

Supervision of Occupational Therapy Level II Fieldwork Students: Impact on and Predictors of Clinician Productivity

Rebecca Ozelie, Janet Janow, Corinne Kreutz, Mary Kate Mulry, Ashley Penkala

MeSH TERMS

- efficiency
- health personnel
- internship, nonmedical
- occupational therapy
- students

This study aimed to determine whether a difference in productivity exists between clinicians supervising and not supervising a Level II occupational therapy student and whether factors including clinician years of experience, practice setting, and clinician productivity without a student could predict clinician productivity while supervising a student. We used paired-sample *t* tests to examine clinician productivity with and without a student in 109 clinician–student encounters and regression analysis to determine factors predictive of clinician productivity with a student. Results indicated no difference in clinician productivity with or without a student. Clinician years of experience, practice area, and productivity without a student were significant predictors of clinician productivity while supervising a student. Study results contradict the belief that supervising Level II fieldwork students lowers clinicians' productivity. Findings suggest that practice area and productivity without a student are important factors influencing the productivity of clinicians supervising a fieldwork student.

Ozelie, R., Janow, J., Kreutz, C., Mulry, M. K., & Penkala, A. (2015). Supervision of Occupational Therapy Level II Fieldwork Students: Impact on and Predictors of Clinician Productivity. *American Journal of Occupational Therapy*, 69, 6901260010. <http://dx.doi.org/10.5014/ajot.2015.013532>

Rebecca Ozelie, DHS, OTR/L, BCPR, is Assistant Professor and Academic Fieldwork Coordinator, Rush University, Department of Occupational Therapy, Chicago, IL; rebecca_ozelie@rush.edu. At the time of the study, she was Student, Doctorate of Health Science Program, University of Indianapolis, Indianapolis, IN.

Janet Janow, Corinne Kreutz, Mary Kate Mulry, and Ashley Penkala were Masters Students, Department of Occupational Therapy, Rush University, Chicago, IL, at the time of the study.

Fieldwork has long been a key component in allied health professional curricula. Exposure to clinical experience allows students to apply their academic and theoretical knowledge to clinical practice in a variety of settings and to develop the competence needed to enter the field. Fieldwork not only facilitates students' learning and understanding of their field but also exposes supervisors to current evidence-based practice, research, and trends and gives fieldwork sites the chance to view and recruit students as potential employees (American Occupational Therapy Association [AOTA], 2009). Despite the obvious necessity of fieldwork to the development of new, qualified practitioners, however, there continues to be a shortage of fieldwork placement opportunities (Baldry Currens & Bithell, 2000; Hanson, 2011; Roberts & Simon, 2012; Thomas et al., 2007).

Researchers exploring explanations for this shortage have discovered perceived benefits and barriers that influence clinicians' and institutions' willingness to accept fieldwork students. Supervisors have reported positive aspects of taking on fieldwork students, including the opportunity to teach and stay up to date with current trends and knowledge in health care, the ability to give back to their profession by preparing the next generation for practice, and the chance to create positive change in the patient–provider dynamic (Davies, Hanna, & Cott, 2011). These benefits are not always enough to persuade clinicians and administrators to take students, however. Clinicians and administrators can be deterred from taking students because of perceived extrinsic factors such as increased stress secondary to lack of time and resources, unprepared or difficult

students (Davies et al., 2011; Hanson, 2011), and increased caseload and documentation requirements (Casares, Bradley, Jaffe, & Lee, 2003; Hanson, 2011; Meyers, 1995). Other allied health professionals have reported productivity demands as the basis for not accepting students, defining *productivity* in widely varying ways (Casares et al., 2003; Hanson, 2011; Meyers, 1995); according to Dillon, Tomaka, Chriss, Gutierrez, and Hairston (2003), time spent in direct patient care and number of patients seen were the most common definition of productivity.

