Post-Weaning Housing Conditions Influence Freezing during Contextual Fear Conditioning in Adult Rats

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-- Appendix D --

-- Individual data points: % freezing during reactivation and test --

Individual data show that % freezing decreases from reactivation to test in nearly all animals. The general consistency across subjects in this decline in the saline groups suggests that the absence of an amnestic effect in the midazolam (MDZ) groups cannot be attributed to individual differences in the processes engaged during reactivation (i.e., retrieval, destabilization, or extinction) that cancelled each other out. Note that such an underlying pattern could have been able to explain the current results, since post-reactivation MDZ administration has been shown to decrease fear when destabilization occurred, while the opposite pattern has been observed in case of extinction (i.e., MDZ induces return of fear). If this were indeed the case, and two sub-populations would have been observed, actual MDZ effects on destabilization and extinction would have been masked when looking at average scores.

Enriched Housing	Standard Housing	Impoverished Housing

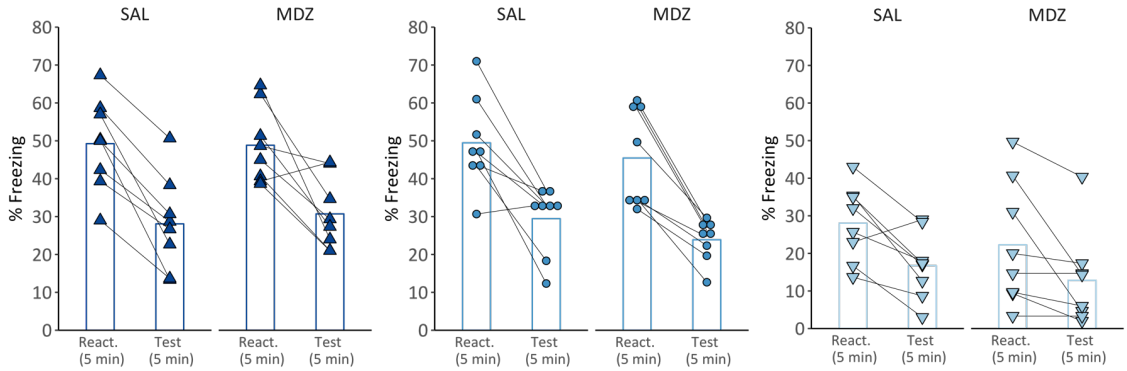

Figure D.1. Individual data of the decline in % freezing from reactivation to test (first 5 min) per housing condition. SAL = saline, MDZ = midazolam (after reactivation). All rats are included (*N* = 48).

Enriched Housing	Standard Housing	Impoverished Housing

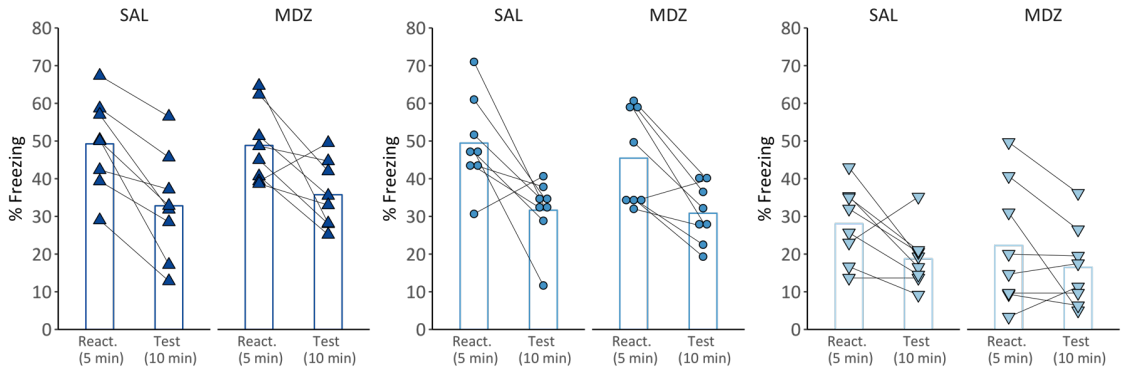

Figure D.2. Individual data of the decline in % freezing from reactivation to test (complete 10-min session) per housing condition. SAL = saline, MDZ = midazolam (after reactivation). All rats are included (*N* = 48).