#### **ORIGINAL PAPER**



# Descriptions and Reflections on the Cognitive Apprenticeship Model of Psychotherapy Training & Supervision

Robert E. Feinstein<sup>1</sup>

Accepted: 10 November 2020 / Published online: 20 November 2020 © Springer Science+Business Media, LLC, part of Springer Nature 2020

#### Abstract

This paper offers a detailed description of a Cognitive Apprenticeship Model for psychotherapy training and supervision. This form of training has been utilized in a novel psychotherapy training program developed for psychiatric trainees, enrolled in a specialized psychotherapy scholars track, embedded in an adult psychiatric residency training program. The paper offers new elaborations of the model, reflections on the apprenticeship supervision and implementation, and clinical lessons learned. The four dimensions of this model include: (1) acquisition of psychotherapy content knowledge; (2) an application of the Cognitive Apprenticeship Model of Supervision, utilizing modeling, coaching, scaffolding, articulation, reflection and exploration as essential aids in structuring a live, real-time supervisory experience; (3) sequencing of clinical psychotherapy training activities; and (4) use of situated learning and communities of practice, as important components of psychotherapy training. The article also discusses an apprentice method of psychotherapy supervision including the intake, working through, and termination phases, Barriers impeding apprenticeship supervision and implementation, and reflections on participant experiences are discussed. This approach may be valuable to others considering the development or evolution of psychotherapy training programs for psychiatrists, psychologists, social workers, or other mental health professionals.

**Keywords** Cognitive apprenticeship model · Psychotherapy training · Psychotherapy supervision · Situated learning · Communities of practice · Experiential learning

#### Introduction

The cognitive apprenticeship framework (Collins 2006; Stalmeijer et al. 2009; Lyons et al. 2017), based on experiential learning principles (Kolb and Kolb 2009), has been utilized for psychotherapy training and supervision at the University of Colorado, Department of Psychiatry from 2012 to 2018. This approach was applied within a psychotherapy scholar's track (Feinstein and Yager 2013). A track is a 3-year intensive psychotherapy training program, for psychiatric residents embedded in a 4-year general adult psychiatric residency training program. The psychotherapy scholar's track offers intensive psychotherapy training, using didactics, reflective activities, supervision, and also has the requirement of developing a scholarly project, involving

# General Psychotherapy Training Methods

It is generally agreed that psychotherapy training is best offered in multi-component training packages (Harris et al. 2014; Herschell et al. 2010). A common core triad for psychotherapy training, used with some variations, has its origins in psychoanalytic training (Watkins 2010; Watkins



psychotherapy. A description of the track and preliminary data are available for review elsewhere (Feinstein and Yager 2013; Feinstein et al. 2015). Since then, the author have developed version 2.0, a more comprehensive model, which we are implementing at the Dell Medical School Department of Psychiatry. This paper offers a detailed description of the cognitive apprenticeship framework for psychotherapy training and supervision, new elaborations and reflections on the clinical training program, and lessons learned. It is hoped that this may be valuable to others considering the development of a psychotherapy training programs for psychiatrists, psychologists, social workers and other mental health professionals.

Robert E. Feinstein
Robert.Feinstein@austin.utexas.edu

Department of Psychiatry and Behavioral Sciences, University of Texas Dell Medical School, 1601 Trinity St Bld B (Mail Stop 0Z600), Austin 78712, TX, USA

and Callahan 2019). This triad of training includes: (1) developing self-awareness (e.g. using reflective learning and reflective practice) and/or by being in psychotherapy (Kovach et al. 2015); (2) offering didactic and interactive teaching including: seminars with a standard psychotherapy curriculum, review of treatment manuals, relevant literature, practice presenting clinical cases, discussions of treatment approaches, and case write-ups designed to hone case formulation skills and elucidating various treatment approaches; and (3) supervision.

# **Cognitive Apprenticeship Model**

The Cognitive Apprenticeship Model (CAM) (Stalmeijer 2015) adds to the traditional apprenticeship model of observation and task performance (Collins 2006). CAM has been used to learn specific technical or manual skills (e.g., skill of a cobbler or car maker) but expanded to a broader model of 'learning complex cognitive processes (e.g. reasoning, pattern recognition, problem solving) through guided experiences (Stalmeijer et al. 2009). Cognitive, in this context, means teachers are explicit about verbalizing with their trainees, their thought processes, reasoning, and the problem-solving approaches they use to guide their decision making.

The CAM describes four dimensions which, facilitate learning, both technical and cognitive skills (Stalmeijer 2015). These include: (1) acquiring content knowledge; (2) traditional apprenticeship training; (3) sequencing; and (4) situated learning and communities of practice.

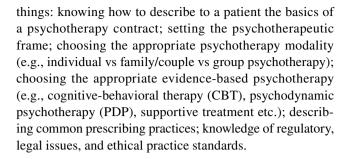
# Cognitive Apprenticeship Model for Psychotherapy Training and Supervision

# **Psychotherapy Content Knowledge**

As it applies to psychotherapy, content knowledge covers, in broad strokes, the domain and strategic knowledge, needed by trainees, to become competent psychotherapists.