Cost-benefit analysis is "a systematic and analytical process of comparing benefits and costs in evaluating desirability of a project or programme" (Mishan & Quah, 2007, p. i). Researchers in both inpatient and outpatient settings have conducted cost-benefit analyses of the impact on clinical practice of supervising students (Dillon et al., 2003; Gillis & Silver, 1997; Meyers, 1995; Shalik, 1987). Factors considered have included revenue generated by students working alongside clinical instructors (Meyers, 1995), monetary costs incurred while the supervisor trains the student (Shalik, 1987), and intangible costs such as supervisor stress and frustration (Meyers, 1995). Early studies reported positive outcomes from taking Level II fieldwork students in inpatient settings, resulting in benefit to the facility (Dillon et al., 2003; Shalik, 1987). Shalik (1987) suggested that longer fieldwork placements in physical dysfunction, psychiatric, and geriatric settings benefited facilities monetarily and reported a mean benefit of \$400 per week per student. These documented benefits of fieldwork, however, have not been influential enough to address the national shortage of fieldwork placements, and further examination of this topic is necessary.

Sevenhuysen and Haines (2011) used a qualitative research design to explore perceptions of and barriers to providing clinical education to physiotherapy students in Hong Kong. They found that clinicians identified increased workload as the greatest barrier to offering clinical education opportunities. The authors called for further research on the effect of clinical education on clinicians to clarify how clinicians incorporate the additional work of supervising a student into their workload.

Shalik (1987) measured productivity in terms of the time occupational therapy students spent in patient treatment and the time occupational therapy supervisors spent in fieldwork-related duties. They determined that at market rates in 1986, Level II fieldwork resulted in a mean benefit to the facility of \$4,700 for a 12-wk placement. Holland (1997) assessed productivity by comparing the number of new patients treated, the number of treatments given to patients, and the quality of patient outcomes achieved by occupational therapists supervising

a student and those not supervising a student. Therapists with a student treated more patients than those without a student. The number of treatments per patient and patient outcomes as perceived by the therapists (i.e., "positive," "negative," or "unknown") reported at discharge were comparable, indicating an overall increase in productivity by the therapists supervising a student.

Dillon and colleagues (2003) defined productivity differently, considering the number of patients the supervisor treated, the number of *Current Procedural Terminology* (CPTTM) codes the supervisor generated, and the number of evaluations the supervisor performed measured against the number of hours the supervisor worked. In a sample of 5 occupational therapists from acute and inpatient rehabilitation settings, the authors examined supervisor productivity during 4 wk with a student and 4 wk without a student. They found that the therapists saw more patients per day and generated more CPT codes while supervising a student, indicating enhanced supervisor productivity. No statistically significant difference was found in the number of evaluations performed by supervisors with and without a student.

Rodger et al. (2012) evaluated the productivity of 34 occupational therapy and nutrition/dietetics fieldwork students and 47 supervisors in Australia. The students and supervisors completed a survey documenting their time use in 30-min intervals and the number of *occasions of service*, defined as number of patients seen, number of minutes spent with patients, and indirect patient care, placement, service management, and other activities performed, outputs that are more comprehensive than traditional definitions of productivity. The authors found a net increase in the daily mean number of occasions of service when supervisors were with a student. They also noted the difficulty of measuring productivity in terms of activities not related to patient care and of assessing productivity beyond the patient care context.

Researchers have sought to determine factors that accurately predict fieldwork success. Sevenhuysen and Haines (2011) found that clinicians perceived that clinical education could have a positive effect on workload if the students were competent, although other researchers have established that academic grades and achievement measures are poor predictors of student fieldwork performance (Anderson & Jantzen, 1965; Best, 1994; Englehart, 1957; Howard & Jerosch-Herold, 2000). The student is only one part of the fieldwork dynamic, however. Characteristics of clinical educators should also be considered when evaluating fieldwork outcomes; years of experience may predict fieldwork outcomes given that supervisors undergo a learning or growth process to become effective (Christie, Joyce, & Moeller, 1985). In addition, type of practice

setting may influence fieldwork outcomes. Shalik (1987) reported a higher net financial value of fieldwork placements in physical disability and psychiatric settings compared with pediatric settings (a difference of \$605.91 for the entire fieldwork placement). However, Shalik also acknowledged that more research was needed to evaluate the role that area of practice plays in fieldwork success.

Most research regarding the impact of supervising fieldwork students on clinician productivity was conducted before passage of the Patient Protection and Affordable Care Act of 2010 (ACA; Pub. L. 111-148), making it important to revisit this issue. As the baby boomer generation ages, the demand for health care professionals will increase, driving occupational therapy programs to enroll more students and increasing the demand for fieldwork placements. Fisher and Friesema (2013) indicated that one challenge of the ACA is to demonstrate a positive cost-benefit ratio. Administrators may feel pressure from the ACA to demand higher productivity from occupational therapists, thus dampening the therapists' enthusiasm for taking on fieldwork students.

