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## The Relationship between Admission Criteria and Fieldwork Performance in a Masters-Level OT Program: Implications for Admissions

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# The Relationship between Admission Criteria and Fieldwork Performance in a Masters-Level OT Program: Implications for Admissions

## **Abstract**

Occupational therapy (OT) graduate programs strive to produce an effective OT workforce with competent and engaged OT practitioners. Admission into OT graduate programs is an increasingly competitive process, with most programs having more applicants than spaces available. Programs need to select applicants that will be the most successful in meeting graduation requirements, including both academic and clinical components. This pilot study was designed to examine the relationship between admission criteria and fieldwork (FW) performance. The study utilized a retrospective analysis with a convenience sample of 108 students with complete data from a private university in the Midwest. Independent variables of Graduate Record Examination (GRE) subscale scores (GRE-verbal, GRE-quantitative, and GRE-written) and undergraduate Cumulative Grade Point Average (CGPA) were included. The dependent variable was level II FW performance, as measured by the AOTA *Fieldwork Performance Evaluation* (FWPE). Results of this study found a significant correlation between CGPA and FWPE scores for level IIA FW experiences, and a significant correlation between GRE-written and FWPE scores for level IIB FW experiences. Regression models for FW IIB indicated that GRE-written was a significant predictor of FWPE scores for the FW IIB experience. This pilot study provides information that may be utilized during OT admission processes.

## **Keywords**

Occupational Therapy, Fieldwork, Admissions, Fieldwork Performance Evaluation

## **Cover Page Footnote**

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A major responsibility of occupational therapy (OT) graduate programs is to produce an effective OT workforce with competent and engaged occupational therapists. Due to the nature of OT andragogy, which includes both didactic and experiential learning, it is possible to measure the outcomes of graduate-level OT student education in several ways. A typical measure of student success is academic performance. However, clinical performance also should be considered as an outcome of OT educational preparation. Minimal information about the effectiveness of commonly used admission criteria is available regarding the criteria's ability to predict student success in the clinical requirement (fieldwork placements) of OT graduate programs. Therefore, this pilot study examines the relationship between admission criteria and fieldwork performance.

Admission into OT graduate programs across the country is an increasingly competitive process, with most programs having many more applicants than spaces available. In 2011, 23,044 students completed applications for admission into master's degree-level OT programs in the United States, but only 6,193 spaces were available for new admissions (American Occupational Therapy Association [AOTA], 2012a). Thus, it is important to develop strategic admission processes that will identify the students who will be the most successful in both the academic and clinical requirements. Once admitted into a program, OT students are required to complete didactic coursework and supervised clinical experiences in accordance with the requirements defined by the

Accreditation Council for Occupational Therapy Education (ACOTE, 2011). Students who do not complete the educational requirements are unable to enter the field of OT. Faced with the challenge of receiving an abundance of applicants and choosing those who will be the most successful in meeting graduation requirements, academic programs need to consider performance in both academic and clinical requirements.

The clinical performance of OT students is evaluated through student participation in fieldwork (FW) placements. ACOTE standards require each student to complete a series of FW placements (2011). As stated by the AOTA, "the purpose of FW education is to propel each generation of OT practitioners from the role of student to that of practitioner" (2009, p. 393). Initial FW placements are referred to as level I FW placements. These include directed observation and participation in aspects of the OT process. Qualified personnel, including but not limited to OT practitioners, supervise the level I FW experiences. The expectations of level I FW experiences vary greatly among programs and clinical settings, but they share a focus on an introduction to the FW experience, the application of knowledge, and an understanding of the clients. ACOTE standards also require successful completion of level II FW experiences in which students participate full time for 24 weeks in clinical experiences supervised by licensed occupational therapists. Level II FW experiences provide OT students the opportunity to apply academic learning to clinical practice, with the requirement to demonstrate entry-level

competence. Often considered the pinnacle of OT education, level II FW experiences typically occur after the completion of level I FW experiences and the majority of didactic instruction. ACOTE requires level II FW placements to be reflective of more than one practice area. Thus, level II FW experiences are commonly divided into two placements—level IIA and level IIB—each for a 12-week duration. Each FW placement provides a unique experience and student performance is evaluated individually for each level II FW experience.