# **Psychotherapy Domain Knowledge**

Psychotherapy domain knowledge is taught didactically and interactively. It includes, but is not limited to: teaching the basics of common factors used by all forms of psychotherapy (Feinstein et al. 2015); knowledge of different schools or theories of psychotherapy; knowledge about the elements and applications of theory-based strategies, tactics, and interventions; and the knowledge about how to track psychotherapy progress with outcome measurements. Psychotherapy domain knowledge also includes many practical



# Psychotherapy Strategic Knowledge

Strategic knowledge involves developing strategic, technical, and attitudinal competence (Stalmeijer 2015). Psychotherapy strategic competence is defined as the therapist's ability to think and continuously reflect on therapeutic aims and theoretical and practical methods for achieving those goals. This includes utilizing complex reasoning, inference, developing clinical formulations, making wise treatment decisions, etc. Technical competence refers to knowing what to say, how and when to say it, using a variety of theory-based problemsolving approaches or interventional styles, designed to get the desired results. Technical competence also includes knowing how to handle specific problems, such as: suicide and violence risk; behavioral issues or acting out; therapy resistances; transference; countertransference, etc. Attitudinal competence means developing the capacity to use selfawareness therapeutically and develop a non-judgmental attitude toward a wide variety of patients and problems. Attitudinal competence also involves helping clinicians to be sensitive and sincere, observe, empathize, mentalize, use discretion, be direct, and have excellent resilient listening and communications skills.

# Cognitive Apprenticeship Model of Psychotherapy Supervision

A second dimension of the CAM for psychotherapy training uses a traditional apprentice format for supervising and teaching trainee's psychotherapy skills. Applying this model, supervisors guide the psychotherapy learning processes, utilizing modeling, coaching, and scaffolding (Collins 2006; Stalmeijer et al. 2009; Kolb and Kolb 2009). These tools are designed to help trainees acquire an integrated set of technical psychotherapy skills through processes of observation and guided practice. Three additional supervision tools include: articulation, reflection, and exploration (Collins 2006; Stalmeijer et al. 2009, 2013). These tools can be used by supervisors to facilitate conscious access and control over psychotherapy reasoning required for case formulation, problem-solving, decision-making, and use of various theories, strategies, tactics, and techniques.



#### Modeling

Modeling (Stalmeijer et al. 2013) psychotherapy is a two-part process: (1) The supervisor demonstrates or models doing psychotherapy with a patient, in the presence of a trainee. The supervisor verbalizes his/her clinical reasoning, emotional reactions, reasons for the strategies, tactics, and interventions used, case conceptualization, and treatment approach. Next, the trainee reports his/her observations about the session and asks questions. Unfortunately, many supervisors stop here; (2) In the second, more impactful part of this process, the trainee models with a patient some of the learned aspects of doing psychotherapy, while also receiving live in-the-moment and post-session feedback from the supervisor.

# Coaching

Coaching, often a part of supervision, emphasizes three elements (Stalmeijer et al. 2013; Feinstein 2017; Rangachari et al. 2017): (1) active rehearsal includes: how to discuss the therapeutic contract and psychotherapeutic frame with a patient; and managing common problems that may arise (e.g. suicidal ideation, a patient coming late, not paying fees, etc.); (2) repetition and practice, using specific psychotherapy strategies, tactics, or interventions. For example, when and how to use a particular school of psychotherapy; practicing the psychodynamic sequence of confrontation, clarification, and interpretation; uncovering of a hot thought and questioning the evidence for and against a hot thought etc.; (3) receiving immediate feedback (Saedon et al. 2012). The coaching process is designed to reinforce progressive and successive approximations toward the ideal.

Coaching often occurs in four ways: (1) moment-to-moment, real-time, live coaching with the patient present; (2) call-in or remote coaching; the trainee is in session while the supervisor is observing, listening, and sending in suggestions by phone, or by a blue-tooth ear piece; (3) immediate post-session coaching, using role-play and role-play reversals. In this form of coaching, the trainee chooses a difficult part of a session and role-plays the patient, while the supervisor acts as therapist. Then, they reverse roles. They discuss what worked and did not work, and why; (4) traditional (after-the-fact) weekly coaching; the trainee recount their sessions, discuss their process notes, and/or reviews video or audio recordings where they can be coached on techniques.

# Scaffolding

Scaffolding is also a two-part process of "trainee-centered teaching," which, can be done as an iterative, yet informal process (Stalmeijer et al. 2013). This includes: (1) ascertaining before teaching, the trainee's level of knowledge

and experience doing psychotherapy. This can be accomplished by asking for the trainee's self-assessment of their level of psychotherapy expertise; reviewing prior psychotherapy course work; recounting the time the trainee has spent doing psychotherapy; assessing the number and kinds of cases treated; reviewing prior evaluations (if available); and seeing a videotape of a trainee's session; (2) teaching at the trainee's current developmental level and progressively raising the bar, commensurate with the trainees growing understanding of theory and developing skill set.

