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RATIONALE FOR A NEW MEASURE OF COMPETENCE IN THERAPY

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Abstract. Therapy process research has made surprisingly little headway during the past 25 years, which has been attributed to a range of methodological and conceptual problems. As a result, appeals have been made for fresh approaches to psychotherapy process research. Here we provide an experiential learning model as one promising way to crystallize conceptualizations of competence in therapy and to advance research. The model provides an integrative account of the moderators and mediators believed to explain the way that therapy achieves its outcomes. Its breadth takes it beyond the scope of its closest rival, the assimilation model. By way of illustration, the theoretical components of the experiential metaphor were operationalized and mapped onto an existing competence scale, the Cognitive Therapy Scale.

Keywords: Therapy process research, experiential model, competence, moderators, mediators.

Introduction

Therapy process research is the study of interaction between patient and therapist systems. The goal of this research is to identify the process of change in the interaction between

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these two systems (Greenberg & Pinsof, 1986). In experimental terms, the task is to establish the functional relationship between therapy (the independent variable) and its clinical outcomes (the dependent variables). These outcomes are also influenced by other variables, which can be classed as ''moderators'' and ''mediators'' (Shadish & Sweeney, 1991). A moderator affects the direction or strength of the relation between independent and dependent variables (e.g., the therapist's level of experience or the patient's ''psychological mindedness''), while a mediator is the mechanism through which the therapy is able to affect the various outcomes (e.g., the therapeutic orientation or ''alliance''). Shadish and Sweeney (1991) point out that moderators and mediators are often referred to collectively as ''therapy process''.

Unfortunately, therapy process research is not yet in a position to identify the key variables in therapy, as there remains considerable conceptual and methodological disarray (Greenberg & Newman, 1996; Shapiro, 1995). What might improve matters? One view is that a systematic and pan-theoretical approach is required, so as to identify the variables that are most significant in explaining therapy-process interactions (Beutler, 1990; Ward, Troop, Todd, & Treasure, 1996). A useful device for this is an appropriate metaphor, as this can enable researchers and clinicians to formulate and communicate complex ideas more effectively (Leary, 1990).

There has been disapproval of metaphors in psychological research, derived from the positivistic penchant for observable and manipulable phenomena. However, metaphors often underlie even the most rigorous examples of research, and so it may be best to be explicit about their role (Leary, 1990; Nevin, 1996). In psychotherapy process research, a case in point is the drug metaphor (Stiles, 1994; Stiles & Shapiro, 1989, 1994), which implicitly subscribes to the view that competent therapy consists of ''active ingredients'' (techniques such as interpretation, confrontation, or evaluation of clients' cognitions), together with a variety of non-specific factors (e.g., empathy and warmth), which act as ''fillers'' and ''flavours''. It is derived broadly from a medical model, in particular a pharmacological perspective.

Stiles and colleagues (1990), unhappy with the drug metaphor, propose that it be replaced by one based on the Piagetian notion of ''assimilation''. This metaphor provides an integrative account of the core part of therapy, namely the way patients deal with their problematic experiences by ''assimilating'' them into their existing schemata, through the process of therapy. By comparison, as described by Piaget, ''accommodation'' entails a change in the schemata themselves, so that new experiences can be assimilated. Stiles et al. (1990) propose that the process of assimilation and accommodation occur simultaneously and inseparably during effective therapy. The assimilation model is in fact an assimilation and accommodation metaphor, or a ''developmental stages'' construction, in contrast with the medical one implied by the drug metaphor.

While the assimilation model is an improvement on previous metaphors, its constructs remain rather abstract. Hence, the present authors think that an exposition of the processes underlying assimilation and accommodation would further facilitate our understanding of effective therapy. To this end, we looked both within and outside the therapy process research field to determine an appropriate metaphor of change that would capture the mediating features. Ultimately, the model that seemed most attractive, in that its relevance to the process of therapy was immediately apparent, was the experiential learning cycle (Kolb, 1984).

