

Information Handout

Professional Version | UK English

Thought-Action Fusion



Description

The *Thought-Action Fusion* information handout forms part of the cognitive distortions series, designed to help clients and therapists to work more effectively with common thinking biases.

A brief introduction to cognitive distortions

Cognitive distortions, cognitive biases, or 'unhelpful thinking styles' are the characteristic ways our thoughts become biased (Beck, 1963). We are always interpreting the world around us, trying to make sense of what is happening. Sometimes our brains take 'shortcuts' and we think things that are not completely accurate. Different cognitive short cuts result in different kinds of bias or distortions in our thinking. Sometimes we might jump to the worst possible conclusion ("this rough patch of skin is cancer!"), at other times we might blame ourselves for things that are not our fault ("If I hadn't made him angry he wouldn't have hit me"), and at other times we might rely on intuition and jump to conclusions ("I know that they all hate me even though they're being nice"). These biases are often maintained by characteristic unhelpful assumptions (Beck et al., 1979).

Different cognitive biases are associated with different clinical presentations. For example, catastrophising is associated with anxiety disorders (Nöel et al., 2012), dichotomous thinking has been linked to emotional instability (Veen & Arntz, 2000), and thought-action fusion is associated with obsessive compulsive disorder (Shafran et al., 1996).

Catching automatic thoughts and (re)appraising them is a core component of traditional cognitive therapy (Beck et al., 1979; Beck, 1995; Kennerley, Kirk, Westbrook, 2007). Identifying the presence and nature of cognitive biases is often a helpful way of introducing this concept – clients are usually quick to appreciate and identify with the concept of 'unhelpful thinking styles', and can easily be trained to notice the presence of biases in their own automatic thoughts. Once biases have been identified, clients can be taught to appraise the accuracy of these automatic thoughts and draw new conclusions.

Thought-Action Fusion

Magical thinking (sometimes referred to as 'magical ideation') refers to "beliefs that defy culturally accepted laws of causality, such as beliefs in magical influences" (Einstein & Menzies, 2006). Examples include beliefs about mind-reading, telekinesis, or that breaking a mirror will result in bad luck. Developmental approaches suggest that children use magic as an explanatory tool when they encounter events that violate their expectations (Phelps & Wooley, 1994). While magical explanations decrease during childhood, beliefs in superstitions, curses, or spells frequently persist into adulthood, although they often decline with age (Brashier & Multhaup, 2017).

Thought-action fusion (TAF), also known as the omnipotence of thoughts, is a cognitive distortion and subtype of magical thinking, whereby individuals believe that thoughts and actions are inextricably linked (Berle & Starcevic, 2005; Rachman & Shafran, 1999). Shafran and Rachman (2004) identify two forms of TAF:

- **Likelihood TAF:** "the belief that having an unwanted, unacceptable intrusive thought increases the likelihood that a specific event will occur".
- **Morality TAF:** "the belief that having an unacceptable intrusive thought is almost the moral equivalent of carrying out that act".

However, likelihood and moral TAF are often closely related. For example, believing that thoughts can result in harm is likely to trigger moral judgements about the self for thinking in this way (Rachman & Shafran, 1999).

A variant of TAF, thought-object fusion (TOF) describes the belief that thoughts and feelings can be transferred to objects and 'passed on' to other individuals (Gwilliam et al., 2014; Myers et al., 2009). For example, an individual might think that wearing shoes belonging to a deceased person will somehow contaminate them with death (Bearle & Starcevic, 2005).

Description

Finally, Thought-shape fusion (TSF) is associated with some eating disorders (Shafran & Robinson, 2004).

Shafran and colleagues (1999) identify three forms of TSF:

- **Likelihood TSF:** “the belief that just thinking about eating a forbidden food makes it likely that the person has gained weight or changed shape”.
- **Moral TSF:** “experiencing the thoughts about eating forbidden food is believed to be morally equivalent to actually eating the prohibited food”.
- **Feeling TSF:** “experiencing thoughts about eating forbidden food increases the feeling of fatness”.

Limited research has explored the origins of TAF. However, Bearle and Starcevic (2005) suggest that certain factors may increase the likelihood of this thinking style emerging. They include elevated beliefs about personal responsibility, being exposed to strict belief systems and moral codes, and co-occurrence of thoughts and significant life events (e.g., a relative dying shortly after wishing they were dead).