# **Articulation or Socratic Questioning**

Socratic questioning, also called articulation, is the process by which supervisors ask trainees non-threatening, but thought-provoking questions (Stalmeijer et al. 2013). These questions are designed to help trainees explicitly state their intensions, explain their emotions, clarify their thinking (e.g., 'Why did you say that?'); challenge the trainee's assumptions (e.g., 'Is this always the case?'); discussing the evidence as a basis for an argument or point of view; raising alternative perspectives or explanations; understanding the implications and consequences of language, behaviors, and interventions; questions the question (e.g., 'Why do you think that I asked that question?'). These kinds of Socratic questions are used to deepen knowledge, improve capacities to reflect, improve understanding of theory and techniques, improve retention of learned experiences, and discover new areas and opportunities to promote growth.

#### Reflection

Using reflective learning, in written or verbal forms, trainees reflect on, and analyze their approach to psychotherapy, assess new learning needs, and use these exercises to improve their self-awareness (Aronson 2011; Colomer et al. 2018). Trainees also use reflective practice (Aronson 2011; Fragkos 2016; Moon 2004) to consider the many practical aspects of working with patients such as: understanding how time and frequency of sessions affects psychotherapy; how money and insurance impacts the process; consider the rhythm and timing of interventions in a single session; reflecting on the differences and transitions from opening phases of psychotherapy, to working through, to termination; when and if to include family members in session etc.

#### **Exploration**

As trainees advance, supervisors should encourage their trainees to explore different approaches (Stalmeijer et al. 2013) to case formulation, problem solving, use of multiple theories and techniques, how to develop an eclectic blend of theory and technique. Supervisors should strive to stimulate



the trainee's curiosity, encouraging trainees to independently read and think. Trainees need to flexibly discover and experiment with their own therapeutic creativity, and within safe boundaries, explore how to use different styles, techniques, and alternative approaches (Yager and Feinstein 2017).

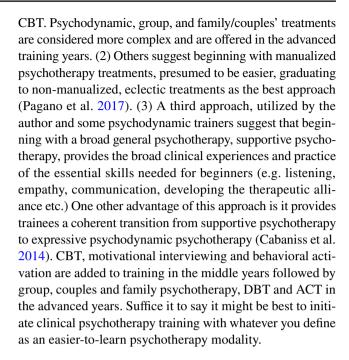
# Reflection on Sequencing Psychotherapy Clinical Training Activities

The third dimension of CAM focuses on the sequencing of learning activities (Stalmeijer 2015). This can begin by helping trainees gain a clear conceptual model of the entire task (e.g. teaching from global concepts and general skills to specializes skills and techniques), before executing its parts (Stalmeijer 2015). Sequencing of learning activities can be operationalized for psychotherapy clinical training by beginning with a global focus on the common factors (Feinstein et al. 2015) utilized by all psychotherapies because these account for 88% of psychotherapy outcomes (Norcross and Lambert 2018). As a companion, we can begin initial clinical training with a global focus on common psychotherapy techniques such as listening, communicating, verbal techniques, common intensions, inductive and deductive reasoning, strategies for change, etc. The book, Learning Psychotherapy exemplifies this approach (Beitman and Yue 2004).

The literature does not reveal a consensus or a specific evidenced-based approach as to how best to sequence and supervise clinical psychotherapy training. The approaches used vary greatly by programs, different disciples (e.g. psychiatrist, vs psychologist, vs social worker, etc.), the kind of psychotherapy clinics available for training (e.g. hospitalbased, student mental health, private practice), the kind of psychotherapy services offered, the population of patients seen, and the core values, mission, and cultures of different programs. However, issues worth considering include; (1) clinical sequencing for learning various psychotherapy modalities (2) sequencing by patient complexity (3) depth vs breadth training (4) General vs special populations (5) sequencing the kind of supervision.

# **Sequencing Psychotherapy Modalities**

Psychotherapy can be taught and practice by beginning with easier or less complex modalities progressing to more difficult or complex modalities. Defining easier to more difficult modalities is not easy. There is no clear evidence that any one approach is better than another (McGowen et al. 2009). Three approaches to sequencing clinical training experiences have been described and deserve consideration. These include: (1) The McMaster Psychotherapy Program, initially teaches empathy, alliance-building, and listening, early in training, emphasizing "emotion-focused psychotherapy" first (Weerasekera 2020). Residents in the middle years, learn



# **Sequencing by Patient Complexity**

It is probably useful, as a general guideline, to consider matching patient complexity to the trainee's level of experience. Beginners learning psychotherapy could start seeing patients with a single common diagnosis or problems (e.g. anxiety and depression with a school or a work problem) and progress to more complex patients with co-morbid diagnoses and problems (e.g. bipolar patient with suicidality and homelessness). Advanced psychotherapy trainees might choose more difficult population of patient's which may require more specialized psychotherapy training such as patient with eating disorders, personality disorders, psychotic disorders, autistic disorders or patient that are developmentally delayed. This approach may have many practical obstacles based on ability of programs to make these decisions.

# **Considering Depth Versus Breadth Training**

Psychologists and social workers are typically trained emphasizing depth of psychotherapy experiences, initially with exposure to a few cases (5–10 cases) often working with patients who have a commonly encountered group of diagnoses. The depth of fewer cases is developed with intensive weekly supervision, extensive case write-ups, often with literature reviews, for an initial clinical training lasting 1–2 years. This choice is often based on source of patients or clinical settings available to those programs.

