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OPERANTLY CONDITIONED PLACE-AVOIDANCE IN ZEBRAFISH (DANIO RERIO)

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Zebrafish (Danio rerio) are commonly utilized in neuroscience and psychology for genetic, pharmacological, and developmental research. Zebrafish have been shown to be capable of learning through classical and operant conditioning. The current study examined conditioned place-avoidance through operant conditioning in zebrafish, using a novel automated data collection system. In a ten-minute training period, fish reliably learned to avoid shock by restricting their movement to a randomly assigned side of the tank. In a follow-up assessment period with no shock, we found that on average, within 40 minutes, fish no longer avoided the side of the tank previously associated with shock.