The history of CBT

From the Stoics and Pavlov to Beck and the “third wave”: what really happened, where the myths are and what the evidence says, with sources.

DRAFT this text has not yet been approved by the author and may change.

15 chapters ~55 min read

How solid is each fact

Proven by research **Clinical consensus** **In the author's own words**
Interpretation / disputed **Documented fact** **Not verified**

In short

- "Beck invented CBT" is only half true. CBT grew from several independent lines, not from one man.
- The core idea is about 2,000 years old: the Stoic Epictetus wrote that people are disturbed not by things, but by their opinions about them.
- The first wave of CBT was behavioural: laws of learning, found in the lab, applied to human fear. The working ingredient seems to be exposure, facing the fear on purpose.
- Albert Ellis came first. He started practising his approach in 1955 and first presented it in 1956; Beck's first papers on thinking in depression came out in 1963–1964. Both came out of psychoanalysis and reached similar ideas independently.
- Aaron Beck set out to prove the psychoanalytic theory of depression right, and his own data wouldn't let him. Cognitive therapy grew from what he found instead.
- The early trials favoured cognitive therapy but had weak spots. The strongest finding is that relapse (depression coming back) was less common after therapy ended than after medication was stopped.
- CBT is the most researched talking therapy, but for depression it barely outperforms other proper psychotherapies: the difference is g = 0.06, on a scale where 0 means no difference (against a waitlist or usual care, CBT scores 0.79). Most researched does not mean most effective.
- The "three waves" are a useful story, not a scientific fact. The division itself is disputed, and even its main opponents, Hofmann and Hayes, ended up writing a paper together in 2019.

Timeline: 2,000 years at a glance

The whole history of CBT on one line, from the Stoics to large meta-analyses. Details and sources are in the chapters below.

~2,000 years ago

Epictetus: people are disturbed not by things but by their opinions about things

ROOTS

1904

Pavlov wins the Nobel Prize, then spends decades on conditioned reflexes

BEHAVIOURAL LINE

1920

Watson and Rayner: the "Little Albert" experiment — fear can be learned

BEHAVIOURAL LINE

1924

Mary Cover Jones: three-year-old Peter gradually stops fearing a rabbit

BEHAVIOURAL LINE

1953

The term "behaviour therapy" appears; Skinner's book comes out

BEHAVIOURAL LINE

1955

Ellis starts practising his approach, the future REBT

COGNITIVE LINE

1958

Wolpe's book: fear is weakened gradually, while staying calm

BEHAVIOURAL LINE

1963–1964

Beck's first papers on thinking in depression

COGNITIVE LINE

1977 — Rush, Beck and colleagues' trial: cognitive therapy versus an antidepressant
EVIDENCE

1979 — "Cognitive Therapy of Depression", the first detailed manual by Beck and co-authors
COGNITIVE LINE

1993 — Marsha Linehan describes DBT for borderline personality disorder
THIRD WAVE

1999 — Hayes, Strosahl and Wilson's book on ACT
THIRD WAVE

2008 — IAPT across England: CBT becomes the backbone of state-funded care
EVIDENCE

2023 — Meta-analysis of 409 trials: for depression CBT barely outperforms other therapies
EVIDENCE

What the colours on the timeline mean. The lines below are a way of telling the story, not a strict scientific classification: the "three waves" split itself is disputed, as a separate chapter below explains.

Roots
An old philosophical idea: we are disturbed not by events but by our opinions about them

Methods: —

People: Epictetus and the Stoics

Behavioural line
The first wave. Fears and habits are learned, so they can be unlearned. The work targets behaviour rather than thoughts

Methods: Conditioning, systematic desensitisation, exposure

People: Pavlov, Watson, Mary Cover Jones, Skinner, Wolpe, Eysenck

Cognitive line

The second wave. Feelings depend on how we think about an event, and thoughts can be tested and changed

Methods: REBT (Ellis), cognitive therapy (Beck), cognitive-behaviour modification (Meichenbaum)

People: Ellis, Beck, Meichenbaum

Third wave

What matters is not only what we think but how we relate to our thoughts and feelings: acceptance, mindfulness, values

Methods: ACT, DBT, MBCT, FAP

People: Hayes, Linehan, Segal, Williams and Teasdale, Kohlenberg and Tsai

Evidence

Not a wave but a line of research: trials and meta-analyses that test whether and how much CBT helps

Methods: Randomised trials, meta-analyses

People: Rush, Hollon, Cuijpers and others

How to read these notes: evidence labels and myths

Every claim here carries a label that tells you how solid it is, so you can see at a glance what is proven, what is someone's account and what is still open.

These are open notes to Episode 1 of the CBT series on YouTube; they can be read on their own. They tell the story in order, from ancient philosophy to today's research, with sources and years.

The labels

Label in these notes	What it means
Proven by research	Randomised trials (participants are split into groups by chance, for example therapy vs medication, and the results are compared) or meta-analyses (studies that pool many such trials)
Clinical consensus	Clinical guidelines, i.e. official advice to clinicians on what to treat with (such as the UK's NICE guidelines), or professional associations
In Beck's own words (or the author's own account)	What the founder or his institute says; not independently checked
Biographers' / historians' interpretation	A reading of the facts, or a point still in dispute
Documented fact	Dates, publications, institutions
Not verified	We couldn't open the primary source; treat with care

Where sources disagree, both versions are given.

Popular myths are marked with a "Myth vs fact" callout, and all of them are collected in “Myths about CBT: a quick check” near the end.

This is education, not therapy or diagnosis. These notes mention suicide; if you need support now, see If you need help now at the end.

One name, two meanings

CBT stands for cognitive behavioural therapy. In the broad sense it is a family of methods, not one method **clinical consensus; Hofmann et al., 2012; Hofmann, Sawyer & Fang, 2010**.

Broadly, the name covers a family of cognitive, behavioural and emotion-focused methods (Hofmann et al., 2012). Narrowly, it means Beck's cognitive therapy, built on the cognitive model, in which thoughts and perceptions shape feelings and behaviour (in Beck's institute's own words; Beck Institute).

Early Beck called his method "cognitive therapy"; Judith Beck's 2020 textbook calls it "Cognitive Behavior Therapy" **documented fact**. We found no direct Beck Institute statement that the two names are synonyms, though the literature often uses them that way.

Sources: Hofmann et al., 2012 · Hofmann, Sawyer & Fang, 2010 · Beck Institute, About CBT

A 2,000-year-old idea: the Stoics

The thought at the heart of CBT, that our view of events shapes how we feel about them, was written down by a Stoic philosopher almost two thousand years ago.

"Not by the things, but by the opinions"

Long before laboratories and clinical trials, the Stoic Epictetus put the idea in one line. In *Enchiridion* 5, in George Long's translation, he wrote: "Men are disturbed not by the things which happen, but by the opinions about the things."
documented fact, quoted verbatim from the Perseus edition

Read it slowly and you have, in a nutshell, what twentieth-century therapists would later build whole methods around.

Both founders pointed back to the Stoics

This is not a link invented by later historians. In their 1979 manual *Cognitive Therapy of Depression* (p. 8), Beck and his co-authors Rush, Shaw and Emery themselves traced cognitive therapy to the Stoic philosophers **in Beck's own words; quoted in Robertson, 2010**.

Ellis did the same: he credited the Stoics and quoted Epictetus
documented fact; Ellis, 1962, pp. 35, 54, 109; Ellis & MacLaren, 2005, p. 10.

Sources: Robertson, 2010 · Epictetus, Enchiridion 5, tr. Long · Ellis, 1962 (Reason and Emotion in Psychotherapy) · Ellis & MacLaren, 2005

Fear can be learned: Pavlov, Watson and "Little Albert"

Laboratory work on learning showed that fear can be taught, which raised the obvious next question: can it be untaught?

