The Empirical Status of Rational Emotive Behavior Therapy (REBT) Theory & Practice

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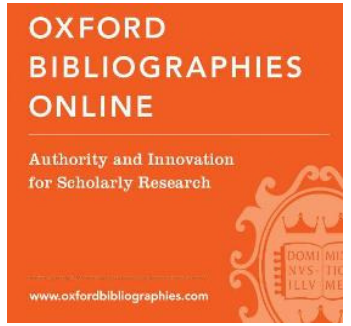
Key References & Resources

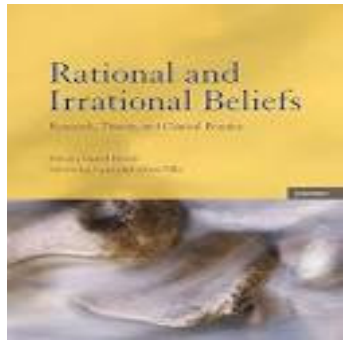
•**Acknowledgement: This synopsis is based on the following source materials:**

- David, D. (in press). Rational emotive behavior therapy. In R. L. Cautin & S. O. Lilienfeld (Eds.), *Encyclopedia of Clinical Psychology*. Hoboken, NJ: Wiley-Blackwell.
  - http://albertellis.org/rebt-in-the-context-of-modern-psychological-research/

- David, D. (forthcoming 2014). Rational emotive behavior therapy. In D. S. Dunn (Ed.), *Oxford Bibliographies in Psychology*. New York, NY: Oxford University Press.

- David, D., Lynn, S., & Ellis. A. (2010). *Rational and irrational beliefs. Implications for research, theory, and practice*. New York, NY : Oxford University Press.





Note: Complementary to the above mentioned three key references, one can also check the following review: David, D., Szentagotai, A., Kallay, E., & Macavei, B. (2005). A Synopsis of Rational Emotive Behaviour Therapy (REBT); Fundamental and Applied Research. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 3,* 175-221.

•**Additional resources**

•**International Institute for the Advanced Studies of Psychotherapy and Applied Mental Health –** http://www.psychotherapy.ro

- *Journal of Cognitive and Behavioral Psychotherapies*

•**Albert Ellis Institute** – http://www.albertellis.org

- *Journal of Rational-Emotive and Cognitive-Behavior Therapy*

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Introduction - REBT & CBT

- REBT and cognitive therapy/CT are the foundational specific CBT approaches of the architecture of the general CBT paradigm. Starting from this general CBT architecture, other various specific CBT approaches were then derived (e.g., schema therapy, etc.).

- Thus, REBT cannot be compared to CBT, because

  REBT is CBT!

- However, REBT can and should be contrasted to other specific CBT approaches (i.e., "CBT schools") such as:

  - cognitive therapy/CT;
  - schema therapy/ST;
  - dialectic and behavior therapy/DBT;
  - acceptance and commitment therapy/ACT .

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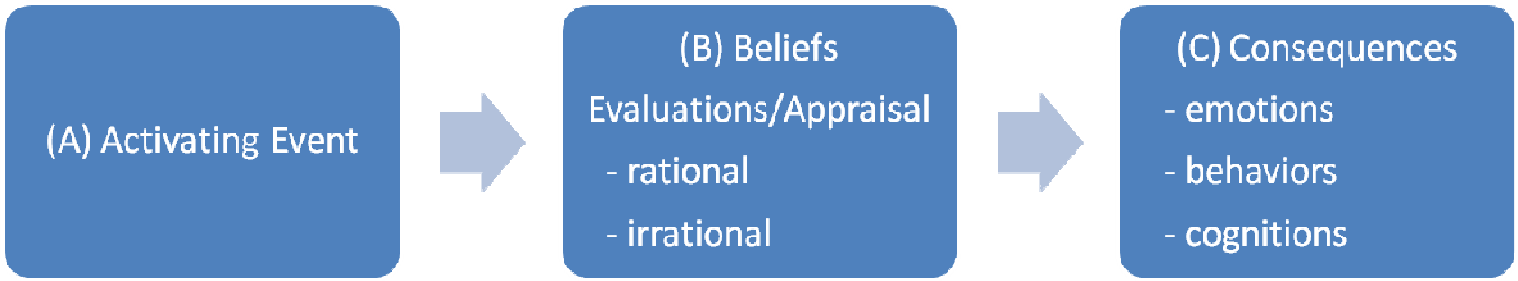
REBT Theory - Traditional ABC model of REBT (see Ellis, 1994)



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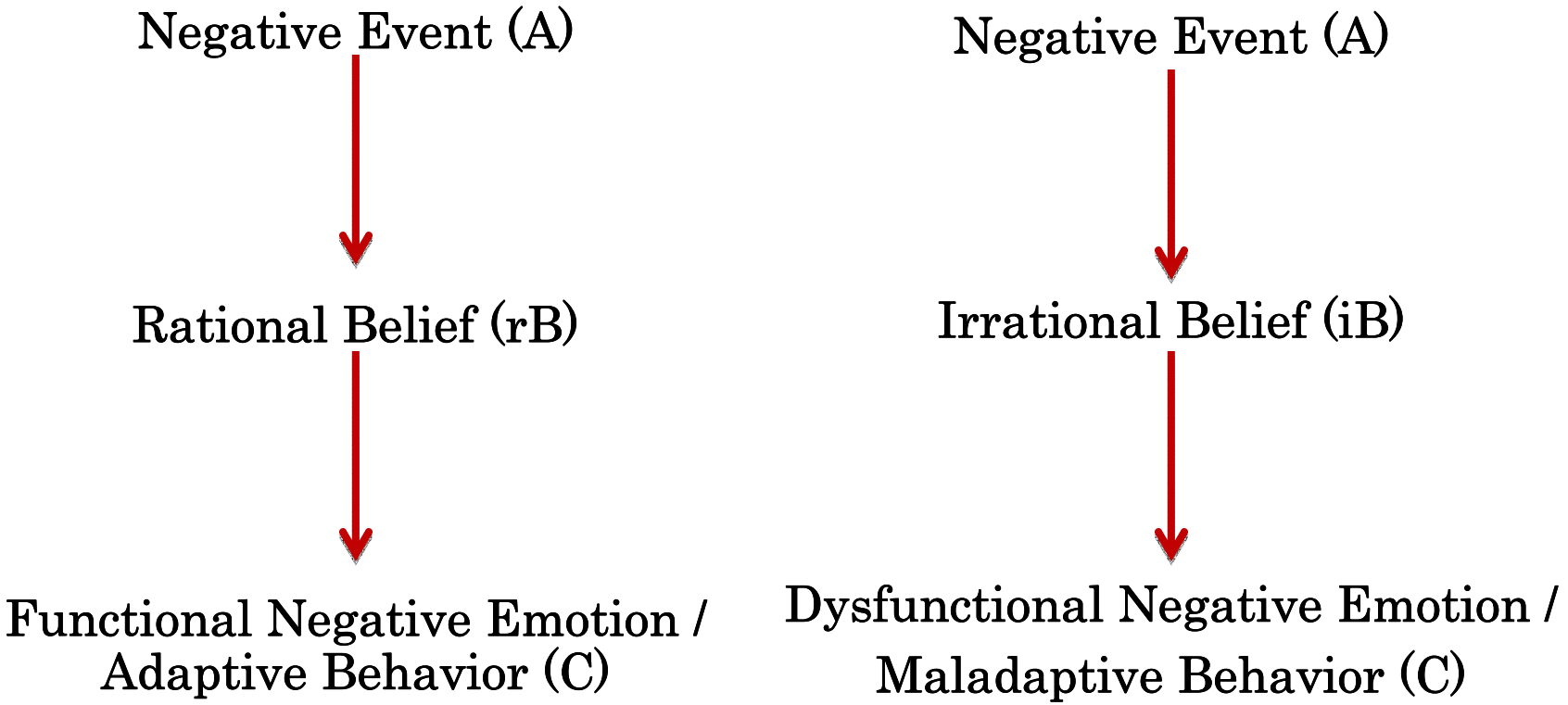
REBT Theory - Traditional ABC model
REBT continued (see Ellis, 1994)