Studies of student learning during FW placements indicate a progression of student development through the experiences. Coates and Crist (2004) studied student development over the course of a level II FW experience. The results indicated that students displayed increasingly more mature performance over the 12 weeks, including more goal directed and efficient thoughts, movements, and interpersonal activities. The results also indicated that clinical reasoning skills moved from procedural reasoning (completing the task) to conditional reasoning (considering the full impact of the client's deficits on quality of life) during assessments. Similar to Coates and Crist's findings, Cohn (1989) suggested that students need to develop two skill sets to complete FW experiences successfully. These include the technical skills of the application of treatments and clinical reasoning skills. Cohn indicated that clinical reasoning skills are developed based on a combination of knowledge of procedures, experiences with patients, and interpretation of

evolving situations. Student engagement in two distinct clinical learning experiences during FW placements provides opportunities for developmental learning, which can culminate in mature clinical reasoning abilities.

ACOTE (2011) specifies that a formal evaluation of student performance in each level II FW must occur. The AOTA *Fieldwork Performance Evaluation for the Occupational Therapy Student* (FWPE; AOTA, 2002) is provided by ACOTE as an example of such a measure and is used by many OT graduate programs. The FWPE was developed by the AOTA in 2002. Students are measured on a variety of clinical skills and professional behaviors at the end of their level II FW experience by their fieldwork educator. The categories of evaluation include (a) the fundamentals of practice, (b) the basic tenets of OT, (c) evaluation and screening, (d) intervention, (e) communication, and (f) professional behaviors. These six categories include a total of 42 performance measures using a 4-point scale. A total score of 122 out of 168 has been determined to be the minimum score required for successful completion of the FW placement.

Prior research has been able to shed some light on the predictors of FW success. The skills required for successful completion of level II FW are thought to include a complex interaction of emotional intelligence, professional behaviors, clinical reasoning, and academic knowledge. In a study of emotional intelligence, self-efficacy, and FW performance, Andonian (2013) found that some components of emotional intelligence were

significantly correlated to components of FW performance, as measured by the FWPE. The emotional intelligence component of understanding emotions was significantly related to scores on intervention skills on the FWPE, and the emotional intelligence component of managing emotions was significantly related to communication skills on the FWPE. Additional attributes of students who are successful in FW experiences have been identified as students with prior professional experience related to their FW setting and students who had a choice in their FW placement (Andonian, 2013). Studies have shown that deficits in academic preparation, technical skills, problem solving skills, and clinical reasoning abilities are attributes of failing students (James & Musselman, 2005). Few studies, however, have investigated the relationship between level II FW performance and preadmission criteria for entry-level graduate OT programs to determine what factors contribute to success in FW placements.

Auriemma (2007) surveyed 136 accredited professional OT programs and found that 26 different admission criteria were being used across the US. The most frequently used admission criteria, respectively, were grade point average (GPA), letters of recommendation, autobiographical sketches, applications, spontaneous writing samples, and group interviews. These findings suggest that a variety of admission criteria are used amongst programs in order to select successful students; however, insufficient empirical evidence exists to support one criterion or group of criterion over another. Graduate programs in other health

care professions also use a variety of admission criteria, but two cut across all fields of graduate study. They are the Graduate Record Examination (GRE; Educational Testing Service [ETS], 2010) scores and undergraduate cumulative grade point average (CGPA) (Salvatori, 2001).

Perhaps the most commonly used criterion for admission into graduate school is undergraduate CGPA. A student's undergraduate CGPA is an average of all of the grades obtained in coursework across all prior college and university experiences. The undergraduate CGPA is calculated by dividing the number of quality points a student earned in courses taken by the total number of course credits taken.

Another widely used criterion is the GRE score, which is designed to assess a student's aptitude for graduate study. According to ETS (2010), the GRE General Test is designed to test reasoning, critical thinking, the ability to communicate effectively in writing, and discipline-specific knowledge. The GRE General Test consists of three sections: verbal reasoning (GRE-verbal), quantitative reasoning (GRE-quantitative), and analytical writing (GRE-written). The GRE-verbal section tests a person's ability "to analyze and evaluate written material and synthesize information obtained from it, analyze relationships among component parts of sentences and recognize relationships among words and concepts" (ETS, 2010, p. 3). The GRE-quantitative section "tests basic mathematical skills and understanding of elementary mathematical concepts, as well as the ability to reason quantitatively and to solve

problems in a quantitative setting” (ETS, 2010, p. 4). Finally, the GRE-written section “tests critical thinking and analytical writing skills. It assesses the ability to articulate and support complex ideas clearly and effectively (ETS, 2010, p. 4). Because such skills are targeted outcomes of FW experiences, we hypothesized that there could be some predictive value in using them to help make admissions decisions related to clinical success.

