



Special Issue of Comparative Psychology

Número Especial sobre Psicología Comparada



Editorial

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It is a great pleasure to write the editorial piece for the special issue of the International Journal of Psychological Research devoted to Comparative Psychology. Fortunately, the contributors and editors to this issue have greatly facilitated my task by putting together a super special issue that reflects the richness and diversity of our discipline. Indeed, Comparative Psychology is rich and diverse, and not just in one way, but in multiple ones. It is a discipline that uses (and sometimes combines) various types of data including physiology, cognition, learning, and behavior. This aspect is clearly reflected in the collection of manuscripts that form this issue, with each area roughly represented equally in numbers.

Comparative Psychology is diverse because it focuses on multiple questions and multiple species. Again, this is something that can be clearly be seen in this issue that includes studies focused on topics as diverse as sexual behavior and reproduction (Moreira et al., this issue; Xu & Agmo, this issue), memory (Herbranson, this issue), learning and foraging (Perez Acosta et al., this issue), and social influences on behavior (Montoya & Gutierrez, this issue) in species as diverse as primates, rodents and pigeons. It would have been desirable to see some contributions on dogs and corvids, which are currently receiving considerable research attention in Comparative Psychology. Also, although some fascinating work is being conducted on invertebrates (see e.g., Collett & Collett & Wehner, 1999; Guillette, Hollis & Markarian, 2009; Muszynski & Couvillon, 2015), it does not usually figure prominently in our discipline. Although Comparative Psychology has become increasingly more diversified in terms of the species investigated (see Call et al., *in press*), one can still get a glimpse in this issue about which are the

main zoological groups that have been traditionally favored by comparative psychologists. This is not a reason to despair since progress has been made since Beach's (1950) seminal paper, but it should serve us as a reminder that our task is not complete yet and we need to strive to achieve the broadest zoological base possible in our discipline.

Over the years, the amount of information that has accumulated about the physiology, cognition, learning and behavior of numerous species is massive. Most of this information is a product of studies focusing on a particular species combined with the information available in the literature about the same or other species. These studies are motivated by an intrinsic interest in knowledge about how particular species behave, develop and evolve. Interestingly, other disciplines have turned to Comparative Psychology because it can provide animal models of human behavior. Psychopharmacology and clinical psychology, just to mention two disciplines represented in this issue, have often borrowed knowledge and procedures from our discipline to advance their own knowledge. It is fair to say that comparative psychologists have contributed in decisive ways to illuminate other disciplines, and crucially, we have been able to do so from an evolutionary perspective. This is not a small feat, but an important contribution for establishing bridges between the social and natural sciences. For instance, note that the comparative focus on gambling (Zentall, this issue) naturally brings together three disciplines: clinical psychology, evolutionary biology and behavioral economics.

Despite our progress, there is one aspect that in my view is still underdeveloped in Comparative Psychology. Although we are in a better position to

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make comparisons encompassing a handful of species, we are still not in a position to embark on large scale comparisons that would inform us about how behavior and cognition evolve (see MacLean et al., 2014 for an exception). The comparative method is one of the most powerful tools that we have at our disposal to tackle such a fascinating endeavor. But the strength of the comparative method critically depends on the number of species analyzed and their socio-ecological diversity. Unlike comparative anatomists, who can input data on dozens or even hundreds of species into their analyses, comparative psychologists are still struggling to put together high-quality data on a handful of diverse species, even for some of the simplest tasks available. But perhaps this is just the next big development that may take place in Comparative Psychology.

A development that if it were to occur, would have been nevertheless paved by studies like those included in this special issue in which researchers with diverse backgrounds painstakingly gathered the data that was required to attempt broader comparisons about the behavior and cognition across the animal kingdom.

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