Abstract
The determination of sex in skeletonised remains is one of the fundamental pillars of the construction of a biological profile for an individual. Methods that use the pelvic girdle have been reported to be the most accurate, but this approach is not always applicable, thus making metric methods on other skeletal elements an important alternative. Several studies have shown that metric methods are population specific and can be affected by secular change. The present study investigates the sexual dimorphism in the scapula, clavicle, humerus, radius, ulna, femur, tibia and fibula from a sample of 131 skeletons (69 male and 62 female) of the Santiago Subactual Collection, Chile. The data were subjected to discriminant function analysis yielding accuracy of 70% to 90.5% in sex determination. The presence of bilateral asymmetry within and between individuals was also investigated, achieving significance only at the individual level. The results of this study contribute not only to the characterization of part of the modern Chilean population but are also relevant to forensic analysis.

Keywords
Chilean population, sex determination, appendicular skeleton, bilateral asymmetry, discriminant function.