Fieldwork is a critical component of occupational therapy education because it "propels each generation of occupational therapy practitioners from the role of student to that of practitioner" (AOTA, 2012, p. 393), thus providing a gateway into the profession (Roberts & Simon, 2012). The importance of fieldwork to students' academic preparation makes exploration of reasons for the national fieldwork shortage essential. Research has produced information about benefits of and barriers to fieldwork education; however, little recent quantitative research has explored the impact of supervising Level II students on clinician productivity.

This study aimed to determine whether clinicians mentoring a Level II fieldwork student had significantly different productivity from those not supervising a student. In addition, we sought to investigate whether other variables identified in the literature as potential predictors of fieldwork success (i.e., area of practice, clinician years of experience, and clinician productivity without a student) can predict clinician productivity while supervising a student. The study hypotheses were as follows: (1) Clinician productivity with a student and without a student does not differ, and (2) identifiable factors are predictive of clinician productivity while supervising a student.

Method

Research Design

This study used a retrospective cohort design. The study was approved by the institutional review boards of the

participating institutions, and a waiver of informed consent was granted because data collection procedures were retrospective.

Participants

A convenience sample of occupational therapists from a large rehabilitation organization in Chicago was used. The organization employs approximately 115 occupational therapists and hosts approximately 40–45 Level II students each year in the practice areas of inpatient rehabilitation, outpatient rehabilitation, and pediatrics. The inclusion criteria for therapists were as follows: supervised a Level II occupational therapy student for 12 wk during 2009–2013, was licensed and registered as an occupational therapist, had ≥ 1 yr of experience, and had been employed at the facility 3 mo before and 3 mo after supervising the Level II student. Only Level II students who were completing the second of their two fieldwork placements were included in the sample.

Following Rodgers and colleagues' (2012) protocol, we excluded productivity measures exceeding 100 to eliminate *double counting* of students' and supervisors' contributions, which occurs when students and their supervisors see patients concurrently and both bill individual CPT codes. Double counting gives the appearance of the licensed clinician being more productive than he or she actually is. We also excluded therapists who shared a student with another supervisor or supervisors, used supervision models other than the one-to-one model, or supervised a student who failed or did not complete his or her Level II fieldwork. The latter group was excluded to construct a more cohesive sample because we anticipated that students who struggled would occupy more of their fieldwork supervisors' time.

Procedures

The primary dependent variable used in this study was the productivity of clinicians supervising a Level II occupational therapy student. Productivity measures for clinicians while they were without a student were collected during the 12 wk before they began student supervision. To control for seasonal differences in productivity (i.e., changes in census based on time of year), we gathered data from periods throughout the entire calendar year. We also collected data on clinician years of experience and area of practice as identified on the AOTA Fieldwork Data Form (i.e., inpatient rehabilitation, general rehabilitation outpatient, pediatric hospital, and pediatric outpatient; AOTA, 2014). The organization we collected data from has practice settings representative of inpatient rehabilitation,

outpatient rehabilitation, and pediatric hospital and pediatric outpatient; pediatric hospital and pediatric outpatient were combined because of a small sample in the practice area of pediatrics. The three practice areas of inpatient rehabilitation, outpatient rehabilitation, and pediatrics were assigned numerical codes and used for analysis.

Clinician productivity with a student was measured on a 0–100 scale, with 100 being the most productive. We defined productivity as the proportion of direct patient care time out of the clinician's total time available. Productivity did not include time spent outside of direct patient care. Billing procedures used at the facility were consistent with those outlined in "Fieldwork Level II and Occupational Therapy Students: A Position Paper" (AOTA, 2012), which states that services provided by the occupational therapy student under the supervision of a qualified practitioner are billed as services provided by the supervising licensed practitioner. Productivity data were gathered from the rehabilitation hospital's electronic productivity database. All data were deidentified by the facility.

Data Analysis

Data and descriptive information were analyzed using IBM SPSS Statistics Version 18.0 (IBM Corporation, Armonk, NY). Paired-sample *t* tests were conducted to determine whether differences existed in productivity with and without a student. For the independent variables (i.e., area of practice, clinician years of experience, and clinician productivity without a student), frequencies were examined to determine whether the number of categories and the number of items in each category were appropriate for statistical testing when assessing their association with clinician productivity. Bivariate associations were determined for clinician years of experience at the time of the student encounter, productivity with a student, and productivity without a student. Multiple regression analysis was conducted to determine whether the independent variables were predictive of clinician productivity when supervising a student. Dummy coding of the practice setting variable was used for this analysis.

