Let $S = \{a, b, c, d\}$ be a sample space for an experiment. Suppose the probabilities of observing a, b, c, d, are 1/2, 1/4, 1/6, 1/12, respectively. What is the probability that either $\{b, c\}$ or $\{c, d\}$ or both occur?

(a) 1/2

(b) 2/3

(c) 5/48

(d) 1/3

(e) 3/4

(f) 3/8

(g) 1/4

(h) 0

(i) 1

(j) None of these