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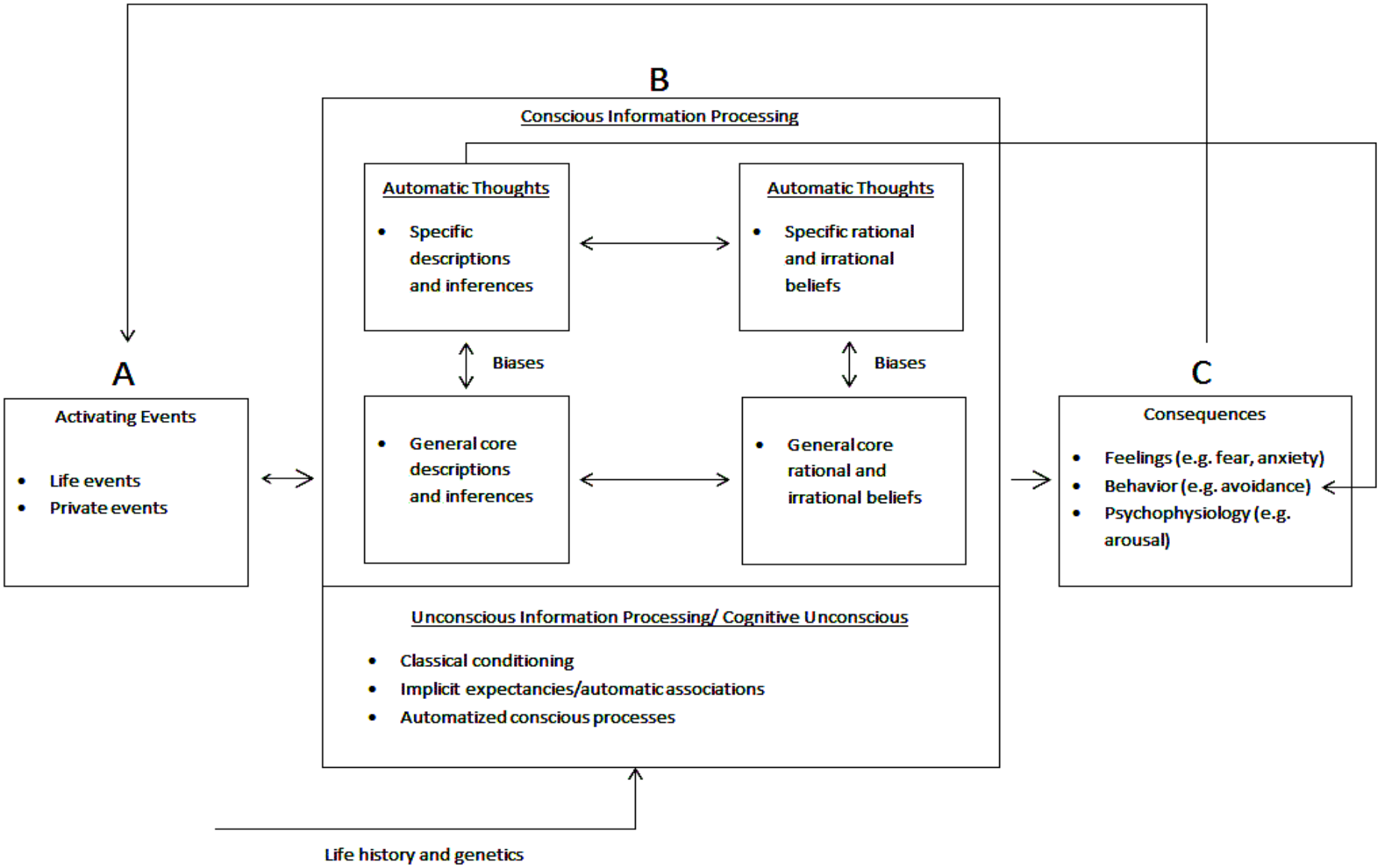
REBT Theory – An Integrative Modern ABC Model of CBT/REBT (see David, in press)



REBT Theory - Key rational (RB) & irrational beliefs (IB) (see David et al., 2010)

- Demandingness (DEM)
  - Rigid thinking
  - A core IB (i.e., irrational primary appraisal mechanism)
  - Alternative RB is PREFERENCES (i.e., flexible and accepting thinking/PRE)
- Awfulizing (AWF) / catastrophizing
  - Thinking the worst thing that could happen
  - A derivative IB (i.e., an irrational secondary appraisal mechanism)
  - Alternative RB is NON-CATASTROPHIZING (i.e., a nuanced evaluation of badness/BAD)
- Low frustration tolerance (LFT) / frustration intolerance (FI)
  - A derivative IB (i.e., an irrational secondary appraisal mechanism)
  - Alternative RB is FRUSTRATION TOLERANCE (FT)
- Global evaluation (GE) that could appear in the form of:
  - self-downing / self-depreciation (SD),
  - other downing (OD), and/or
  - life downing (LD).
  - A derivative IB (i.e., an irrational secondary appraisal mechanism)
  - Alternative RB is UNCONDITIONAL ACCEPTANCE (UA) in the form of:
    - unconditional self-acceptance (USA),
    - unconditional other acceptance (UOA), and/or
    - unconditional life acceptance (ULA).

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I. REBT Theory - The Nature of RBs & IBs

(see David, 2014; in press; David et al., 2010)

•DEM seems to be the irrational PRIMARY appraisal mechanism, from which (see for empirical support DiLorenzo et al., 2007; Hyland et al., 2013)

- irrational SECONDARY appraisal mechanisms:
  - AWF,
  - LFT / FI, and
  - GE in the form of SD, OD, and LD.
- are derived to generate distress.

•Thus, while DEM is primary to distress, it is not proximal to it!

•PRE seems to be the rational PRIMARY appraisal mechanism, from which (see for empirical support Hyland et al., 2013a)

- rational SECONDARY appraisal mechanisms:
  - BAD;
  - FT; and
  - UA in the form of USA, UOA, ULA.

are derived to generate functional feelings.