From digestion to reflexes

The story of behaviour therapy begins with a physiologist, not a therapist. Ivan Pavlov (1849–1936) won the Nobel Prize in 1904 for work on digestive glands, then spent 30+ years on conditioned reflexes **documented fact; Uytman, 1967**. A conditioned reflex is a reaction that is not inborn but learned, when one thing happens together with another again and again. From this work grew the idea that reactions, including emotional ones, can be learned.

1904 — Ivan Pavlov (1849–1936) wins the Nobel Prize for work on digestive glands, then spends 30+ years on conditioned reflexes
Documented fact Uytman, 1967

1920 — Watson & Rayner, "Conditioned emotional reactions" ("Little Albert")
Documented fact Watson & Rayner, 1920

2011 — Ben Harris, a historian, "Letting go of Little Albert", on how textbooks retold the experiment
Documented fact Harris, 2011

The Little Albert experiment (1920)

In 1920 the researchers John Watson and Rosalie Rayner published "Conditioned emotional reactions", the paper now known as "Little Albert": on a single baby, called Albert in the paper, they tried to show that fear can be learned **documented fact; Watson & Rayner, 1920**. Rayner was a 21-year-old graduate student who assisted Watson with this work; she later married him, after his divorce **documented fact; APA Monitor, 2012**. At about 9 months, Albert showed no fear of a white rat, a rabbit or masks.

At about 11 months, the rat was paired several times with a loud blow on a steel bar behind him. Fear of the rat appeared and spread to a rabbit, a dog, fur, cotton wool and a Santa Claus mask.

The original paper calls this spread "transfer"; today it is called generalisation. A month later the fear was still there, though weaker.

The ending textbooks rewrote

What happened next? Nothing. The fear was never removed, and the paper says so plainly **documented fact, quoted verbatim**: "Unfortunately Albert was taken from the hospital the day the above tests were made."

Textbooks later added invented details, including a "cure", as the historian Ben Harris has shown **historians' interpretation; Harris, 1979 and 2011**. Today such an experiment would not pass an ethics committee.

Myth vs fact **Myth:** Little Albert's fear was later cured. **What the evidence says:** the original paper says no attempt was made; Albert was taken from the hospital the day of

the last tests **documented fact; Watson & Rayner, 1920**.

Who Albert really was is also unsettled. In 2009 it was suggested that "Albert" was a boy named Douglas Merritt, but this identification is disputed. Later research on the question was not checked against primary sources for these notes **not verified**.

Sources: Watson & Rayner, 1920 · Harris, 2011 · Uytman, 1967 · APA Monitor, 2012

Fear, step by step: Wolpe and the birth of behaviour therapy

In the 1950s the laws of learning moved from the lab into the clinic, and the method that survived the test of time turned out to be simple: face the fear on purpose.

A psychiatrist who lost faith in talking

Joseph Wolpe (1915–1997) was a South African psychiatrist. He turned to Pavlov and Hull after losing faith in psychodynamic therapy, the talking treatment that grew out of psychoanalysis **historians' interpretation; Carona et al., 2023**.

Clark Hull (1884–1952) was an American psychologist known for experiments on learning. In his theory, the link between a situation and a response grows stronger each time the response is rewarded by reducing a need **documented fact; Britannica**. Ideas like these let Wolpe treat neurotic fear as a learned habit that can be weakened, an alternative to Freud **historians' interpretation; Poppen, 1998, via Athabasca University**.

1948–1956 — Joseph Wolpe (1915–1997), South African psychiatrist, develops systematic desensitisation
Documented fact Carona et al., 2023

1958 — Wolpe, *Psychotherapy by Reciprocal Inhibition*
Documented fact Carona et al., 2023

Systematic desensitisation

Systematic desensitisation is a way of weakening fear gradually. The idea is to move toward what you fear step by step while staying relaxed. Relaxation and fear were thought to be incompatible. That is where the "reciprocal inhibition" in Wolpe's book title comes from: two incompatible reactions, relaxation and fear, hold each other back.

The results Wolpe reported sound spectacular. In a series of 210 cases, he reported almost 90% "apparently cured or much improved" **the author's own account**. That is the author's own report,

with no control group (people for comparison who did not get the treatment), so we cannot tell how many patients would have improved anyway. It is not a trial.

What actually does the work

Later research took the method apart. It rested on two premises: you need to be relaxed, and you need to approach the fear in small steps. Craske et al. (2012) questioned both. Michelle Craske is a professor of psychology and psychiatry at UCLA who directs its Anxiety and Depression Research Center and studies how exposure therapy works **documented fact; UCLA**. Exposure means facing what you fear on purpose; graded exposure does it in small steps, from easy to hard. It turned out that relaxation does not boost graded exposure, and ungraded exposure, without the small steps, is no worse than graded **proven by research; Craske et al., 2012, as summarised by Carona et al., 2023**.

The working ingredient seems to be exposure: facing the fear on purpose.

> Myth vs fact **Myth:** relaxation and a carefully graded ladder are what make desensitisation work. **What the evidence says:** relaxation does not boost graded exposure, and ungraded exposure is no worse than graded; exposure itself seems to be the active ingredient **proven by research; Craske et al., 2012**.

The mother of behaviour therapy

Wolpe was not the first to treat fear this way. About 30 years earlier, the American psychologist Mary Cover Jones showed that a child's fear can be taken apart step by step. Her patient was Peter, a three-year-old boy who was terrified of a white rabbit (and of feathers and fur as well).

Jones gave Peter his favourite food and, while he ate, brought the rabbit in its cage a little closer each time: first from the far end of the room, then nearer and nearer. In the end Peter could hold the rabbit calmly. Jones described the case in "A laboratory study of fear: the case of Peter" **documented fact; Jones, 1924, Pedagogical Seminary, 31, 308–315**.

It is the same principle Wolpe later built his method on: fear fades when you meet it in small steps while staying calm. That is why Wolpe called Jones "the mother of behaviour therapy" **historians' interpretation; Rutherford, 2010**.

Who coined "behaviour therapy"?

The early 1950s were busy. B. F. Skinner, another key figure of the behavioural wave, published *Science and Human Behavior* in 1953. The same year, reports by Skinner and his co-authors Solomon and Lindsley used the term "behavior therapy" **documented fact; Labrador, 2004**.

Harry C. Solomon was a psychiatrist who from 1943 ran the Boston Psychopathic Hospital documented fact; American Psychiatric Association archives. Ogden Lindsley was Skinner's student at Harvard; in 1953 he set up a laboratory at Harvard Medical School that is widely seen as the first to study human behaviour with Skinner's methods documented fact; ABAI. Their studies with patients with psychosis took place at Metropolitan State Hospital in Waltham, Massachusetts documented fact; Labrador, 2004.

Who coined "behaviour therapy" is disputed sources disagree; Springer, 2011; SAGE, 2005. A Springer reference work (2011) names three independent authors (Lindsley 1953, Lazarus 1958, Eysenck 1959); the SAGE encyclopedia (2005) names Lazarus, 1958.

Eysenck, the provocateur

Hans Eysenck, another key figure of the first, behavioural wave, published a critical review of psychotherapy outcomes in 1952 and "Learning theory and behaviour therapy" in 1959 documented fact.

In the 1952 review, Eysenck pooled earlier reports on patients with neuroses. About 44% improved with psychoanalysis and about 64% with mixed-method psychotherapy, while about 72% improved without any systematic psychotherapy. His conclusion: "The figures fail to support the hypothesis that psychotherapy facilitates recovery from neurotic disorder." documented fact; Eysenck, 1952 The review became an argument that the usual treatments were unproven, which helped open the door to new, testable methods such as behaviour therapy historians' interpretation; Labrador, 2004.

Sources: Carona et al., 2023 · Labrador, 2004 · Watson & Watson, 2011 · Lazarus, 2005 · Eysenck, 1959 · Eysenck, 1952 · Britannica: Clark L. Hull · Athabasca University: Joseph Wolpe · American Psychiatric Association archives: Harry C. Solomon · ABAI: Ogden Lindsley · UCLA: Michelle G. Craske

Albert Ellis: the one who came first

Ellis created rational emotive behaviour therapy (REBT), one of the first cognitive behavioural therapies. He was practising it from 1955, about seven years before Beck's first papers on thinking in depression.