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The Experiential Learning model

Kolb summarized a model of ''learning by experience'' that drew upon the work of various developmental psychologists, most notably Piaget. Here the process of learning is seen as one of resolving conflicts between diametrically opposed modes of adapting to the world. One of these conflicts is between concrete experience and abstract thought (or ''apprehension'' and ''comprehension''). The other is between reflection and action (or ''prehension'' and ''transformation''). It is Kolb's contention that individuals need all four different kinds of abilities if they are to be effective:

> They must be able to involve themselves fully, openly and without bias in new experience, . . . be able to reflect on and observe their experiences from many perspectives, . . . be able to create concepts that integrate their observations into logically sound theories, . . . and . . . be able to use these theories to make decisions and solve problems. . . . Integration of conflicts among the adaptive modes is the hallmark of true creativity and growth (p. 30)

It follows that individuals in whom one or other of the basic learning modes is either substantially suppressed or extremely dominant will fail to learn effectively and, in some way, fail to adapt successfully to the world. For example, in therapy, patients are frequently unable to ''involve themselves, fully, openly, and without bias'' in the reality of their experience because they ''over-conceptualize'', generating and maintaining inaccurate beliefs about themselves, other people or the world at large, through the process of assimilation. By contrast, in effective therapy patients will tend to reflect on their situation, engage in new experiences (including behaving in alternative ways), engage in problem solving and coping strategies, and finally develop alternative theories and concepts of their world. The information within this system will flow continuously around the cycle interactively, and true accommodation will occur when the information processed leads to a new construction of the world.

This metaphor requires us to examine those techniques that help move the patient through the four elements of the cycle: in general terms, how can therapists facilitate experiential learning? How do they aid reflection? How might they promote problem-solving? How should one help people to revise and construct their concepts? Beyond its initial attractiveness, the model of experiential learning also appears worthy of further articulation within the therapeutic setting because it focuses on the learner and so emphasizes the outcomes of therapy for the patient (i.e., what is learned). Our task was then to build into the model those key abilities on the part of the therapist that assist the patient to move through the learning cycle in such a way as to reflect the relationships between these abilities. By doing this we could define competence empirically, as advocated by Waltz, Addis, Coerner and Jacobson (1993). Competence is normally defined as the ability to apply knowledge, understanding and skills to the standards that are required in employment (Training Agency Group, 1988; Beaumont, 1995). Waltz et al. (1993) stressed that the evaluation of competence should subsume adherence to a therapy protocol as well as clinical proficiency (skill).

The experiential model representing the relationship between therapist competence and change in the patient is shown in Figure 1, set out as a circumplex. A circumplex model includes codeable types of interpersonal behaviour set out around a circle, each type classified in sectors in order to represent fundamental dimensions of the given relationships,