I. REBT Theory - The Nature of RBs & IBs (continued) (see David, 2014; in press; David et al., 2010)

- DEM (PRE), AWF (BAD), LFT/FI (FT), and GE (UA) are cognitive processes that could be applied to:
  - different contents (e.g., comfort, achievement etc.) and
  - context (e.g., me, other, life),
  - thus generating RBs and/or IBs.

- While DEM and GE/SD seem to be organized like schemas, LFT/FI and AWF seem to be organized like propositional networks (see for empirical support Szentagotai et al. 2005).
  - Other authors (e.g., DiGiuseppe, 1996) conceptualize all IBs as evaluative schemas.

- RBs and IBs are shaped during human development (David & DiGiuseppe, 2010).
  - RBs and IBs are based on:
    - cultural/educational influences; and
    - biological (e.g., evolutionary) predispositions.
      - especially the IBs

I. REBT Theory - The Nature of RBs & IBs (continued) (see David, 2014; in press; David et al., 2010)

- REBT theory has been criticized as being too simplistic in arguing that just a few classes of rational and irrational beliefs can explain the large variation of mental disorders. Alternative and/or complementary CBT theories (i.e., cognitive therapy) have promoted specific cognitive models for each specific disorder.
  - For an interesting debate see Ellis, 2003 vs. Padesky & Beck, 2003

- "…The REBT professionals reacted to these criticisms cogently, arguing that (1) by changing the core general irrational beliefs, one also changes the specific cognitions involved in specific psychological problems; (2) rational and irrational beliefs are hot cognitions (i.e., appraisals), while most of the specific investigated cognitions (i.e., automatic thoughts) are cold cognitions; unless appraised, cold cognitions do not generate feelings, and therefore rational and irrational beliefs are core mechanisms involved in psychopathology; (3) REBT's reductionist approach, when used, is similar to neuroscience, where just a few classes of neurotransmitters account for a large variation in symptoms and mental disorders; and (4) REBT actively seeks out specific cognitions involved in specific psychological problems because they are part of a comprehensive etiopathogenetic theory, although they might not be the core mechanisms…" (taken from David, 2014)

I. REBT theory - The Nature of RBs & IBs (continued) (see David, 2014; in press; David et al., 2010)

- Sample of publications on this topic:
  - David, D., & DiGiuseppe, R. (2010). Social and cultural aspects of rational and irrational beliefs. A brief reconceptualisation. In D. David, S. J. Lynn, & A. Ellis, A. (Eds.). *Rational and Irrational Beliefs: Research, Theory, and Clinical Practice*. NY: Oxford University Press.
  - DiGiuseppe, R. (1996). The nature of irrational and rational beliefs: progress in rational emotive behavior theory. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 4,* 5-28.
  - DiLorenzo, T .A., David, D., & Montgomery, G. H. (2007). The interrelations between irrational cognitive processes and distress in stressful academic settings. *Personality and Individual Differences, 42*, 765-776.
  - Hyland, P., Shevlin, M., Adamson, G., & Boduszek, D. (2013). The organization of irrational beliefs in posttraumatic stress symptomology: Testing the predictions of REBT theory using structural equation modeling. *Journal of Clinical Psychology* (in press) DOI: 10.1002/jclp.22009 (ISSN 1097-4679).
  - Hyland, P., Shevlin, M., Adamson, G., & Boduszek, D. (2013a). The moderating role of rational beliefs in the relationship between irrational beliefs and posttraumatic stress symptomology. *Behavioural and Cognitive Psychotherapy.*(in press) DOI: 10.1017/S1352465813000064.
  - Szentagotai, A., Schnur, J., DiGiuseppe R., Macavei, B., Kallay, E., & David, D. (2005). The organization and the nature of irrational beliefs: schemas or appraisal? *Journal of Cognitive and Behavioral Psychotherapies, 2*, 139-158.

I. REBT Theory - The Nature of RBs & IBs (continued): Testing the ABC Model

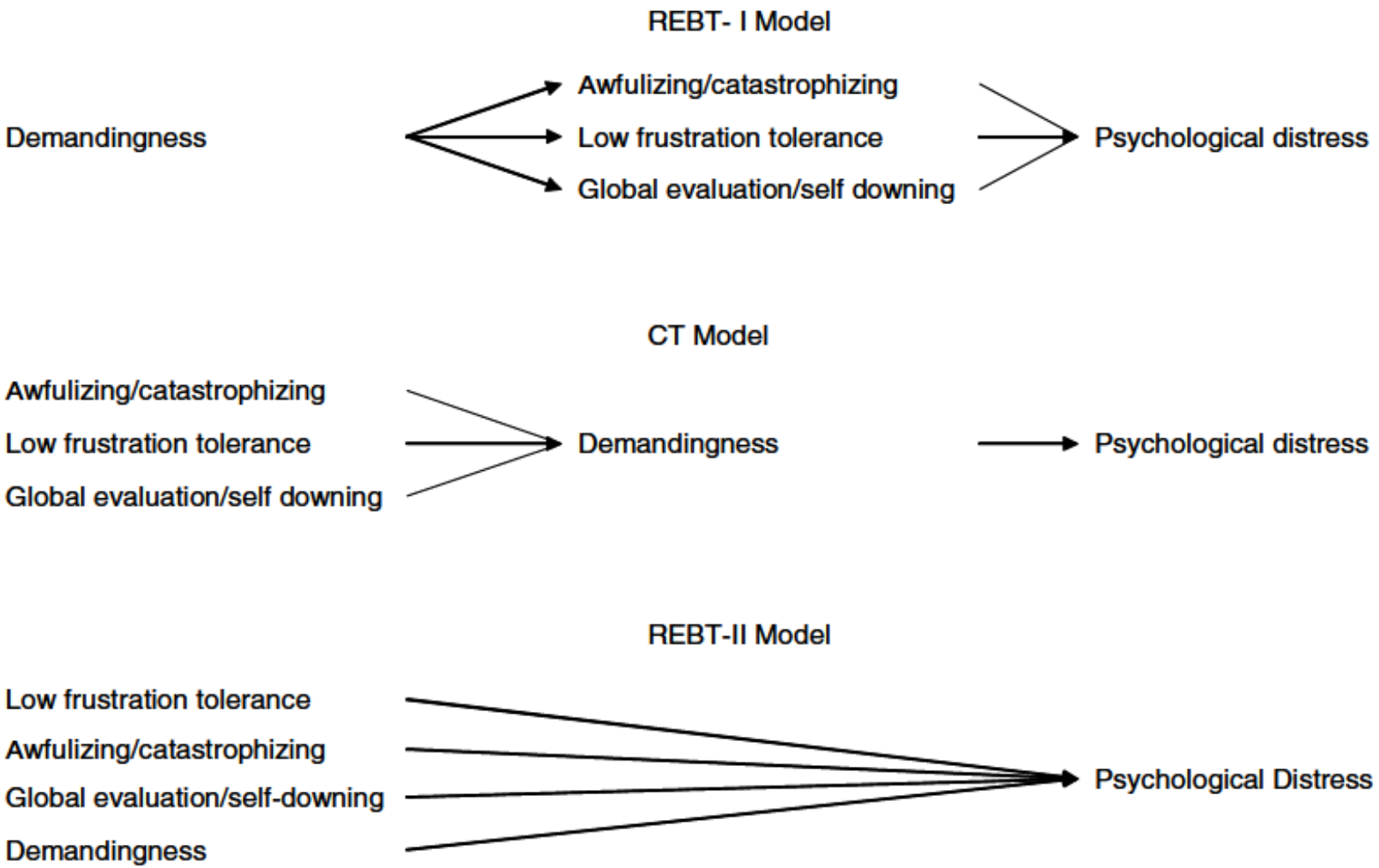

Fig. 1. Proposed models depicting interrelations between irrational beliefs and psychological distress.