Important **What Ellis created, in short.** His method is **REBT, rational emotive behaviour therapy**. Its idea: we are upset not by events themselves but by our beliefs about them, and those beliefs can be examined and changed. That is the same foundation as CBT, which is why REBT is counted among the first forms of cognitive behavioural therapy; the Albert Ellis Institute itself calls it "the first form of CBT" in the institute's own words. The name changed twice while the method stayed the same: **1955 — "rational therapy" (RT)**

→ 1961 — "rational emotive therapy" (RET) → 1993 — "rational emotive behaviour therapy" (REBT) documented fact; Ellis, 1995. That is why Ellis was calling himself a "rational therapist" back in the 1950s, long before the current name existed.

What the three words in the name mean

Each word in the name REBT stands for one part of the work.

- **Rational.** Therapist and client look for irrational beliefs and reconsider them. An irrational belief is a rigid demand on oneself, on other people or on life. It usually sounds like "must", "have to" or "should", for example: "I absolutely must have my important goals fulfilled!" the author's own account; Ellis, "Emotional Disturbance... in a Nutshell". For Ellis there are no absolute musts, only "it would be better" the author's own account; Ellis, "My Philosophy of Psychotherapy". The task is to turn a rigid demand into a flexible wish.
- **Emotive.** REBT works with feelings, not only with thoughts. The word entered the name in 1961, to answer the charge that the approach ignored feelings documented fact; Ellis, 1995. One emotive technique is rational emotive imagery. A person imagines a major failure and practises changing the feeling: healthier disappointment or regret instead of depression the author's own account; Ellis, "Nutshell". Ellis also used role play and "shame-attacking exercises" the author's own account; Ellis, "My Philosophy".
- **Behaviour.** Beliefs are also changed through action. The client does homework in real life the author's own account; Ellis, "My Philosophy". For example, someone avoids meeting people for fear of rejection. They go and meet people anyway, reminding themselves that rejection is unpleasant but not awful the author's own account; Ellis, "Nutshell". The word "behaviour" was added to the name in 1993 documented fact; Ellis, 1995. Most REBT studies set clients homework documented fact; King et al., 2024.

What it looks like in everyday life. Take the example from the table in "The ABC model" below. A, the event: "I was rejected". B, the belief: "Everyone must like me, or I'm worth nothing". C, the consequence: the person feels terrible and withdraws. Ellis added two more letters to these three the author's own account; Ellis, "Nutshell":

- **D — disputing.** The irrational belief is tested with questions. Where is it written that everyone must like me? Does one rejection really prove I'm worth nothing? Does thinking this way help me?
- **E — the new effect.** A more rational belief appears: "It's unpleasant to be rejected. But not everyone has to like me, and rejection doesn't make me worthless". The feeling does not vanish, but it becomes healthier: sadness or disappointment instead of depression.

The meaning of D and E comes from Ellis the author's own account; Ellis, "Nutshell". The questions and sentences in the example are ours, for illustration.

Ellis and Beck: what is the difference

Ellis and Beck studied the same thing: how thoughts shape feelings. But they came at it in different ways.

	Ellis, REBT	Beck, cognitive therapy
Where it came from	From a therapist's practice and from philosophy. Ellis left psychoanalysis and practised his approach from 1955 **documented fact; REBT Network, 2007**. REBT's foundation is philosophical **in Beck's own words; Padesky & Beck, 2003**	From research on depression. Beck set out to confirm psychoanalytic theory in his patients' dreams, and the data said the opposite **in Beck's own words; Beck, 2008**. Cognitive therapy's foundation is empirical, that is, based on data **in Beck's own words; Padesky & Beck, 2003**
Main target	Irrational beliefs, above all rigid, absolute "musts" and "shoulds" **the author's own account; Ellis, "Nutshell"**	Automatic thoughts, the cognitive triad and schemas, the deep core beliefs **documented fact; Padesky, 2004**. Also cognitive distortions, typical errors in thinking **in the institute's own words; J. Beck, 2024**
Therapist's style	Active and directive. The therapist disputes the client's beliefs head-on. By his own account, Ellis spent most of his time vigorously teaching the client **the author's own account; Ellis, "My Philosophy"**	Collaboration, or "collaborative empiricism". The therapist does not tell the client their thinking is wrong. Together they test a thought like a hypothesis: they look at the facts and run experiments in real life. The therapist asks Socratic questions, questions that help a person reach the conclusion themselves **in the institute's own words; J. Beck, 2024**
Goal	Unconditional self-acceptance: valuing yourself as a whole person, not by single actions or successes **in the institute's own words; Sy, 2017**. Ellis distinguished "feeling better" from "getting and staying better"; the second goal goes deeper **in the institute's own words; David, Albert Ellis Institute**	Learning to evaluate your own thoughts, "a lifetime skill" **in the institute's own words; J. Beck, 2024**. And relieving symptoms: the first trials measured success by a drop in depression **documented fact; Rush et al., 1977**

	Ellis, REBT	Beck, cognitive therapy
Research	In REBT's early years there were few controlled studies **documented fact; David et al., 2018**. Later there were more. A 2018 meta-analysis pooled 82 studies and found a medium-sized effect, d = 0.58 **proven by research; David et al., 2018**. A 2024 review counted 162 studies, 82 of them randomised **documented fact; King et al., 2024**	Beck measured from the start: the BDI depression inventory appeared in 1961 **documented fact; Beck Institute, 2021**. In 1977 cognitive therapy was compared with an antidepressant in a randomised trial **documented fact; Rush et al., 1977**. Later came separate models and protocols for different disorders **in Beck's own words; Padesky & Beck, 2003**

An important caveat: the "philosophy versus data" contrast was drawn by Beck himself, together with his student Christine Padesky. It is the view of one side **documented fact; authors: Padesky & Beck, 2003**. Direct comparisons of REBT with cognitive methods are few, only 9. In them the difference is close to zero, d = 0.08 **proven by research; David et al., 2018**. So there is no evidence that one approach is stronger than the other.

They share more than divides them. Both hold that feelings depend largely on how a person understands an event **the author's own account; Ellis, "Nutshell"; Beck Institute, About CBT**. Both are active: the client does not only talk in the session but also does tasks between meetings **the author's own account; Ellis, "My Philosophy"; Beck Institute: Understanding CBT**. That is why today both belong to the broad CBT family, a name for a whole group of related methods rather than a single therapy **clinical consensus; Hofmann et al., 2012; King et al., 2024**.

From psychoanalyst to "rational therapist"

Albert Ellis (27 September 1913, Pittsburgh – 24 July 2007, New York) began, like Beck, inside psychoanalysis and left it. His approach changed its name twice along the way, and each renaming had a stated reason.

1943, 1947

MA and PhD in clinical psychology, Columbia University

Documented fact REBT Network, 2007

1953 (from January)

Breaks with psychoanalysis, calls himself a "rational therapist"

Documented fact REBT Network, 2007

1955 — Starts practising rational therapy

Documented fact REBT Network, 2007; Ruggiero et al., 2018

1956 — First presents it to colleagues: paper at the convention of the American Psychological Association (APA), Chicago, August

Documented fact Ellis, 1958

1957 — Paper "Rational psychotherapy and individual psychology"

Documented fact Ellis, 1957

2 April 1959 — Institute for Rational Living founded (Albert Ellis Institute since 1996)

Documented fact Albert Ellis Institute

1961 — RT (rational therapy) renamed RET (Rational Emotive Therapy), to answer the charge that it ignored feelings

Documented fact / the author's own account Ellis, 1995

1962 — Book *Reason and Emotion in Psychotherapy*

Documented fact Blackwell & Heidenreich, 2021

1993 — RET renamed REBT (Rational Emotive Behavior Therapy), so it would not be seen as "too cognitive"

Documented fact / the author's own account

Ellis, 1995; Albert Ellis Institute

So when did REBT "begin"? Sources disagree: 1955, 1957 or 1962. The safe wording: the approach took shape in the mid-1950s **historians' interpretation**.