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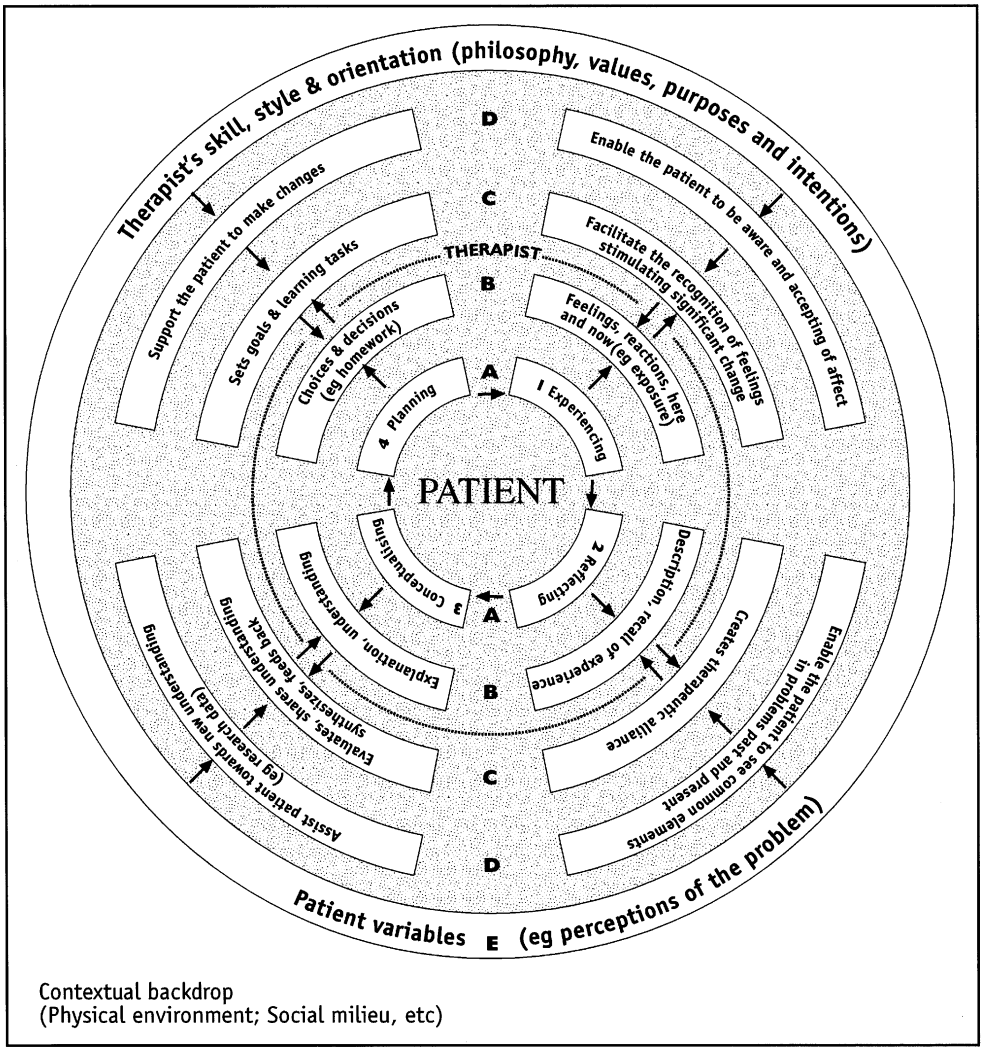


Figure 1. The experiential learning model of therapy process, as applied to Cognitive Therapy

leading to a taxonomy of key behaviours and to predictions about the respective impacts (Kiesler, 1983). In the present example, the patient is located at the centre of the model, and is enabled to learn by moving through the four learning modes described by Kolb (1984): experiencing, reflecting, conceptualizing and planning. This movement is shown as sequential (clock-wise) in the model, but, in reality, patient change may result from movement backwards or across the model. The four learning modes are represented by using ring A of Figure 1.

At any moment in time (pre, mid, post-treatment) these modes will be interacting and determining the patient's current status. For example, consider a patient suffering from panic disorder prior to treatment: typically there will be an overwhelming sense of fear and an

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awareness of uncomfortable physical sensations (*experiencing*); the sensations will be misinterpreted catastrophically (*reflecting*). The symptoms will often be perceived as a sign of illness (perhaps an impending heart attack: *conceptualizing*); leading to avoidance behaviours that will reinforce this view (*planning*). Further self-assessment information will reinforce the judgement of weakness and vulnerability (*reflection and conceptualization*), and so on. Effective treatment of this person will entail interventions addressing these four modes. For example, it will involve the patient in learning to tolerate the feelings (i.e., the fear, pounding heart, etc. *experiencing*), to reappraise symptoms (*reflection*) and arrive at a more realistic understanding of them (*conceptualizing*). It will also require that the patient gathers unbiased information regarding triggers (reflecting) and further revises self-understanding (conceptualization). Finally, the patient will have to be prepared to engage in behavioural tests to consolidate new beliefs (planning and experiencing). The importance of the modes will vary, depending on such factors as the problem type (e.g., more experiencing for anxiety disorders), the therapeutic experience and the phase of therapy. These four modes of experiential learning are now detailed.