Several studies have examined undergraduate CGPA and GRE scores as potential predictors of success in graduate school more generally. Most studies have defined graduate school success as academic achievement; however, as measured through GPAs. Studies from allied health disciplines have indicated that undergraduate CGPA is predictive of graduate CGPA (Utzman, Riddle, & Jewell, 2007). Burton and Wang (2005) evaluated GRE-verbal scores, GRE-quantitative scores, and undergraduate CGPA as predictors of multiple measures of long-term graduate school success, including graduate CGPA. The results indicated that the combination of GRE scores and undergraduate CGPA were strongly correlated with graduate CGPA ( $r = .49, p < .05$ ). Kuncel, Wee, Serafin, and Hezlett (2010) conducted a meta-analysis of 94 studies that examined the predictive validity of the GRE for graduate school performance and concluded that the GRE-verbal and the GRE-quantitative were valid predictors of master’s students’ graduate CGPA. In this meta-analysis, the corrected operational validity of the GRE verbal in predicting graduate CGPA was  $\rho = .38$  ( $SD_{obs} = .14$ ) and the GRE quantitative was  $\rho =$

$.30$  ( $SD_{obs} = .12$ ). Although relationships between GRE scores and academic performance exist, the strength of these associations and predictive ability is low. Katz, Chow, Motzer, and Woods (2009) identified that the GRE predicted only 5% to 8% of variance in graduate nursing program CGPA, and advocated eliminating it from use in admissions decisions. ETS recommends that each discipline and program evaluate their own data to determine how GRE scores are used in the admissions process. Studies have indicated that an association between CGPA, GRE scores, and graduate academic performance exist, but few have examined the relationship between these criteria and the clinical performance required in graduate-level OT education.

Specific to OT academic success, Lysaght, Donnelly, and Villeneuve (2009) found that undergraduate CGPA was the largest predictor of OT program CGPA performance ( $R^2 = .15, F(1,125) = 21.92, p < .01$ ). Kirchner, Stone, and Holm (2000) examined preadmission criteria and found positive correlations between OT program CGPA and undergraduate CGPA ( $r = .37, p < .01$ ), GRE-verbal ( $r = .26, p < .01$ ), GRE-quantitative ( $r = .34, p < .01$ ), and GRE-written ( $r = .51, p < .01$ ). Further, they found that regression modeling indicated that undergraduate CGPA and all three subscales of the GRE were significantly predictive of OT program CGPA.

The study by Kirchner et al. (2000) is one of the few studies that have explored the relationship between GRE scores and OT student FW performance. Although the study found a

significant relationship between GRE-written and FW performance scores, ( $r = .33, p < .01$ ) the regression model using GRE for predicting FW performance was not significant. Katz and Mosey (1980) found a positive correlation between students' undergraduate CGPA and student FW performance ratings in physical disability settings ( $r = .31, p < .05$ ) as well as OT program CGPA with FW performance scores in physical disability and psychosocial settings ( $r = .36, p < .01$  and  $r = .39, p < .01$ , respectively). Both of the studies used the *Fieldwork Evaluation Form for the Occupational Therapist*, which is an older version of the currently utilized FWPE. While studies have indicated that undergraduate CGPA and GRE scores can predict graduate CGPA, the relationship to clinical performance, an integral part of graduate-level OT education, is less understood. Additionally, the few studies that have examined the relationship between admission criteria and FW performance have not used the current FWPE tool.

The objective of the current study, therefore, was to determine if a relationship exists among undergraduate CGPA, GRE scores, and student performance in FW placements. Although previous research has indicated that undergraduate CGPA and GRE scores may predict academic performance, no recent studies have examined if undergraduate CGPA and GRE scores can predict fieldwork performance. This study addresses the gap in information about the use of admissions selection criteria for predicting a clinically focused outcome. This study's null hypothesis was that undergraduate CGPA and GRE scores are not

predictive of student success in fieldwork, as measured by the current FWPE.

## Methods

### Design

This pilot study involved a retrospective analysis of secondary data from one Master of Science degree in OT program to learn whether admission criteria were predictive of performance in level II FW experiences. Data included independent variables of quantitative selection criteria for entry into the OT program and level II FWPE scores as the outcome measure. Approval was obtained by the University's Institutional Review Board to conduct the retrospective analysis of student data.