Results

We obtained an initial sample of 114 clinician–student encounters. Five encounters were excluded because of incomplete data sets, for a final sample size of 109. The 109 encounters we analyzed included 56 clinicians (some clinicians had more than one student encounter within the data set). The number of student encounters each clinician had, years of clinician experience at the time of each encounter, and practice areas are presented in Table 1.

Table 1. Characteristics of the Sample

Variable	<i>n</i> (%)
No. of student fieldwork experiences per clinician (<i>N</i> = 56)	
1	26 (46)
2	18 (32)
3	4 (7)
4	6 (11)
5	1 (2)
6	1 (2)
Experience at time of student fieldwork encounter, yr (<i>N</i> = 109)	
0–5.00	60 (55)
5.01–10.00	31 (28)
10.01–15.00	12 (11)
>15.00	6 (6)
Clinician practice areas during fieldwork (<i>N</i> = 109)	
Outpatient rehabilitation	58 (53)
Inpatient rehabilitation	42 (39)
Pediatrics	9 (8)

Paired-sample *t* tests showed no significant difference in clinician productivity with and without a student, *t* (107) = -0.926 , $p = .357$. Table 2 summarizes the intercorrelations among variables. A significant positive correlation was found between clinician productivity without a student and clinician productivity with a student, $r = .75$, $p < .001$. Clinician years of experience was found to be negatively correlated with both clinician productivity with a student, $r = -.45$, $p < .001$, and clinician productivity without a student, $r = -.34$, $p < .001$.

The multiple regression model, including clinician years of experience, area of practice, and clinician productivity without a student, produced an R^2 of .62, $F(4, 103) = 41.713$, $p < .001$. As seen in Table 3, Step 2, the practice settings of inpatient rehabilitation and pediatrics were associated with higher productivity with a student compared with outpatient rehabilitation after controlling for the other variables in the model. The β value for years of experience decreased with the addition of practice setting. Additionally, in Step 3, clinician productivity without a student was identified as the strongest predictor of clinician productivity with a student and further decreased the association of years of experience with productivity.

Table 2. Clinician Experience and Productivity With and Without a Student

Variable	1	2	<i>M</i>	<i>SD</i>
1. Years of experience ^a	—	—	5.999	4.78
2. Productivity with a student	-.45***	—	.748	0.06
3. Productivity without a student	-.34***	.75***	.752	0.07

Note. — = not applicable; *M* = mean; *SD* = standard deviation.

^aClinician years of experience at time of student fieldwork encounter.

*** $p < .001$.

Table 3. Summary of Hierarchical Regression Analysis for Variables Predicting Productivity With a Student ($N = 109$)

Step	<i>B</i>	<i>SE B</i>	β
Step 1			
Constant	.783	.01	
Years of experience	-.005	.00	.446***
Step 2			
Constant	.745	.01	
Years of experience	-.003	.00	.220*
Inpatient rehabilitation	.045	.01	.391***
Pediatrics	.057	.02	.284**
Step 3			
Constant	.373	.04	
Years of experience	-.002	.00	.150*
Inpatient rehabilitation	.018	.01	.153†
Pediatrics	.014	.01	.067
Productivity without a student	.510	.06	.627***

Note. For Step 1, $R^2 = .20$; for Step 2, $R^2 = .33$, $\Delta R^2 = .13$, $p < .001$; for Step 3, $R^2 = .62$, $\Delta R^2 = .29$, $p < .001$.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Our findings suggest that clinician productivity with a student was significantly influenced by the practice setting. We did a post hoc test to explore clinician area of practice and productivity using a one-way analysis of variance. Results indicate a significant difference in mean clinician productivity with a student between practice settings, $F(2, 105) = 21.97$, $p < .001$. Games-Howell post hoc tests revealed a statistically significant difference in clinician productivity with a student in outpatient rehabilitation (mean = 72.38, standard deviation [*SD*] = 0.04; $p < .001$) and both inpatient rehabilitation (mean = 78.25, *SD* = 0.05) and pediatrics (mean = 79.24, *SD* = 0.05; $p < .05$). According to Field (2009), the Games-Howell procedure is an accurate post hoc analysis when sample sizes are unequal. Results showed no significant difference between clinician productivity with a student in pediatrics and inpatient rehabilitation. A post hoc analysis comparing years of experience across practice settings revealed a significant difference, $F(2, 106) = 22.99$, $p < .000$: Clinicians in outpatient settings had significantly more years of experience (mean = 8.44, *SD* = 5.22) than those in either inpatient rehabilitation (mean = 3.05, *SD* = 1.84) or pediatrics (mean = 3.99, *SD* = 1.90).

