Commentary: Developmental Stages of Forensic Psychiatry Fellowship Training—from Theoretical Underpinnings to Assessment Outcomes

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Dr. Pinals' paper provides an excellent foundation for studying the developmental process of forensic psychiatry fellows during their training year. She proposes three stages: (1) transformation, (2) growth of confidence and adaptation, and (3) identification and realization. This commentary compares Dr. Pinals' proposed developmental stages to Margaret Mahler's theory of infant development and to Dr. Lev Vygotsky's social learning theory. Assessment methods to evaluate core competencies suggested by the American Council on Graduate Medical Education (ACGME) and American Board of Medical Specialties (ABMS) are reviewed. A potential survey of forensic psychiatry fellowship program directors to validate Dr. Pinals' proposed developmental model is described.

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In her article, Dr. Pinals[1] proposes developmental stages of forensic psychiatry fellows that include (1) transformation, (2) growth of confidence and adaptation, and (3) identification and realization. In laying the groundwork for her proposed three-stage model, Dr. Pinals provides an excellent summary of the emerging requirements by the American Council on Graduate Medical Education (ACGME) for core competencies in six domains and of the literature specific to forensic psychiatry training. Dr. Pinals theorizes that forensic psychiatry fellows progress through three theoretical stages and comments that there may be regression or fluidity of movement between the stages. Dr. Pinals suggests that by understanding these developmental stages, forensic educators can successfully assist the trainee through each stage.

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This commentary will address three topics in relationship to Dr. Pinals' suggested stages of educational development: (1) theories of childhood development and social learning theory compared with Dr. Pinals' three-stage model; (2) suggested application of ACGME and American Board of Medical Specialties (ABMS) toolbox assessment methods to assess learning and achievement of required core competencies; and (3) a potential future survey of forensic psychiatry fellowship program directors to validate Dr. Pinals' proposed developmental model.

Childhood Development and Social Learning Theory

Dr. Pinals lays a theoretical framework for the forensic psychiatry fellows' development during the course of their training. Many educational and training approaches utilize components of childhood development and social learning theory. Numerous childhood developmental theories attempt to explain a child's growth in regard to cognition, moral reasoning, emotional development, and social learning. Dr.

Table 1 Comparison of Mahler's Stages of Separation-Individuation with Pinals' Developmental Stages of Forensic Psychiatry Fellows

Mahler's Stages of Separation-Individuation*	Pinals' Forensic Fellows Stages of Development†
Differentiation (5–10 months) Infant begins to hatch from autistic shell, develops cognitively, and begins to compare what is and is not "mother." Anxiety toward strangers (the unknown) involves both curiosity and fear.	Transformation Fellow has limited knowledge and may have a sense of loss emerge as he or she moves from the known and comfortable clinical treatment role. Trainee may have a sense of anxiety regarding the unknown and his or her ability to manage time and to acquire basic forensic skills.
Practicing (10–16 months) Infant begins to gain a new perspective, a mood of elation at times. Exhibits characteristic separation anxiety when the mother is not around.	Growth of Confidence and Adaptation Fellow gains new perspective and comfort level with role as forensic psychiatrist. Confidence begins to develop in newly acquired skills. Sense of identify is "just beginning to blossom." Fellow has increasing curiosity and begins to focus on the future.
Rapprochement (16–24 months) Toddler has more awareness of physical separation, brings objects to mother, desires to be soothed by mother but may not be able to accept help. Resolution of crises occurs as child is able to obtain gratification from his/her own accomplishments.	
Object Constancy (24–36 months) Child becomes comfortable with mother's absence, has gradual internalization of mother, and can tolerate delay and endure separations.	Identification and Realization Fellow begins to believe he or she has mastered certain skills and "realize [his or her] self-identification as forensic psychiatrists."

* Adapted, with permission, from Mahler MS: On the first three phases of the separation-individuation process. Int J Psychoanalysis 53:333–8, 1968.
† Adapted, with permission, from Pinals DA: Forensic psychiatry fellowship training: developmental stages as an educational framework. J Am Acad Psychiatry Law 33:317–23, 2005.