The ABC model

Ellis's ABC model links an event, the beliefs about it and their consequences **the author's own account; Albert Ellis Institute**.

Letter	Meaning	Example
A	Activating event	"I was rejected"
B	Beliefs, rational or irrational	"Everyone must like me, or I'm worth nothing"
C	Consequences: emotional, behavioural, cognitive, bodily	Feeling terrible, withdrawing

Ellis saw the rigid "must" (demandingness) as the core of irrational thinking. Catastrophising ("this is awful, it couldn't be worse"), low frustration tolerance ("I can't stand this") and global self-ratings ("I'm worth nothing") follow from it **historians' interpretation; Ruggiero et al., 2018**.

The model can also loop. A consequence (C) can become a new event (A), and this is how "anxiety about anxiety" arises **the author's own account**.

Ellis or Beck: the dates

Ellis practised from 1955 and presented in 1956. Beck's papers "Thinking and depression" I (1963) and II (1964) appeared in *Archives of General Psychiatry* **documented fact**.

The Albert Ellis Institute calls REBT "the first form of CBT" (the institute's own claim; Albert Ellis Institute).

> Myth vs fact **Myth:** REBT is a version of Beck's therapy. **What the evidence says:** by the dates it is the other way round; Ellis and Beck founded two cognitive lines independently, both out of psychoanalysis **historians' interpretation; Ruggiero et al., 2018**.

The year of the cognitive revolution

Ellis was not working in a vacuum: the cognitive revolution set the stage. In a 2003 paper, George Miller dates the birth of cognitive science, the science of thinking and knowing, to 11 September 1956, the day of a symposium at MIT (the Massachusetts Institute of Technology). He calls it a "counter-revolution" against behaviourism, the school of psychology that studied behaviour and held that thoughts can't be measured **historians' interpretation; Miller, 2003**.

George A. Miller (who died in 2012, aged 92) was an American psychologist, best known for "The Magical Number Seven, Plus or Minus Two" (1956), the paper suggesting that people can hold about seven "chunks" of information in short-term memory. The "cognitive revolution" is the 1950s shift in which psychology turned back to studying the mind and moved away from behaviourism; Princeton describes Miller as one of its leaders, alongside Jerome Bruner and Noam Chomsky **documented fact; Princeton University, 2012**.

How influential was Ellis?

Important **Is it true that a 1982 survey ranked Ellis above Freud, second only to Rogers?** Yes, this one holds up, and both versions describe the same ranking. The survey is D. Smith's paper in *American Psychologist* (1982): Rogers came first, Ellis second and Freud third **documented fact; Warner, 1991; Columbia University Libraries, 2011**. Columbia University Libraries add that it polled 800 members of the American Psychological Association. We could not open the 1982 paper itself, so this rests on two later sources that cite it.

Sources: REBT Network, 2007 · Ellis, 1957 · Ellis, 1995 · Albert Ellis Institute: REBT · Albert Ellis Institute: history · Ruggiero et al., 2018 · Blackwell & Heidenreich, 2021 · Miller, 2003 · Ellis, 1958 (J. Gen. Psychol. 59(1), 35–49) · Ellis, 1962 (Reason and Emotion in Psychotherapy) · Princeton University, 2012: George Miller · Warner, 1991 · Columbia University Libraries, 2011 · Smith, 1982 (American Psychologist 37, 802–809; not opened) · Padesky & Beck, 2003 · Ellis, "Emotional Disturbance and Its Treatment in a Nutshell" · Ellis, "My Philosophy of Psychotherapy" · Sy, 2017: unconditional self-acceptance · David, Albert Ellis Institute: REBT and modern research · David et al., 2018 · King et al., 2024 · J. Beck, 2024 · Beck Institute: Understanding CBT · Beck Institute, About CBT · Padesky, 2004 · Beck, 2008 · Beck Institute publication list, 2021 · Rush et al., 1977 · Hofmann et al., 2012

Aaron Beck: the analyst whose own data said no

Aaron T. Beck (18 July 1921, Providence – 1 November 2021, at 100) trained as a psychoanalyst, tried to prove its theory of depression, and built cognitive therapy from what he found instead.

Important **What Beck created, in short.** His method is called **cognitive therapy**. Its idea: at the root of depression and anxiety lie quick **automatic thoughts** and deeper beliefs about oneself, the world and the future; therapist and client test these thoughts together as hypotheses and change them. Today the Beck Institute calls the method "cognitive behaviour therapy" and notes that it was originally called cognitive therapy **in the institute's own words; Beck Institute, About CBT**. So "CBT" in the narrow sense is Beck's method, and in the broad sense a whole family of methods that also includes Ellis's REBT. **Ellis's REBT and Beck's cognitive therapy are two early forms of CBT.**

Life timeline

1921 — Born in Providence, Rhode Island, youngest child of Jewish immigrants from Ukraine (then the Russian Empire); father Harry Beck, a printer with socialist views; mother Elizabeth Temkin

Documented fact Inquirer, 2021; Goode, 2000; Beck & Fleming, 2022

age 7 or 8 — Broken arm, surgery, serious infection, over a month in hospital

sources disagree on the age

Documented fact Goode, 2000; Fried, 2022

1942 — Brown University: English and political science, magna cum laude

Documented fact Mendlowicz et al., 2022; Penn Almanac, 2006

1946 — Yale School of Medicine

Documented fact Mendlowicz et al., 2022

1950 — Marries Phyllis Whitman

Documented fact Inquirer, 2025

1954 — Joins the University of Pennsylvania, starts psychoanalytic training

Documented fact Penn Medicine, 2021

1956 or 1958 — Completes psychoanalytic training (Padesky: 1956; NYT: 1958)

Sources disagree Padesky, 2004; Goode, 2000

1959–1961 — Dream studies in depression

Documented fact Beck Institute publication list, 2021

1961 — Beck Depression Inventory (BDI), a questionnaire for measuring depression

Documented fact Beck Institute, 2021

1963, 1964

"Thinking and depression" I and II

Documented fact Beck Institute, 2021

1967

Depression: Clinical, Experimental, and Theoretical Aspects: automatic thoughts, cognitive triad, schema model

Documented fact Padesky, 2004

1976

Cognitive Therapy and the Emotional Disorders

Documented fact Beck Institute, 2021

1979

Beck, Rush, Shaw & Emery, *Cognitive Therapy of Depression*, the first detailed manual

Documented fact Beck Institute, 2021

1994

Beck Institute founded by Aaron and Judith Beck

Documented fact

Beck, J. S., History of Beck Institute; Penn Medicine, 2021

2006

Lasker Award

Documented fact Lasker Foundation; Penn Almanac, 2006

2021

Dies in his sleep, 1 November, aged 100

Documented fact Inquirer, 2021; AP, 2021

A frightened boy

Before Aaron was born, the family had lost two children; a daughter died in the 1919 flu epidemic **documented fact**. Sources give different totals for the number of children, from three to five **sources disagree**.

His mother was depressed for years after that and very protective of her youngest son **documented fact, per biographies**. Some biographers link his mother's depression to his lifelong interest in depression **biographers' interpretation**. Beck himself did not say so.

At 7 or 8 he spent over a month in hospital after a broken arm, surgery and a serious infection. Afterwards he had a fear of blood and injury: hospital scenes, even in films, made his blood

pressure drop, and the smell of ether could make him faint documented fact; Goode, 2000; AP, 2021.

How did he cope? He told *The New York Times*: "I learned not to be concerned about the faint feeling, but just to keep active." in Beck's own words; Goode, 2000. AP called this the first cognitive therapy exercise he did, on himself (journalists' interpretation; AP, 2021).

