Cognitive-behavioral therapists typically present a list of “cognitive distortions” that describe the common errors we make at the level of our *thoughts*. (You are likely to find a list of those distortions in virtually every CBT workbook, and even in the Articles section of my website). However, there is another process of faulty reasoning that has to do with forming incorrect *beliefs*, and at this deeper level, our judgment can get even further off track. Why does the mind generate such causal mistakes, or fill in missing data with false information? The following list cites some credible sources that explain how and why we tend to produce (and even defend) a faulty belief system. Look closely to see if you can identify any famous persons mentioned here, and consider whether you too might share the same vulnerability to human error.

**Authorship Confusion.**

Daniel Wegner creates the phrase “authorship confusion” to describe how people mistakenly assume responsibility for causing an event, simply because the thought preceded the occurrence.¹

**‘As If’ and ‘What If’ Thoughts Lead to Believed-In Imaginings.**

Theodore Sarbin offers the phrase “believed-in imaginings” to describe the storied constructions people use to verify the existence of improbable events. A strong level of commitment to one’s story leads to a sense of realistic perception, causing the believer to move from an “as if” perspective to a conviction of actual reality. The person considers something as if it were true, and pretty soon, it becomes true. When this happens, the belief and the phenomenon cannot easily be differentiated.²
Causal Mistakes and Reasoning Errors.

Jean Piaget states that from a very young age, people develop mistaken beliefs about causal relationships between the mind and the physical world. Examples include thinking that actions, gestures or mental operations such as counting can bring about a desired event or stave off something bad, or that there is a meaningful relationship between random occurrences. Numerous other authors agree that the mind makes certain mistakes by allowing individuals to connect unrelated events while giving them unique significance.

Cognitive Fusion.

Steven C. Hayes explains that we believe our thoughts to be literally true when perhaps they are not. Most of us have a propensity to look “from” our thoughts instead of “at” our thoughts, since ideas arise convincingly inside our heads in the form of language. Additionally, certain notions are defended and maintained because they exist in networks – or “relational frames” – with other thoughts. In this way, ideas become entrenched and we become “fused” with our thinking. “I’m right and I can give you the reasons” is a strong indicator of cognitive fusion.

Cognitive Motivation to Reduce Uncertainty.

Leonard Zusne and Warren Jones illustrate that, “A ‘why’ question requires a ‘because’ answer. If the information is not available, incorrect information will be used.” The authors describe that we all have a cognitive motivation to secure explanations, however faulty. Other researchers agree that when individuals are faced with conditions of incomplete knowledge, they are compelled to construct beliefs in order to fill the gap of ambiguity and the unknown. This cognitive motivation to remove uncertainty is so powerful that the mind will prefer to fill the gap with incorrect information rather than to maintain a condition of uncertainty.
**Congruence is Preferred Over Truth.**

Zusne and Jones also describe how we want to believe something simply because it matches up with how we feel. Our conclusions are geared toward seeking an internal state of congruence and consistency, and in this way we can replace the disturbing psychological condition of uncertainty or imbalance.⁸

**Difficulty Tolerating Uncertainty.**

Jeffrey S. Victor explains why even disturbing beliefs receive credibility, writing, “A mistaken explanation for emotional pain can be preferable for a confused person to the ambiguity of uncertainty.”⁹ Donald Spence agrees that because people do not easily tolerate uncertainty, they create irrational accounts when plausible explanations are unavailable.¹⁰ In an attempt to make life meaningful and for it to make sense, people assemble beliefs from a number of sources in order to stitch together personal unknowns. Steven Jay Lynn, et. al. concur that for this reason, individuals are vulnerable to a condition of overconfidence that is susceptible to the mind’s many flaws and imperfections.¹¹

**Evolution Favors Anxious Genes.**

Aaron T. Beck explains that “our tendency to exaggerate the importance of certain situations – believing them to be a matter of life and death – overmobilizes our apparatus for dealing with threats and thus overrides normal functioning. It has been said that ‘evolution favors anxious genes.’ It is better to have ‘false positives’ (false alarms) than ‘false negatives’ (which miss the danger) in an ambiguous situation. One false negative – and you are eliminated from the gene pool. Thus, the cost of survival of the lineage may be a lifetime of discomfort.”¹²

**Magical Thinking.**

Numerous famous writers including Sigmund Freud, Margaret Mahler, and Ernest Becker have discussed magical thinking as a primitive defense that is often
used to relieve certain anxieties tied to the existential pain of separation, self-esteem, limitation, longing, loss, chance, death, and uncertainty. Magical thinking is described as the belief that thoughts and reality are connected and that thinking can influence the actual world. This is a universal condition that begins in infancy and continues to a large extent throughout everyone’s lifetime. Omnipotence (the belief that we caused something by thinking about it) is one form of magical thinking. Superstitious thinking is also similar to magical thinking.13

Heather Stone explains that magical thinking often emerges as an attempt to bypass ambiguity and the necessary psychological work of authentic suffering and existential awareness.14 Other authors clarify that under such conditions of uncertainty, lack of information, or an inability to explain phenomena, magical thinking will predominate. Magical thinking especially emerges when elements of chance, accident, hope, fear, and danger are conspicuous.15 Other forms of suffering that provoke magical thinking are seen at such times when profound longings emerge that accompany a perceived lack of control.16 From a behavioral perspective, magical thinking exists largely to control the uncontrollable.17

**Overvalued Ideation.**

The International Obsessive-Compulsive Foundation describes this phenomenon as “when the person with OCD has great difficulty understanding that his/her worry is senseless.”18 Jonathan Grayson similarly says it is “the belief that the concerns underlying the symptoms are entirely realistic.”19 Steven Phillipson states that from this perspective, “the patient is not fully aware in a logical way that the threat is of an irrational nature.”20

**Reinforcement.**

Famous behaviorists such as Ivan Pavlov, Edward Thorndike, and B.F. Skinner all produced well-known studies on superstitious behavior, demonstrating that when reinforcement and behavior are accidentally or intermittently paired,
people learn that certain meaning exists, and that meaning has lasting power over them, even if it’s wrong.\textsuperscript{21}

**Susceptibility to Coincidence.**

Stuart Vyse writes that our personal beliefs end up being formed by observing coincidences, and that this human sensitivity to coincidence is an “overlooked psychological truth and a monumental understatement.”\textsuperscript{22} Raeann Dumont concurs, “Our personal belief system has been constructed by observing coincidences. . . . All of us, in every stage of life, have a limited reality.”\textsuperscript{23}

**Thought-Action Fusion.**

Stanley Rachman describes “thought-action fusion” as a tendency to confuse thinking about an action with the action itself.\textsuperscript{24}

### Notes


11 Lynn, et al., “Rendering the Implausible Plausible,” 133.


18 International OCD Foundation, [www.ocfoundation.org](http://www.ocfoundation.org), Glossary of Terms.


22 Vyse, *Believing in Magic*, 60.
