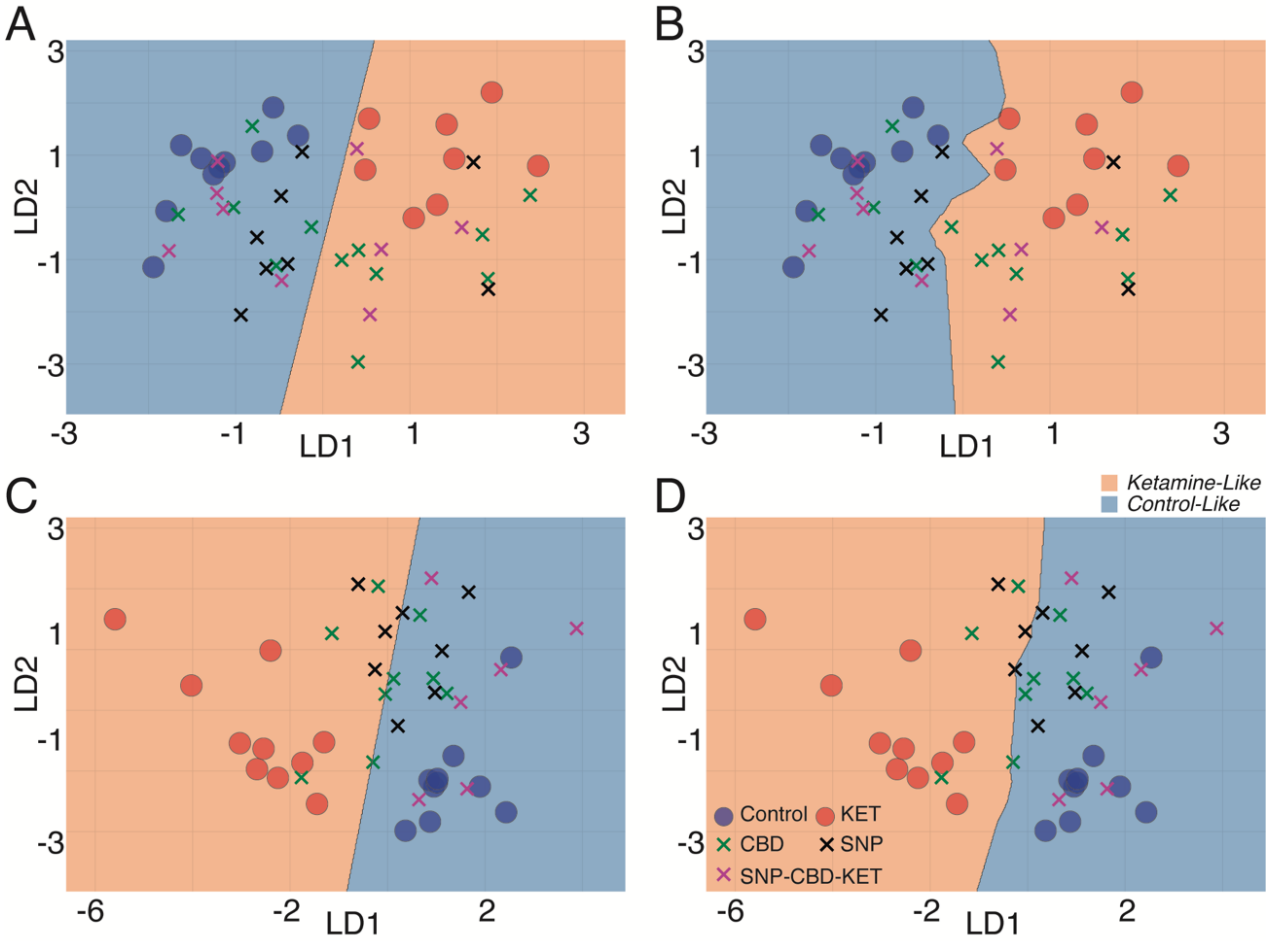
http://doi.org/10.47626/1516-4446-2025-4301
Prophylactic efficacy of cannabidiol and sodium nitroprusside in a ketamine model of schizophrenia: sex-dependent effects on positive-like and cognitive impairments – Prado DBA et al.

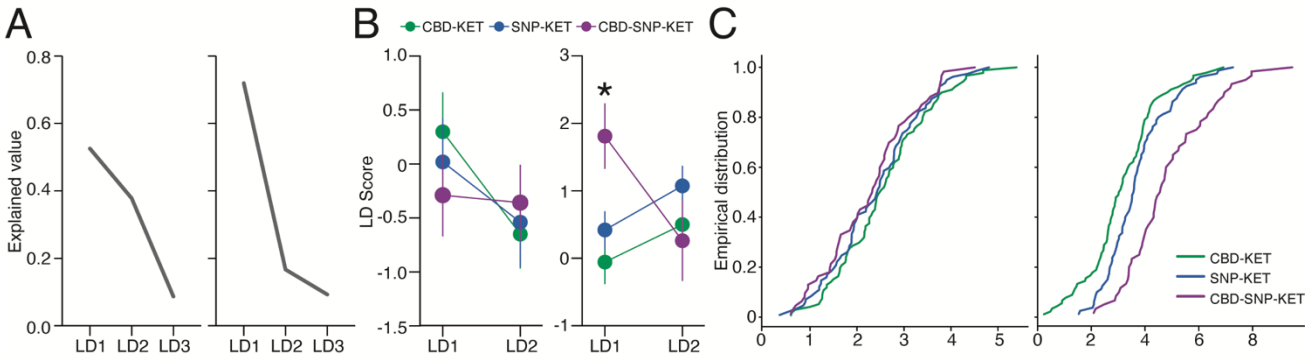
Supplementary Figure S1 Classification algorithms used to estimate treatment efficacy produced similar results