He repeated first grade. The quote "I always thought it was because I was dumb" appears only in a secondary source not verified against a primary source. His older brothers helped him catch up, and he finished school first in his class documented fact.

The psychiatrist who didn't want to be one

Beck wanted to be a neurologist and found psychiatry "nihilistic". A staff shortage sent him on a mandatory six-month rotation, meaning he had to spend six months working in psychiatry: "Even though I fought it, I finally had to do it." in Beck's own words; Beck, 2006; Bowles, 2004

The dream experiment (1959–1961)

Psychoanalytic theory explained depression as anger turned inward. Beck's dream studies ran 1959–1961 at the University of Pennsylvania documented fact; Beck Institute publication list, 2021: Beck & Hurvich, 1959; Beck & Ward, 1961. He set out to confirm the theory in his patients' dreams, and found something else.

What psychoanalytic theory predicted	What Beck found
Depression = anger turned inward, a need to suffer	Less hostility in depressed patients' dreams, not more
Dreams full of hostility	Dreams about loss, defeat, rejection, being defective
Success would make patients worse (masochism)	Success made patients feel better
—	Dream themes matched patients' conscious negative thoughts, only stronger

The first study used a small group of depressed and non-depressed patients. At first he read the results as confirming the "need to suffer" in Beck's own words; Beck, 2008.

What convinced him most was something else: correcting patients' mistaken interpretations led to remission, meaning the symptoms of depression went away, in about 10–12 sessions in Beck's own words; Beck, 2008, looking back almost 50 years later.

Important One hypothesis didn't hold; psychoanalysis as a whole was not disproved.

The tidy version and the real one

The story was also less tidy than it sounds. Christine Padesky (2004), Beck's former student, says his faith in psychoanalysis eroded gradually over about ten years.

The historian Rachael Rosner (2012, 2014), working with his personal archive, shows the "dreams to insight" story is simplified: a department conflict (a petition in January 1962) and years of isolation also mattered **historians' interpretation; Rosner, 2012, 2014**.

What was the petition? In January 1962 Kenneth Appel, head of psychiatry at the University of Pennsylvania, urged the whole department to sign a petition against the psychiatrist Eli Robins, the medical dean's preferred candidate. Beck refused to sign. The conflict strained his ties with colleagues and friends, and he stepped back from teaching for about five years **historians' interpretation; Psicologia USP, 2017, after Rosner**.

"I'm boring him": automatic thoughts

By Beck's own account, a patient describing her intimate life felt anxious. Asked about it, she admitted she was thinking "I'm afraid I'm boring you."
in Beck's own words; Goode, 2000; Smith, 2009

He called such thoughts **automatic thoughts**: fast, half-noticed, and they shape how we feel. In 1967 his book *Depression: Clinical, Experimental, and Theoretical Aspects* set out automatic thoughts, the cognitive triad and the schema model **documented fact; Padesky, 2004**. The cognitive triad is a negative view of three things at once: oneself, the world and the future. Schemas are core beliefs, deeper and more stable than quick automatic thoughts.

Rejected by the psychoanalysts

The American Psychoanalytic Association turned down his membership twice; one objection was that his patient got better in too few sessions
documented fact, per historians; Psicologia USP, 2017, after Rosner.

Later he called psychoanalysis "a faith-based therapy" **in Beck's own words; Smith, 2009**.

His wife: the "reality tester"

Phyllis Whitman Beck (1927–2025) was married to him for 71 years. With four children, she studied law at night at Temple University, graduating in 1967, aged 39, first in her class **documented fact; Inquirer, 2025**.

In 1981 she became the first woman appointed to Pennsylvania's Superior Court. Note that a woman already sat on the state Supreme Court in 1961 **documented fact; Inquirer, 2025**.

Beck called her his "reality tester" **in Beck's own words; Goode, 2000**.

Their children are Roy, Judith, Daniel and Alice. Judith Beck is president of the Beck Institute and author of *Cognitive Behavior Therapy: Basics and Beyond*; Alice Beck Dubow became a judge **documented fact**.

Most of his work came after 50

Here is a detail worth pausing on. Before 50, Beck had published fewer than 40 works. In the years from 50 to 80 he published 370 **documented fact; Padesky, 2004, for before 50 and 50–80**.

Over his lifetime he wrote 600+ articles and about 25 books **documented fact**. The book count varies slightly **sources disagree**: Penn Medicine (2021) gives 600+ articles and 24 books; the Beck Institute gives 25.

He created several scales: BDI (depression, 1961; updated BDI-II 1996), BHS (hopelessness, 1974) and BAI (anxiety, 1988). The scales are copyrighted, so we name them and do not reproduce them.

Hopelessness and suicide

His studies found that hopelessness predicted later suicide better than how depressed a person was **in Beck's own words; Beck, 2006**.

> Important Today hopelessness is a recognised risk factor, but no single sign predicts suicide on its own. If you are having thoughts of not wanting to live, see If you need help now at the end.

This line of work led to treatment. In a 2005 randomised trial co-authored by Beck, 10 sessions of cognitive therapy after a suicide attempt reduced repeat attempts over 18 months from 41.6% to 24.1% **proven by research, one trial; Brown et al., 2005**. Safety Planning grew out of this line of work (Thase, 2022). Described by Stanley and Brown in 2012, it is a brief intervention: the person writes, with a clinician, a short ordered list of their own warning signs, ways to cope, people and places that help, and professionals to contact, plus steps to keep lethal means out of reach **documented fact; Stanley & Brown, 2012**.

In his 90s

Most people retire; Beck started a new direction. In his 90s he worked on Recovery-Oriented Cognitive Therapy (CT-R) for people with serious mental illness. It is built around what a person wants from life rather than symptoms **documented fact; Beck Institute**.

One randomised trial (2012, 60 patients with schizophrenia) found improved functioning, that is, how well a person copes with everyday life: d = 0.56

proven by research, single study; Grant et al., 2012. d is an effect size: the bigger it is, the bigger the difference between groups, and 0 means no difference.

"90 is the new 70" and "I was born with happy genes" in Beck's own words; Art Carey, 2011. By 90 his eyesight and hearing had declined so much that he gave up tennis (Art Carey, 2011).

Criticism

Not everyone was impressed. Psychoanalysts called the approach superficial; behaviourists said thoughts can't be measured; psychiatrist Donald Klein argued cognitive therapy mostly boosts morale documented fact; Goode, 2000.

That CBT helps is better supported than Beck's explanation of why it helps (Gaudiano, 2008).

Journalist Benedict Carey recalls that Beck took criticism hard (a journalist's recollection; Carey, 2021).

Awards, and one title to avoid

Besides the Lasker Award (2006), his awards include the Heinz Award (2000/2001) and the Grawemeyer Award, and membership of the National Academy of Medicine.

- **Lasker Award.** The Lasker Awards, often called "America's Nobels", honour major contributions to medical research. Beck received the 2006 Albert Lasker Clinical Medical Research Award "for the development of cognitive therapy" documented fact; Lasker Foundation; Penn Almanac, 2006.
- **Heinz Award.** The Heinz Awards were set up in 1993 by Teresa Heinz in memory of her husband, Senator John Heinz. Beck was named the recipient of the 2000 Heinz Award in the Human Condition, announced in February 2001, which explains the two years documented fact; Daily Pennsylvanian, 2001.
- **Grawemeyer Award.** The University of Louisville's Grawemeyer Award for Psychology, worth $200,000, recognises outstanding ideas in psychology. Beck received it in 2004 for his work on cognitive therapy documented fact; APS Observer, 2004.

Myth vs fact **Myth:** Beck was a "Nobel nominee". **What the evidence says:** Nobel nominations are sealed for 50 years, so the claim cannot be checked not verified.