Pinals' model has many similarities to psychologist Margaret Mahler's[2] theory of infant development that involves the concept known as separation-individuation.

Dr. Mahler proposed that an infant's ability to function separately from his mother requires movement through four phases of separation-individuation: differentiation, practicing, rapprochement, and object constancy. I am not suggesting that forensic psychiatry fellows are "infantile," but they must initially identify with and attach to a program followed by a formal separation from the training program at the conclusion of the fellowship. In many ways, this process is similar to that of a developing infant who must learn how to separate from his mother.

The process of a forensic psychiatry fellow's growth and development proposed by Dr. Pinals closely parallels the stages of separation-individuation proposed by Dr. Mahler. In particular, Dr. Mahler's differentiation stage parallels Dr. Pinals' transformation stage, Dr. Mahler's combined stages of practicing and rapprochement are comparable with Dr. Pinals' stage of growth of confidence and adaptation, and Dr. Mahler's phase known as object constancy is roughly equivalent to Dr. Pinals' stage of identification and realization. A review of Dr. Mahler's separation-individuation stages and a comparison with Dr. Pinals' developmental stages are provided in Table 1.[1,2]

The social development theory of learning is primarily attributed to work of Lev Vygotsky, a Russian developmental psychologist who pioneered the idea that the intellectual development of individuals is a function of human communities rather than of individuals alone. One of Dr. Vygotsky's most important concepts in regard to the learning process is the Zone of Proximal Development (ZPD). According to him, the ZPD is "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers."[3] More simply stated, the ZPD represents the gap or degree of separation that a person can learn either unaided or with the help of an adult or peer. Dr. Vygotsky proposed that all learning occurs in this Zone of Proximal Development.[4]

Dr. Vygotsky's social learning theory challenges educational training programs to develop learning environments in which students play an active role in both their own education and in that of their peers. In addition, teachers are expected to require more from students than rote memorization and recitation, by applying specific learning processes known as scaffolding and reciprocal teaching. Scaffolding is the term used by Dr. Vygotsky to describe the process by which a teacher creates opportunities in which the student can expand his skills and knowl-

edge. Reciprocal teaching involves students' actively participating in the educational discourse rather than simply answering questions.[5,6]

In her paper, Dr. Pinals outlines learning objectives for each of her theoretical stages and suggests methods of supervision and training to achieve the objectives. Dr. Pinals' discussion of various teaching methods effectively incorporates key principles of Dr. Vygotsky's social learning theory in her developmental paradigm. For example, Dr. Pinals utilizes the concepts of scaffolding and reciprocal teaching with her recommendation of combined approaches to forensic psychiatric training that include individual supervision, fellow observation, review of a fellow's audio- or videotapes, and peer/group supervision. Do these techniques work in forensic psychiatry training programs? The effectiveness of such teaching may be measurable through suggested assessment methods outlined by the ACGME and ABMS.

Application of ACGME/ABMS Suggested Toolbox Methods

As part of the emerging practice of evaluating each resident's development during his course of training, ACGME in conjunction with ABMS has described 13 potential evaluation techniques titled "Toolbox of Assessment Methods."[7] In her paper, Dr. Pinals briefly mentions these techniques for evaluating a forensic psychiatry fellow's achievement of core competencies. A general disclaimer provided by the ACGME and ABMS regarding their suggested "toolbox" reads, "The Toolbox includes description of assessment methods that can be used for evaluating residents. It does not include all the tools that can or may be used by a residency program for evaluating residents, or by a program director in verifying that a resident has demonstrated sufficient professional ability to practice competently or independently."[7] This caveat serves to remind program directors that no exact evaluation technique is mandated by the ACGME or ABMS. However, a review of suggested assessment tools may provide assistance for program directors in how to assess their fellows' mastery of core competencies. The following definitions of these evaluation techniques are those provided by the ACGME and ABMS and not by this writer.