Discussion

The results of this study contradict the perception that clinician productivity decreases when supervising a fieldwork student, an argument that prompts many facilities to decline fieldwork contracts and further exacerbates the national shortage of available placements. We found no significant difference in the productivity of clinicians with a student and without a student. Although the literature

review revealed that extrinsic factors such as productivity demands often deter clinicians from taking students, the results of this study provide evidence that productivity demands are not an adequate justification for declining fieldwork placements and, therefore, should not deter clinicians' acceptance of fieldwork students in the future.

By determining whether variables such as area of practice, clinician years of experience, and clinician productivity without a student significantly influenced clinician productivity with a student, this study aimed to uncover strategies for optimizing student-clinician productivity. The statistical findings indicated a negative relationship between clinician years of experience and productivity with a student; that is, as clinicians' years of experience increased, productivity decreased. In the bivariate analysis, the correlation was fairly strong ($r = -.45$). Simple correlations have serious limitations, however. Except in randomized controlled trials, a variety of factors often contribute to a given outcome.

To further investigate the counterintuitive correlation between productivity and years of experience, we completed a regression analysis. In Step 1 of the analysis, clinician years of experience accounted for 19% of the variance in clinician productivity with a student. We added practice setting to the regression analysis in Step 2 and found that practice setting was a significant determinant of productivity with a student: The outpatient rehabilitation setting was associated with less productivity. Furthermore, the strength of the predictive power of clinician years of experience decreased, suggesting that part of the original association of years of experience with productivity was related to practice setting. In Step 2, for the overall model, years of experience contributed 3% of the variance and practice setting 17%. In the final model, which takes into account clinician productivity without a student, the unique variance contributed by years of experience and setting was 2% each. Productivity without a student contributed 29% to the overall variance.

In addition, our post hoc analysis of clinician years of experience and practice setting revealed that clinician years of experience were significantly higher in the outpatient rehabilitation setting, the setting with the lowest productivity. Thus, the regression analysis showed that clinician years of experience were a minor factor, contributing only 2% to the overall model, and that practice setting and productivity without a student were also predictors of clinician productivity with a student.

The analysis indicates that area of practice can be predictive of clinician productivity rates while supervising a student. Results also indicated that clinician productivity with a student was higher in pediatrics and inpatient rehabilitation. Conversely, Shalik (1987) reported a significant difference in the net value of Level II fieldwork

placements between pediatric settings and other areas of practice, suggesting that pediatric settings did not economically benefit from Level II students until the 13th week of placement, whereas physical dysfunction settings became profitable sometime during Weeks 3–5 of placement. However, Shalik stated that these findings should be viewed cautiously because of the disproportionate representation of pediatric settings versus physical dysfunction settings in the study sample.

Ladyshevsky, Barrie, and Drake (1998) found that physical therapists' level of productivity did not decrease when supervising a Level II student in an outpatient orthopedic clinic. We believe that with the changing climate of health care and reimbursement, the findings of Shalik (1987) and Ladyshevsky et al. (1998) have become outdated. Because student supervision practices are widely guided by Medicare regulations (which also are the gold standard for private health insurances used in pediatric settings), and because these regulations have changed in the past 16 yr, the evidence of greater clinician productivity with a student in pediatrics and inpatient rehabilitation provided by this study may be the most representative.

In addition to practice setting, various intrinsic factors influencing the fieldwork educator may also affect clinician productivity. We found a significant relationship between clinician productivity with and without a student; that is, clinicians who were productive before taking a student were also productive with a student, meaning that productivity is related more to intrinsic clinician factors than to student-related factors. Investigation of intrinsic clinician factors was beyond the scope of this study.