I. REBT Theory - The Nature of RBs & IBs (continued): Results (DiLorenzo et al., 2007)

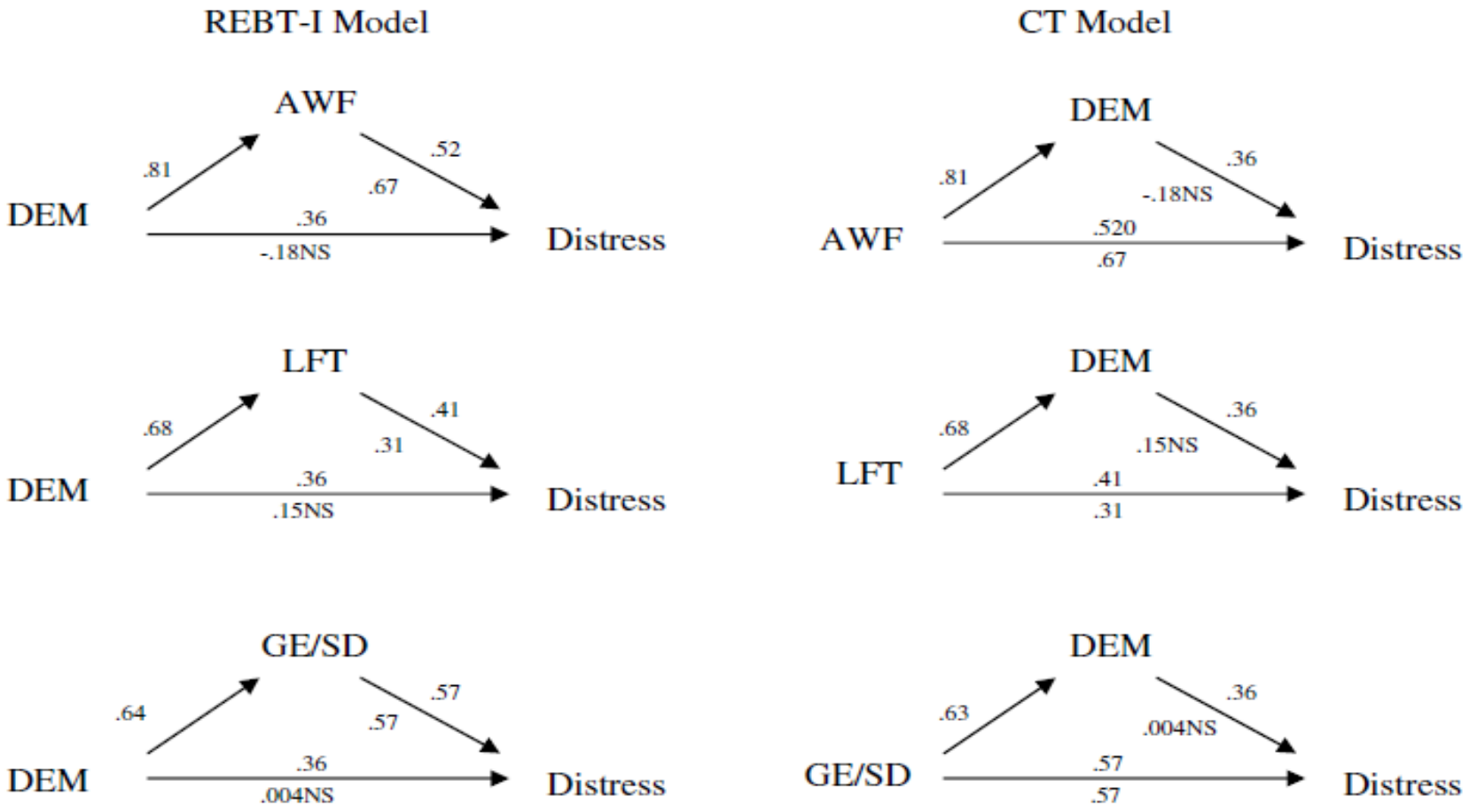

Fig. 2. Mediational diagrams for models testing the interrelations among demandingness (DEM), awfuli catastrophizing (AWF), low frustration tolerance (LFT), global evaluation/self-downing (GE/SD) and Time 1 dis Values presented are standardized parameter estimates. Values above lines reflect bivariate relations; values below reflect multivariate relations accounting for other predictors in the regression equation. All relations are signif ($p < .05$) unless indicated otherwise (NS).

II. REBT Theory - Assessment of RBs & IBs

(see David, 2014; in press; David et al., 2005)

- Smith (1989) argued that many RB & IB scales were:
  - contaminated by affective items and/or
  - that they were based on the older models of the REBT theory.

- New generations of RB & IB measures were published (see Bernard, 1998):
  - (1) containing cognitive items that are not contaminated by affective items;
  - (2) differentiating the process of thought (e.g., DEM) from the content of thought (e.g., DEM about achievement);
  - (3) making a clear distinction between descriptions, inferences, and evaluations (i.e., appraisal); and
  - (4) separating the scores of rational and irrational beliefs (they are not conceptualized as bipolar constructs- i.e., low irrational beliefs scores do not mean high rational beliefs scores).

II. REBT Theory - Assessment of RBs & IBs (continued) (see David, 2014; in press; David et al., 2005)

- **Recently, research in the field started to be focused on:**
  - **(1) the development of context specific (e.g., depression) and/or individualized measures of RB & IBs (e.g., Solomon et al., 2003; Solomon et al., 1998) and**
  - **(2) on the measures based on indicators other than direct self-reports (e.g., implicit measures based on articulated thoughts during simulated situations – Szentagotai et al., 2008).**

- **Probably the best measures of RBs & IBs used today are:**
  - **(1) the Short Form of the General Attitude and Beliefs Scale (Linder et al., 1999) and**
  - **(2) the Attitude and Belief Scale II (DiGiuseppe et al., 1988; see also for a short form of it by Hyland et al., 2013b).**

III. REBT Theory - The Impact of RBs & IBs on Other Cognitions (see David, 2014; in press)

•There is an important distinction between "*hot*" (i.e., appraisal/evaluations) and "*cold*" (i.e., descriptions/inferences) cognitions (see David, 2003; Wessler, 1982)

- RBs and IBs are "*hot*" cognitions

•Four different possibilities for how cold and hot cognitions regarding the activating event can be related once activated (David, 2003; David et al., 2010):

- (1) distorted representation of the event that is negatively/irrationally appraised –> emotional suffering;
- (2) non-distorted representation that is negatively/irrationally appraised –> emotional suffering;
- (3) distorted representation that is non-negatively appraised –> non-suffering; and
- (4) non-distorted representation that is non-negatively appraised –> non-suffering..

