

The evolution of teaching and social learning

A current issue in the bio-social sciences:

The Life History of Learning Subsistence Skills among Hadza and BaYaka Foragers from Tanzania and the Republic of Congo

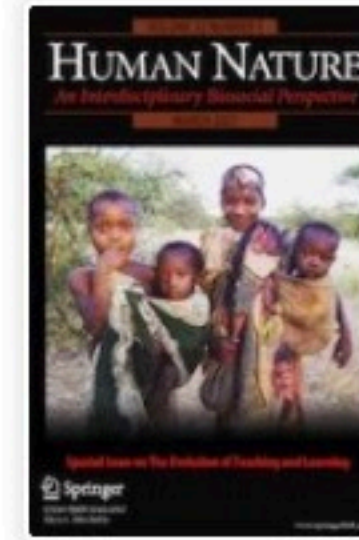
[Sheina Lew-Levy](#), [Erik J. Ringen](#), [Alyssa N. Crittenden](#), [Ibrahim A. Mabulla](#), [Tanya Broesch](#) & [Michelle A. Kline](#) 

[Human Nature](#) **32**, 16–47 (2021) | [Cite this article](#)

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Abstract

Aspects of human life history and cognition, such as our long childhoods and extensive use of teaching, theoretically evolved to facilitate the acquisition of complex tasks. The present paper empirically examines the relationship between subsistence task difficulty and age of acquisition, rates of teaching, and rates of oblique transmission among Hadza and BaYaka foragers from Tanzania and the Republic of Congo. We further examine cross-cultural variation in how and from whom learning occurred. Learning patterns and community perceptions of task difficulty were assessed through interviews. We found no relationship between task difficulty, age of acquisition, and oblique transmission, and a weak but positive relationship between task difficulty and rates of teaching. While same-sex transmission was normative in both societies, tasks ranked as more difficult were more likely to be transmitted by men among the BaYaka, but not among the Hadza, potentially reflecting cross-cultural differences in the sexual division of subsistence and teaching labor. Further, the BaYaka were more likely to report learning via teaching, and less likely to report learning via observation, than the Hadza, possibly owing to differences in socialization practices.



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Special Issue on The Evolution of Teaching and Learning

Issue editors

Helen Elizabeth Davis, Alyssa N. Crittenden & Michelle Scalise Sugiyama

13 articles in this issue

Childhood Teaching and Learning among Savanna Pumé Hunter-Gatherers

Mismatch between Foraging and Postindustrial Societies

[Karen L. Kramer](#) 

[Human Nature](#) **32**, 87–114 (2021) | [Cite this article](#)

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Abstract

Research in nonindustrial small-scale societies challenges the common perception that human childhood is universally characterized by a long period of intensive adult investment and dedicated instruction. Using return rate and time allocation data for the Savanna Pumé, a group of South American hunter-gatherers, age patterns in how children learn to become productive foragers and from whom they learn are observed across the transition from childhood to adolescence. Results show that Savanna Pumé children care for their siblings, are important economic contributors, learn by doing rather than by instruction, and spend their time principally in the company of other children. This developmental experience contrasts with that of children in postindustrial societies, who are dependent on adults, often well past maturity; learn in formal settings; and spend much of their time in the company of adults. These differences raise questions about whether normative behaviors observed in postindustrial societies are representative of human children. This comparison also identifies

What does the ethnographic record tell us about social learning among hunter-gatherers?

