

## **A Pilot Use of Team-Based Learning in Psychiatry Resident Psychodynamic Psychotherapy Education**

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**Objective:** *Demonstrating psychotherapy competency in trainees will test the resources of psychiatry training programs. The authors outline the phases of team-based learning (TBL).*

**Methods:** *The University of Oklahoma College of Medicine, Tulsa (OUCM-T), Department of Psychiatry reorganized its psychodynamic psychotherapy didactic course using TBL.*

**Conclusion:** *Team-based learning offers a promising alternative to traditional psychodynamic psychotherapy didactics, potentially increasing resident learning efficiency through a structured learning cycle emphasizing accountability to a learning team.*

**Academic Psychiatry 2005; 29:293–296**

Recently, the Accreditation Council for Graduate Medical Education (ACGME) mandated that psychiatry residents demonstrate competency in five psychotherapy modalities (1). This directive prompted a renewed focus on psychotherapy training in psychiatry, but training programs face significant obstacles in meeting this challenge. In addition to facing the difficulty of defining competency, training programs will have to develop or redirect faculty resources to address competency training and assessment (2). Consequently, program costs for training each resident, estimated by one program at \$78,159 annually, could rise significantly (3). Another challenge is the limited training time for residents to acquire competency. Perhaps not immediately apparent, another potential barrier may involve the current structures of psychotherapy training itself. Psychotherapy training in psychiatry typically involves faculty supervision of casework supported by didactic lecture presentations on theory and technique. The lecture format, while efficient for teaching, may imply several expectations that could hinder optimal learning. For instance, residents may expect that all relevant knowledge on the topic will be presented in the lecture, that passive participation in the lecture will result in mastery of the material, and, in cases in which preclass preparation is not assigned or assessed, that knowledge-centered learning activities outside of the classroom have limited value. The implication is that the lecture-centered instructional format may promote passivity in resident learners, a posture incompatible with highly efficient learning.

In short, while surmounting obstacles, psychiatry training programs are mandated to produce much more from the same, or fewer, resources. How might training programs rise to this challenge? If more must be learned within the same time frame and without significantly increased resources, one answer may be to increase resident learning efficiency. One method of achieving this goal is to promote better resident engagement with, and respon-

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sibility for, their learning process. To support residents in this endeavor, training programs may need to reevaluate their instructional methods.

### Method

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To address these issues related to instructional format, the University of Oklahoma College of Medicine, Tulsa (OUCM-T), Department of Psychiatry reorganized its psychodynamic psychotherapy didactic course. This segment of the continuous psychotherapy seminar has been among the most challenging for residents to master because of the breadth and complexity of its concepts. Overall goals of the reorganization included increasing resident responsibility for acquisition of knowledge, communicating the importance of extraclassroom preparation, increasing active engagement with the learning material, and improving efficiency of learning. The organizing instructional strategy used to meet these goals is team-based learning (TBL). Team-based learning is a structured approach to the class session originally developed for use in science and business courses with large student-to-faculty ratios (4). It is increasingly being applied to medical and psychiatric training (5, 6). A primary rationale for its use is improving learning by helping students take a more active role in the learning process. To do so, TBL uses group dynamics to increase learning efficiency. It has been modified for use and applied to a theory-intensive 5-week segment of the OUCM-T psychodynamics course

Team-based learning involves three phases of learning: Phase I, Pre-Class Preparation; Phase II, Readiness Assurance Test (RAT); Phase III, Application of Concepts. Phase I occurs prior to class, while phases II and III occur during class sessions. Applying TBL as a new instructional format required educating residents explicitly on its details. Residents were introduced to the TBL learning cycle and were given clear instructions on their responsibilities for each phase of learning. Two learning groups were formed, each with 6–8 members evenly spread across training years. Prior to each class session, residents completed Phase I by accessing online knowledge resources that would have formerly been presented in class. These materials include learning objectives, slide presentations, and reading lists tailored to each week of the course. These materials are available on the OUCM-T e-Reserves system, a library service that enables instructors to place instructional materials on a password-protected web page. When residents arrived for class, they were expected to have reviewed the learning materials. Representative of such learning resources were those available for week 3: a slide presentation entitled

“Freud and Classical Theory” with accompanying learning objectives and a reading list including selections from Kaplan and Sadock’s *Comprehensive Textbook of Psychiatry, 7th ed.* (pp. 564–570, pp. 572–579).

Class began with Phase II, a Readiness Assurance Test (RAT). The RAT is a multiple-choice quiz that the residents first take individually and then as a learning team. The quiz assessed residents’ acquisition of knowledge from that week’s learning resources. After the quiz was completed, results from each group were openly reported and discussed. The faculty member solicited answers from each group and invited comparisons and contrasts between-group responses to the RAT. The faculty member then reported correct answers and considered appeals. The week 3 RAT was composed of 5 multiple-choice questions, two of which are illustrated (Appendix 1).

