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Decision-making is an integral component for many animals as they navigate their environment. This is particularly pertinent for social animals as they assess their social surrounding and make context-dependent behavioral decisions based on social interactions with conspecifics. The neural substrates underlying status-dependent decision-making and activation of relevant motor behaviors remain poorly understood. Here, we investigated the effects of social experience on the endocannabinoid (eCB) system and its capacity to regulate the activation pattern of two opposing motor circuits: escape and swim behaviors in zebrafish. Endocannabinoids such as 2-Arachidonoylglycerol (2-AG) have been implicated in regulating reward systems, aggression and motivated behavior by modulating chemical neurotransmission by acting retrogradely on presynaptic cannabinoid type 1 receptor (CB_1R). However, our knowledge of the effects of social factors in regulating the eCB system and its modulation of spinal motor circuits remain limited. We show that the escape and swim circuits are socially regulated. Socially dominant animals favor swimming over escape, while submissive animals prefer to escape rather than swim. Remarkably, these status-dependent activation patterns are mediated by and can be reversed with 2-AG application acting through dopamine receptor type 1 that potentiates eCB signaling. Underlying these differences in motor patterns are changes in brain gene expression of diacylglycerol, a precursor of 2-AG and CB_1R, both are important in proper eCB function. This novel finding points to the importance of the eCB system as a key modulatory component in shifting the balance of motor circuits activation as an adaptive behavioral strategy in the decision-making process.