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Correlation of Measures of Psychotherapy Competency in Psychiatry Residents

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INTRODUCTION: The ACGME Residency Review Committee in Psychiatry has stipulated that general psychiatry trainees develop “competency in applying supportive, psychody- namic, and cognitive-behavioral psychotherapies to both brief and long-term individual practice” [1]. Residency programs are required to demonstrate curriculum and faculty are required to verify that trainees have attained the required competencies. Yet no generally accepted reliable and valid measure of psychotherapy competency has yet been developed.

Several measures are widely used to assess resident competence in psychotherapy [2,7].
• Evaluation by individual psychotherapy supervisors [3,4].
• Rating of resident’s conduct of psychotherapy in live, recorded, or transcribed performance.
• Training portfolios.
• Performance on a multiple choice examination such as the Columbia Psychodynamic Psychotherapy Competency Test [5].

There have been few studies examining the reliability and validity of available competency assessment measures, and little empirical research examining the success of training programs in developing trainee competence in psychotherapy. The current study had two goals:
1. To examine the changes in various performance measures as residents progress through training.
2. To explore correlations among various measures of psychotherapy competence.

METHODS: We conducted a retrospective analysis of all available data for residents in our program from July 2000 through July 2009 (63 residents), including:
1) Psychiatry Resident in Training Examination (PRITE) – Global Psychiatry score and Psychosocial Therapies subscore.
2) Columbia Psychodynamic Psychotherapy Competency Test (CPPCT) - Scores (given as percentile rank among all examinees).
3) Counseling Self-Estimate Inventory (COSE) – Scores on the COSE were collected for all PGY1 or PGY2 residents; however, COSE assessments were not routinely collected for PGY3 and PGY4 residents in the early years of this study. Our analysis used a total of 34 of 37 items on the COSE due to inadvertent omission on some forms.
4) Supervisor ratings - Averaged global supervisor ratings of resident performance (5 point scale) in the following areas: formulation skills; psychotherapeutic interventions; tolerance of uncertainty; transference, countertransference, boundaries; ability to utilize different conceptual models; humanistic qualities; practice-based learning (self evaluation, integration of feedback into practice); communication and interpersonal skills; working with difficult patients.

TABLE 1: Number of Residents with Available Data

<table>
<thead>
<tr>
<th>Year</th>
<th>PGY-1</th>
<th>PGY-2</th>
<th>PGY-3</th>
<th>PGY-4</th>
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<tbody>
<tr>
<td>2000</td>
<td>35</td>
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<td>2009</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

Statistical analyses were performed with the Statistical Package for Social Sciences, SPSS. Analyses comparing performance in different training years were done using unpaired t tests (two tail) on pooled data for each training year. Correlations were done using paired data for individual residents to derive Pearson two tailed correlation coefficients. Due to missing data, the N for correlations was often less than the total N.

RESULTS: Figures 1-3 show changes in COSE, PRITE, and CPPCT by training year.

Fig 1: COSE Mean Item Score
Fig 2: CPPCT Mean Percentile Rank

Changes in Performance Measures during Residency

| PRITE Global Psychiatry scores changed significantly from PGY-2 to PGY-4. Psychosocial Therapy subscore did not change significantly from PGY-1 to PGY-2, but increased significantly in PGY-3 & PGY-4.
| COSE (resident confidence): COSE score unchanged (both total score & all individual COSE items) between PGY-1 and PGY-2. COSE increased dramatically by early PGY-3 after one year of classes and conducting supervised psychotherapy with 2 patients (24 of 34 COSE items showed significant change at p < 0.05 level or greater). COSE increased further in PGY-4 year (COSE for N = 40 too small for meaningful analysis). COSE item score range = 1-7.

Table 2: Correlations Among Measures of Competence

<table>
<thead>
<tr>
<th>Measure</th>
<th>Correlation with PRITE</th>
<th>Correlation with PGY-2</th>
<th>Correlation with PGY-3</th>
<th>Correlation with PGY-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSE</td>
<td>0.23</td>
<td>0.25</td>
<td>0.28</td>
<td>0.30</td>
</tr>
<tr>
<td>PRITE</td>
<td>0.25</td>
<td>0.27</td>
<td>0.30</td>
<td>0.32</td>
</tr>
<tr>
<td>CPPCT</td>
<td>0.24</td>
<td>0.26</td>
<td>0.29</td>
<td>0.31</td>
</tr>
</tbody>
</table>

• Performance measures collected at different times during training years.
• Retrospective analysis of data not systematically collected for research.

DISCUSSION

Resident confidence increases with first experiences conducting supervised psychodynamic psychotherapy, paralleled by significant improvement in PRITE psychosocial subscores. The early COSE-late CPPCT score correlation may suggest that greater psychotherapy interest or experience on entry predicts greater learning.
• The negative correlation between supervisor rating and COSE scores suggests a possible supervisory reaction to overconfidence and/or inflation of ratings to boost confidence.
• Uniformly above average supervisor scores that do not change year to year may reflect reluctance to give lower ratings, rating by PGY-expectation rather than competence, or lack of dependability of supervisor ratings.

The relative lack of correlations may mean measures assess different aspects of performance, lack validity, or merely reflect the small N’s in our study.

CONCLUSIONS:
Resident self-assessment does not appear to reflect competence as assessed by supervisors, or knowledge as assessed by objective tests.
• Global supervisor evaluations do not appear to reliably measure competence.
• Standardized supervisor assessment instruments are needed.

Further work is needed to develop reliable, valid measures of competency.

REFERENCES:
1. ACGME Program Requirements for Graduate Medical Education in Psychiatry (Effective: July 1, 2007)