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III. REBT Theory - The Impact of RBs & IBs on Other Cognitions (continued)

(see David, 2014; in press)

•People having a combination of IBs (primary plus secondary irrational appraisal: DEM plus AWF; DEM plus FI; and/or DEM plus GE/SD):

- generate descriptions/inferences which are less functional than those generated by people having rational beliefs and
- the most proximal cause of dysfunctional descriptions/inferences of the irrational beliefs structure is represented by the secondary irrational appraisal mechanisms (AWF, LFT/FI, GE).

III. REBT Theory - The Impact of RBs & IBs on Other Cognitions (continued) (see David, 2014; in press)

- During stressful situations, the general core IBs interact with various specific activating events generating specific automatic thoughts that then further generate distress.
  - see for empirical support: Bond & Dryden, 1996; Bond & Dryden, 2000; Bond et al., 1999; Dryden et al., 1989; Dryden et al., 1989a; Szentagotai & Freeman, 2007.

IV. REBT Theory - The Impact of RBs & IBs on Human Feelings (see David, 2014; in press)

- Main component of research in REBT theory due to:
  - the key role of emotions in clinical psychology and
  - the fact that REBT is part of the *cognitive revolution* in psychology in general (Lazarus, 1989), and in the clinical field in particular (Ellis, 1994).

- Dysfunctional feelings (e.g., *depressed mood, anxiety, anger, guilt*) are themselves psychological problems (e.g., subclinical problems),
  - but they are also part of various psychological disorders, especially when they generate strong distress and/or disabilities.

IV. REBT Theory - The Impact of RBs & IBs on Human Feelings: Functional and Dysfunctional Negative Feelings
(see David, 2014; in press)

•Two models of treating functional (e.g., sadness rather than depression, concern rather than anxiety, annoyance rather than anger, remorse rather than guilt) and dysfunctional negative feelings in REBT theory (see David, 2003; David & Cramer, 2010; Ellis & DiGiuseppe, 1993):

- (1) a Unitary Model of Distress (i.e., the distinction is in terms of intensity - based on Ellis & Harper, 1961; for support see Wessler, 1996) and
- (2) a Binary Model of Distress (i.e., the distinction is in terms of quality and/or both quality and intensity – based on Ellis & Harper, 1975; for empirical support see David et al., 2005a; Harris et al., 2006).

•Previous debate in the REBT field was conducted under the *qualitative* versus *quantitative/intensity* distinction in functional and dysfunctional negative feelings (see Ellis & DiGiuseppe, 1993).

•The decision is not clear cut yet, although newer studies favor the binary model of distress (see for a review David & Cramer, 2010).

IV. REBT Theory - The Impact of RBs & IBs on Human Feelings (continued)
(see David, 2003)

•An etiopatogenetic guided relationship between irrational beliefs and dysfunctional feeling:

- Anxiety symptoms:
  - DEM+AWF
- Depressive symptoms:
  - DEM+GE/SD
- Guilt related symptoms:
  - DEM (moral/personal code of conduct)+GE/SD
- Anger-out symptoms:
  - DEM+LFT/FI+GE/OD/LD
- Anger-in symptoms:
  - DEM+LFT/FI+GE/SD

IV. REBT Theory - The Impact of RBs & IBs on Human Feelings: Functional and Dysfunctional Positive Feelings

(see David, 2014; in press)

- Despite the number of studies investigating the impact of RBs and IBs and/or REBT on positive affect (see Schnur et al., 2009)
  - there are a lack of studies investigating the distinction between functional and dysfunctional positive feelings

- More recently, this distinction has come under empirical (Tiba & Szentagotai, 2005) and theoretical (Bernard et al., 2010; Szentagotai & David, 2013) analyses/investigations.

V. REBT Theory: The Impact of RBs & IBs on Human Behavior (see David, 2014; in press)

•IBs generate dysfunctional feelings that in turn facilitate tendencies for maladaptive behaviors (see Dryden, 2002)

- (e.g., avoidant and/or escape-based behaviors)

•RBs generate functional feelings that in turn facilitate adaptive behaviors (see Dryden, 2002)

- (e.g., problem-solving-based behaviors)

•Rational and irrational beliefs can also influence behavior indirectly, by the descriptions and inferences they generate and/or prime.

•Most of the studies support the impact of IBs/RBs on human behaviors (e.g., Alden & Safran, 1978; Bonadies et al., 1984; Kombos et al., 1989; Prola, 1984; Schill et al., 1978). Some negative and/or mixed results also exist (Rosin & Nelson, 1983). For a comprehensive review see Szentagotai & Jones, 2010.

VI. REBT Theory - The Impact of RBs and IBs on Psychophysiological Indicators (see David, 2014; in press)

•The relation between RBs & IBs and psychophysiological indicators is complex and results are mixed

•High levels of IBs are associated with high/intense physiological/emotional arousal (Goldfried & Sobocinsky, 1975)

- Classical conditioning has been used as a main explanation of the relationship between IBs and physiological arousal (e.g., Master & Gershman, 1983).
- Other studies have also failed to support the irrational beliefs-arousal hypothesis (e.g., Craighead et al., 1979; Smith et al., 1984).

•There is support for a relationship between IBs and plasma level inflammatory markers (Papageorgiou et al., 2006) and between IBs and various psychosomatic disorders and/or biological indicators involved in somatic disorders (Woods & Lyons, 1990; Lyons & Woods, 1991).

•We need more specific predictions (a more detailed theory): what psychophysiological indicators should be expected and to be impacted by IBs/RBs; why and how?

VII. REBT theory: REBT & Related Theories
(see David, 2014; in press)

•REBT theory is related to major psychological theories and clinical fields:

- Emotional theories (e.g., appraisal theory, bi-factorial theory, emotional regulation paradigm etc.)
  - Cristea, I., Szentagotai, A., Nagy, D., & David, D. (2012). The bottle is half empty and that's bad, but not tragic: Differential effects of negative functional reappraisal. *Motivation and Emotions, 36*, 550-563. DOI: 10.1007/s11031-012-9277-6
  - David, D., Schnur, J., & Birk, J. (2004). Functional and dysfunctional emotions in Ellis' cognitive theory; An empirical analysis. *Cognition and Emotion, 18*, 869-880.
  - Szasz, P. L., Szentagotai, A., & Hofmann, S. G. (2011). The effect of emotion regulation strategies on anger. *Behaviour Research and Therapy, 49,* 114-119.