The regression model to determine factors that were predictive of clinician productivity with a student provides a means to assist in determining the best student–clinician fit. Practice area and productivity without a student were highly predictive of clinician productivity with a student, accounting for 60% of the variance, and these factors should be considered when determining optimal productivity outcomes.

Limitations

This study has several limitations that may have affected the results. The primary limitation was the use of data from one facility, which limits the generalizability of the findings. The value of fieldwork education and teaching at the facility may not be representative of all sites. Additionally, this facility uses a traditional medical model, which may not be representative of nontraditional community-based settings or school system settings, in which productivity is often more difficult to measure. In addition, this setting primarily

accepts students who are completing their second Level II placement, and because these students already had completed one Level II placement, they may have been independent sooner and thus more productive than students completing their first Level II placement.

A second limitation is the focus on only 12-wk Level II placements and the inclusion of only traditional one-to-one supervision models, which limit the applicability to Level I fieldwork experiences and nontraditional supervision models. A third possible limitation surrounds the possibility of human error in measures of productivity; productivity measures were based on the clinicians' own input of patient care units. Productivity outputs could be inaccurate if clinicians entered these units incorrectly or did not fully understand the billing practices.

Future Research

Further research is needed to develop a more comprehensive understanding of the forces influencing clinician productivity during fieldwork placements. To enhance the generalizability of research findings, future research could replicate this study using productivity data from additional sites. In addition, we recommend exploring the impact of students on patient outcomes as a means to further justify the benefits of students at fieldwork sites.

Implications for Occupational Therapy Practice

This study has the following implications for occupational therapy practice:

- The reasons for the national shortage of fieldwork placements need to be further evaluated and addressed.
- No significant difference was found in clinician productivity with and without a fieldwork student, and thus productivity demands should not deter sites from taking fieldwork students.
- Fieldwork sites should consider the effects of practice setting and clinician productivity without a student because these factors may affect clinician productivity with a student.

Conclusion

The national shortage of fieldwork placements (Roberts & Simon, 2012) continues to stress occupational therapy academic institutions across the country. One perceived barrier to the acceptance of fieldwork placements is the expectation of decreased clinician productivity. This study indicates that fieldwork educators do not experience lowered productivity when supervising a student. Clinical and academic fieldwork

coordinators and health care administrators should consider the contribution of clinician productivity without a student and practice area to productive fieldwork experiences. Use of this information may be a first step toward addressing the shortage of fieldwork availability. ▲

Acknowledgments

We thank the Departments of Occupational Therapy at Rush University and the University of Indianapolis for their support of this project. We acknowledge the immense support of Donna Zahara and the Rehabilitation Institute of Chicago. Additionally, we thank Patricia Murphy for her statistical expertise, Michael Roberts for his expertise and feedback, Rebecca Barton for her support and advice, and Mary Ellen Stoykov for her guidance with this project.

