In some sense, the Segal-Bargmann space, with gaussian weight $e^{-|z|^2}$ appears as a limit case of the Bergman space in a ball of \mathbb{C}^n . We study generalized L^p spaces on \mathbb{C}^n , associated to the weight $e^{-|z|^{2m}}$, m > 0. In particular, we give criteria for boundedness of the Bergman projection and present some results for spectral properties of operators on these Fock spaces.