### Sample

The data were collected from a private university in the Midwest region of the US that is accredited by ACOTE. This convenience sample included an initial total of 115 students who completed a Master of Science degree in OT between 2008 and 2012. Students who had undergraduate CGPA and GRE scores and who passed level II FW experiences were included in this sample. Students who did not complete level II FW for any reason were excluded because their FWPE frequently was not completed, resulting in a score of "0", which adversely impacted the data and was not a true representation of their abilities. Additionally, students who did not have an undergraduate CGPA or GRE scores reported upon admission were excluded. Seven students were excluded from the sample based on inclusion and exclusion criteria for a final sample size of 108.

## Measures

The study included independent variables of GRE subscale scores (GRE-verbal, GRE-quantitative, and GRE-written) and undergraduate CGPA. The dependent variable in this study is level II FW performance, as measured by the FWPE (AOTA, 2002). Each of these measures is described briefly below.

**Graduate record examination scores.** The GRE subscale scores were obtained from official GRE score reports from ETS upon application to the OT program. Official scores were reported directly from ETS to the institution, and university admissions personnel verified all GRE scores on each applicant's file. All GRE scores are based on the GRE General Test, prior to the 2011 revision. The GRE is administered through both paper and computer-based versions, which have been shown to produce comparable scores (ETS, 2010). The verbal and quantitative section scores each included a scale with a range of 200-800 points in 10-point increments. These two sections include multiple-choice tests, which are computer adapted. ETS reported reliability measures for both the verbal and quantitative sections using simulation data. The reliability coefficient of each of these sections is considered strong (GRE-verbal:  $\alpha = .92$ , GRE-quantitative:  $\alpha = .91$ ). The analytical writing section includes two written essays and the final score is the average score from the two essays the test taker completes. The essays are scored on a scale of 0-6 in .5 increments and the reliability of this section ( $\alpha = .77$ ) is also considered acceptable (ETS, 2010).

**Undergraduate CGPA.** Undergraduate CGPA was obtained from official transcripts submitted upon application to the OT program and included any course taken at the college level prior to application to the OT program. Undergraduate CGPA was measured on a 4-point scale, with a range of 0-4. Undergraduate CGPA was calculated by university admissions office personnel and included in each applicant's file.

**Fieldwork site type.** Fieldwork experiences can be differentiated between FW site types, including mental health, pediatrics, outpatient, acute care, and rehabilitation. This categorical variable was assigned based on the majority of patients seen in the setting.

**Fieldwork performance evaluation.** The dependent variable, level II FW performance, was measured using the FWPE (AOTA, 2002). The FWPE is used nationally to measure student clinical performance during the two required FW experiences. The tool includes 42 performance-based items grouped by 6 subscales. Each item is scored on a 1-4 scale (*unsatisfactory, needs improvement, meets standards, and exceeds standards*), is part of a subscale, and the subscale scores are combined to produce one cumulative score. Total scores on the FWPE range from 0-168. Students are required to receive a final score of 122 on the FWPE to pass the level II FW experience. Fieldwork educators complete the FWPE at the conclusion of the student's 12-week FW experience. Separate scores (FWPE IIA and FWPE IIB) were provided for the participants who



completed FW placements (level IIA and level IIB). The psychometric properties of the tool were evaluated in a pilot study using Rasch Analysis, which included a sample of 342 FWPE evaluations from students at hospital, school, community, nursing home, private practice, and nursing home settings (Alter, 2003). The results of the pilot study indicated that there was an adequate range of items measuring FW competency and the standard error for each item was acceptable. Additionally, 41 of the 42 items displayed goodness-of-fit, and item separation (a measure of reliability) was considered acceptable. Based on this study, changes were made to the FWPE, including language changes, exclusion of the poorly fitting item, and the addition of one item (Alter, 2003). No additional studies of the validity or reliability of the FWPE were found.

### **Data Analysis**

Data from five cohorts, 115 students, were gathered from student files. Data that are routinely gathered and archived by the university, including admission application information and FWPEs, were compiled into a comprehensive database and de-identified by primary investigators. After examining the data, seven subjects did not meet the inclusion criteria for the study and were excluded from the sample for either failure of FW placement or not reporting GRE scores on admission. Six students failed their level II FW experience and one student did not have a GRE score upon admission.