Mode 1: Experiencing

Experiencing involves patients in learning to be more aware and expressive of their physical sensations, emotions and thoughts. The therapist's role is to help create the conditions that will facilitate awareness, differentiation and expression, in order to enable patients to recognize their feelings and the content in which they occur, that is events and accompanying cognitions (e.g., thoughts and feelings records). Recent research in cognitive therapy has indicated the importance of this mode (Castonguay, Goldfried, Raue, Wier, & Hayes, 1996).

Mode 2: Reflecting

In this mode, patients are engaged in recalling and describing their experiences. The therapist listens actively and uses careful questioning and sensitive feedback in order to facilitate fresh understanding and to enable the patient to make connections among apparently disparate experiences.

Mode 3: Conceptualizing

Conceptualizing involves patients in developing objectivity about their experiences and having a more accurate, deeper or perceptive understanding of their problem, which might lead to new understanding and to synthesis. The therapist provides accessible theoretical ideas to help inform the patient's thinking, gives feedback and facilitates re-evaluation in order to help the patient to make fresh sense of the situation (e.g., educating the patient about the physiological basis of panic).

Mode 4: Planning

In cognitive behavioural therapy, therapist and patient choose and plan actions to break dysfunctional habits, test out new hypotheses and develop coping abilities. The therapist

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also enables the setting of goals and selection of tasks designed to test out beliefs and make manageable changes (e.g., ''homework'' assignments: Blackburn & Twaddle, 1996).

Ring B in Figure 1 shows some of the key activities in which patients engage as they move round the learning cycle. Ring C identifies activities undertaken by the therapist to support the patient's engagement. Ring D indicates the therapist's goals in each quadrant of activity, and ring E acknowledges that all aspects of the therapist's behaviours are rooted in his/her professional competence, style and orientation. Of particular interest to therapy process research is the interface between rings B and C — the many and diverse ways in which therapist and patient influence each other's thoughts, feelings and actions through the therapeutic relationship. The processes vary with the stages or modes in the learning cycle. Of course, the entire interaction between patient and therapist takes place within the context set by a multitude of variables, such as the physical setting, the personalities of the participants, the institutional milieu within which their interaction takes place, and so on.

None of these categories are new in themselves. Emotional experiencing, recalling experiences, reformulating and taking action are all regarded as valid and integral parts of patients' engagement with therapy, labelled in terms appropriate to the chosen school of thought. What is original in the present model is the way in which these elements are combined into a nested hierarchy of processes (the circumplex) that are drawn from a well-established theory of learning, and which are articulated in terms amenable to empirical verification. This kind of emphasis recognizes circular causality and the combined effects of patterns of variables within a context (e.g., no assumption is required of a 1:1 correspondence between patient change processes and therapist activities). This conception has been articulated before (e.g., Greenberg, 1986), but not yet thoroughly operationalized nor evaluated in therapy (Shoham-Salomon, 1990). Key notions are therefore how a patient ''transforms'' experience and ''transacts'' with the environment (the therapist and the patient's personal world) in order to learn and change (or to ''assimilate'' and ''accommodate'').

Operationalisation of the experiential learning model: the example of cognitive therapy

If this metaphor is valid, one would expect that those patients who are able to move round the cycle easily will perform best in therapy. Such a prediction is open to falsification by assessing the construct validity of the model against existing scales of patient suitability for psychotherapy. For example, the learning cycle could be compared with the items of the Suitability for Short-Term CT Rating Form (SST CTRF: Safran & Segal, 1990). This is a clinically derived 10-item scale (ability to access thoughts; ability to access emotions; ability to work conceptually; ability to be focused; accept responsibility for change; display optimism; therapeutic alliance in-session; therapeutic alliance out-of-session; absence of security operations; low chronicity), which is positively related to outcome.