Examples of this style of thinking include the following:

- “I thought about my wife getting hurt, so now it’s more likely to happen” (TAF).
- “I thought about sex with someone other than my husband, which is as bad as having an affair” (TAF).
- “My teddy bear holds my feelings and memories from childhood” (TOF).
- “Just thinking about ordering fast food makes me feel fatter” (TSF).

People who habitually engage in TAF may have ‘blind spots’ when it comes to:

- Overestimating the power of thoughts and their impact on events.
- Forming accurate (rather than illusionary) connections between events.
- Seeing thoughts and morality as independent of one another.
- Disengaging from intrusive thoughts and images.
- Fairly and objectively attributing responsibility for events.

As with many cognitive biases, there are evolutionary reasons why people might think magically. Gilbert (1998) suggests many information-processing biases are built into the human mind because they have proved to be adaptive in some situations. For example, humans have long been exposed to severe and unmanageable threats. In this context, TAF and other forms of magical thinking may have given people a sense of control, reducing the high levels of anxiety that could have compromised their survival (Markle, 2010).

TAF has been studied extensively in obsessive compulsive disorder (OCD), contributing to the belief that intrusive thoughts are important and dangerous (Amir et al., 2001). It is also associated with other clinical problems, including:

- Depression (Gjelsvik et al., 2018)
- Eating disorders (Shafran & Robinson, 2004)
- Generalised anxiety disorder (Hazlett-Stevens et al., 2002)
- Health anxiety (Arnaez et al., 2019)
- Panic disorder (Muris et al., 2001)
- Psychosis (Kabakci et al., 2008)
- Social anxiety (Muris et al., 2001)
- Suicidality (Gjelsvik et al., 2018)

Instructions

Suggested Question

Many people struggle with thought-action fusion, and it sounds like it is something you experience too. Would you be willing to explore it with me?

Clinicians might begin by providing psychoeducation about thought action fusion and automatic thoughts more generally. Consider sharing some of these important details:

- Automatic thoughts spring up spontaneously in your mind, usually in the form of words or images.
 - They are often on the 'sidelines' of our awareness. With practice, we can become more aware of them. It is a bit like a theatre – we can bring our automatic thoughts 'centre stage'.
 - Automatic thoughts are not always accurate: just because you think something, doesn't make it true.
 - Automatic thoughts are often inaccurate in characteristic ways. One common type of bias in automatic thoughts is 'thought-action fusion': you assume that something is likely to happen because you thought about it, or that you're bad in some way because you had a certain thought.
 - Signs that you are experiencing thought-action fusion include feeling distressed because you had an intrusive thought, trying very hard 'not' to have certain thoughts, or feeling the need to 'neutralise' unwanted thoughts.
 - In many ways, we are evolved to 'think magically'. Even if you know that thinking is unlikely to have a direct influence on events, a small amount of doubt about this makes these thoughts hard to ignore. Some psychologists think magical thoughts may have helped early humans feel less anxious about uncontrollable events, understand and solve problems they had little knowledge about, and be alert to potential dangers.
- Many treatment techniques are helpful for working with TAF.
- **Psychoeducation.** People who experience TAF often have misconceptions about the meaning of intrusive thoughts and what constitutes 'normal' thinking. Psychoeducation can correct these misunderstandings and normalise clients' experiences (Zucker et al., 2002). Relevant information might include:
 - 80–90% of people experience intrusive or involuntary thoughts that come 'out of the blue'.
 - These intrusive thoughts are often unwanted and unpleasant.
 - There is no scientific evidence indicating that thoughts can have a direct influence on the external world (e.g., telekinesis).
 - Some people are concerned by intrusions because they believe these thoughts are important and dangerous. In other words, they assume that intrusive thoughts will somehow make bad things more likely, which causes distress.
 - **Decentering.** Meta-cognitive awareness, or decentering, describes the ability to stand back and view a thought as a cognitive event: as an opinion, and not necessarily a fact (Flavell, 1979). Help clients to practise labelling the process present in the thinking rather than engaging with the content. For instance, they might say "This is magical thinking" to themselves whenever they notice these thoughts.
 - **Cognitive restructuring with thought records.** Self-monitoring can be used to capture and re-evaluate TAF as it occurs.