Descriptive statistics were obtained for all variables, including GRE scores, undergraduate CGPA, FWPE IIA and IIB scores, and FW site type. Descriptive statistics indicated that the data

were skewed, violating assumptions of parametric tests. Therefore, the Wilcoxon Signed Rank Test was used to examine the relationship between FWPE IIA and FWPE IIB scores to determine if the two scores differed from each other. Additionally, the Kruskal-Wallis test was used to test for differences in FWPE scores based on FW placement type. Spearman's correlation analysis was used to explore bivariate relationships for each of the two FW placements (level IIA and level IIB) and admission criteria (undergraduate CGPA and GRE scores). Based on the results of the bivariate analysis, regression models were built using each FWPE IIA and IIB score as outcome variables. In the regression models, independent variables that showed significant or near significant relationships to FWPE scores were included. This resulted in regression model differences for FWPE IIA and IIB. Statistical Package for the Social Sciences (SPSS) version 18 software was used for all of the statistical analysis.

### **Results**

Descriptive analysis of the sample of 108 subjects is shown in Table 1. The mean score for FWPE IIA was 136.33 (11.73) and for FWPE IIB was 137.24 (12.03). The Wilcoxon Signed-Rank test for FWPE IIA and IIB scores indicated that on average, student scores were not significantly different in FWPE IIA and IIB,  $z = -.36$ ,  $p = .72$ . The preliminary analysis indicated similarity between the averages of these two scores, but because of theoretical concerns, the two scores were further analyzed separately. Fieldwork site type

was investigated to determine if this had an impact on the FWPE scores. Descriptive statistics by FW site type can be found in Table 2. The results of Kruskal-Wallis tests indicated that FWPE IIA and

IIB scores were not significantly different based on FW site type, FWPE IIA:  $H(4) = 3.20, p > .52$ ; FWPE IIB:  $H(4) = 4.64, p = .33$ .

**Table 1**  
*Descriptive Statistics for the Independent and Dependent Variables*

Variable	<i>n</i>	<i>M (SD)</i>	Range
CGPA	108	3.36 (.33)	2.62-3.97
GRE-V	108	453.80 (70.75)	340-660
GRE-Q	108	559.81 (97.69)	250-740
GRE-W	108	4.31 (.58)	3-6
FWPE IIA	108	136.33 (11.73)	122-168
FWPE IIB	108	137.24 (12.03)	122-168

*Note.* CGPA = pre-admission cumulative GPA; GRE-V = GRE verbal subscale; GRE-Q = GRE quantitative subscale; GRE-W = GRE written subscale; FWPE IIA = first level II Fieldwork Performance Evaluation score; FWPE IIB = second level II Fieldwork Performance Evaluation score.

**Table 2**  
*Descriptive Statistics for Fieldwork Site Type and Fieldwork Performance Evaluation Scores*

Fieldwork Site Type	<i>n</i>	<i>M (SD)</i>	Range
FW IIA			
Mental Health	9	139.56 (13.65)	125-168
Acute Care	25	135.20 (11.05)	124-163
Rehabilitation	33	133.64 (9.48)	122-162
Pediatrics	31	138.77 (13.52)	122-168
Outpatient	10	137.45 (11.42)	126-164
FW IIB			
Mental Health	10	137 (12.45)	125-159
Acute Care	25	138.2 (14.02)	122-168
Rehabilitation	27	132.41 (8.06)	122-153
Pediatrics	31	139.31 (11.64)	123-164
Outpatient	15	140.07 (12.21)	123-168

*Note.* FW IIA = first level II fieldwork; FW IIB = second level II fieldwork.

When FWPE IIA and IIB scores were considered separately, a significant relationship was found between undergraduate CGPA and FWPE IIA scores,  $r = .20, p = .04$ . There was also a relationship between GRE-written and FWPE IIB scores,  $r_s = .20, p < .04$ . No other significant relationships were found among admission criteria and FWPE IIA or IIB scores, although relationships

between independent variables were found (see Table 3). That is, the results of this analysis showed GRE subsection scores were related to each other (GRE-verbal and GRE-quantitative,  $r = .35, p = .01$ ; GRE-verbal and GRE-written,  $r = .25, p = .01$ ). These results are similar to those reported by ETS (GRE-verbal and GRE-quantitative,  $r = .32$ , GRE-verbal and GRE-written,  $r = .66$ ) (ETS, 2010).