As can be seen from Table 1, four of the SST CTRF items map on to the items of the learning cycle (level 'A' of the circumplex), while most of the remainder are to do with the therapeutic alliance (the transition phase between 'B & C' of the circumplex). The penultimate item ''absence of security operations'' is an interesting feature as it represents the presence of dysfunctional patient styles that are likely to disrupt therapy. In terms of the learning cycle, these might manifest themselves as an exaggerated tendency to over-intellectualize (over-reflect) or become aggressive (over-experience), or to behaviourally withdraw

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Table 1. Overlap between the experiential learning model and a measure of the patient's suitability for cognitive therapy (SSCTRF: Saffran & Segal, 1990)

Experiential learning cycle	SSCTRF item	Circumplex level
Experiencing	Emotional expression — ability to express feelings and engage in arousing experiences	A
Conceptualizing	Work in conceptualization — ability to operate with cognitive therapy model	A
Reflecting	Work with thoughts	A
	Access of thoughts	
Planning	Ability to be focused and goal orientated	A
Promoting movement through cycle	Therapeutic alliance in/out of session	}
	Optimism	}
	Responsibility for change	} B/C
	Security operations	} transitions
	Chronicity	}

(avoiding experiencing), etc. The tenth item is chronicity, which suggests that lack of practice moving round the cycle is associated with poor outcome (i.e., individuals may become stuck within a specific mode and, over time, find it increasingly difficult to move to new modes).

The experiential learning metaphor implies a reconstruction or adaptation of the 13-item Cognitive Therapy Scale (CTS – Young & Beck, 1988), which is widely used for measuring therapist competence in Cognitive Therapy. The original scale (Young & Beck, 1980) identified 11 activities, later extended to 13, that a therapist must undertake to facilitate patient change. Each of these features is assessed in terms of a six-point rating system. The scale is in three parts: 1. General interview procedure; 2. Interpersonal effectiveness; and 3. Specific cognitive/behavioural techniques. The third part assesses skill and adherence in items specifically associated with cognitive therapy, while the prior two address more general, pan-theoretical therapeutic skills that provide the necessary environment to promote effective change. Discussion between the authors and expert cognitive therapists regarding the overlap between the CTS and the experiential learning model suggest that, with re-wording, most of the CTS items would capture the essence of all four experiential learning modes. However, it was noted that the CTS does not adequately recognize emotional expression as a necessity during therapy. Therefore, in order to adapt the scale successfully one new item (No. 7) was added to account more fully for the ''experiencing'' mode; the newly devised item was termed ''facilitation of emotional expression''. This refers to the therapist's ability to encourage patients to express feelings and to enable the patient to develop a heightened awareness of affect.

In addition, to capture the complex nature of therapeutic competence, a need was identified to operationalize an interpersonal skill that we called ''charisma/flair''. Charisma is a form of power and is based on personal authority, characterized ultimately by the ability of the therapist to encourage and inspire the patients' involvement (Bryman, 1992; Halpert,

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Table 2. The Cognitive Therapy Scale (Revised) (CTS-R) and the Experiential Learning Model

CTS-R item	Changes made to CTS and main experiential learning mode
General interview procedure	
1. Agenda setting	1. No change; Planning
2. Eliciting feedback	2. No change; Reflecting
3. Collaboration	3. No change; Experiencing
4. Pacing and efficient use of time	4. No change; Planning
Interpersonal effectiveness	
5. Interpersonal effectiveness	5. Interpersonal Effectiveness; Experiencing
6. Facilitation of emotional expression	6. New item; Experiencing
7. Charisma/flair	7. New item; Experiencing
Specific cognitive-behavioural techniques	
8. Guided discovery	8. No change; Conceptualizing
9. Conceptualization	9. No change; Conceptualizing
10. Identifying key cognitions	10. No change; Reflecting
11. Application of cognitive techniques	11. No change; Experiencing
12. Application of behavioural techniques	12. No change; Experiencing
13. Use of home-work	13. No change; Planning
14. Therapist's non-verbal behaviour	14. New item: general facilitation of movement round the experiential cycle

1990). Flair is the natural aptitude or ''nose'' for what is effective, in terms of the choice of therapeutic methods and style. In terms of the therapy process literature, the charisma and flair factor (CFF) is perhaps closest to the notion of a facilitating ''relationship attitude'', as outlined by Lambert (1989). In terms of our model (Figure 1), the CFF belongs in the outer ring as an aspect of the therapist's general style. Therefore, two items from the Interpersonal Effectiveness Section, ''empathic skills'' and ''professionalism'' from the original CTS were modified. Our experience indicated that the item termed ''professionalism'' did not differentiate therapists and could therefore be dropped, while ''empathic skills'' could be subsumed under the existing item ''interpersonal effectiveness''. Table 2 indicates how the items of the CTS and of the CTS-R incorporate all four modes of the experiential learning cycle. Further details of the changes to the CTS are reported in a related paper (Blackburn et al., 1999).