In general, psychiatrists are trained with breadth experiences in hospitals or community-based clinics, initially learning supportive psychotherapy with



psychopharmacology for outpatient caseloads (80–150 patients) that have a wide ranges of diagnoses. This is typically accompanied by attending precepting and 1-h of weekly psychotherapy supervision. Residents learn other psychotherapy modalities, with more depth experiences, that come later in their training or are embedded in a psychotherapy track, with a small group of 5–10 psychotherapy cases, over a 3-year period.

It's likely that both depth and breadth psychotherapy training is optimal though often this is dependent on the kind, availability of clinical training sites and programmatic aims.

#### **General vs Special Populations**

Psychology and social work training programs, mostly due to funding, have been trending toward teaching psychotherapy while working with specific age groups (child vs adolescent vs adult), or with specific populations (e.g. American Indians, autistic kids, or in integrated behavioral health environments). Psychiatric residents typically do their psychotherapy training with adults but get some exposure to child, adolescent, and geriatric psychotherapy later in their training.

Ideally, doing psychotherapy with a general population, teaching from general and global to specialized and local makes pedagogic sense (Stalmeijer 2015). Working with all age groups is optimal as this would facilitate a deeper understanding of development across the lifecycle.

# **Kinds of Supervision**

Supervision can be optimized by obtaining many different views of trainees. Most program begin with case-based supervision. This offers a broad view of the trainee's knowledge and thinking, and chances to discuss diagnosis, problem identification, treatment contracting, theoretical orientation, case formulation, choice of an evidenced-based psychotherapy, and treatment options.

Audio and/or video supervision is typically added secondarily in some programs. It permits direct asynchronous observation of a trainee which is very valuable for giving specific and detailed feedback on how to conduct a session, language and tone, empathy, development of the working alliance, timing of interventions, use of the strategies, tactics, and techniques.

Process note supervision is rarely used in most program. Our program uses split process note supervision. Split process notes means alternating (week-to-week) taking written process notes while in session of either what the patient says or what the therapist says. After each session, the trainee, writes from memory, the missing half of the session which was not recorded. Relying on memory of what the patient

or therapist said or did can provide a natural window into the subjective experiences and unconscious processing of therapist. This is valuable aid for revealing and discussing transference and countertransference. In addition, since most therapist will not be able to precisely remember what they said and did, they will fill in the blanks of their memory. This becomes a method of having them rehearse, practice, and reformulate what they wished they had said or done.

Live supervision or apprenticeship supervision is rarely done regularly in most programs. It allows an enriched supervisor and trainee experience permitting demonstration, modeling and immediate feedback to the trainee.

Within our training program, we recommend that all supervisors use of all four of these methods of supervision with each trainee. Each methods provides a different views of the trainee's abilities, patient responses, and gives supervisors multiple venues to foster the development and hone the psychotherapy skills of their trainees.

# **Situated Learning and Communities of Practice**

The fourth and final dimension of CAM is largely based on situated learning theory (Stamlier 2015; O'Brien and Battista 2020) with communities of practice (Hoadley 2012; Cruess et al. 2018; McLoughlin et al. 2018). Optimal learning environments often incorporate four sociological elements: (1) situated learning; meaning the learning environment should reflect the nature of the task in the real world; (2) a community of practice, where trainees are actively engaged with a group of colleagues who are learning and practicing similar tasks; (3) intrinsic motivation; aligning the internal motivation of trainees with a goal of their interest; and (4) exploiting cooperation, which means allowing and stimulating collaboration between trainees, to foster collaborative problem-solving and professional norms. These four sociological elements have been applied as an essential component of our psychotherapy scholar tract (Stamlier 2015).

# Situated Learning in the Psychotherapy Scholar Tract

Psychotherapy training for our psychiatric residents is generally conducted in a real world setting of a general hospital and community oriented psychiatric outpatient clinics. This is an ideal setting for situated learning, as for 3 years, residents can have both breadth and depth psychotherapy training with patients of various ages, having a wide range of diagnoses and problems, coming from diverse cultures, and socio-economic backgrounds.

#### A Community of Practice and Fostering Collaboration

A community of practice (COP) (Stamlier 2015; O'Brien and Battista 2020) means arranging training in a real-world



setting which maximizes shared common values and practice norms while asking learners to engage with each other in increasing complex tasks supported by a social community. Our psychotherapy track was designed to foster individual learning alongside of learning within the track's COP. We have a cohort of up to eight psychiatric trainees, two residents at each of four different levels of training. All newcomers, intermediate learners, and advanced trainees work individually, in groups by level of training, and often in a single large group for case conference, observing psychotherapy masters, and for some didactic teaching. Trainees also practice psychotherapy with their own cohort of patient while also doing group and family therapy training specifically designed so that trainees at the beginning levels work as a co-therapist with advance trainees.