Useful prompts include:

Suggested Questions

- *What evidence shows that thinking about this will make it more likely to happen? Is that evidence reliable or circumstantial?*
- *Has thinking about this caused it to happen before now? Have you ever acted on this thought in the past?*
- *Has thinking about a positive event made it happen in the past? Why not?*
- *How would thinking about this cause it to happen? What mechanism would bring that about?*
- *If thoughts lead to action, how are people able to control themselves when they feel angry?*
- *If someone virtuous or ethical had a similar unwanted thought, would you think they are immoral or in danger? Why not?*
- *Would an immoral person be concerned about having these thoughts? What does your concern say about your morality?*

- **Behavioural experiments.** Experiments can help establish whether thoughts directly influence events. These tasks involve thinking about a specific outcome multiple times and seeing whether it occurs. For example, clients might:

- Purchase a lottery ticket and think about winning the jackpot.
- Select a home appliance and think about it breaking down.
- Imagine they catch a cold.
- Think about a loved one being harmed.

Some clients are reluctant to think about bad things happening to a loved one. If so, experiments can begin with thinking about unpleasant things happening to the therapist.

Experiments can also focus on whether thoughts lead to actions. For example, the client could try:

- Holding a sharp object to see if they act on thoughts about stabbing themselves.
- Going to a quiet library to see if they act on thoughts about shouting offensive words.
- Visiting a train station to see if they act on thoughts about pushing a stranger in front of the train.
- **Surveys.** Clients often benefit from discovering how other people think and how they appraise their thoughts. Topics for (anonymous) surveys might include the following:

Suggested Questions

- *Do other people ever experience similar intrusive thoughts to the client?*
- *Do they think these thoughts are immoral or will cause bad things to happen?*
- *Do they think the client is immoral for having such thoughts?*

- **Testing beliefs and assumptions.** It can be helpful to explore whether the client holds beliefs or assumptions that drive thought-action fusion, such as, "Negative thoughts increase the risk that bad things will happen" and "Thinking about an action is just as bad as doing it". If assumptions like these are identified, clients can assess how accurate and helpful they are. Their attitudes towards healthier assumptions can be explored, such as, "Thoughts and actions are different – thinking can't affect external events on its own". Assumptions can also be tested using behavioural experiments, including surveys (e.g., "Let's see if other people believe their thoughts are as dangerous as I think mine are").

References

- Amir, N., Freshman, M., Ramsey, B., Neary, E., & Brigidi, B. (2001). Thought–action fusion in individuals with OCD symptoms. *Behaviour Research and Therapy*, 39, 765-776. DOI: 10.1016/S0005-7967(00)00056-5.
- Arnáez, S., García-Soriano, G., López-Santiago, J., & Belloch, A. (2020). Dysfunctional beliefs as mediators between illness-related intrusive thoughts and health anxiety symptoms. *Behavioural and Cognitive Psychotherapy*, 48, 315-326. DOI: 10.1017/S1352465819000535.
- Beck, A. T. (1963). Thinking and depression: I. Idiosyncratic content and cognitive distortions. *Archives of General Psychiatry*, 9, 324-333. DOI: 10.1001/archpsyc.1963.01720160014002.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. Guilford Press.
- Beck, J. S. (1995). *Cognitive behavior therapy: Basics and beyond*. Guilford Press.
- Berle, D., & Starcevic, V. (2005). Thought–action fusion: Review of the literature and future directions. *Clinical Psychology Review*, 25, 263-284. DOI: 10.1016/j.cpr.2004.12.001.
- Brashier, N. M., & Multhaup, K. S. (2017). Magical thinking decreases across adulthood. *Psychology and Aging*, 32, 681–688. DOI: 10.1037/pag0000208.
- Einstein, D. A., & Menzies, R. G. (2006). Magical thinking in obsessive-compulsive disorder, panic disorder and the general community. *Behavioural and Cognitive Psychotherapy*, 34, 351-357. DOI: 10.1017/S1352465806002864.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist*, 34, 906. DOI: 10.1037/0003-066X.34.10.906.
- Gilbert, P. (1998). The evolved basis and adaptive functions of cognitive distortions. *British Journal of Medical Psychology*, 71, 447-463. DOI: 10.1111/j.2044-8341.1998.tb01002.x.
- Gjelsvik, B., Kappelmann, N., von Soest, T., Hinze, V., Baer, R., Hawton, K., & Crane, C. (2018). Thought–action fusion in individuals with a history of recurrent depression and suicidal depression: Findings from a community sample. *Cognitive Therapy and Research*, 42, 782-793. DOI: 10.1007/s10608-018-9924-7.
- Hazlett-Stevens, H., Zucker, B. G., & Craske, M. G. (2002). The relationship of thought–action fusion to pathological worry and generalized anxiety disorder. *Behaviour Research and Therapy*, 40, 1199-1204. DOI: 10.1016/S0005-7967(01)00138-3.
- Kabakcı, E., Demir, B., Demirel, H., & Şevik, A. E. (2008). Thought–action fusion: Is it present in schizophrenia? *Behaviour Change*, 25, 169-177. DOI: 10.1375/bech.25.3.169.
- Markle, D. T. (2010). The magic that binds us: Magical thinking and inclusive fitness. *Journal of Social, Evolutionary, and Cultural Psychology*, 4, 18–33. DOI: 10.1037/h0099304.
- Muris, P., Meesters, C., Rassin, E., Merckelbach, H., & Campbell, J. (2001). Thought–action fusion and anxiety disorders symptoms in normal adolescents. *Behaviour Research and Therapy*, 39, 843-852. DOI: 10.1016/S0005-7967(00)00077-2.

