

Refutation of rational emotive behavior therapy (REBT) and logic-based therapy (LBT)

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Abstract: We evaluate seven definitions of rational emotive behavior therapy (REBT) using the implication operator. None is tautologous. Logic-based therapy (LBT), as based on REBT, is similarly refuted.

We assume the method and apparatus of Meth8/VL4 with Tautology as the designated *proof* value, **F** as contradiction, **N** as truthity (non-contingency), and **C** as falsity (contingency). For results, the 16-valued truth table is row-major and horizontal, or repeating fragments of 128-tables, sometimes with table counts, for more variables. (See ersatz-systems.com.)

LET p, q, r, s, t, u: Adversity; Belief; Consequence; Dispute; Effectiveness; Feelings
 ~ Not, ¬; + Or, ∨, ∪; - Not Or; & And, ∧, ∩; \ Not And;
 > Imply, greater than, →, ≻; < Not Imply, less than, ≪
 = Equivalent, ≡, ≐, @ Not Equivalent, ≠;
 % possibility, for one or some, ∃, ∂, M; # necessity, for every or all, ∀, □, L;
 (p=p) **T** as tautology; (p@p) **F** as contradiction;
 (%p<#p) **C** as contingency, Δ; (%p>#p) **N** as non-contingency, ∇;
 ~(y < x) (x ≤ y), (x ⊆ y).

From: en.wikipedia.org/wiki/Rational_emotive_behavior_therapy

Where the following letters represent the following meanings in this model:

A- The adversity (1.1)

Remark 1.1: The adversity is a necessary requirement for this model to commence.

#p = (p=p); **FNFN FNFN FNFN FNFN** (1.2)

B- The developed belief in the person of the A Adversity (2.1)

#p>q; **TCTT TCTT TCTT TCTT** (2.2)

C- The consequences but the consequences of that person's Beliefs ie B (3.1)

(#p>q)>r; **FNEF TTTT FNEF TTTT** (3.2)

D- The person's disputes of A B and C. In latter thought. (4.1)

Remark 4.1: A dispute is the possible outcome of this model.

((#p>q)>r)>%s; **TCTT CCCC TTTT TTTT** (4.2)

E- The effective new philosophy or belief that develops in that person through the occurrence of D in their minds of A and B (5.1)

Remark 5.1: The effective new conjecture (to include new philosophy or new belief) is the consequent of the model at this stage.

$$\begin{aligned} (\%s<(\#p<q))>t ; & \quad \text{NNNN NNNN } \mathbf{FNFF} \mathbf{FNFF} (8) , \\ & \quad \text{TTTT TTTT TTTT TTTT} (8) \end{aligned} \quad (5.2)$$

F- The developed feelings of one's self either at point and after point C or at point after point E. (6.1)

Remark 6.1: The description "at point and after point" is taken as an inexact description to mean the equivalent of "after point" because "at point" is accomplished en route to "after point". In relational algebra, "equal to and greater than" is equivalent to "equal to or greater than". In mapped logic this reduces to "greater than".

$$\begin{aligned} (r>u)+(t>u) ; & \quad \text{TTTT } \mathbf{FFFF} \text{ TTTT } \mathbf{FFFF} (4) , \\ & \quad \text{TTTT TTTT TTTT TTTT} (12) \end{aligned} \quad (6.2)$$

The argument of the REBT model implies successive stages to proceed as Eqs. (1.1) implies (2.1) implies (3.1) implies (4.1) implies (5.1) implies (6.1). (7.1)

$$\begin{aligned} (((\#p>q)>r)>((\#p>q)>r)>\%s))>(((\%s<(\#p<q))>t)>((r>u)+(t>u))) ; \\ & \quad \text{TTTT NNNN TTTT } \mathbf{FFFF} (4) , \\ & \quad \text{TTTT TTTT TTTT TTTT} (12) \end{aligned} \quad (7.2)$$

Eqs. 1.2-7.2 as rendered are *not* tautologous. This refutes rational emotive behaviour therapy (REBT). We do not evaluate the subsequent three insights derived from REBT.

We examine a separate follow on to REBT known as logic-based therapy (LBT)

From: en.wikipedia.org/wiki/Logic-based_therapy

LBT assigns three states as sentences for "Point A (Activating event), Point B (Belief system), and Point C (behavioral and emotional Consequence)". This is equivalent to the above Eqs. 3.2 and 4.2, all *not* tautologous. The rule of inference in LBT also is restricted to the implication operator as "If O then R: 1. O; 2. Therefore R". Because this rule is used exclusively above in Eqs. 1.2-7.2 we abandon further evaluation of LBT.