A-B) Support vector machines and *k*-nearest neighbors in male rats. C-D) Support vector machines and *k*-nearest neighbors in female rats.
CBD = cannabidiol; KET = ketamine; LD = linear discriminant; SNP = sodium nitroprusside.

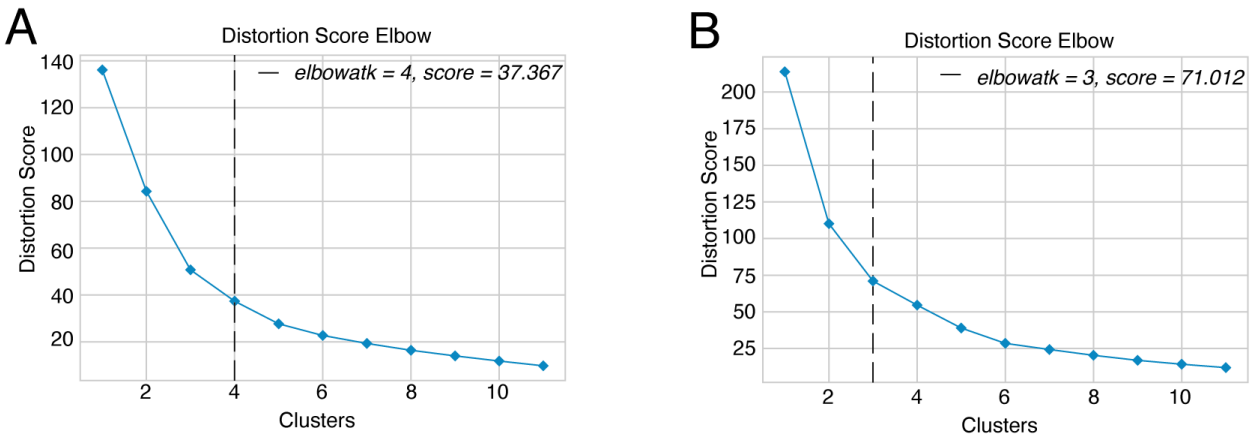
http://doi.org/10.47626/1516-4446-2025-4301
Prophylactic efficacy of cannabidiol and sodium nitroprusside in a ketamine model of schizophrenia: sex-dependent effects on positive-like and cognitive impairments – Prado DBA et al.

Supplementary Figure S2 LD scores and the empirical distribution of treated groups



A) Explained variance of the male (right) and female (left) LD. B) LD1 and LD2 score of treatment groups in males (right) and females (left) (LD score-treatment effect: $F_{(2,20)} = 6.675$, $p < 0.01$; NK *post hoc* significance: CBD-SNP-KET LD1 vs CBD-KET LD1, CBD-SNP-KET LD1 vs SNP-KET LD1). C) The empirical cumulative distribution function for the distances of treated subjects and KET animals in males (right) and females (left).
CBD = cannabidiol; KET = ketamine; LD = linear discriminant; SNP = sodium nitroprusside.

Supplementary Figure S3 Distortion score using the elbow method for male and female clusterization



A) Distortion scores indicating four cluster formations in male groups. B) Distortion scores indicating three cluster formations in female groups.

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Supplementary Table S1 Males' mean and CI clusters

Cluster	Total distance	Proportion center time	Sucrose consumption	DI NOR 30 min	DI NOR 24 h
1	5587.94 (4298.77 to 7190.38)	3.56 (2.53 to 4.65)	0.51 (0.37 to 0.66)	-0.04 (-0.19 to 0.11)	0.39 (0.18 to 0.59)
2	1680.56 (1338.52 to 2050.28)	5.16 (3.75 to 6.55)	0.85 (0.76 to 0.91)	0.50 (0.38 to 0.64)	0.51 (0.32 to 0.67)
3	3759.85 (2306.11 to 5528.59)	3.95 (3.34 to 4.64)	0.49 (0.34 to 0.63)	0.57 (0.43 to 0.71)	0.34 (0.16 to 0.53)
4	1882.79 (1418.07 to 2426.20)	3.91 (2.90 to 4.89)	0.76 (0.66 to 0.86)	0.05 (-0.06 to 0.14)	0.40 (0.12 to 0.67)

NOR = novel object recognition test.