References

- Myers, S. G., Fisher, P. L., & Wells, A. (2009). An empirical test of the metacognitive model of obsessive-compulsive symptoms: fusion beliefs, beliefs about rituals, and stop signals. *Journal of Anxiety Disorders, 23*, 436-442. DOI: 10.1016/j.janxdis.2008.08.007.
- Noël, V. A., Francis, S. E., Williams-Outerbridge, K., & Fung, S. L. (2012). Catastrophizing as a predictor of depressive and anxious symptoms in children. *Cognitive Therapy and Research, 36*, 311-320. DOI: 10.1007/s10608-011-9370-2.
- Phelps, K. E., & Woolley, J. D. (1994). The form and function of young children's magical beliefs. *Developmental Psychology, 30*, 385-394. DOI: 10.1037/0012-1649.30.3.385.
- Rachman, S., & Shafran, R. (1999). Cognitive distortions: Thought-action fusion. *Clinical Psychology and Psychotherapy, 6*, 80-85. DOI: 10.1002/(SICI)1099-0879(199905)6:2<80::AID-CPP188>3.0.CO;2-C.
- Shafran, R., & Rachman, S. (2004). Thought-action fusion: A review. *Journal of Behavior Therapy and Experimental Psychiatry, 35*, 87-107. DOI: 10.1016/j.jbtep.2004.04.002.
- Shafran, R., & Robinson, P. (2004). Thought-shape fusion in eating disorders. *British Journal of Clinical Psychology, 43*, 399-408. DOI: 10.1348/0144665042389008.
- Shafran, R., Teachman, B. A., Kerry, S., & Rachman, S. (1999). A cognitive distortion associated with eating disorders: Thought-shape fusion. *British Journal of Clinical Psychology, 38*, 167-179. DOI: 10.1348/014466599162728.
- Shafran, R., Thordarson, D. S., & Rachman, S. (1996). Thought-action fusion in obsessive compulsive disorder. *Journal of Anxiety Disorders, 10*, 379-391. DOI: 10.1016/0887-6185(96)00018-7.
- Veen, G., & Arntz, A. (2000). Multidimensional dichotomous thinking characterizes borderline personality disorder. *Cognitive Therapy and Research, 24*, 23-45. DOI: 10.1023/A:1005498824175.
- Westbrook, D., Kennerley, H., & Kirk, J. (2011). *An introduction to cognitive behaviour therapy: Skills and applications (2nd ed.)*. Sage.
- Zucker, B. G., Craske, M. G., Barrios, V., & Holguin, M. (2002). Thought action fusion: can it be corrected? *Behaviour Research and Therapy, 40*, 653-664. DOI: 10.1016/S0005-7967(01)00054-7.