References

- American Occupational Therapy Association. (2012). Fieldwork Level II and occupational therapy students: A position paper. *American Journal of Occupational Therapy*, 66(6, Suppl.), S75–S77. <http://dx.doi.org/10.5014/ajot.2012.66S75>
- American Occupational Therapy Association. (2014, July 29). *Fieldwork data form*. Retrieved from <http://www.aota.org/en/Education-Careers/Fieldwork/Supervisor.aspx>
- Anderson, H. E., Jr., & Jantzen, A. C. (1965). A prediction of clinical performance. *American Journal of Occupational Therapy*, 19, 76–78.
- Baldry Currens, J., & Bithell, C. (2000). Clinical education: Listening to different perspectives. *Physiotherapy*, 86, 645–653. [http://dx.doi.org/10.1016/S0031-9406\(05\)61302-8](http://dx.doi.org/10.1016/S0031-9406(05)61302-8)
- Best, C. E. (1994). A prediction model of performance in Level II fieldwork in physical disabilities. *American Journal of Occupational Therapy*, 48, 926–931. <http://dx.doi.org/10.5014/ajot.48.10.926>
- Casares, G. S., Bradley, K. P., Jaffe, L. E., & Lee, G. P. (2003). Impact of the changing health care environment on fieldwork education: Perceptions of occupational therapy educators. *Journal of Allied Health*, 32, 246–251.
- Christie, B. A., Joyce, P. C., & Moeller, P. L. (1985). Fieldwork experience, Part II: The supervisor's dilemma. *American Journal of Occupational Therapy*, 39, 675–681. <http://dx.doi.org/10.5014/ajot.39.10.675>
- Davies, R., Hanna, E., & Cott, C. (2011). "They put you on your toes": Physical therapists' perceived benefits from and barriers to supervising students in the clinical setting. *Physiotherapy Canada, Physiotherapie Canada*, 63, 224–233. <http://dx.doi.org/10.3138/ptc.2010-07>
- Dillon, L. S., Tomaka, J. W., Chriss, C. E., Gutierrez, C. P., & Hairston, J. M. (2003). The effect of student clinical experiences on clinician productivity. *Journal of Allied Health*, 32, 261–265.
- Englehart, H. V. (1957). An investigation of the relationship between college grades and on-the-job performance during clinical training of occupational therapy students. *American Journal of Occupational Therapy*, 11, 97–101, passim.
- Field, A. (2009). Comparing several means: ANOVA (GLM 1). In *Discovering statistics using SPSS* (pp. 347–394). Thousand Oaks, CA: Sage.
- Fisher, G., & Friesema, J. (2013). Implications of the Affordable Care Act for occupational therapy practitioners providing services to Medicare recipients. *American Journal of Occupational Therapy*, 67, 502–506. <http://dx.doi.org/10.5014/ajot.2013.675002>
- Gillis, A. D. H., & Silver, J. A. (1997). Cost/benefit analysis of a dietetic internship program. *Canadian Journal of Dietetic Practice and Research*, 58, 132–136.
- Hanson, D. J. (2011). The perspectives of fieldwork educators regarding Level II fieldwork students. *Occupational Therapy in Health Care*, 25, 164–177. <http://dx.doi.org/10.3109/07380577.2011.561420>
- Holland, K. A. (1997). Does taking students increase your waiting lists? *Physiotherapy*, 83, 166–172. [http://dx.doi.org/10.1016/S0031-9406\(05\)66073-7](http://dx.doi.org/10.1016/S0031-9406(05)66073-7)
- Howard, L., & Jerosch-Herold, C. (2000). Can entry qualifications be used to predict fieldwork and academic outcomes in occupational therapy and physiotherapy students? *British Journal of Occupational Therapy*, 63, 329–334.
- Ladyshewsky, R. K., Barrie, S. C., & Drake, V. M. (1998). A comparison of productivity and learning outcome in individual and cooperative physical therapy clinical education models. *Physical Therapy*, 78, 1288–1298, discussion 1299–1301.
- Meyers, S. K. (1995). Exploring the costs and benefits drivers of clinical education. *American Journal of Occupational Therapy*, 49, 107–111. <http://dx.doi.org/10.5014/ajot.49.2.107>
- Mishan, E. J., & Quah, E. (2007). *Cost-benefit analysis* (5th ed.). London: Routledge.
- Patient Protection and Affordable Care Act, Pub. L. 111–148, § 3502, 124 Stat. 119, 124 (2010).
- Roberts, M. E., & Simon, R. L. (2012). Fieldwork challenges 2012. *OT Practice*, 17(6), 20.
- Rodger, S., Stephens, E., Clark, M., Ash, S., Hurst, C., & Graves, N. (2012). Productivity and time use during occupational therapy and nutrition/dietetics clinical education: A cohort study. *PLoS One*, 7, e44356. <http://dx.doi.org/10.1371/journal.pone.0044356>
- Sevenhuysen, S., & Haines, T. (2011). The slave of duty: Why clinical educators across the continuum of care provide clinical education in physiotherapy. *Hong Kong Physiotherapy Journal*, 29, 64–70. <http://dx.doi.org/10.1016/j.hkptj.2011.06.002>
- Shalik, L. D. (1987). Cost-benefit analysis of Level II fieldwork in occupational therapy. *American Journal of Occupational Therapy*, 41, 638–645. <http://dx.doi.org/10.5014/ajot.41.10.638>
- Thomas, Y., Dickson, D., Broadbridge, J., Hopper, L., Hawkins, R., Edwards, A., & McBryde, C. (2007). Benefits and challenges of supervising occupational therapy fieldwork students: Supervisors' perspectives. *Australian Occupational Therapy Journal*, 54(Suppl. 1), S2–S12. <http://dx.doi.org/10.1111/j.1440-1630.2007.00694.x>