**Table 3**

*Summary of Relationships, Means and Standard Deviations for Fieldwork Performance Evaluation Scores (IIA and IIB), Pre-admission Cumulative GPA and scores on the Graduate Record Examination*

Measure	1	2	3	4	5	6	M	SD
1. FWPE IIA	-	0.09	0.20*	0.48	0.17	0.61	136.33	1.12
2. FWPE IIB		-	-0.47	0.00	0.87	0.20*	137.24	1.17
3. CGPA			-	0.10	0.14	-0.02	3.364	0.03
4. GRE-V				-	0.35**	0.25*	456.96	6.72
5. GRE-Q					-	0.12	564.52	9.19
6. GRE-W						-	4.31	0.05

*Note.* \* $p < .05$ . \*\* $p < .01$ . FWPE IIA = first level II Fieldwork Performance Evaluation score; FWPE IIB = second level II Fieldwork Performance Evaluation score; CGPA = pre-admission cumulative grade point average; GRE-V = score on verbal subtest of GRE; GRE-Q = score on quantitative portion of GRE; GRE-W = score on written portion of GRE.

Linear regression models were established separately for FWPE IIA and IIB scores. The model for FWPE IIA included undergraduate CGPA, which was the only significant association in the bivariate analysis; however, this model did not produce a significant result. The model indicated that undergraduate CGPA is not a significant predictor of FWPE IIA scores ( $p = .05$ ), but there was a trend toward significance.

The regression model for the FWPE IIB included GRE-written in the first block, and the second block included undergraduate CGPA. The GRE-written was included in the model based on the significant bivariate relationship, and

undergraduate CGPA was entered into the model based on the relationship of undergraduate CGPA to FWPE IIA as well as a means to look at another type of admission criteria. The model suggests that GRE-written is a significant predictor of FWPE IIB scores,  $\beta = 4.2$ ,  $R^2 = .042$ ,  $p = .03$ . When undergraduate CGPA was entered into the model, the relationship between GRE-written remained significant,  $\beta = 4.16$ ,  $R^2 = .045$ ,  $p < .04$ , but the impact of undergraduate CGPA was not significant,  $\beta = 4.16$ ,  $R^2 = .045$ ,  $p = > .58$ . The results indicate that a one-point improvement in GRE-written scores predict a 4.16 point improvement in FWPE IIB scores (see Table 4).

**Table 4**

*Summary of the Regression Analysis of Fieldwork Performance Evaluation IIB (FWPE IIB)*

	B	SE B	$\beta$
Step 1			
Constant	118.72	8.59	
GRE-W	4.24	1.98	.20*
Step 2			
Constant	125.34	14.72	
CGPA	4.19	1.98	.20*
GRE-Q	-1.90	4.42	-.05

*Note.*  $R^2 = .042$  for Step 1;  $\Delta R^2 = .045$  for Step 2; \* $p < .05$ ; CGPA = pre-program cumulative grade point average; GRE-V = score on verbal portion of GRE; GRE-Q = score on quantitative portion of GRE; GRE-W = score on written portion of GRE.

## **Discussion**

The objective of this study was to determine if a relationship exists between commonly used admission criteria and student FW performance. This information can aid in the selection of admission criteria for OT graduate programs. Results of this study found a significant correlation between undergraduate CGPA and FWPE scores for level IIA FW experiences, and a significant correlation between GRE-written and FWPE scores for level IIB FW experiences. Regression modeling revealed that the significant association between undergraduate CGPA and FWPE IIA scores was lost, indicating that undergraduate CGPA was not predictive of FWPE scores. Regression models for FW IIB indicated that GRE-written was a significant predictor of FWPE scores for the FWPE IIB experience, and that for each one-point increase in GRE-written scores there is a 4- point increase in the FWPE score.

Commonly used admission criteria, including undergraduate CGPA and certain subsections of the GRE, were shown not to be predictive of FW performance as measured by the FWPE in this study. Additionally, the effect size and predictive ability for the GRE-written section was low. The limited range of FWPE scores (122-168) and the limited range of GRE-written scores (3.0-6.0) may have impacted the results. The significant relationships between predictors and outcomes indicate that commonly used admission criteria predict only a small amount of variation in FWPE scores.