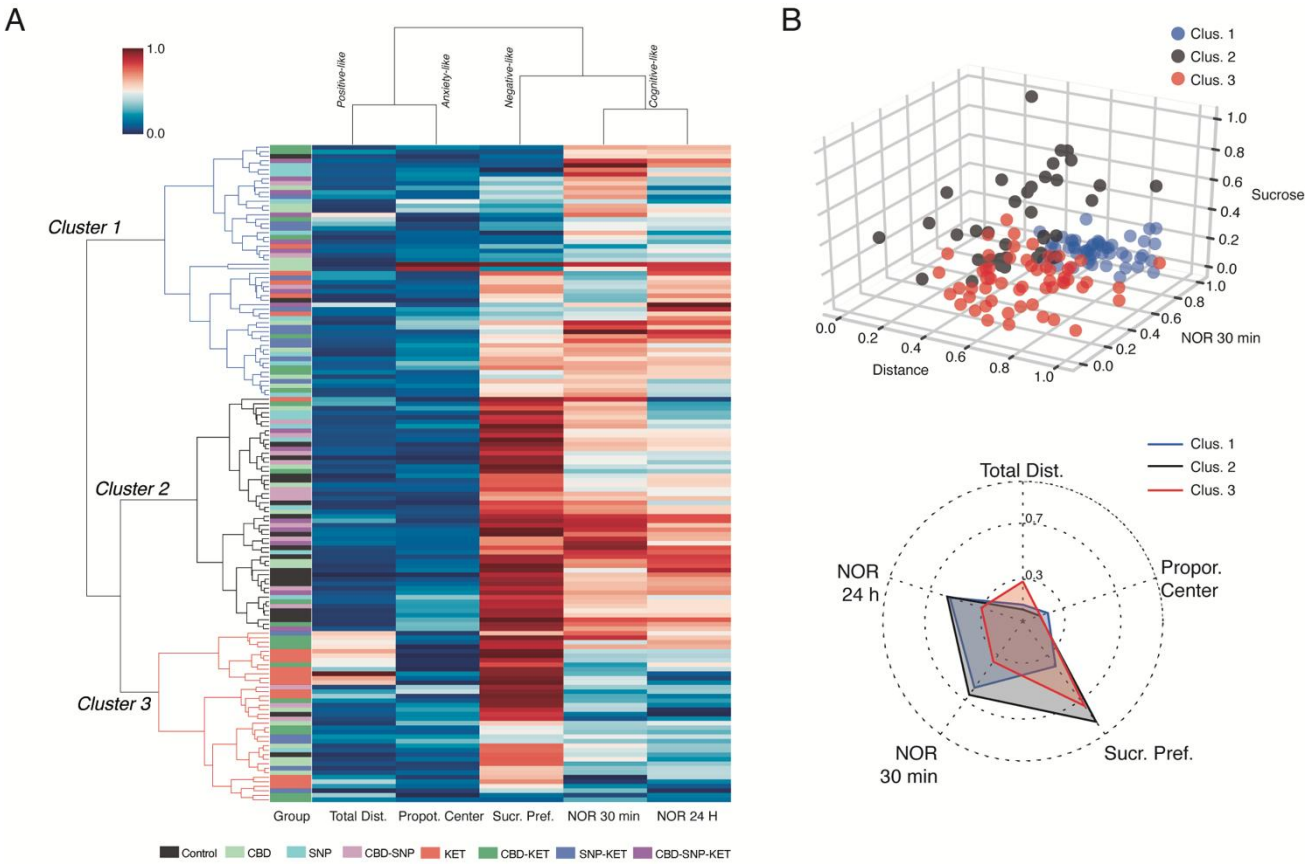
Supplementary Table S2 Females' mean and CI clusters

Cluster	Total distance	Proportion center time	Sucrose consumption	DI NOR 30 min	DI NOR 24 h
1	5259.61 (4031.10 to 6722.72)	3.56 (2.44 to 4.88)	0.45 (0.36 to 0.54)	0.35 (0.20 to 0.50)	0.32 (0.19 to 0.46)
2	10166.61 (7649.48 to 12684.31)	2.83 (1.05 to 5.38)	0.96 (0.95 to 0.97)	0.10 (-0.04 to 0.28)	-0.02 (-0.15 to 0.11)
3	2424.99 (1637.24 to 3362.96)	1.87 (1.26 to 2.53)	0.88 (0.79 to 0.94)	0.53 (0.37 to 0.69)	0.56 (-0.43 to 0.69)

NOR = novel object recognition test.

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Supplementary Figure S4 Behavioral characteristics describe marked differences between all experimental groups



A) Dendrogram of the agglomerative cluster and normalized behavioral features for each individual. Results indicate the formation of three distinct and interpretable clusters. B) Cluster formation on a three-dimensional plot of the most descriptive behavioral features followed by radar plot.
CBD = cannabidiol; KET = ketamine; NOR = novel object recognition test; SNP = sodium nitroprusside.