analytical approach aimed at identifying indirect and nonadditive sources of survival variability. We found that the effect of the spawning stock biomass on the ensuing age-0 abundance (i.e., density dependence) changes in relation to water temperature, with a more direct link between the two variables at lower temperatures. For older life stages (i.e., age-1 to age-3) we found that the predation effect of subadult cod (age-3 to age-6) on younger stages is stronger at higher water temperatures. These results are further investigated in relation to the contrasting life challenges of a maturing cod, such as feeding and growth during the first months of life, and settlement and spatial distribution later in life.

Keywords: recruitment dynamics, density dependence, nonadditivity, Barents Sea cod.

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