360-Degree Evaluation Instrument

The purpose of the 360-degree evaluation tool involves input from multiple individuals who are familiar with the resident's performance. This type of evaluation generally utilizes a Likert rating scale (i.e., a scale of 1 to 5, with 5 meaning "all the time" and 1 meaning "never").[7] Potential evaluators in the forensic psychiatry fellowship program include the training director, site supervisors, co-fellows, attorneys and judges who have worked with the fellow, and members of the treatment team in treatment and forensic settings. Whereas 360-degree evaluations in a general psychiatry residency may often include input from the resident's patients, such feedback in a forensic psychiatry fellowship program has certain inherent limitations. For example, as many of the evaluations conducted by the forensic psychiatry fellow occur in the context of evaluating a defendant in a criminal trial, surveying defendants for their comments on the fellow's court testimony performance may be of questionable benefit. One could certainly envision a situation in which a defendant judged to be malingering by the fellow may be less inclined to provide positive feedback on the fellow's performance, even if such feedback is warranted. In those fellowship programs in which the forensic psychiatry fellow provides clinical treatment in a forensic setting (e.g., a forensic hospital or correctional facility) such input may be feasible. Careful review, however, of evaluations would be necessary, as the fellow may receive unfair negative feedback in situations in which he or she appropriately denies the prescription of potential substances of abuse to forensic clients inappropriately seeking medications or faking psychiatric symptoms.

Chart Stimulate Recall Oral Examination

The chart stimulate recall (CSR) examination is an oral examination in which a trained or experienced physician questions the resident in a standardized format. In the clinical setting, this involves rating the resident using an established scoring procedure and well-established protocol on a variety of cases. This evaluation method requires that each case be scored in advance with predefined scoring rules. The resident is questioned over a 5- to 10-minute period regarding the diagnosis, care, clinical findings, and treatment plans of various patients, with the entire examination lasting between 30 and 60 minutes.[7]

The application of this assessment method in a forensic psychiatry fellowship program could be utilized to assess the fellow's skill and knowledge of managing individuals in a forensic setting. Suggested

examples of potential CSR examinations could include the identification of violence risk factors with proposed treatment interventions or the assessment and treatment of suspected malingered symptoms in a correctional environment. Although it is possible that court-ordered evaluations, such as competency-to-stand-trial (CST) or criminal responsibility evaluations, could be assessed using this method, the complexities of each forensic case would be likely to make CSR a less effective tool for determining mastery of nontreatment forensic evaluations.

Checklist Evaluation

In the checklist evaluation, specific behavior or steps that make up a more complex competency component are delineated. A "yes" or "no" response is provided to indicate that the desired activity occurred and the completeness of the activity (such as total, partial, or incorrect) can also be rated. Checklists are generally useful in situations that involve patient care skills and for interpersonal and communication skills.[7] Potential applications in a forensic psychiatry fellowship program could include the development of a checklist tool that measures the fellow's performance on various forensic psychiatric evaluations. For example, if a checklist evaluation tool were developed for a court-appointed CST evaluation, the assessment could note whether the fellow provided relevant statements of nonconfidentiality, whether appropriate questions assessing trial competency were reviewed, and whether the statutory criteria for CST were appropriately applied. A potential challenge using the checklist evaluation method in a legal setting is obtaining permission for the supervisor to be present during the course of a fellow's live evaluation. As an alternative, the training director could develop a checklist tool that assesses various forensic psychiatric reports with specified expectations to be included in each report.

Global Rating of Live or Recorded Performance

In contrast to other types of assessment methods, the global rating evaluation tool is retrospective and rates the resident on general categories of ability over a specified period. Typically, these ratings include input from multiple sources of information and provide qualified indicators (such as poor, fair, good, excellent, and outstanding) with room for written comment. The assessment method is very common, often used at the end of rotations, and has been criticized for being highly subjective.[7] In a forensic psychiatry fellowship program, this type of evaluation may be best suited for providing feedback for the fellow's overall performance at the end of a particular rotation.