A Cross-Cultural Analysis of Hunter-Gatherer Social Learning

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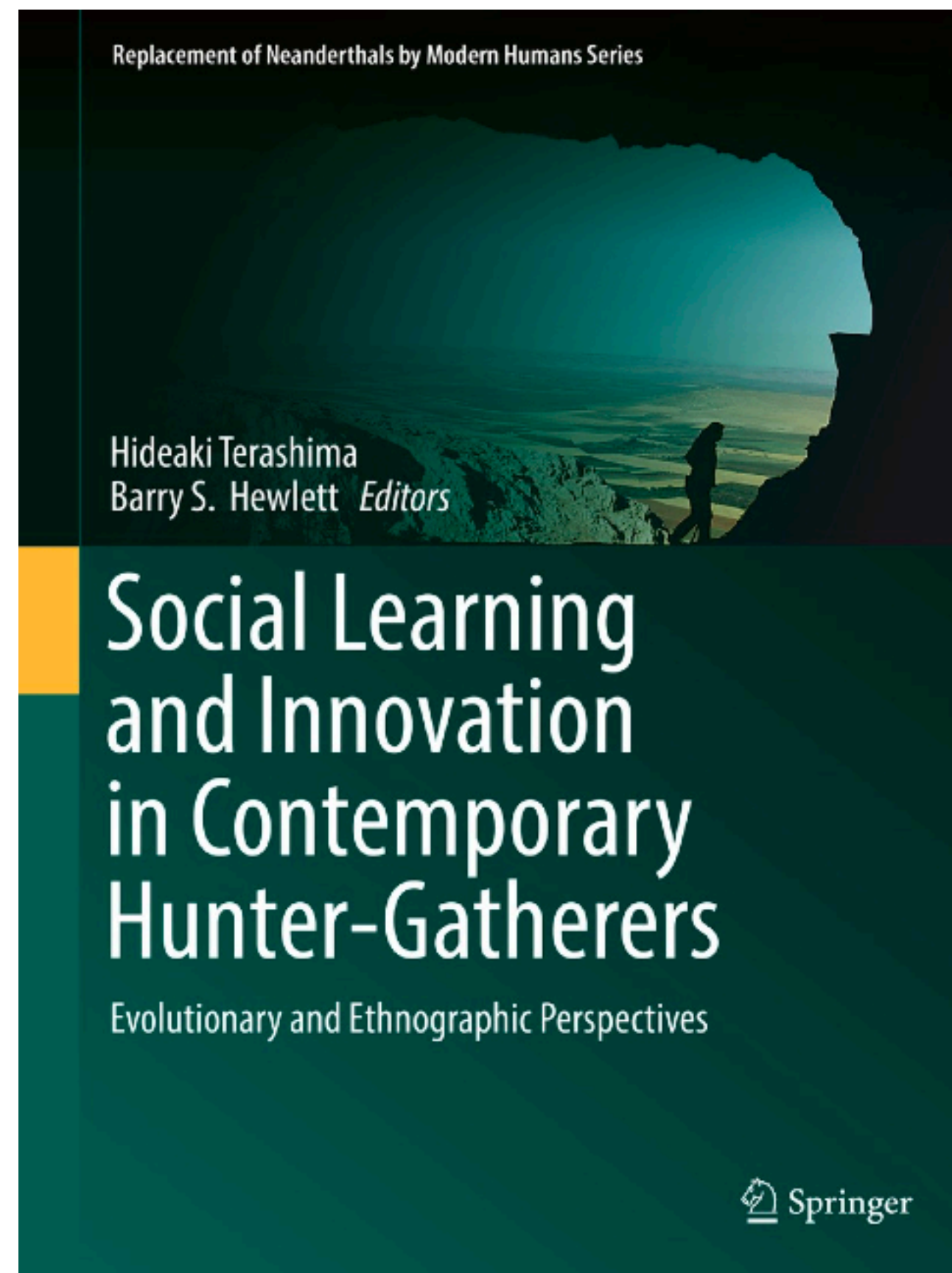
Zachary H. Garfield, Melissa J. Garfield, and Barry S. Hewlett

Abstract

Social learning among hunter-gatherers has been widely discussed in the literature and authors often draw on ethnographic cases to support theoretical models. In this study we report on the cross-cultural occurrence of various modes and processes of social learning in distinct cultural domains from the ethnographic record. To our knowledge this is the first systematic, cross-cultural study of hunter-gatherer social learning. We rely on the sample of hunter-gatherers in the electronic Human Relations Area Files (eHRAF) to generate our source of ethnographic texts. We have coded and analyzed 982 ethnographic texts from 23 diverse societies. Oblique and vertical transmission appear at similar rates. Various forms of teaching are the most common processes of social learning and account for more than half of all coded texts. Vertical and oblique social learning are predominantly characterized by teaching, whereas horizontal social learning is primarily through collaborative learning. Approximations of age reveal a general developmental pattern in which social learning of miscellaneous skills characterizes infancy, subsistence skills dominate early and middle childhood, and the social learning of religious beliefs are most frequent during adolescence. Across development we identify a reduction in the importance of vertical transmission in favor of oblique transmission, for subsistence skills in particular. These results highlight the importance of teaching in the ethnographic record of hunter-gatherer social learning and provide a systematic, cross-cultural, framework for theoretical models to rely on.

Keywords

Hunter-gatherers · Human Relations Area Files · Social learning · Cultural transmission · Teaching



Garfield et al. (2016)