VII. REBT theory - REBT & Related Theories (continued) (see David, 2014; in press)

- Cognitive sciences theories
  - Szentagotai, A., Schnur, J., DiGiuseppe R., Macavei, B., Kallay, E., & David, D. (2005). The organization and the nature of irrational beliefs: schemas or appraisal? *Journal of Cognitive and Behavioral Psychotherapies, 2*, 139-158..
- Neuroscience and neurobiology
  - Cristea, I. et al. (2011). Brain correlates of rational and irrational beliefs: an fMRI study of cognitive reappraisal. *Presented at the 17th Annual Meeting of the Organization of Human Brain Mapping*, June 2011.
  - Papageorgiou, C., et al. (2006). Association between plasma inflammatory markers and irrational beliefs; the ATTICA epidemiological study. *Progress in Neuro Psychopharmacology and Biological Psychiatry, 30,* 1496-1503.

VIII. REBT Theory - Implications for REBT Training & Practice

(see also DiGiuseppe, Doyle, Dryden, & Backx, 2013)

•Generally, disputation (i.e., cognitive restructuring of irrational beliefs into rational beliefs) of DEM should be the first,

- followed by the disputation of its derivatives (e.g., AWF, GE, LFT/FI).
- When DEM is strongly related to its derivatives, if one tries to dispute first the derivatives, they might be resistant to change, because they are primed and maintained by DEM.

•The sole disputation of DEM might not be enough, especially if the derivatives:

- (a) have a functional autonomy from DEM and/or
- (b) they are very vivid clinically.

•Therefore, the derivatives should be targeted too.

VIII. REBT Theory - Implications for REBT Training & Practice (continued)

(see also DiGiuseppe, Doyle, Dryden, & Backx, 2013)

- Sometimes, the derivatives (e.g., AWF, LFT/FI, GE/SD/OD/LD) may even have a functional autonomy from DEM and thus, they are more vividly experienced by clients than DEM. In this case:
  - First dispute the derivative and then
  - Dispute the DEM (i.e., to help your client *get* better rather than only *feel* better).
  - In this situation, an initial focus on DEM might be difficult and/or clinically invalidating.
    - Some clients have difficulty identifying DEM, while the derivatives are very clear in their mind.

- First use the traditional REBT techniques (e.g., logical, empirical, functional/pragmatic, behavioral, emotive), but add and/or change to other new REBT techniques of cognitive restructuring, depending on your client and/or his/her problem:
  - Metaphors; Meditation (e.g., Mindfulness); Spiritual practices; Humor etc.

VIII. REBT Theory -Implications for REBT Training & Practice (continued)

(see also DiGiuseppe, Doyle, Dryden, & Backx, 2013)

- General REBT might work first from changing descriptions/inferences to changing evaluations.
  - Similar to cognitive therapy's strategy

- Elegant/specific REBT starts with the evaluations (e.g., descriptions/inferences remained unchanged as they have functional autonomy from evaluations) and then, if necessary, you may focus on descriptions/inferences.

- Typically, start with the elegant/specific REBT approach and then, depending on the client's response, continue and/or switch to a general REBT approach.

VIII. REBT Theory -Implications for REBT Training & Practice (continued)

(see also DiGiuseppe, Doyle, Dryden, & Backx, 2013)

- In the cognitive restructuration, REBT typically starts from specific beliefs
  - (e.g., in the form of automatic thoughts, be they specific distorted descriptions/inferences and/or – in its elegant form - specific evaluations in the form of specific irrational beliefs).
- and then move to core/general beliefs
  - (e.g., be they general distorted descriptions/inferences and/or – in its elegant form - general evaluations in the form of general irrational beliefs).

REBT Practice: REBT Applied and Translational Research History (see David et al., 2005)

•Empirical research in REBT practice has evolved and developed over three periods : (1) before 1970, (2) between 1970 and 1980, and (3) from the end of the 1980s/beginning of the 1990s to present.

•Prior to 1970, rigorous empirical research regarding REBT practice was infrequently conducted; most of these studies were case studies or studies with quasi-experimental design.

•After 1970, a series of better controlled clinical outcome studies were conducted. However, most of them were trans-diagnostic (rather than psychiatric category-based) and/or effectiveness (e.g., how REBT works in real clinical settings), rather than efficacy (e.g., how REBT works in well-controlled conditions) focused.

- This strategy did not help REBT to move quickly into the evidence-based psychotherapy lists, which were more focused on categorical diagnosis and efficacy studies.
- However, these studies should be re-evaluated today, as the new tendency in the field (including financial agencies like National Institutes of Health) is to stimulate trans-diagnostic and effectiveness–based research.

REBT Practice - REBT Applied and Translational Research History (continued)

(see David et al., 2005)

- Starting with the end of the 1980s/beginning of the 1990s, REBT clinical outcome studies have more and more strictly adhered to rigorous methodological criteria (e.g., randomized clinical trials methodology).
  - It started to push REBT into the various evidence-based psychotherapy lists.

REBT Practice - REBT Applied and Translational Research History (continued)

- Barlow (2004) made a key distinction between general psychotherapy (e.g., REBT) and psychological treatments (e.g., various REBT psychological treatments).
  - Psychotherapy is the generic name for a psychological approach dealing with (1) human optimization/development, (2) health promotions and disorder prevention, and/or (3) the treatment of clinical conditions involving psychological factors in their etiopathogenetic mechanisms. It is often related to one of the following traditions/paradigms: (1) dynamic-psychoanalytical paradigm (e.g., psychoanalysis); (2) humanistic-existential-experiential paradigm (e.g., client-centered therapy), and/or cognitive-behavioral paradigm (e.g., rational emotive behavioral therapy).
  - Psychological treatments (e.g., REBT psychological treatment for major depression) are specific interventions, more or less manualized in clinical protocols, which target more or less homogenous clinical conditions, derived from a generic psychotherapy (e.g., REBT).
- Following this framework, various REBT psychological treatments, derived for more or less specific clinical conditions from the general REBT framework (i.e., see the ABC model), were tested under the name of "REBT" or "CBT".

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I. REBT Practice - REBT as CBT

(see David, 2014; in press)

REBT is the foundational form of the CBT and thus, often it is called in the literature CBT. See below such examples of publications:

- Emmelkamp, P. M., & Beebs, H. (1991). Cognitive therapy with obsessive-compulsive disorder: A comparative evaluation. *Behavioral Research and Therapy, 29,* 293-300.
  - This article argued for the efficacy of REBT; it is also included in the APA Division 12 Research-Supported Psychological Treatments list.

- Gavița, O. A, David, D., Bujoreanu, S., Tiba, A., & Ionuțiu D. (2012). The efficacy of a short cognitive-behavioral parent program in the treatment of externalizing behavior disorders in Romanian foster care children: Building parental emotion-regulation through unconditional self- and child-acceptance strategies. *Children and Youth Services Review*, *34* (2), 1290-1297.

- Gould, R. A., Buckminster, S., Pollack, M. H., Otto, M. W., & Yap, L. (1997). Cognitive-behavioral and pharmacological treatment for social phobia: A meta-analysis. *Clinical Psychology: Science & Practice, 4,* 291-306.

I. REBT Practice - REBT as CBT (continued) (see David, 2014; in press)

- Mersch, P. P., Emmelkamp, P. M., Bogels, S. M., & van der Sleen, J. (1989). Social phobia: individual response patterns and the effects of behavioral and cognitive interventions. *Behavior Research and Therapy, 27*, 421-434.
  - This article argued for the efficacy of REBT; it is also included in the APA Division 12 Research-Supported Psychological Treatments list.