Small group psychotherapy supervision also fosters our COP, as it is conducted with three residents (often a two different levels of training) and a faculty supervisor. Each week, there is a rotation for one resident who presents "long supervision" (45-min discussion), a second resident present "short supervision" (30-min discussion), and the third resident is "out" or does not present. There is a weekly rotation of who presents with faculty supervisors occasionally presenting their own cases as well. This COP for supervision, allows all trainees to following a minimum of three to four cases simultaneously and leads to a process where residents and supervisors learn, teach and supervise each other... our definition of a COP. Our COP for trainees is a dynamic learning environment, matched with support, coaching, supervision, and the co-construction of practice norms with a cadre of 8-10 supervisors. The residents come to know their faculty COP quite well over their 3 years of training.

We encourage all trainees to navigate multiple different psychotherapy COPs. Residents join local, regional, and national psychotherapy groups which offer seminars and conferences. Residents can seek additional mentors from these organization and join their COPs.

In addition, our psychotherapy track requirement is that all trainees complete a scholarly project on any aspect of psychotherapy. This work is presented locally, in poster format, to all trainees and faculty involved with the track, and also within a wider group of psychiatrists in our department. This COP track often engenders projects with similar themes in any 1 year affirming COP norms and practices. Some residents go on to present at national meeting and publish in peer review journals and this allows them access to other mental health COPs.

#### Intrinsic Motivations of Trainee

Our psychotherapy scholars track selects trainees intrinsically interested in psychotherapy as participation is strictly voluntary. We also, via reflective activities and supervision motivate residents to voluntarily pursue their own psychotherapy. Furthermore, we aim to sustain their motivation over 3 years by encouraging each trainee to pursue learning the psychotherapy modalities which aligning best with their career choice, subspecialty interest, or practice sites of interest. For example, residents who want work in a psychiatric emergency room can chose to learn crisis intervention, behavioral activation, or brief CBT; residents planning to work in a partial hospital program, may pursue group therapy; those interested in kids and adolescence, learn family therapy; if interested in addictions, residents can learn motivational interviewing; if interested in outpatient treatment or private practice, they can pursue advanced practice of CBT, Dialectical Behavioral Therapy (DBT), Acceptance & Commitment Therapy, or psychodynamic psychotherapy; residents interested in special populations, such as personality disorders, can learn DBT or transference-focused psychotherapy; residents interested in trauma, pursue training in cognitive processing therapy.

# Practical Implementation of Cognitive Apprenticeship Supervision

Cognitive apprenticeship supervision can be utilized as a primary method for supervising a wide array of different psychotherapy modalities (Harris et al. 2014). These live supervised treatments are typically brief and focused, lasting 5–20 sessions, yet can be extended, based on the needs and wishes of trainees and patient. Supervision is typically structured into three phases: (1) an intake and initiation of psychotherapy; (2) a working through phase of creating change; and (3) termination.

# **Initial Intake and Beginning Psychotherapy**

Patient consent to participate in psychotherapy, with a trainee and faculty member, is obtained at the initial session. Sometimes apprenticeship supervision is offered to patients already in treatment with a trainee, if the treatment is not progressing. We are clear with patients that the apprenticeship format is primarily focused on the patient, but also has a complementary purpose to improve the trainee's psychotherapy skills. We explain that having co-therapists give the patient the benefit of having two professional minds (faculty and trainee) working together to conduct psychotherapy. Patients readily understand and accept this because they know our clinic offers low-cost psychotherapy by trainees as part of our academic and educational mission. We also describe that the trainee and supervisor may discuss in real-time, what is happening in session with the patient. We explain that a trainee may be asked by a supervisor to reflect on something happening in-the-moment, or may be



re-directed to follow a different path or theme. Patient's understand that they are always free to ask questions. To date, in the over 100 apprenticeship cases done with the author, very few patients have refused consent. We also explain our use of patient symptoms and functional outcomes measures (Lambert 2017; Patton 1992) and that we examine the supervisory experience (Cliffe et al. 2016) as well.

During this first phase (e.g. approximately one-third of the total number of anticipated sessions), the supervisor models 45-min intake sessions. Trainees participate at their own comfort level. After each session, there is a 15-min review with trainee and supervisor. The initial sessions demonstrate the use of common psychotherapy factors (e.g. hope, working alliance, positive expectation etc.) (Feinstein et al. 2015) as well as demonstrate uses of some basic psychotherapy interventions (Yager and Feinstein 2017). In addition, supervisors' model and discuss how to: (1) develop a therapeutic alliance; (2) reinforce the therapeutic contract (frequency, times of sessions, finances, etc.); (3) make a preliminary diagnosis, identify a core problem, and describe the dysfunctional patterns; (4) negotiate consensus treatment goals; (5) co-create the case formulation with the patient; (6) introduce outcome measures (7) model the transition from intake to the initiation of psychotherapy. Supervisors verbalize their clinical reasoning, reveal their emotional reactions, and describe their efforts to develop the working alliance, case formulation etc. The supervisor and trainee discuss their reactions to each other and the patient, their understanding of symptoms, problems, themes, and the processes and flow of psychotherapy. Trainees are encouraged to question, discuss, and reflect on the effectiveness of the strategies, tactics, and interventions used.

