8 Cannabis and anxiety: What does the research say?

Just as cannabis is implicated in an increased risk of depression but is also used by some to ameliorate the effects of depression, some cannabis users report that the drug relieves anxiety, although anxiety may be reported as an adverse symptom of cannabis use \[205\]. Of particular interest is whether cannabis use is associated with the development of anxiety disorders (such as panic disorder, obsessive compulsive disorder or generalised anxiety disorder), which can create significant adverse outcomes for those living with such a disorder.

A study analysing data from the United States National Comorbidity Survey shows that respondents who were dependent on cannabis were over two times more likely to have a lifetime diagnosis of generalised anxiety disorder or to have ever had panic disorder \[129\]. Additionally, those with a lifetime cannabis dependence diagnosis who were currently using cannabis were over twice as likely to have a current anxiety disorder than those who had never been dependent on cannabis. In Australia, the prevalence of anxiety disorders is higher among those with cannabis dependence (17%) compared with those who do not use cannabis (5%), according to the National Survey of Mental Health and Well-being \[206\]. However, this relationship was not significant once confounding factors such as demographics, personality, and other drug use were controlled for, suggesting that an unobserved factor may be responsible.

Panic disorder is one of the rare examples of acute cannabis use precipitating a chronic disorder \[250\]. These cases were unusual and would probably have been precipitated by another stressor, but the causal linkage was evident. While cannabis dependence appears to be related to the development of panic attacks \[230\], the evidence for cannabis use alone is mixed \[230\][251].

Both alcohol and cannabis dependence have been found to develop in those diagnosed with social anxiety disorder independently of other anxiety disorders \[252\].

Both Degonda and Angst \[253\] and Tournier et al. \[43\] found that agoraphobia was related to cannabis use. However, Tournier et al. \[43\] found no relationship between state anxiety and cannabis use and concluded that cannabis neither produced nor relieved anxiety in their sample.

Generalised anxiety disorder has been found to be a predictor of both alcohol dependence and cannabis abuse \[254\] although less powerful than conduct disorder.

The only studies located that examined the relationship between obsessive compulsive disorder and cannabis use found no significant relationship \[255\][230] and social phobia appears more strongly associated with alcohol use \[253\]. There is almost no research into any causal connection of cannabis use with post-traumatic stress disorder.
As previously emphasised, longitudinal research is needed to establish whether a relationship is causal. Two separate longitudinal studies conducted in New Zealand have not found a relationship between cannabis use and anxiety disorders [276][277]. Similarly, an American prospective study found no association between cannabis use and anxiety disorders [276]. Two Australian studies did find a relationship: the first only for females [216]; and the second study for both sexes [62]. However, it should be pointed out that these two studies measured anxiety and depression together, so it is possible that the depression is accounting for the relationship. Additionally, it may be that the longer follow up periods in the latter studies allowed for the relationship to emerge. Overall, the evidence for the claim that cannabis use causes anxiety disorders later in life is not supported by the limited evidence available.