- Montgomery, G.H. et al. (2009). Fatigue during breast cancer radiotherapy: An initial randomized study of cognitive-behavioral therapy plus hypnosis. *Health Psychology, 3,* 317-322.

- Montgomery, G. H. et al. (in press). A Randomized Clinical Trial of a Cognitive-Behavioral Therapy plus Hypnosis Intervention to Control Fatigue in Breast Cancer Radiotherapy Patients. *Journal of Clinical Oncology* (Impact factor = 18.34).

- Schnur, J.B., David, D., Kangas, M., Green, S., Bovbjerg, D. M., & Montgomery, G. M. (2009). A randomized trial of a cognitive-behavioral therapy and hypnosis intervention on positive and negative affect during breast cancer radiotherapy. *Journal of Clinical Psychology, 65,* 443-455.

I. REBT Practice - REBT as CBT (continued) (see David, 2014; in press)

- Shapiro, D. A., & Shapiro, D. (1982). Meta-analysis of comparative therapy outcome studies: A replication and refinement. *Psychological Bulletin, 92,* 581-604.

- Meaden, A. Keen, N., Aston, R., Barton, K., & Bucci, S. (2013). *Cognitive Therapy for Command Hallucinations.* London: Routledge.
  - The protocol includes a REBT module. For details about the use of REBT in psychoses see here:
    - http://albertellis.org/rebtcbt-psychoses-manuals/

- The List of Empirically Supported Treatments - Division 12 of the American Psychological Association:
  - Various empirically-supported treatments and/or research-based psychological treatments based on CBT practically also include REBT components (see for example CBT for irritable bowel syndrome: http://www.apa.org/divisions/div12/rev_est/cbt_ibs.html)

II. REBT Practice - REBT in Qualitative Reviews as REBT (see David, 2014; in press)

•These qualitative reviews offered support for the idea that REBT practice is efficacious, and formulated weaknesses of REBT research and suggestions for future developments:

- DiGiuseppe, R., Miller, N. J., & Trexler, L. D. (1977). A review of rational emotive psychotherapy studies. *The Counseling Psychologist, 7,* 64-72.
- Zettle, R. D., & Hayes, S. C. (1980). Conceptual and empirical status of rational-emotive therapy. *Progress in Behaviour Modification, 9*, 125-166.
- Smith, T. W. (1982). Irrational beliefs in the cause and treatment of emotional distress: A critical review of the rational-emotive model. *Clinical Psychology Review, 2,* 505-522.
- Haaga, D. A. F., & Davidson, G. C. (1989). Slow progress in rational-emotive therapy outcome research: Etiology and treatment. *Cognitive Therapy and Research, 13,* 493-508.
- Haaga, D. A. F., & Davidson, G. C. (1989a). Outcome studies of rational emotive therapy. In M. E. Bernard & R. DiGiuseppe (Eds.), *Inside rational-emotive therapy: A critical appraisal of the theory and therapy of Albert Ellis*, New York: Academic Press.
- Haaga, D. A. F., & Davidson, G. C. (1993). An appraisal of rational-emotive therapy. *Journal of Consulting and Clinical Psychology, 61*, 215-220.
- David, D., Szentagotai, A., Kallay, E., & Macavei, B., (2005). A Synopsis of Rational Emotive Behaviour Therapy (REBT); Fundamental and Applied Research. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 3,* 175-221.

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III. REBT Practice - REBT in Quantitative Meta-Analyses as REBT (see David, 2014; in press)

•Findings (see the below meta-analyses) support REBT as an evidence-based oriented psychotherapy for:

- a large spectrum of clinical conditions and disorders (e.g., anxiety, depression);
- populations (i.e., children and adults); and
- formats (i.e., individual versus group versus family / couple / parenting).

•They are good sources for both specific outcomes studies related to REBT and understanding REBT limitations and the needs for future developments.

- Lyons, L. C., & Woods, P. J. (1991). The Efficacy of Rational-emotive Therapy: A Quantitative Review of the Outcome Research. *Clinical Psychology Review, 11,* 357-369.
- Engels, G. I., Garnefsky, N., & Diekstra, R. F. (1993). Efficacy of Rational-emotive Therapy: A Quantitative Analysis. *Journal of Consulting and Clinical Psychology, 61,* 1083-1090.
- Gonzalez, J. E., Nelson, J. R., Gutkin, T. B., Saunders, A., Galloway, A., & Shwery, C. S. (2004). Rational Emotive Therapy with Children and Adolescents: A Meta-Analysis. *Journal of Emotional and Behavioral Disorders, 12,* 222-235.

III. REBT Practice - REBT in Quantitative Meta-Analyses as REBT (continued) (see David, 2014; in press)

Smith, M. L., & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist, 32,* 752-60.

•REBT had the second highest effect size (after systematic desensitization), being followed by

- behavior modification,
- Adlerian,
- implosion,
- client-centered,
- psychodynamic,
- transactional analysis, and
- eclectic therapies.
    - But be aware about the well-known criticisms of this meta-analysis!

IV. REBT Practice - REBT in International Clinical Guidelines as REBT

- Experts' guidelines promoted by various agencies are often more conservative than regular meta-analyses in establishing that a certain treatment is an evidence-based treatment.

- Typically, agencies formulate their decisions based on the most rigorous studies, using panels of experts, while meta-analyses usually try to be as inclusive as possible.

IV. REBT Practice - REBT in International Clinical Guidelines as REBT (continued): NICE Guidelines and the Division 12's APA

These studies offered empirical support for including REBT as a probably efficacious treatment for depression in the *National Institute for Health and Clinical Excellence Guidelines* and in the *Research Supported Psychological Treatments List of the Division 12 of the American Psychological Association (APA)*:

- David, D., Szentagotai, A., Lupu, V., & Cosman, D. (2008). Rational emotive behavior therapy, cognitive therapy, and medication in the treatment of major depressive disorder: A randomized clinical trial, post-treatment outcomes, and six-month follow-up. *Journal of Clinical Psychology, 64,* 728-746.
- Sava, F., Yates, B., Lupu, V., Szentagotai, A., & David, D. (2009). Cost-effectiveness and cost-utility of cognitive therapy, rational emotive behavior therapy, and fluoxetine (Prozac) in treating depression: A randomized clinical trial. *Journal of Clinical Psychology, 65*, 36-52.
- Szentagotai, A., David, D., Lupu, V., & Cosman, D. (2008). Rational Emotive Therapy, Cognitive Therapy, and medication in the treatment of major depressive disorder: Theory of change analysis. *Psychotherapy: Theory, Research, and* Practice, *4,* 523-538.