The findings of this study are similar to previous studies that included an outcome measure of student clinical performance. Kirchner et al. (2000) also found a relationship between the GRE-written and FW performance, but the study used a different outcome measure for evaluating FW performance. The results support the consideration of GRE-written subscale scores in admission decision making, although the weak predictive ability suggests that, in relationship to clinical performance, other factors may be influencing FWPE scores and should be considered in conjunction.

The results of this study support a view of developmental categorization of student skills required for FW performance. Cohn (1989) identified two basic skill sets required for FW success, including technical skills and clinical reasoning. The undergraduate CGPA represents acquisition of general knowledge acquired prior to entering professional programs, while the GRE-written subtest is designed to measure the ability to use complex reasoning. The trend toward a significant relationship between undergraduate CGPA and FWPE IIA scores and GRE-written and FWPE IIB scores found in this study suggests that different skills may be emphasized during each of the two FW experiences, despite the use of the same FWPE tool. According to the ACOTE standards, occupational therapy education “should be designed to promote clinical reasoning and reflective practice” (AOTA, 2012b, p. 34). During students’ first FW (IIA), concrete knowledge of OT, including the ability to administer an assessment

properly and to formulate typical treatment plans based on a diagnosis, may be a primary expectation and focus. If students first must master technical skills and the application of treatment, when students reach their second level II FW (IIB) the students and fieldwork educators may then be expected to focus more directly on the students' development of clinical reasoning and analytical skills. By the end of the FW experiences, OT students are expected to take in, process, and synthesize information in addition to generating effective treatment plans independently. This study's findings that the GRE-written score has a relationship with a higher FWPE IIB score suggests that students with higher general reasoning and writing abilities at entry may be better able to demonstrate this set of complex skills by the end of their training.

Limitations for this pilot study include that the sample population represents students attending a single private Midwestern university and is not a nationally representative sample. In addition, the sample was comprised predominantly of Caucasian females, aged 21 to 35 years. Furthermore, a full representation of all students in the OT program between 2008 and 2012 was not complete, as students who did not have GRE scores on their application and students who failed one or both level II FW placements were omitted from the data set. Additionally, there were limitations in the measurement instruments. The variance in FWPE scores was small. Additionally, only one pilot study of the validity and reliability of the FWPE was performed (Alter, 2003). Fieldwork educator

scoring on the FWPE may vary because training in the use of the FWPE is not required. Finally, the study did not consider potential confounding variables that may have impacted the students' scores on the FWPE. These variables include varied curriculum sequences, students' academic performance during the OT program, students' preference for FW placement type, students' interpersonal skills, and students' previous exposure to clinical settings, which may mediate the students' performance on FW placements.

The trend toward a significant predictive relationship between undergraduate CGPA and FWPE IIA scores should be considered lightly given the limitations of the study. The relationship can be further examined with a larger and more representative sample. Implications for future research include examination of other variables as potential predictors of successful level II FW performance, such as letters of recommendation, spontaneous writing samples, interviews, professional experience, emotional intelligence measures, prerequisites completed, and intrinsic personal attributes. The psychometric properties of the FWPE have not been adequately addressed and further research can establish the validity and reliability of this tool. Additionally, future research should include investigating the factors or indicators present with the students who received a failing grade for their level II FW placements.

### **Implications for Practice**

Results suggest an interesting relationship between admission criteria and FW performance, which may inform the admissions decisions. If

supported by additional studies with a broader base, admissions professionals may use this study's findings when selecting students for graduate-level OT programs. Specifically, admissions professionals might focus on the importance of evaluating future clinical abilities during the admission process and may consider the GRE-written section. Additionally, academic faculty may utilize these findings in an effort to best prepare students to become strong clinicians by working to enhance their written and verbal skills.

### **Conclusion**

This study provided results to consider during the evaluation of candidates for admission into OT graduate programs. The most commonly used admission criteria for OT graduate programs

have not been well studied in relationship to clinical outcomes. A widely used admission criterion, undergraduate CGPA, was noted with no predictive ability on clinical performance, although past research has shown a strong relationship with OT program CGPA. The GRE has been shown to have a weak relationship to OT program CGPA, but this study has indicated that the GRE-written score has some relationship, although also weak, to clinical performance. Successful student clinical performance is essential to entering the field of OT and this study has explored the predictors of success prior to matriculation into an OT graduate program. Although additional research about the topic is needed, this pilot study points to factors that justify further investigation.

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