# **Working Through**

During this second phase (typically one-third of sessions), the trainee leads all sessions with the supervisor present. The trainee focuses on solidifying the alliance and staying attuned to consensus goals. Trainees often intervene with the techniques common to all forms of psychotherapy, but will also incorporate the interventions associated with the specific kind of treatment (e.g. CBT). Supervisors listen, but also offer well-timed, tactful, real-time feedback and coaching of the trainee during sessions. Supervisors may redirect the path of a session, model the use of a specific strategy, tactic, or intervention, or simply assist at difficult points in a session. The most difficult issue for supervisors, is giving targeted feedback. Supervisors also need to allow trainees to make mistakes and most importantly refrain from taking over the sessions. After each 45-min session, trainees and supervisors have 15 min to discuss the session. Supervisors may utilize role-playing to help the trainee rehearse,

or practice alternative approaches, when one didn't work in session. Supervisors need to scaffold their teaching to the trainee's level and relevant emerging in-session issues. Socratic questioning is used to deepen the resident's understanding of psychotherapy. In this middle phase, the supervisor and trainee discuss, utilize, and manage the many possible reactions, when three people are engaged in a psychotherapy session. Transference and countertransference reactions often includes discussion of the patient's, trainee's and supervisors' reactions to each other. In our experience, patients often perceive the co-therapists as parents, which often reveals quickly both paternal and maternal transference and related countertransference as well as hidden complex family dynamics. Between sessions, trainee's use written reflections to help them hone their skills.

# **Termination Phase**

During the final termination phase (typically one-third of sessions), the trainee conducts all the sessions on their own. Trainees have the option of asking the faculty to be silently present for all sessions, or can have faculty continue to remotely observe the session. The residents can also choose to record the sessions for asynchronous reviews with the supervisor. Supervisor continues to scaffold teaching, while encouraging the trainee's reflection about the process. Supervisors support and embolden their trainees to experiment with use of their language, empathy, and to practice different strategies, tactics, and interventions.

In this phase, trainees continue their focus on resolving the identified symptoms or problems. They discuss with their patient the successes and growth that has occurred. They reviewing the results of the outcome measures used. They also discuss new or unresolved issues that may require ongoing treatment. Trainees facilitate the patient's internalization of the therapist's viewpoints or problem-solving approaches. They help patients manage the sadness, anxiety, anger, or gratitude, often accompanying termination. Trainees often have to deal with termination issues, such as: (1) re-emergence of patient symptoms that seemed resolved; (2) the patient's flight into health ("I don't need any more psychotherapy"), brought on by the patient's attempt to deal with the impending separation; (3) making recommendations for the next steps; and (4) developing a relapse-prevention plan. The trainee, patient, and supervisor share feedback with each other.

# **Barrier to Implementation & Some Solutions**

There are some barriers to the implementation of cognitive apprenticeship supervision that will vary by program.



# **Theoretical Objections**

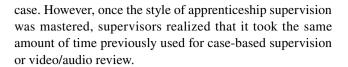
Some psychodynamic supervisors, were initially concerned that the transference and countertransference would be disturbed or obscured or that having two therapists, doing individual psychotherapy with one patient, might encourage patient splitting. Those supervisors willing to engaging in this process, were surprised to find that regardless of gender, supervisors were often seen as "father" in the transference and that the trainees, also regardless of gender, were typically viewed as "maternal." The corresponding countertransference's of the patient were clear and in evidence. Subsequently, supervisors reported the patient's transferences were readily observable and useful for elucidating the patient's internal representations, and often led to discussion of the patient's family dynamics. Families, couples, and group supervisors, used to serving as co-therapists, predictably adapted to this form of supervision most easily.

# **Availability of Supervisors**

Psychology and social work graduate schools have commented that psychotherapy training in their graduate programs have been externalized to community providers because the academics at these programs have stopped clinical practice in favor of research and teaching. This can be managed by having community providers join sessions at their trainee's clinical site. Recently, novel experiences using virtual technology (Zoom, Google Hangouts, etc.) during COvid-19 have offered a new solution. Community providers, trainees, and patients can all be in the same virtual room. The author has piloted this with great success. This virtual approach has enabled trainees to join from the diverse training locations, enabled community providers to stay in their private offices, and allowed patient selection to come from diverse clinics. All participants needed some time to adapt to the technology and the virtual environment. They all quickly appreciated the convenience, elimination of travel time and parking hassles. This technological pivot required discussions about the pros and cons of virtual technology, and dealing with operational issues such as: obtaining forms and informed consent virtually; securing patient confidentiality in their own homes; and obtaining malpractice coverage for tele-mental health. Inasmuch as it looks like tele-mental health is here to stay, this virtual approach could become a viable long-term alternative to supervisors having to be present with the trainee and patient.

#### Time

Since most programs require one-hour of weekly supervision for each case, there were fears that apprenticeship supervision would take more time. During start up, this was the



#### Resources

Some additional supervisor training and orientation to the cognitive apprentice model of supervision is required. We re-allocated existing supervisor training to training supervisor in this model. We also offered two annual half-day supervisor retreats for training. These trainings, with offers of CMEs and CEUs for those attending, were well received.