Scaling

By defining competence in this way, the CTS-R is intended to assess the effectiveness of key therapist activities in cognitive therapy. How the therapist achieves this impact is not tightly prescribed in the original CTS. Therefore, further structural revision of the CTS was undertaken in order to improve both the clarity and the scoring procedure. For example, in terms of assessing the skilfulness of the therapist in adhering to the model, we adopted the Dreyfus (1989) five level distinction, altering the definitions slightly to be most relevant for therapy process research and extending the scale to take account of incompetence. The

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Table 3. The adapted competence scale for assessing the therapist's skilfulness (Dreyfus, 1989).

Level 0:	Incompetent — The therapist commits errors and displays poor and unacceptable behaviour, leading to negative therapeutic consequences.
Level 1:	Novice — At this level the therapist displays a rigid adherence to taught rules and is unable to take account of situational factors. He/she is not yet showing any discretionary judgement.
Level 2:	Advanced beginner — The therapist treats all aspects of the task separately and gives equal importance to them. There is evidence of situational perspective and discretionary judgement.
Level 3:	Competent — The therapist is able to see the tasks linked within a conceptual framework. He/she makes plans within this framework and uses stabilized and routinized procedures.
Level 4:	Proficient — The therapist sees the patient's problems holistically, prioritizes tasks and is able to make quick decisions. The therapist is clearly skilled and able.
Level 5:	Expert — The therapist no longer uses rules, guidelines or maxims. He/she has deep tacit understanding of the issues and is able to use novel problem-solving techniques. The skills are demonstrated even in the face of difficulties (e.g., excessive avoidance).

resulting six levels are ''incompetent'', ''novice'', ''advanced beginner'', ''competent'', ''proficient'' and ''expert''. These levels are set out with their definitions in Table 3. A further refinement was to define these six levels empirically, by adding a reference to the impact obtained with the patient (e.g., therapist encourages goal-setting and patient engages in collaborative goal-setting).

The 14 items of the CTS-R are therefore rested on a uni-dimensional Likert Scale, ranging from 0–5 according to the scale in Table 3, each level being defined in detail to conform to the six levels of competence. It should be noted that Table 3 merely summarizes the Dreyfus (1989) scale. The definitions provided in Table 3 require careful operationalization so that inter-rater reliability can be achieved. We have in fact carried out this operationalization and achieved adequate reliability levels (Blackburn et al., 1999). The total score on the 14 items represent the evaluation of the therapist's overall competence (i.e., it subsumes adherence, skilfulness and the CFF).

Discussion

In the Introduction we made the case for metaphors in psychotherapy research by noting how they can increase our understanding of complex phenomena and can help us to specify new relationships amongst key therapy variables. The experiential learning model provides an integrative account of therapy process research in just these respects. It appears to be able to encompass the various proposals for revitalizing therapy process research within one coherent re-conceptualization. For example, the model enables therapy to be analysed in terms of its immediate effects, through what is termed brief ''interaction episodes'' or ''mini-outcomes'' (McCullough et al., 1991). This kind of functional analysis should refine our understanding of the mechanisms whereby therapeutic change is achieved. The model also incorporates explicitly the moderators and mediators of therapy (Shadish & Sweeney, 1991), defining them in terms of the experiential learning cycle (the mediator of change), nested within a circumplex (Kiesler, 1983). This model therefore recognizes that therapy

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can be effective at the level of its successful impact on the mediators of personal change (i.e., in facilitating adaptive experiential learning), as well as at the level of symptomatic change (e.g., Shadish & Sweeney, 1991). The model also emphasizes change phases (Howard, Lueger, Maling, & Martinovitch, 1993), although at the level of ''micro-phases'' (i.e., moment by moment transitions).

