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## CHIMPANZEES' COORDINATION IN A 'STAG HUNT' GAME

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Chimpanzees engage in a number of complex group activities such as boundary patrolling or group hunting. It has been shown that synchronization during these activities not only comes about, because agents individually but simultaneously detect and move towards the target object, but that chimpanzees have some understanding of the partners' role and take their behavior into account. It is unclear, however, whether some mutual understanding of the given situation is sufficient or whether more advanced communicative behaviors are necessary to coordinate a successful joint action. In this study, we assessed chimpanzees' (N=12) abilities to coordinate with conspecifics in a 'Stag Hunt' game, i.e., both players could choose between a single action with a low-value reward and a cooperative action with a high-value reward. Retrieval of the high-value reward required simultaneous coordination by both players and resulted in the loss of the low-value reward. In one condition visibility between partners was guaranteed so that communication was possible and in the other condition it was cut off. Regardless of whether chimpanzees could see each other or not ( $t(11) = 1.381$ ,  $P = \text{n.s.}$ ), both partners decided for the cooperative option in 91% of the trials and succeeded in 95% of those. These results reveal that a mutual understanding of the situation is sufficient to succeed in the task and that monitoring the other's actions and negotiating about decisions is not necessary. Animal research complies with the "WAZA Ethical Guidelines for the Conduct of Research on Animals by Zoos and Aquariums".

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