# **Experiences with Cognitive Apprenticeship Role of Psychotherapy Supervision**

# **Patient's Experiences**

In a group of approximately 100 of the author's cases, patients overwhelmingly expressed their interest and gratitude for the apprenticeship style of psychotherapy sessions. Many patients initially described it as "being weird," but enjoyed the attention from two therapists, learning some things about the psychotherapy process, participating in the supervisee's training, and the opportunities to give direct feedback to both therapists. About 1/3 of the 100 patients successfully completed the brief treatment; while 2/3 continued on in psychotherapy with their trainee. About 70% eventually met their psychotherapy goals.

# **Trainee's Experiences**

Trainees were apprehensive about beginning apprenticeship supervision. There were some initial complaints and logistics difficulties of arranging appointments with three people and some hassles using the technology. Trainees were aware they would be closely watched and fearful they might be exposed or criticized in front of a patient. Those feelings attenuated, at different rates, depending on the trainee's level and confidence, and the supervisor's ability to successfully adapt to this model. Eventually, most trainees felt comfortable with the process. Trainees described the live coaching, during the sessions, as the most powerful, effective, and memorable learning. They appreciated that in-session coaching was judiciously applied. Trainees felt they enjoyed and benefited from the role-playing and rehearsals during the post-session supervision periods. Many trainees commented that seeing a supervisor work was a unique learning experience, reducing their idealization of supervisors, and helping them to develop a more realistic vision of what actually happens in psychotherapy.



Most trainees realized that supervisors make "mistakes" and more generally that making mistakes is inevitable. Trainees grasped that mistakes in timing and techniques were easily forgiven, but that mistakes of the heart, much less so. They recognized that the repair, after you make a mistake, was often more important than the mistake itself. Many trainees felt and that patient observing them make mistakes often allowed patients to be less judgmental about their own mistakes. A surprisingly large number of trainees said these apprenticeship experiences really convinced them that psychotherapy worked. Many felt these experiences were the highlight of their training.

# Supervisor's Experiences

Faculty were, in general, the most difficult to recruit. Many expressed they were not experienced enough to do this, or had fears that their own capabilities were insufficient to the task, or that they would be exposed and judged and lose the resident's esteem. However, once a small group of supervisors (approximately 33%) tried the process, almost all felt it was an enriched psychotherapy training and supervisory experience. Group and family/couple psychotherapist, and faculty relatively new to becoming supervisors, were the most interested in continuing apprenticeship supervision. They reported it pushed them to be better supervisors. They enjoyed the challenges of live supervision, the role-playing interactions with their trainees, and the direct feedback they could give and receive about doing psychotherapy. Most commented that the six specific tools of supervision had not previously been described or used by them. They reported having the apprenticeship structure and using the six tools, was very valuable and offered an easy and convenient supervisory framework for their teaching.

# Conclusion

This paper reviews the cognitive apprenticeship framework as applied to psychotherapy training and supervision. The paper illustrates the four core concepts of the model, practical ideas about implementation, and reflections on the process. Readers are encouraged to utilizes these processes and determine for themselves whether these ideas are useful for psychotherapy training and supervision.

# Compliance with Ethical Standards

**Conflict of interest** The authors does not have any conflicts of interest nor anything to disclose.

#### References

- Aronson, L. (2011). Twelve tips for teaching reflection at all levels of medical education. *Medical Teacher*, 33(3), 200–205.
- Beitman, B., & Yue, D. (2004). Learning psychotherapy: A time-efficient, research-based, and outcome-measured psychotherapy training program. New York: W.W. Norton.
- Cabaniss, D. L., Arbuckle, M. R., & Moga, D. E. (2014). Using learning objectives for psychotherapy supervision. *American Journal of Psychotherapy*, 68(2), 163–176.
- Cliffe, T., Beinart, H., & Cooper, M. (2016). Development and validation of a short version of the supervisory relationship questionnaire. *Clinical Psychology and Psychotherapy*, 23(1), 77–86.
- Collins, A. (2006). Cognitive apprenticeship. In S. Ed & R. Keith (Eds.), *The Cambridge handbook of the learning science* (pp. 47–600). New York, NY: Cambridge University Press.
- Colomer, J., Serra, L., Cañabate, D., & Serra, T. (2018). Evaluating knowledge and assessment-centered reflective-based learning approaches. Sustainability, 10(9), 3122.
- Cruess, R. L., Cruess, S. R., & Steinert, Y. (2018). Medicine as a community of practice: Implications for medical education. *Academic Medicine*, 93(2), 185–191.
- Feinstein, M. (2017). Health coaching. In R. E. Feinstein, J. V. Connelly, & M. Feinstein (Eds.), *Integrated behavioral health and primary care* (pp. 459–496). Oxford: Oxford University Press.
- Feinstein, R. E., Heiman, N., & Yager, J. (2015). Common factors affecting psychotherapy outcomes: Some implications for teaching psychotherapy. *Journal of Psychiatric Practice*, 21(3), 180–189.
- Feinstein, R. E., Huhn, R., & Yager, J. (2015). Apprenticeship model of psychotherapy training and supervision: Utilizing six tools of experiential learning. *Academic Psychiatry*, 39(5), 585–589.
- Feinstein, R. E., & Yager, J. (2013). Advanced psychotherapy training: Psychotherapy scholars' track, and the apprenticeship model. *Academic Psychiatry*, 4, 248–253.
- Fragkos, K. C. (2016). Reflective practice in healthcare education: An umbrella review. *Education Sciences*, 6(3), 27.
- Harris, J. E., Kelley, L. J., Campbell, E. L., & Hammond, E. S. (2014). Key strategies training for individual psychotherapy: An introduction to multitheoretical practice. *Journal of Psychotherapy Integration*, 24(2), 138.
- Herschell, A. D., Kolko, D. J., Baumann, B. L., & Davis, A. C. (2010). The role of therapist training in the implementation of psychosocial treatments: A review and critique with recommendations. Clinical Psychology Review, 30(4), 448–466.
- Hoadley, C. (2012). 12 What is a community of practice and how can we support it?. Theoretical Foundations of Learning Environments, 286.
- Kolb, A. Y., & Kolb, D. A. (2009). Experiential learning theory: A dynamic, holistic approach to management learning, education and development. The SAGE Handbook of Management Learning, Education and Development, 42, 68.
- Kovach, J. G., Dubin, W. R., & Combs, C. J. (2015). Use and characterization of personal psychotherapy by psychiatry residents. Academic Psychiatry, 39(1), 99–103.
- Lambert, M. J. (2017). Maximizing psychotherapy outcome beyond evidence-based medicine. *Psychotherapy and Psychosomatics*, 86(2), 80–89.
- Lyons, K., McLaughlin, J. E., Khanova, J., & Roth, M. T. (2017). Cognitive apprenticeship in health sciences education: A qualitative review. Advances in Health Sciences Education, 22(3), 723–739.
- McGowen, K. R., Miller, M. N., Floyd, M., Miller, B., & Coyle, B. (2009). Insights about psychotherapy training and curricular sequencing: Portal of discovery. *Academic Psychiatry*, 33(1), 67–70.



