

Evidence Summary: Deep Pressure Stimulation & Therapeutic Effects

1. Weighted Blankets and Deep Touch Pressure (DTP) Research

- A randomized controlled trial found that using a 15 lb weighted blanket significantly reduced anxiety and pain compared to a 5 lb blanket, especially in those with high trait anxiety.
- A systematic review noted consistent benefits of weighted blankets in improving sleep quality, reducing negative emotions, and alleviating daytime symptoms in psychiatric and anxious populations.
- A pilot study showed that weighted blankets reduce agitation, reinforcing the calming effect of deep pressure stimulation (DPS).
- A 12-month follow-up study of weighted chain blankets in psychiatric patients showed improvement in insomnia and daytime symptoms.
- DPS benefits are enhanced for those with sensory sensitivity—self-reported anxious individuals may derive increased relief.

2. Mechanistic Support: Physiological Evidence of DTP

- Deep touch pressure (DTP) used in dental settings reduced anxiety during stressful procedures.
- DPS engages skin and deep-tissue mechanoreceptors to shift the nervous system toward parasympathetic response, supporting rest and regulation.
- DPS has been validated by sensory integration theory and occupational therapy literature.

3. Psychiatric / Service Dog & Animal-Assisted Evidence

- DPS is one of the most frequently reported service tasks by psychiatric assistance dog users.
- Military veterans with PTSD who received service dogs showed reduced anxiety and depression in trials.
- Service dog owners report better emotional and social functioning compared to non-dog controls.
- DPS using animal body weight is widely practiced even if under-studied in clinical trials.

4. Limitations & Scientific Cautions

- Many DPS studies rely on small sample sizes or self-reporting.
- There is no large-scale clinical study directly analyzing the effect of canine DPS via weight on feet.
- Individual response to DPS varies; benefit is not universal but scientifically plausible.
- Results should be interpreted as part of an emerging evidence base, not absolute proof.

5. Interpretation & Application to Your Case

- The literature clearly supports deep, consistent pressure as a tool to manage anxiety.
- Your dog's application of body weight to your feet is functionally consistent with recognized DPS practices.
- The scientific foundation—though not yet tailored to foot-specific animal DPS—is strong enough to support a claim of legitimate therapeutic benefit.
- This bolsters the validity of your psychiatric service dog's function and role in organic emotion regulation.