, F., & Ciccarelli, P. (2001). Benchmarking recruitment and retention among professional therapists: Local and national perspectives. Perth: Institute for the Service Professions, Edith Cowan University and Therapy Focus.
44. Spector, P. (1997). *Job satisfaction application, assessment, causes, and consequences*. Thousand Oaks, CA:Sage.
45. Stamps, P. (1997). *Nurses and work satisfaction: An index for measurement*. Chicago: health administration press.
46. Taylor, D. , and Tashakkori, A. (1995). Decision participation and school climate as predictors of job satisfaction and teachers' sense of efficacy. *Journal of Experimental Education*, 63, 217–230.
47. Tharenou, P. (1993). A test of reciprocal causality for absenteeism. *Journal of organizational behaviour*, 14, 269-290.
48. Wisniewski, L., & Gargiulo, R. M. (1997). Occupational stress and burnout among special educators: A review of the literature. *The Journal of Special Education*, 31, 325–346.