



Figure 7.4: Metropolis algorithm applied to Bernoulli likelihood with beta( $\theta|1, 1$ ) prior and  $z = 14$  with  $N = 20$ . For each of the three columns, there are 50,000 steps in the chain, but, for the left column the proposal standard deviation (SD) is 0.02, for the middle column SD=0.2, and for the right column SD=2.0. Copyright © Kruschke, J. K. (2014). *Doing Bayesian Data Analysis: A Tutorial with R, JAGS, and Stan. 2nd Edition*. Academic Press / Elsevier.