

Anxiolytic Drugs Long-Term Effects on Anxiety

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Psychological Experiment Proposal

Author Note

First paragraph: Goal of the experiment

Second-Fourth paragraph: Theoretical background

Fifth paragraph: Hypothesis and research question

Sixth-Eighth paragraph: Experiment explained

Abstract

Anxiety plagues many individuals across the nation in their daily lives. To assist in the lives of these individuals anxiolytic drugs have been developed. These drugs often provide the relief needed for those suffering, but come with a downside in many cases. These downsides are found in the form of rebound anxiety. This rebound anxiety more often than not creates a worse life for the patient as they are either forced to be dependent on the drug or left with worsened anxiety.

The goal of this experiment is to discover a link between an increase or decrease in anxiety from the use of anxiolytic medications such as alprazolam. With this link discovered this information can be used to revolutionize the difficult field of anxiety management within patients and increase their quality of life no matter the outcome. Maybe even to discover new anti-anxiety tactics when interviewing the subjects of this experiment to create a healthier anxiety management tactic.

The first article in the background portion of this experiment is A Review of Alprazolam Use, Misuse, and Withdrawal. This article does a good job of describing why alprazolam is the most commonly abused benzo due to its fast acting and hard hitting effects. This is shown by comparing the reward feeling of different benzodiazepines on the individual. The half-life is shown to be shorter than other benzodiazepines as well which would create a more intense craving feeling as the drug empties out of the body faster than others. This emptying out of the body causes withdrawal symptoms in as little as one week of taking the drug. These particular withdrawal symptoms from alprazolam end up creating particularly unique kinds of rebound anxiety within the individual. In particular individuals even report increased anxiety after the abuse or use of the drug. “Another study reported that of 126 patients with panic disorder treated with alprazolam, 27% of patients had rebound anxiety that was more severe than pretreatment anxiety, and 35% of patients had new somatic symptoms after alprazolam discontinuation, despite a taper over 4 weeks.” This gives an idea at how severe the drugs effect on post-acute withdrawal symptoms can be on day to day life of someone suffering from anxiety that tried to alleviate their pain with this drug.

The next article is High-Dose Benzodiazepine Dependence: A Qualitative Study of Patients' Perceptions on Initiation, Reasons for Use, and Obtainment. This article focuses on those that used these benzodiazepines and how they helped at first but soon took over their lives by being such an addictive substance. Many testimonials are used in this article to further prove their point. These include many who receive the medication from their doctor and have amazing results with it, but soon become dependent and cannot stop even further having to increase their doses. This creates an individual that is hooked for life on a substance as their life without it is now even worse than it was before as they know what it is like to be relieved of their symptoms. Often times this lifelong urge for anxiety free life leads to doctors attempting to cut individuals off from the drug incorrectly and forcing them on the street creating the next wave of drug addicts. The article uses witness testimonial to explain how this happens. "My doctor does not prescribe me benzodiazepines anymore. She told me that I would not get any benzos from her (...). The only option left is back on the street...That, I did not want." Being relieved and then allowing the symptoms to come back creates someone plagued by anxiety and fully dependent on their doctor to feel normal rather than feel better. Many of these individuals report never being able to fully recover from the increase in anxiety symptoms from using these medications.

The last article being used is Benzodiazepines I: Upping the Care on Downers: The Evidence of Risks, Benefits and Alternatives. This article focuses on the amount of prescriptions given for these drugs in order to mask symptoms instead of fix them. Often times anxiety is caused by an underlying issue rather than just making itself manifest. This leads to individuals masking their symptoms and allows for the symptoms to come back and even worsen after they receive a medication that numbs them. This want to numb with medication leads to a sharp increase in medication intake as tolerance builds. The article describes the tolerance associated with this urge to numb the pain of anxiety with medication “While therapeutic effects are subject to tolerance, adverse effects often are not, with cognitive, depressogenic, and disinhibiting effects typically persisting long-term when present and increasing in risk if doses are increased in response to therapeutic tolerance.” These medications are carelessly prescribed in order to quickly fix the patient and create someone addicted to medication in order to fund the pharmaceutical industry. The patients need care other than numbing agents.

With this hypothesis many questions will be asked of the subjects of our experiments, taking a more interview like approach to the experiment. The pool of attendees will include those with anxiety disorder diagnosis who are not on any medications, those who are on these medications currently, and those who have taken the medications and quit for a period of time to get past the initial withdrawal symptoms. A pool of those who are on these medications for self medicating/abuse will be interviewed as well.

These questions will include asking what medications these individuals are on or have taken. Have they experienced withdrawal symptoms? Have they noticed an increase or decrease in their anxiety levels or triggers after taking these medications? Do they think these medications

are helpful for daily anxiety or a crutch to sedate the anxiety away? Will they remain on these medications forever? Do they notice cravings for the medication itself?

### **Research Question**

Does habitually taking anxiolytic medication cause rebound anxiety?

### **Hypothesis**

Patients given anxiolytics drugs such as alprazolam will have rebound anxiety to the point that their quality of life is reduced after being prescribed.

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The withdrawal symptoms will be compared between chronic users, light users, and those who have stopped taking the drug altogether. The anxiety levels recorded between those before and after use will also be compared to those who are currently on the drug to get an

understanding of the effectiveness of the drug itself. When this level of effectiveness is established, the difference in anxiety levels will be compared along with the question of if these individuals think the anxiety difference is large enough to warrant staying off the drug altogether or staying on it.

### References

- Ait-Daoud, N., Hamby, A. S., Sharma, S., & Blevins, D. (2018). A Review of Alprazolam Use, Misuse, and Withdrawal. *Journal of Addiction Medicine*, 12(1), 4–10. doi: 10.1097/adm.0000000000000350
- Guina, J., & Merrill, B. (2018). Benzodiazepines I: Upping the Care on Downers: The Evidence of Risks, Benefits and Alternatives. *Journal of Clinical Medicine*, 7(2), 17. doi: 10.3390/jcm7020017
- Liebrenz, M., Schneider, M., Buadze, A., Gehring, M.-T., Dube, A., & Caflisch, C. (2015). High-Dose Benzodiazepine Dependence: A Qualitative Study of Patients' Perceptions on Initiation, Reasons for Use, and Obtainment. *Plos One*, 10(11). doi: 10.1371/journal.pone.0142057