Rational Emotive Behavior Therapy, Cognitive Therapy, and Medication in the Treatment of Major Depressive Disorder: A Randomized Clinical Trial, Posttreatment Outcomes, and Six-Month Follow-Up

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Iuliu Hatieganu University of Medicine and Pharmacy, Romania

A randomized clinical trial was undertaken to investigate the relative efficacy of rational-emotive behavior therapy (REBT), cognitive therapy (CT), and pharmacotherapy in the treatment of 170 outpatients with nonpsychotic major depressive disorder. The patients were randomly assigned to one of the following: 14 weeks of REBT, 14 weeks of CT, or 14 weeks of pharmacotherapy (fluoxetine). The outcome measures used were the Hamilton Rating Scale for Depression and the Beck Depression Inventory. No differences among treatment conditions at posttest were observed. A larger effect of REBT (significant) and CT (nonsignificant) over pharmacotherapy at 6 months follow-up was noted on the Hamilton Rating

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RATIONAL EMOTIVE BEHAVIOR THERAPY VERSUS COGNITIVE THERAPY VERSUS PHARMACOTHERAPY IN THE TREATMENT OF MAJOR DEPRESSIVE DISORDER: MECHANISMS OF CHANGE ANALYSIS

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Cognitive-behavioral psychotherapies (CBT) are among the first-line interventions for major depressive disorder (MDD), and a significant number of studies indicate their efficacy in the treatment of this disorder. However, differential effects of various forms of CBT have seldom been analyzed in the same experimental design. On the basis of data collected in a randomized clinical trial comparing the efficacy of rational–emotive behavior therapy (REBT), cognitive therapy (CT), and pharmacotherapy (SSRI) in the treatment of MDD, the present article investigates the theory of change advanced by REBT and CT. Measures included to test the two theories of change assess three classes of cognitions: (a) automatic thoughts, (b) dysfunctional attitudes, and (c) irrational beliefs. The results indicate that REBT and CT (and also pharmacotherapy) indiscriminately affect the three classes of cognitions. On the long term (follow-up), a change in implicit demandingness seems more strongly associated with reduced depression and relapse prevention.

Keywords: major depressive disorder, REBT, cognitive therapy, SSRI, theory/mechanism of change

Mood disorders rank among the top 10 causes of worldwide disability (Murray & Lopez, 1996; Scott, McGee, Wells, & Browne, 2006). Among these, major depressive disorder (MDD; also known as *unipolar major depression*) is predominant and garners the greatest attention as it represents the first cause of disability worldwide (Scott et al., 2006; U.S. Department of Health and Human Services [USDHHS], 1999). Moreover, suffering is not limited to the patient—spouses, children, parents, siblings, and friends experience frustration, guilt, anger, and financial hardship in their attempt at appeasing or coping with the depressed person's suffering. MDD is also a tragic contributor to mortality, suicide being one of its most dreaded complications (USDHHS, 1999). Indeed, this disorder accounts for 20–35% of all deaths by suicide, as 10–15% of patients hospitalized with depression commit

Cost-Effectiveness and Cost-Utility of Cognitive Therapy, Rational Emotive Behavioral Therapy, and Fluoxetine (Prozac) in Treating Depression: A Randomized Clinical Trial

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Cost-effectiveness and cost-utility of cognitive therapy (CT), rational emotive behavioral therapy (REBT), and fluoxetine (Prozac) for major depressive disorder (MDD) were compared in a randomized clinical trial with a Romanian sample of 170 clients. Each intervention was offered for 14 weeks, plus three booster sessions. Beck Depression Inventory (BDI) scores were obtained prior to intervention, 7 and 14 weeks following the start of intervention, and 6 months following completion of intervention. CT, REBT, and fluoxetine did not differ significantly in changes in the BDI, depression-free days (DFDs), or

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V. REBT Practice - REBT in International Clinical Guidelines as REBT (continued): Cochrane Reviews

•Greaves, D. (1997). The Effect of Rational-Emotive Parent Education on the stress of mothers of children with Down syndrome. *Journal of Rational-Emotive and Cognitive-Behavior* Therapy, *15,* 249-267.

•Joyce, M. R. (1995). Emotional relief for parents: Is Rational-Emotive Parent Education effective? *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 13,* 55-75.

- The above two studies were included in the following *Cochrane Review*: Barlow, J., Coren, E., & Stewart-Brown, S. S. B. (2007). *Parent-training programmes for improving maternal psychosocial health (Review).* The Cochrane Collaboration. John Wiley & Sons, Ltd. (see here: http://www.ncbi.nlm.nih.gov/pubmed/22696327).
  - REBT effects were significant in reducing parental depression-dejection, parental distress (as measured by POMS), parental guilt, and parental irrational beliefs.

V. REBT Practice - REBT in International Clinical Guidelines as REBT (continued)

•Block, J. (1978). Effects of a rational-emotive mental health program on poorly achieving, disruptive high school students. *Journal of Counseling Psychology, 25,* 61-65.

- **Based on this study, *Division 53 of the American Psychological Association* included REBT (rational-emotive mental health program) as a probably efficacious treatment for oppositional defiant disorders & conduct disorder in the list of evidence-based mental health treatments for children and adolescents. It appears now under the CBT name.**

•Smart Recovery (http://www.smartrecovery.org/intro/index.htm)

- **REBT is a key component of Smart Recovery, a self-help program for substance abuse and addictions. Smart Recovery describes itself as "*…SMART Recovery® is a recognized resource for addiction recovery by the American Academy of Family Physicians, the Center for Health Care Evaluation, The National Institute on Drug Abuse (NIDA), US Department of Health and Human Services, and the American Society of Addiction Medicine…*"**
  (see it at http://www.smartrecovery.org

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V. REBT Practice - Additional Examples of Empirical Support for REBT as REBT

•Macaskill, N. D. & Macaskill, A. (1996). Rational-emotive therapy plus pharmacotherapy versus pharmacotherapy alone in the treatment of high cognitive dysfunction depression. *Cognitive Therapy and Research* , *20* (6) , pp 575-592.

•Shelley, A. M., Battaglia, J., Lucey, J., Ellis, A, & Opler, L. A. (2001). Symptom-specific group therapy for inpatients with Schizophrenia. *Einstein Quarterly Journal of Biology and Medicine, 18,* 21-28.

•Wang, C. et al. (1999). Comparative study of rational emotive therapy for 95 patients with dysthymic disorder. *Chinese Mental Health Journal, 13,* 172–183.

REBT Theory & Practice - REBT Status: Conclusion (see David & Montgomery, 2011)

- REBT is an evidence-based oriented psychotherapy
- REBT occupies mainly the "green" categories (II, III, IV)

Table 1. Psychotherapies Classification Framework: Categories I–IX

	Theory		
	Well Supported[a]	Equivocal—No, Preliminary, or MD[b]	SCE[c]
Therapeutic package			
Well Supported[d]	Category I	Category II	Category V
Equivocal—No, Preliminary, or MD[b]	Category III	Category IV	Category VII
SCE[c]	Category VI	Category VIII	Category IX

CLINICAL PSYCHOLOGY
SCIENCE AND PRACTICE

The Scientific Status of Psychotherapies: A New Evaluativ Framework for Evidence-Based Psychosocial Interventions

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Guy H. Montgomery, Department of Oncological Sciences, Mount Sinai School of Medicine

- More research is needed to move REBT from the light green (Categories II, III, IV) to the dark green (Category I).

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