

**Sakaguchi, Minoru**

**Two-population secretary problems.** (English) Zbl 0709.62074  
Math. Jap. 35, No. 5, 917-934 (1990).

The author considers six versions of the secretary problem, combining the features full-information, no-information and partial information with two different ways to split the population into two groups (classification before and after selection, respectively). The problems are mainly described in terms of their dynamic programming equation; moreover some of them are shown to be of the monotone type, where the optimal strategy turns out to be a one-step-look-ahead rule.

The main goal of the paper is to classify some well-known selection problems within this set of two-population problems, to indicate similarities among them, and thus to provide interesting new directions for the extension of secretary problems.

Reviewer: [F.T.Bruss](#)

**MSC:**

[62L15](#) Optimal stopping in statistics  
[60G40](#) Stopping times; optimal stopping problems; gambling theory  
[90C90](#) Applications of mathematical programming

Cited in **3** Reviews

**Keywords:**

[urn models](#); [secretary problem](#); [full-information](#); [no-information](#); [partial information](#); [dynamic programming equation](#); [monotone](#); [optimal strategy](#); [one-step-look-ahead rule](#); [selection problems](#); [two-population problems](#)