Sources: Goode, NYT, 2000 · AP in Boston Globe, 2021 · Philadelphia Inquirer, 2021 · Beck & Fleming, 2022 · Mendlowicz et al., 2022 · Fried, 2022 · Beck, 2006 · Bowles, 2004 · Padesky, 2004 · Beck, 2008 · Psicologia USP, 2017 · Smith, 2009 · Inquirer, 2025 · Beck Institute: Dr. Aaron T. Beck · Beck Institute: Judith Beck · Penn Medicine, 2021 · Beck Institute publication list, 2021 · History of Beck Institute · Lasker Foundation · Penn Almanac, 2006 · Brown et al., 2005 · Thase, 2022 · Beck Institute: CT-R · Grant et al., 2012 · Art Carey, 2011 · Gaudiano, 2008 · Benedict

Carey, 2021 · Heinz Awards · NCTSN: BDI-II · Beck et al., 1974 · Beck et al., 1988 · EBSCO: Beck's cognitive triad · Stanley & Brown, 2012 · Lasker Foundation: 2006 award · Daily Pennsylvanian, 2001 · APS Observer, 2004

Beck and Ellis: who borrowed from whom, and how the lines converged

Beck and Ellis arrived at similar ideas separately, and over the next decades the behavioural and cognitive lines, plus a few bridge-builders and British researchers, merged into what we now call CBT.

Did Beck borrow from Ellis?

It is a fair question, given the dates. In a 2002 letter to Christine Padesky, Beck wrote that he learned of Ellis's work only after his 1963–1964 papers, from a letter by Ellis himself. Karen Horney and Alfred Adler, he wrote, were the ones who influenced him **in Beck's own words; Padesky, 2004**.

Both were psychoanalysts who broke with parts of Freud's theory. Karen Horney (1885–1952), a German-born American psychoanalyst, argued that social conditions, rather than inborn drives, shape much of personality and its problems. Alfred Adler (1870–1937), an Austrian psychiatrist, worked with Freud and then split from him; his "individual psychology" looks at a person's feelings and memories in the light of their overall life goals **documented fact; Britannica**.

> Myth vs fact **Myth:** Beck invented CBT alone. **What the evidence says:** CBT grew from 1950s behaviour therapy, Ellis's REBT (before Beck's first papers), cognitive behaviour modification and British disorder-specific protocols **historians' interpretation; Blackwell & Heidenreich, 2021**.

Two lines, one family

In 1970 Beck argued in *Behavior Therapy* that behavioural and cognitive therapy are close and differ mainly in their theory of how change happens **in Beck's own words; Blackwell & Heidenreich, 2021**.

The bridge-builders

Three authors built bridges between the waves **documented fact; the "bridge" reading is historians' interpretation**.

Donald Meichenbaum wrote *Cognitive Behavior Modification* (1977) and *Stress Inoculation Training* (1985). Cognitive behaviour modification grew out of his research on self-instructional

training: teaching people to change what they say to themselves, the inner instructions that guide what they do. Stress inoculation training teaches coping in three phases: understanding one's stress, learning and rehearsing skills such as relaxation and problem-solving, then using them in real stressful situations. Michael Mahoney wrote *Cognition and Behavior Modification* (1974) and was the first editor of *Cognitive Therapy and Research* (1977).

Albert Bandura introduced self-efficacy (1977): change runs through expectations of coping, built by experiences of mastery **documented fact; Bandura, 1977**.

More second-wave milestones

Other second-wave milestones include exposure with response prevention for OCD (Meyer, 1966), meaning facing what triggers the obsession without the usual actions a person uses to calm down; covert sensitisation (Cautela, 1967) and Lazarus's multimodal therapy (1976).

In covert sensitisation, the person repeatedly imagines doing an unwanted behaviour and then imagines an unpleasant result, such as nausea, so that the behaviour loses its pull; nothing has to happen for real. Multimodal therapy looks at seven areas of a person's life, summed up as BASIC I.D.: behaviour, affect (emotions), sensation, imagery, cognition, interpersonal relationships and drugs/biology.

The first big integration of the behavioural and cognitive traditions is often said to be Clark's panic model (1986), which explains panic as a catastrophic reading of normal body sensations **historians' interpretation**. The first joint World Congress of behavioural and cognitive therapy (WCBCT) took place in 1995.

Associations followed. AABT, founded in 1966 by ten behaviourists, became the Association for Behavioral and Cognitive Therapies (ABCT) in 2005; the European association added "cognitive" in 1992 **documented fact**.

AABT stood for the Association for Advancement of Behavior Therapy; Wolpe and Lazarus were among its ten founders **documented fact; ABCT history**.

One model per disorder (mostly Oxford, 1985–2000)

From 1985 to 2000, mostly in Oxford, researchers built a separate cognitive model for each disorder. All rows are documented fact. A protocol here means a step-by-step treatment programme for one specific disorder.

Disorder	Model or protocol	Year
OCD (obsessive-compulsive disorder)	Salkovskis: intrusions as triggers; beliefs about responsibility for harm are key	1985
Panic disorder	Clark: panic as a catastrophic reading of normal body sensations	1986
Panic disorder	Barlow & Craske: *Mastery of Your Anxiety and Panic*; behavioural treatment of panic	1988, 1989
Social anxiety	Clark & Wells: cognitive model of social phobia	1995
Eating disorders	Fairburn et al.	1999
PTSD (post-traumatic stress disorder)	Ehlers & Clark: cognitive model of PTSD	2000

Foa's prolonged exposure and Resick's cognitive processing therapy (1992) are often listed here, but their primary sources were not checked for these notes, so they are not in the table **not verified**.

A whole country chose CBT

Then a health system bet on it. In 2004, NICE recommended CBT for depression and anxiety **clinical consensus**. In 2006 the programme IAPT (Improving Access to Psychological Therapies) was tried out at pilot sites. About 52% of patients recovered, but the evaluation was uncontrolled, meaning there was no comparison group (Clark, Layard & Smithies, 2008).

In 2008 IAPT was rolled out nationally in the NHS, England's public health service. According to Clark (2018), it treated over 560,000 patients a year, about half of whom recover, and had trained over 10,500 therapists (programme's own data; Clark, 2018).

Today it is called NHS Talking Therapies; the year of the renaming could not be confirmed **not verified**.

IAPT offered only NICE-recommended methods, mostly CBT. This made CBT the backbone of a national health system, and also drew criticism of one modality dominating (interpretation).

Sources: Padesky, 2004 · Blackwell & Heidenreich, 2021 · Bandura, 1977 · Meichenbaum, publications · Clark, 1986 · Salkovskis, 1985 · Clark & Wells, 1995 · Ehlers & Clark, 2000 · Craske publications (Barlow & Craske) · Clark, 2011 · Clark, Layard & Smithies, 2008 · Clark, 2018 · NHS Talking Therapies manual · ABCT history · EABCT · Britannica: Karen Horney · Britannica: Alfred Adler · Meichenbaum, 1977 · Defense Health Agency: stress inoculation training · Gale

Encyclopedia of Psychology: covert sensitisation · SAGE Encyclopedia, 2015: multimodal therapy

Does CBT work? Yes, with caveats

The early trials favoured cognitive therapy but had weak spots; the strongest finding is that relapse was less common after therapy ended than after medication was stopped.

The first trials and their weak spots

In 1977 cognitive therapy was put head to head with an antidepressant. Here are the key trials, with their caveats.