In particular, the experiential learning model provides a conceptually coherent account of how the therapist's responsiveness to the different learning needs of the patient can occur. The responsivity thesis argues that effective therapy takes place when therapists act on feedback from the ongoing interaction with the patient in order to be ''systematically appropriately responsive'' (Stiles & Shapiro, 1994, p.946). That is, when the patient needs to move from one phase of the experiential learning cycle to another, the therapist uses techniques sensitively (e.g., awareness raising questions) to create the necessary pressure or ''dialectic'' to enable the patient to make progress. The focus of interest thereby shifts from ingredients such as the nature and amount of different therapist techniques (e.g., monitoring automatic thoughts) to the empathy, depth or timing with which such ingredients are deployed. The responsivity model is therefore closer to a ''recipe'' approach (matching ingredients to emerging need), but differs from a recipe in that full ingredients should not be decided in advance of therapy (Stiles, 1994).

How does the assimilation model (Stiles et al., 1990) compare to our experiential learning one? In general terms, both models are attempts to transfer findings from one research field to another, and both originate from the work of Piaget and his predecessors. While the assimilation model borrows directly from Piaget's construction of personal development, the experiential learning model draws on the work of Piaget, Vygotsky and others, as integrated by Kolb (1984). This leads to some specific differences, including the assumed association in the experiential learning model between assimilation and two modes of processing (''reflecting'' and ''conceptualizing''), with the remaining two modes being necessary for accommodation (i.e., ''planning'' and ''experiencing''). Thus, unlike the assimilation model, the experiential learning model predicts that accommodation will only occur if the patient is appropriately engaged in the ''action'' phase of the cycle (by planning and experiencing). All four aspects of the experiential cycle are necessary for problem resolution.

However, the models share far more than divides them, both being psychological conceptions that have the patient's learning at heart, and both are ''content-free'' — i.e., the therapist actions that might foster patient change are not prescribed, as several methods may work equally well. Also, they both fulfil the requirements of a good metaphor in highlighting how specific elements in therapy process are related to outcome and in being amenable to observation and experiment. From the clinician's standpoint they also both indicate how best to select and structure therapy, and how to work with and modify affect. For example, Stiles et al. (1990) suggest that ''exploratory'' forms of therapy (i.e., counselling or psychodynamic methods) may be most appropriate in cases where the patient has a poorly formulated problem, while ''prescriptive'' therapies (e.g., cognitive-behavioural methods) may be most suitable where the problem is clearly formulated.

Comparison of the models suggest that they are broadly comparable on ''structural'' criteria (Warr, 1980: e.g., both have a clear focus and explicate causality), but that the experiential learning model may be preferable in terms of ''functional'' criteria (Leary, 1990), as it attempts to create more links than the assimilation model — i.e., it may have greater heuristic value. It also affords a greater coherence to the process field, resulting in

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more testable hypotheses. This is because it has the outer ''cycles'' linked in falsifiable relationships to the patient's learning (the innermost cycle). For example, the experiential learning model indicates how one might incorporate other important aspects of process, such as the therapeutic relationship cycle, which Stiles et al. (1990) were only able to allude to as ''complementary'' (p. 419).

However, the most exacting test of a model is the empirical one — does it withstand repeated attempts to falsify it? For this to occur the model first has to be operationalized. While Stiles et al. (1990) have indicated through case material how the assimilation model is thought to work, we have attempted to provide an assessment system that would allow observers to code and rate the four phases of the experiential learning cycle. By way of illustration, this was done by revising and expanding the existing CTS.

In conclusion, we believe that the experiential learning model, with its strong but largely anecdotal support from other fields of behaviour change (especially from staff training and development), can help therapy process researchers to reap more rewards in the next decade than they have done previously. It brings a fresh and promising metaphor to bear from another discipline, and provides a systematic, pan-theoretical account that has research potential, as well as a means of prioritizing research activities and of measuring therapy competencies, itself a priority (Aveline, Shapiro, Parry, & Freeman, 1995).

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