- McLoughlin, C., Patel, K. D., O'Callaghan, T., & Reeves, S. (2018). The use of virtual communities of practice to improve interprofessional collaboration and education: Findings from an integrated review. *Journal of Interprofessional Care*, 32(2), 136–142.
- Moon, J. A. (2004). A handbook of reflective and experiential learning: Theory and practice. New York: Routledge.
- Norcross, J. C., & Lambert, M. J. (2018). Psychotherapy relationships that work III. *Psychotherapy*, 55(4), 303.
- O'Brien, B. C., & Battista, A. (2020). Situated learning theory in health professions education research: A scoping review. *Advances in Health Sciences Education*, 25(2), 483–509.
- Pagano, J., Kyle, B. N., Johnson, T. L., & Saeed, S. A. (2017). Training psychiatry residents in psychotherapy: The role of manualized treatments. *Psychiatric Quarterly*, 88(2), 285–294.
- Patton, M. J. (1992). The supervisory working alliance inventory: A validity study. Accessed July 2020, from https://files.eric.ed.gov/ fulltext/ED360358.pdf
- Rangachari, D., Brown, L. E., Kern, D. E., & Melia, M. T. (2017). Clinical coaching: Evolving the apprenticeship model for modern house staff. *Medical Teacher*, 39(7), 780–782.
- Saedon, H., Salleh, S., Balakrishnan, A., Imray, C. H., & Saedon, M. (2012). The role of feedback in improving the effectiveness of workplace-based assessments: A systematic review. *BMC Medical Education*, 12(1), 25. https://doi.org/10.1186/1472-6920-12-25.
- Stalmeijer, R. E. (2015). When I say cognitive apprenticeship. *Medical Education*, 4(49), 355–356.
- Stalmeijer, R. E., Dolmans, D. H., Snellen-Balendong, H. A., van Santen-Hoeufft, M., Wolfhagen, I. H., & Scherpbier, A. J. (2013).

- Clinical teaching based on principles of cognitive apprenticeship: Views of experienced clinical teachers. *Academic Medicine*, 88(6), 861–865.
- Stalmeijer, R. E., Dolmas, D. H., Wolfhagen, I. H., & Scherbier, A. J. (2009). Cognitive apprenticeship in clinical practice: Can it stimulate learning in the opinion of students? Advances in Health Science Education, 14(4), 535–546.
- Watkins, C. E., Jr. (2010). Psychoanalytic constructs in psychotherapy supervision. American Journal of Psychotherapy, 64(4), 393–416.
- Watkins, C. E., Jr., & Callahan, J. L. (2019). Psychotherapy supervision research model; A status report and proposed model. In S. G. De Golia & K. M. Corcoran (Eds.), Supervision in psychiatric practice: Practical approaches across venues and providers (pp. 25–36). Washington, DC: American Psychiatric Publishing.
- Weerasekera, P. (2020). McMaster University. Psychotherapy Traininge-Resources (PTer). Accessed Sept 15, 2020, from http://pter.mcmaster.ca/
- Yager, J., & Feinstein, R. E. (2017). Tools for practical psychotherapy: A transtheoretical collection (or interventions which have, at least, worked for us). *Journal of Psychiatric Practice*, 23(1), 60–77.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