Study	What it found	Caveats	Evidence
Rush, Beck, Kovacs & Hollon, 1977	One of the first randomised trials: cognitive therapy did better than the antidepressant imipramine	Raters knew which group each patient was in (not blind); low drug doses; drug stopped two weeks before assessment; run at the developers' centre (allegiance effect, see below)	**Proven by research, with caveats** **historians' interpretation of weaknesses**
Shaw, 1977	A second controlled trial of Beck's therapy the same year	—	**Documented fact**
NIMH TDCRP, Elkin et al., 1989	250 patients, 16 weeks: CBT and interpersonal therapy (IPT) did not differ and did not fall short of imipramine; for more severe depression, data favoured imipramine and partly IPT	The severe-depression result differed across the three sites (Klein, 1996); Hollon et al. (1992) found no difference	**Proven by research; the severe-depression finding is disputed**
Hollon, DeRubeis et al., 2005	Relapse within 12 months (below)	Gap between past therapy and ongoing medication not statistically significant (P = .20), so it could be due to chance	**Proven by research**

NIMH TDCRP stands for the National Institute of Mental Health Treatment of Depression Collaborative Research Program. It randomly assigned 250 outpatients with depression to four 16-week treatments: CBT, interpersonal psychotherapy, the antidepressant imipramine plus clinical management, and a placebo pill plus clinical management **documented fact; Elkin et al., 1989**. Interpersonal psychotherapy (IPT), developed by Gerald Klerman and Myrna Weissman, is a short, structured therapy that helps a person resolve a current crisis in their relationships; for depression it usually takes 12 to 16 weekly sessions **documented fact; ISIPT**.

The effect that outlasts the therapy

The most striking result is about what happens after treatment stops.

Group	Relapsed within 12 months (Hollon et al., 2005)
Cognitive therapy, then stopped	30.8%
Stayed on antidepressant	47.2%
Antidepressant swapped for placebo (a dummy pill)	76.2%

In other words, past therapy protected at least as well as ongoing pills **proven by research; Hollon et al., 2005**.

> Important A caveat to keep in mind is the allegiance effect: results tend to lean toward the method the researchers favour (Luborsky et al., 1999).

Where CBT's evidence is strongest

A 2012 review of 106 meta-analyses found the strongest support for anxiety disorders, somatoform disorders, bulimia, anger problems and general stress **proven by research; Hofmann et al., 2012**. That does not mean CBT beats every other therapy there.

Somatoform disorders are conditions in which bodily symptoms cause distress but are not explained by a medical illness. In DSM-5, the American diagnostic manual, the term was replaced by "somatic symptom and related disorders" **documented fact; Psychiatric News; Kleinstäuber & Rief, 2015**.

Is CBT losing its power?

Does CBT lose effect over time? A 2015 meta-analysis said yes (Johnsen & Friborg); a 2017 re-analysis with more trials found no steady decline (Cristea et al.). The question is still debated **proven by research, still debated; Johnsen & Friborg, 2015; Cristea et al., 2017**.

Sources: Rush et al., 1977 · Shaw, 1977 · Elkin et al., 1989 · Klein, 1996 · Hollon et al., 1992 · Hollon et al., 2005 · Luborsky et al., 1999 · Hofmann et al., 2012 · Johnsen & Friborg vs Cristea et al.: overview · ISIPT: overview of IPT · Psychiatric News: DSM-5 somatic symptom disorders · Kleinstäuber & Rief, 2015

The uncomfortable number: g = 0.06

CBT is the most researched talking therapy, but for depression it barely outperforms other proper psychotherapies; most researched does not mean most effective.

The number

The key meta-analysis is Cuijpers et al., 2023, in the journal *World Psychiatry* **proven by research; Cuijpers et al., 2023**. Its lead author, Pim Cuijpers, is a professor of clinical psychology at Vrije Universiteit Amsterdam who specialises in clinical trials and meta-analyses of psychological treatments **documented fact; VU Amsterdam**. A meta-analysis is a study that pools many studies; this one covered 409 randomised trials and 52,702 patients with depression.

It measures effect size with Hedges' g: the bigger it is, the bigger the difference between groups, and 0 means no difference. In the table below, 0.79 is a clear difference and 0.06 is almost none.

Comparison	Effect size (Hedges' g)	What it means
CBT vs control conditions (waitlist, care as usual)	0.79	CBT works well
CBT vs other psychotherapies	0.06	Small difference; not significant in most sensitivity analyses

A waitlist is a group of people waiting for therapy who have not received it yet. Sensitivity analyses re-run the same data in different ways to see whether the result holds.

So CBT clearly beats doing nothing or usual care. Against other real therapies, the gap almost disappears.

Myth vs fact **Myth:** CBT is proven more effective than all therapies. **What the evidence says:** for depression its edge over other psychotherapies is small and unstable (g = 0.06); TDCRP found no difference from IPT **proven by research; Cuijpers et al., 2023; Elkin et al., 1989**.

Not a new finding

The NIMH TDCRP (1989) already found no difference between CBT and interpersonal therapy **proven by research; Elkin et al., 1989**.

Process-based therapy, described by Hofmann and Hayes in 2019 (see the next chapter), is partly a response to this. If therapy "brands" perform similarly, look at the processes that

change in a specific person (the authors' position).

What guidelines say

NICE NG222 (2022) lists individual CBT as one of several first-line options (treatments offered first) for depression in adults, alongside behavioural activation, interpersonal therapy, short-term psychodynamic therapy and antidepressants **clinical consensus; NICE NG222, 2022**. Behavioural activation is a talking therapy that helps people with depression lift their mood by gradually doing more of the activities they find rewarding and worthwhile.

For more severe depression, the list is ordered by recommended use. Individual CBT combined with an antidepressant comes first, and individual CBT alone second.

And it is not positive thinking

In CBT you don't swap a bad thought for a nice one; you check it. What is the evidence? Is there another explanation? The goal is a realistic view (the Beck Institute's own position; Beck, J. S., 2020).

> Myth vs fact **Myth:** CBT is positive thinking. **What the evidence says:** thoughts are tested against evidence; the goal is a realistic appraisal (the author's / institute's position; Beck, J. S., 2020).

Sources: Cuijpers et al., 2023 · Cuijpers et al., 2023 (record) · NICE NG222, 2022 · Beck Institute: CBT myths · Norris, 2023 · Beck, J. S., 2020 · Elkin et al., 1989 · VU Amsterdam: Pim Cuijpers · University of York: what is behavioural activation

Three waves of CBT: a useful story, not a scientific fact

CBT's history is usually told as three waves, but the division itself is disputed, and even its main opponents ended up writing together.

The three waves at a glance

Wave	Focus	Key figures and methods
1st, behavioural (1950s–60s)	Learning theory: classical conditioning (as with Pavlov and Little Albert) and operant conditioning	Wolpe, Eysenck, Lazarus, Skinner
2nd, cognitive (1960s–70s on)	Changing the content of thoughts: is this thought true?	Ellis, Beck, Meichenbaum, Mahoney
3rd, contextual (1990s–now)	The function of thoughts, not their form: acceptance, defusion, mindfulness, values	ACT, DBT, MBCT, FAP, behavioural activation, metacognitive therapy (lists differ between sources)

Sources: Hayes, 2004; Ruggiero et al., 2018; Blackwell & Heidenreich, 2021.

The abbreviations in the third row: ACT is Acceptance and Commitment Therapy; DBT, dialectical behaviour therapy, is Linehan's treatment for borderline personality disorder; MBCT is Mindfulness-Based Cognitive Therapy; FAP is Functional Analytic Psychotherapy.

Two terms from the table. Operant conditioning is learning through consequences: people and animals come to do or avoid certain behaviours depending on what follows them. Defusion, in ACT, means stepping back from the literal meaning of a thought and noticing thinking as an ongoing process, instead of taking the thought as a fact.

Who named the third wave

Steven C. Hayes, creator of ACT (Acceptance and Commitment Therapy), coined "third wave" in *Behavior Therapy*, 2004 **documented fact**. Hayes saw the third wave as building on the first two, not replacing them (in the author's own words).

New wave or old hat?

Critics read it differently. Stefan Hofmann is a clinical psychologist known for research on CBT for anxiety and depression; he was a professor at Boston University and in 2021 took up a Humboldt Professorship at the University of Marburg in Germany **documented fact; Humboldt Foundation, 2021**. Gordon Asmundson is a professor of psychology at the University of Regina in Canada who studies fear, anxiety and trauma **documented fact; CIPSRT**. Hofmann & Asmundson (2008), in "New wave or old hat?", argued that ACT has philosophical differences, but its techniques are fully compatible with CBT (historians' / researchers' interpretation).

