$$\psi_{0.5,0}(t) = \frac{1}{\sqrt{0.5}}\left(1 - \left(\frac{t}{0.5}\right)^2\right)e^{-\left(\frac{t}{0.5}\right)^2}$$

$$\psi_{0.5,1}(t) = \frac{1}{\sqrt{0.5}}\left(1 - \left(\frac{t-1}{0.5}\right)^2\right)e^{-\left(\frac{t-1}{0.5}\right)^2}$$

$$\psi_{1,-3}(t) = \left(1 - (t+3)^2\right)e^{-(t+3)^2}$$