Objective Structured Clinical Examination

The objective structured clinical examination (OSCE) tool may have minimal use in a forensic psychiatry fellowship program compared with other assessment methods. The evaluation technique utilizes 12 to 20 separate standardized encounter stations with each station lasting approximately 10 to 15 minutes. The encounter stations usually involve standardized patients, though one can use clinical cases or mannequins to assess technical skills.[7] Owing to the unique legal aspects of forensic psychiatric work, the arrangement of up to 20 various forensic encounter stations in one location is likely to be impractical, particularly with concerns for safety, security, and confidentiality in correctional settings and forensic hospitals.

Procedure, Operative, or Case Logs

Case logs are used to document every encounter that a resident has with a client by the particular condition or procedure performed. They are particularly helpful in assessing the breadth of the resident's experience.[7] In a forensic psychiatry fellowship program, case log evaluation tools could be developed for both clinical work and forensic case involvement. As an example, the fellow could be required to record every criminal case in which he was involved, noting the particular referral question, party requesting evaluation, diagnosis, general demographics of defendant, and opinion on the legal issue in question. Although the recording of such information would not necessarily equate with resident competence, such data would be useful for the training director in reviewing the fellow's exposure to various types of forensic evaluations.

Patient Surveys

Patient surveys are used to assess the patient's satisfaction with the care provided by the resident, hospital, or clinic. The patient is typically requested to provide feedback on the resident's performance and communication skills using some type of rating skill (such as poor, fair, good, excellent).[7] As described in my commentary on 360-degree evaluations, patient

surveys are unlikely to be practical or relevant in assessing the quality of forensic psychiatric evaluations. In forensic evaluations, the evaluee is not a patient, and although professionalism and a respectful attitude from the fellow are important components of the examination, the feedback from a client being evaluated for legal purposes may have limited utility.

Portfolios

Portfolio assessments involve the resident's preparing a collection of various products that demonstrate learning and achievement in accordance with a specified plan. Portfolios typically include written documents, but may also incorporate video or audio recordings. Portfolios are particularly useful for those competencies that are difficult to evaluate, such as practice-based improvement.[7] In a forensic psychiatry fellowship, a forensic portfolio could include a research paper, submitted research protocol, transcript of deposition or trial testimony, videotape of a fellow's presentation, or summary of a legal search on relevant case law.

Record Review

The record review assessment tool involves a retrospective scoring by trained staff of a resident's patient record. The coding form lists predefined information to be obtained, such as medications prescribed, tests ordered, and patient outcomes. The information obtained is compared with accepted patient care standards.[7] As this evaluation technique focuses primarily on patient care, its usefulness in a forensic psychiatry fellowship program involves those programs in which forensic fellows provide ongoing clinical care. Many institutions where fellows provide treatment have ongoing quality assurance monitors that utilize a record review technique, and general feedback from these findings could be incorporated easily into the fellow's evaluation.

Simulations and Models

The simulation and model evaluation technique evaluates the resident by creating situations that closely resemble reality and mirror real clinical problems. The assessment method is commonly used in surgery and anesthesiology training programs with lifelike mannequins or virtual reality environments.[7] Although this toolbox method may not appear immediately applicable to forensic psychiatry fellowships, potential applications of this technique could include the fellow's watching videotapes of individuals who show rapidly escalating aggression or malingered psychiatric symptoms or an unethical request by a simulated attorney, with an assessment of the fellow's reaction and response to each of the scenarios.

Standardized Oral Examination

A standardized oral examination involves a trained physician's assessing the resident's performance by using realistic patient cases. The examiner typically presents a clinical problem to the resident and inquires as to how the resident would manage the case. Selected cases are chosen as representative of the patients the resident would be expected to manage successfully. Examination length varies between 90 minutes to two and one-half hours.[7] A forensic psychiatry residency training program could develop a standardized oral examination of the resident that presents a variety of both clinical and legal forensic issues. For example, a range of various criminal and civil referral case scenarios could be developed that probe the resident's ability to clarify the referral issue, request appropriate records, appreciate potential ethical dilemmas, set appropriate boundaries with the referring agency, and inquire into the application of relevant statutes or case law.

