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## Temperature alters the size selectivity of Southern Ocean fish

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A primary response of many marine ectotherms to warming is a reduction in body size, to lower the metabolic costs associated with higher temperatures. The impact of such changes on ecosystem dynamics and stability will depend on the resulting changes to community size-structure, but few studies have investigated how temperature affects the relative size of predators and their prey in natural systems. We utilised >3,700 prey size measurements from ten Southern Ocean lanternfish species sampled across >10° of latitude to investigate how temperature influences predator-prey size relationships and size-selective feeding. As temperature increased, predators became closer in size to their prey, driven primarily by a decline in predator size and an increase in the relative abundance of intermediate-sized prey. The potential implications of these changes include reduced top-down control of prey populations and a reduction in the diversity of predator-prey interactions. Both of these factors should reduce the stability of community dynamics and ecosystem resistance to perturbations.