When we feel strong emotions – such as fear, sadness, shame, or hopelessness – we have often just had an *automatic thought*. These thoughts can happen so quickly and effortlessly that we are not even aware we've had them. It can take practice to notice them as they arise. Automatic thoughts often feel convincing, but they are not always 100% accurate.

They are often *exaggerated, biased, distorted, or unrealistic*. There are different types of biases, which psychologists call *cognitive distortions* or *unhelpful thinking styles*. We all think in exaggerated ways sometimes, but it can become a problem if your thoughts are distorted very often or very strongly.

Thought-action fusion (TAF) is a style of 'magical thinking' where you believe your thoughts can directly influence the world around you. There are different types: '**Likelihood TAF**' (you believe having a negative thought makes it more likely that something bad will happen to you or another person), '**Morality TAF**' (you believe having a thought about doing something is just as bad as actually doing it), '**Thought-Object Fusion**' (you believe that thoughts and feelings can be transferred to certain objects), and '**Thought-Shape Fusion**' (thoughts about eating certain food make you feel bad about yourself or as if you have gained weight).



Thought-action fusion is associated with a wide range of problems:

- Eating disorders
- Depression
- Generalised anxiety disorder
- Health anxiety
- OCD
- Panic disorder
- Psychosis
- Social anxiety
- Suicidality

Overcoming thought-action fusion

Noticing and labelling

The first step in overcoming thought-action fusion is to notice when you are doing it. Practise self-monitoring so that you get better at catching your unhelpful assumptions as they happen. When you notice one, say something to yourself like:

- "That's an unreasonable response to the thought I'm having."
- "I'm placing too much value on my thoughts again."



Evaluate your thinking

There are lots of ways of viewing a situation or experience. You can practise putting your thoughts in perspective by asking yourself these questions:

- Have thoughts like this always caused bad things to happen in the past? Why not?
- How would my thoughts cause this to happen? Is there a scientific explanation?
- Everyone experiences thoughts like these, so are we all dangerous/bad or is it just me?



Know your facts

It's important to remember that your thoughts are not as 'bad' or 'dangerous' as you believe they are. Extensive research has shown that:

- Everyone experiences negative, unwanted thoughts or 'intrusions' sometimes.
- Intrusions cause distress when we think they are more important than they are (e.g., when we think they make us 'immoral').
- Thoughts don't affect the external world (for example, there's no evidence that telekinesis exists).



Test out your thoughts

You can test out whether your thoughts influence external events by using experiments. For example, you could:

- Buy a lottery ticket and wish for the jackpot – did you win?
- Think about catching a cold – did you become unwell?
- When you feel ready, try more challenging experiments. For example, you could write "I wish that <a loved one> becomes unwell today".



Psychology Tools develops and publishes evidence-based psychotherapy resources. We support mental health professionals to deliver effective therapy, whatever their theoretical orientation or level of experience.

Our digital library encompasses information handouts, worksheets, workbooks, exercises, guides, and audio skills-development resources.

Our tools are flexible enough to be used both in-session and between-session, and during all stages of assessment, formulation, and intervention. Written by highly qualified clinicians and academics, materials are available in digital and printable formats across a wide range of languages.



Resource details

Title: Thought-Action Fusion
Type: Information Handout
Language: English (GB)
Translated title: Thought-Action Fusion

URL: <https://www.psychologytools.com/resource/thought-action-fusion>
Resource format: Professional
Version: 20230920
Last updated by: JP

Terms & conditions

This resource may be used by licensed members of Psychology Tools and their clients. Resources must be used in accordance with our terms and conditions which can be found at: <https://www.psychologytools.com/terms-and-conditions/>

Disclaimer

Your use of this resource is not intended to be, and should not be relied on, as a substitute for professional medical advice, diagnosis, or treatment. If you are suffering from any mental health issues we recommend that you seek formal medical advice before using these resources. We make no warranties that this information is correct, complete, reliable or suitable for any purpose. As a professional user, you should work within the bounds of your own competencies, using your own skill and knowledge, and therefore the resources should be used to support good practice, not to replace it.

Copyright

Unless otherwise stated, this resource is Copyright © 2023 Psychology Tools Limited. All rights reserved.