Standardized Patient Examination

In the standardized patient (SP) examination, either well persons or actual patients are trained to present information in a standardized way. The resident interviews a variety of standardized patients in a series of 10- to 12-minute patient encounters. SPs can be included in the Objective Structured Clinical Examinations described earlier, at one or more designated stations.[7] As previously highlighted, the use of actual clients involved in the legal system (particularly those that are pretrial) in an SP examination poses inherent ethics and legal difficulties. As described in the simulation toolbox assessment method, a program could train healthy persons to present standardized information (such as malingered psychiatric symptoms, vague threats of harm, or allegations of abuse/harassment) if the use of a standardized patient assessment tool is desired.

Written Examination

A written examination includes multiple-choice questions to evaluate a resident's understanding of a

defined body of knowledge. Questions can involve a patient case, clinical findings, or case management.[7] In a forensic psychiatry fellowship, this type of examination may be particularly useful in evaluating the fellow's understanding of legal issues related to designated landmark mental health law cases and general forensic knowledge. A predetermined score/pass rate provides a benchmark for the fellow's knowledge on a broad variety of topics.

Validating Dr. Pinals' Proposed Developmental Model

Dr. Pinals[1] notes that her proposed developmental stages have not been studied under controlled conditions and are an outgrowth of observations of forensic psychiatry fellows and reflections of their experiences over a decade. Background information that would be useful to readers of Dr. Pinals' paper would include the following: (1) demographic breakdown of residents included in her preliminary analysis (i.e., number of residents interviewed/observed, gender of residents, average age of residents, level of post-residency experience, level of forensic psychiatry experience prior to entering forensic psychiatric training); (2) description of the residency program or programs serving as the basis for her proposed stages; and (3) the number of supervisors or faculty participating in the observation of and reflection with the fellows that served as the basis of her proposed developmental stages. This information would be important if other training directors wanted to compare their program to the training site(s) that served as the foundation for this developmental model.

As Dr. Pinals' proposed developmental stages seem both logical and practical, an anonymous survey of training directors could be developed to test the validity of her model. This survey could be forwarded to training directors either quarterly or biannually through the training year. Information that could be part of such a survey includes basic demographic information of fellows, description of forensic rotations, presence or absence of patient treatment requirements versus forensic evaluation requirements, a Likert scale evaluation of a fellow's mastery of specific core competency requirements, and a description of what types of teaching and assessment methods are used. In addition, space for written commentary regarding learning challenges observed by forensic psychiatry fellows may yield additional information. Although such a survey would probably be labor intensive, it would allow a more scientific analysis regarding the stages at which forensic psychiatry fellows master specific forensic competencies and whether such stages vary according to program design and/or teaching methods.

Conclusion

Dr. Pinals' paper is a valuable contribution to the ever-increasing focus not only on what we teach our fellows, but also how we teach them and if our teaching is effective. Her paper provides an excellent foundation for considering the developmental process of those who entrust their forensic psychiatric education to our teaching and guidance. ACGME now requires programs to develop specific core competencies in the areas of patient care, medical knowledge, interpersonal and communication skills, practice-based learning and improvement, professionalism, and system-based practice.[8] ACGME and ABME suggest various assessment tools for measuring core competencies which can be used in training programs to demonstrate how they assess fellows' learning.[7]

The particular methods used to teach and accomplish the forensic psychiatry fellow's mastery of core competencies are under each program's discretion and consequently vary. The program director's challenge is to find those teaching techniques that maximize the learning potential of each forensic psychiatry fellow and to develop evaluation tools that measure knowledge gained. Kahlil Gibran eloquently described how to create that important zone of proximal development critical for learning when he wrote, "The teacher who is indeed wise does not bid you to enter the house of wisdom but rather leads you to the threshold of your own mind" (Ref. 9, p 56).

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