Hofmann, Sawyer & Fang (2010) went further. DBT's and metacognitive therapy's developers see their methods as extensions of CBT, and MBCT continues CBT directly. ACT does differ in theory: it rests on relational frame theory and rejects the cognition–emotion–behaviour model.

Relational frame theory (RFT), developed by Hayes and colleagues, is an account of human language and thinking that builds on Skinner: it explains how people learn to relate words and ideas to one another, and it is the theoretical basis of ACT **documented fact; Zettle, 2005**.

Data show no wave is superior, so the authors call "new wave" misleading (interpretation).

How do the waves differ in practice? Per Hofmann & Asmundson (2008), CBT helps you appraise emotional cues differently before a response arises. ACT teaches you not to suppress a response that has already arisen.

Myth vs fact **Myth:** the third wave replaced CBT. **What the evidence says:** Hayes calls it an extension; critics see the new approaches as part of the CBT family (interpretation; Hayes, 2004; Hofmann, Sawyer & Fang, 2010).

From opponents to co-authors

Here is the twist. In 2019 Hofmann and Hayes, former opponents, co-wrote "Process-based therapy". The idea is to choose interventions by the processes of change in a specific person, not by diagnosis or therapy "brand" (the authors' own position). How well this approach is supported by data has not yet been assessed for these notes.

Third-wave timeline documented fact

1981	Hayes's "comprehensive distancing" manual, ACT's precursor
1985	First account of relational frame theory (RFT)
c. 1990–1991	The name ACT
1991	Functional Analytic Psychotherapy (FAP), Kohlenberg & Tsai
1993	Linehan, *Cognitive-Behavioral Treatment of Borderline Personality Disorder* (DBT)

1999	Hayes, Strosahl & Wilson, *Acceptance and Commitment Therapy*
2000	MBCT randomised trial, Teasdale et al.
2002	Segal, Williams & Teasdale, *Mindfulness-Based Cognitive Therapy for Depression*
2003	Young, Klosko & Weishaar, *Schema Therapy*
2008	Wells, *Metacognitive Therapy for Anxiety and Depression* (often cited as 2009)

"Comprehensive distancing" was the first name of the therapy that became ACT, developed by Hayes and his first doctoral student, Robert Zettle. The name came from the idea of extending the "distancing" step of Beck's cognitive therapy, that is, stepping back from one's own thoughts. It was later changed to avoid the sense of detachment the word carried and to set the method clearly apart from cognitive therapy **documented fact; Zettle, 2005**.

Inside the third wave

In the MBCT trial (Teasdale et al., 2000), among patients who had already had depression three or more times (77% of the participants), MBCT significantly reduced the risk of relapse, that is, of depression coming back, over 60 weeks **proven by research; Teasdale et al., 2000**.

Linehan put "cognitive-behavioral" in DBT's book title, which suggests she saw DBT inside CBT (interpretation; Hofmann et al., 2010).

Whether schema therapy belongs to the third wave is a point on which sources disagree **sources disagree; interpretation**.

Sources: Hayes, 2004 · Hofmann & Asmundson, 2008 · Hofmann, Sawyer & Fang, 2010 · Hofmann & Hayes, 2019 · Zettle, 2005 · Hayes, Strosahl & Wilson, 1999 · Linehan, 1993 · Teasdale et al., 2000 · Segal et al., 2002 · Young et al., 2003 · Wells, 2008 · Kohlenberg & Tsai, 1991 · Ruggiero et al., 2018 · Blackwell & Heidenreich, 2021 · Zettle, 2005: from comprehensive distancing to ACT · Humboldt Foundation, 2021: Stefan G. Hofmann · CIPSRT: Gordon Asmundson · Britannica: operant conditioning · Luoma & Hayes: cognitive defusion · University of Washington: Marsha Linehan

Myths about CBT: a quick check

Most popular claims about CBT's history and power are half-truths; here they are in one place, each with what the evidence says and how solid that is.

Myth	What the evidence says	Label
Beck invented CBT alone	CBT grew from 1950s behaviour therapy, Ellis's REBT (before Beck's first papers), cognitive behaviour modification and British disorder-specific protocols	**Historians' interpretation**
REBT is a version of Beck's therapy	By the dates it is the other way round; Ellis and Beck founded two cognitive lines independently, both out of psychoanalysis	**Historians' interpretation**
Little Albert's fear was later cured	The original paper says no attempt was made	**Documented fact**
Relaxation is what makes desensitisation work	Relaxation does not boost graded exposure; ungraded exposure is no worse than graded; exposure seems to be the working ingredient (Craske et al., 2012)	**Proven by research**
Beck's dream studies disproved psychoanalysis	One hypothesis didn't hold; psychoanalysis as a whole was not disproved, and the "dreams to insight" story is simplified (Padesky, 2004; Rosner)	**Historians' interpretation**
Beck was a Nobel nominee	Nominations are sealed for 50 years, so this cannot be checked	**Not verified**
CBT is positive thinking	Thoughts are tested against evidence; the goal is a realistic appraisal	The author's / institute's position
CBT only treats symptoms	It also works with core beliefs; good practice rests on a case formulation that includes the person's history	The author's / institute's position
CBT is proven more effective than all therapies	For depression its edge over other psychotherapies is small and unstable (g = 0.06); TDCRP found no difference from IPT	**Proven by research**
The third wave replaced CBT	Hayes calls it an extension; critics see the new approaches as part of the CBT family	**Interpretation**

Sources: Beck Institute: CBT myths · Norris, 2023 · Watson & Rayner, 1920 · Carona et al., 2023 · Padesky, 2004 · Cuijpers et al., 2023 · Hofmann, Sawyer & Fang, 2010 · Warner, 1991 · Columbia

University Libraries, 2011

Try this: catch the second sentence

A one-minute exercise in noticing your automatic thoughts. It is a first step of self-observation, not therapy, and it does not replace a specialist.

The exercise

1. Next time you're in a tense conversation, notice the sentence playing in your head alongside what you're saying out loud, like Beck's patient with "I'm afraid I'm boring you."
2. Just catch it. Don't argue with it or judge it.
3. Write it down, word for word. Equipment needed: one pen.

Why this is the first step in CBT

In Beck's model, automatic thoughts are fast and half-noticed, and they shape how we feel **in Beck's own words; Beck Institute**. Noticing them comes before anything else.

Later steps, such as checking a thought against evidence, belong in structured work, ideally with a trained professional. The next episode covers what exactly counts as a "thought" in CBT, based on Judith Beck's work.

Please don't

Please don't use this exercise to diagnose yourself or anyone else.

And don't keep pushing alone if what you notice is persistent hopelessness or thoughts of not wanting to live. Reach out: see If you need help now below.

A blank template

A blank "thought record" template made by @seitopsy (inspired by Beck's thought diary, Beck et al., 1979) is part of the Instagram week for this episode. Forms from books and from the Beck Institute website are copyrighted, so we don't reproduce them here.

Sources: Beck Institute, About CBT · Padesky, 2004 · Goode, NYT, 2000

Further reading: free first

Each item says what it covers and which chapter it belongs to.

Free, online

1. Padesky, C. A. (2004). Aaron T. Beck: Mind, man, and mentor. A biographical essay by Beck's former student: how his faith in psychoanalysis faded, the letter about Ellis, his publications after 50. Chapters “Aaron Beck: the analyst whose own data said no” and “Beck and Ellis: who borrowed from whom, and how the lines converged”.
2. Beck, A. T. (2006). How an anomalous finding led to a new system of psychotherapy. Beck himself on how his data on dreams led him to cognitive therapy. Chapter “Aaron Beck: the analyst whose own data said no”.
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