Following Phase II, Phase III then began with a group learning activity. Such activities involve realistic case material and include questions that require residents to synthesize and apply what they have learned in Phases I and II. Groups worked on the assignment and then openly reported their findings. The faculty member facilitated the ensuing discussions which, at times, involved debate and disagreement between learning groups. The week 3 group assignment required residents to make a trial formulation of a case of sudden right arm paralysis using Freud’s topographic model. The learning cycle then repeated itself the following week.

### Results

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Residents as a group rated the TBL presentation format as excellent, and specific comments about the TBL experience were overwhelmingly positive (Table 1). Qualitatively, the faculty perspective is that the time and resources required to reformat the course were well worth the effort. Faculty found resident enthusiasm for the learning material within the TBL format to be very rewarding. Additionally, based upon their supervision of resident psychotherapy, faculty noted that residents began to integrate psychodynamic concepts into their casework more effectively than in previous years following the typical psychodynamic module. Finally, faculty enjoyed the stimulating interaction with the residents through the informative dialogue promoted by the TBL format.

### Discussion

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To our knowledge, ours is the first report of the use of TBL in psychiatry resident psychotherapy education. We

**TABLE 1: Resident Evaluation Scores and Comments**

Criterion	Mean Score (1 = poor, 5 = excellent)	Comments
Clear objectives	4.96	I am really enjoying this new way of learning
Informative	4.94	I think TBL has been a very effective teaching tool
Relevant	4.94	I have learned so much more this year with this teaching method
Organized	5.0	I'm finally getting this stuff - thank you!
Overall value	4.96	

applied TBL to psychodynamic psychotherapy instruction, but it could easily be applied to other required modalities such as cognitive behavior therapy, brief therapies, and supportive therapy.

Team-based learning is appealing for a number of reasons. First, TBL stresses several important principles. These include the importance of preclass preparation based upon clear learning objectives, the learners' responsibility to themselves and to their groups, and the use of group activities to stimulate interactive learning experiences. These aspects of TBL serve to promote greater resident engagement with and responsibility for the learning process. Second, group application of TBL activities in Phase III help residents begin to translate declarative into procedural knowledge. Although not a substitute for properly supervised casework, this process may enable residents to begin building a bridge between theory and practice by challenging them with realistic clinical problems. Third, although using TBL will initially require extra time and resources from faculty, TBL eventually alleviates the faculty burden for "covering the material" in lecture by shifting first exposure to core learning resources from classroom time to preclass time. This shift increases resident responsibility, but the online placement of resources assists residents in meeting this challenge by significantly increasing their access to the learning materials. Then class time

can be devoted to other learning activities, and faculty can move toward becoming facilitators of learning.

The efficacy of team-based learning in promoting resident competency in psychotherapy has not been empirically evaluated. Team-based learning is a relatively new instructional strategy within psychiatric training, but its research basis extends back two decades (7). The active engagement strategy of team-based learning is supported by educational research that has demonstrated that students learn complex concepts better and retain them longer if they are actively involved in the learning process (8). These findings are supported by research demonstrating that TBL improves critical thinking, comprehension, and information retention (9). Other research has shown that team-oriented approaches to realistic learning tasks result in improved performance in decision-making even beyond a group's best member's performance (10). Nevertheless, research specifically addressing the impact of TBL on psychotherapy competency is needed. Since TBL is oriented more to declarative than to procedural knowledge, evaluating the impact of TBL on available assessments such as Psychiatry Residency in Training Examination (PRITE) scores might begin the process of definitively determining the place of TBL in psychiatric psychotherapy education.

All of these factors suggest that TBL may offer an instructional strategy useful in promoting residents' acqui-

#### APPENDIX 1: RAT 3 Sample Questions

All of the following phrases regarding Freud's topographic model of the mind are true EXCEPT:

- Arrived with Freud's *Interpretation of Dreams* in 1900
- Proposes that the Unconscious censors unacceptable wishes and desires
- Postulates neurotic symptoms are due to unconscious conflicts and forces
- Views the mind as a reflex arc from sensory to motor systems
- Incorporates the concepts of primary and secondary process thinking

Demanding entitlement and excessive dependence upon others to help maintain self-esteem most likely indicates problems negotiating:

- the anal stage
- the oral stage
- the genital stage
- the phallic stage
- none of the above

sition of knowledge and clinical skills necessary for psychotherapy competence. Furthermore, TBL may help residents meet this important goal while enhancing training programs' efficient use of limited resources.

In summary, TBL is a relatively new and untested instructional strategy in psychiatric psychotherapy education. Its efficacy in promoting psychotherapy competence is unknown, but the impact of TBL on comprehension, critical thinking, and retention suggests it could be useful in psychotherapy training, and its emphases on preclass preparation, engaging group dynamics, and in-class assessments offer an attractive and well-accepted instructional alternative to lecture-centered didactics.

*This study was supported by the University of Oklahoma College of Medicine—Tulsa, Department of Psychiatry, Tulsa, OK. The authors thank Patty Murray for editorial assistance.*

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