

$$\begin{aligned}
 \text{Nr. } p_0(0) &= \frac{1}{8} \\
 p_1(1) &= \frac{0}{8} \\
 p_2(2) &= \frac{3}{8} = \frac{1}{3} \\
 p_3(3) &= \frac{2}{8} \\
 p_4(4) &= \frac{1}{8} \\
 p_5(5) &= \frac{1}{8} \\
 p_6(6) &= \frac{1}{8} \\
 p_7(7) &= \frac{1}{8}
 \end{aligned}$$

Wahle Klasse 1 mit $T=9$

$$m_0(T) = \sum_{i=0}^{T-1} p(i) = 0 + 0 + \frac{1}{3} + \frac{2}{9} = \frac{5}{9}$$

$$m_0(T) = \sum_{i=T}^{\infty} p(i) = \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} = \frac{4}{9}$$

$$\mu_0 = \frac{2+2+2+3+3}{5} = 2,4$$

$$\mu_0 = \frac{4+5+6}{3} = 5,5$$

$$\sigma_0^2 = \frac{(2-2,4)^2 + (2-2,4)^2 + (2-2,4)^2 + (3-2,4)^2 + (3-2,4)^2 + (3-2,4)^2}{5} = 0,24$$

$$\sigma_0^2 = \frac{(4-5,5)^2 + (5-5,5)^2 + (6-5,5)^2 + (6-5,5)^2}{4} = 1,25$$

$$\sigma_{\text{within}}^2 = \frac{5}{8} \cdot 0,24 + \frac{4}{3} \cdot 1,25 = 0,689$$