The Effects of Vision on Static-touch Coarse Roughness Discrimination
Li, M. S., Di Luca, M., & Roberts, R. D.

Non-discrepant visual input (identical & non-informative) improved discrimination relative to that in eyes closed conditions. Data was split into two groups based on tactile performance (no-vision).

Improvement was observed only in participants with low tactile roughness sensitivity. Discrimination in high sensitivity participants was unaffected. The two groups also responded differently to discrepant visual information. Mismatching visuotactile signals impaired performance in high but improved it in low sensitivity participants. Rather than a single integrative mechanism, these findings suggest visual inputs affect multiple, distinct mechanisms involved in processing tactile roughness signals.