

ONE HEALTH ATLAS

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No One Health without a true integration of social sciences

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The latest definition of One Health by the One Health High-Level Expert Panel (OHHLEP) emphasizes “society” as a key component, acknowledging that human behaviours significantly influence pathogen exposure, transmission and evolution (Figure 1). Despite this recognition, epidemiologists often employ social science methods as tools they are not trained for and without a solid grasp of the theoretical foundations. This gap is further amplified by a lack of appreciation for heterogeneity among social science fields and for the wide range of academic disciplines that are as varied as the interests of humankind activities and organizations (anthropology, economics, education, history, law, political science, psychology, sociology). Finally, when social science researchers are invited to One Health projects, their participation is included as an afterthought in the projects, relegated to the role of a “bolt-on” to the research process.

True interdisciplinarity at the social-biological scientific interface demands that research questions are framed by both epidemiologists and social scientists, going beyond the mere identification of human behaviours as risk factors. It requires an exploration of how these behaviours are shaped by social, economic and political contexts. This approach would not only deepen the understanding of

disease ecology but also enable a shift from purely technical local interventions to society-based structural changes that target the root causes of pathogen transmission and persistence and other One Health issues. There are, however, multiple challenges in achieving such an integration, including the differing epistemological frameworks and the methodological approaches specific to each discipline, such as the nature of data of interest and the fundamental objectives of data analyses while following both qualitative or quantitative approaches (Figure 2).

Overcoming this divide requires mutual respect and an acknowledgement of the complementarity of both sets of disciplines by being engaged in reciprocal data-sharing and joint analysis. For instance, social scientists can investigate the drivers of risk behaviours identified by epidemiologists, providing nuanced perspectives on how these behaviours can be altered as well as how control interventions can be adapted to the local context. Subsequently, the outcomes of these behaviour changes must be studied from both biological and social science perspectives, thus fostering a more comprehensive understanding of disease ecology and more effective control strategies targeting the broader societal structures that perpetuate health risks.

References

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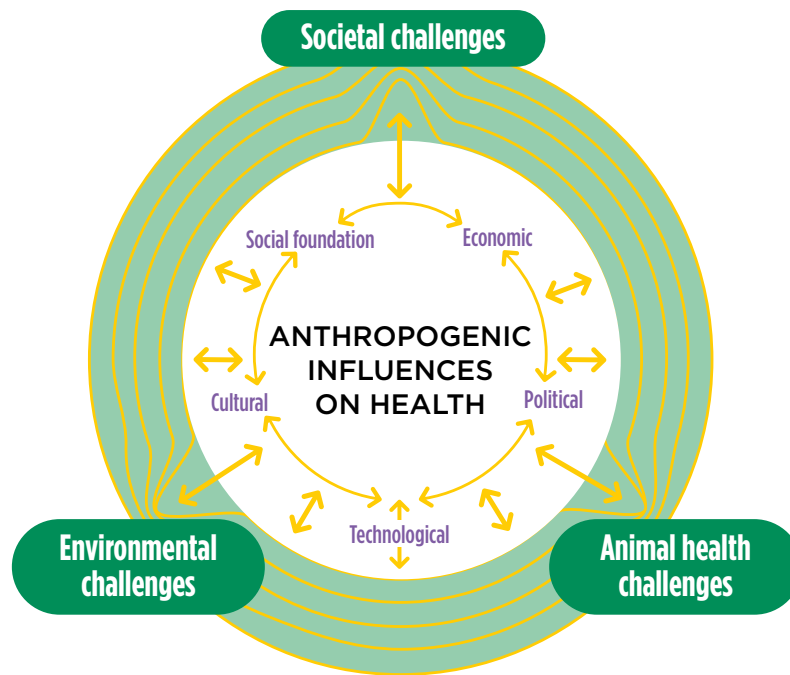


Figure 1. Problem statement identified by the One Health High-Level Expert Panel (OHHLEP) in their One Health Theory of Change. One Health Theory of Change: “Working toward a world better able to prevent, predict, detect, and respond to health threats and improve the health of humans, animals, plants, and the environment while contributing to sustainable development.” Source: <https://cdn.who.int/media/docs/default-source/one-health/ohhlep/ohhlep--one-health-theory-of-change.pdf>

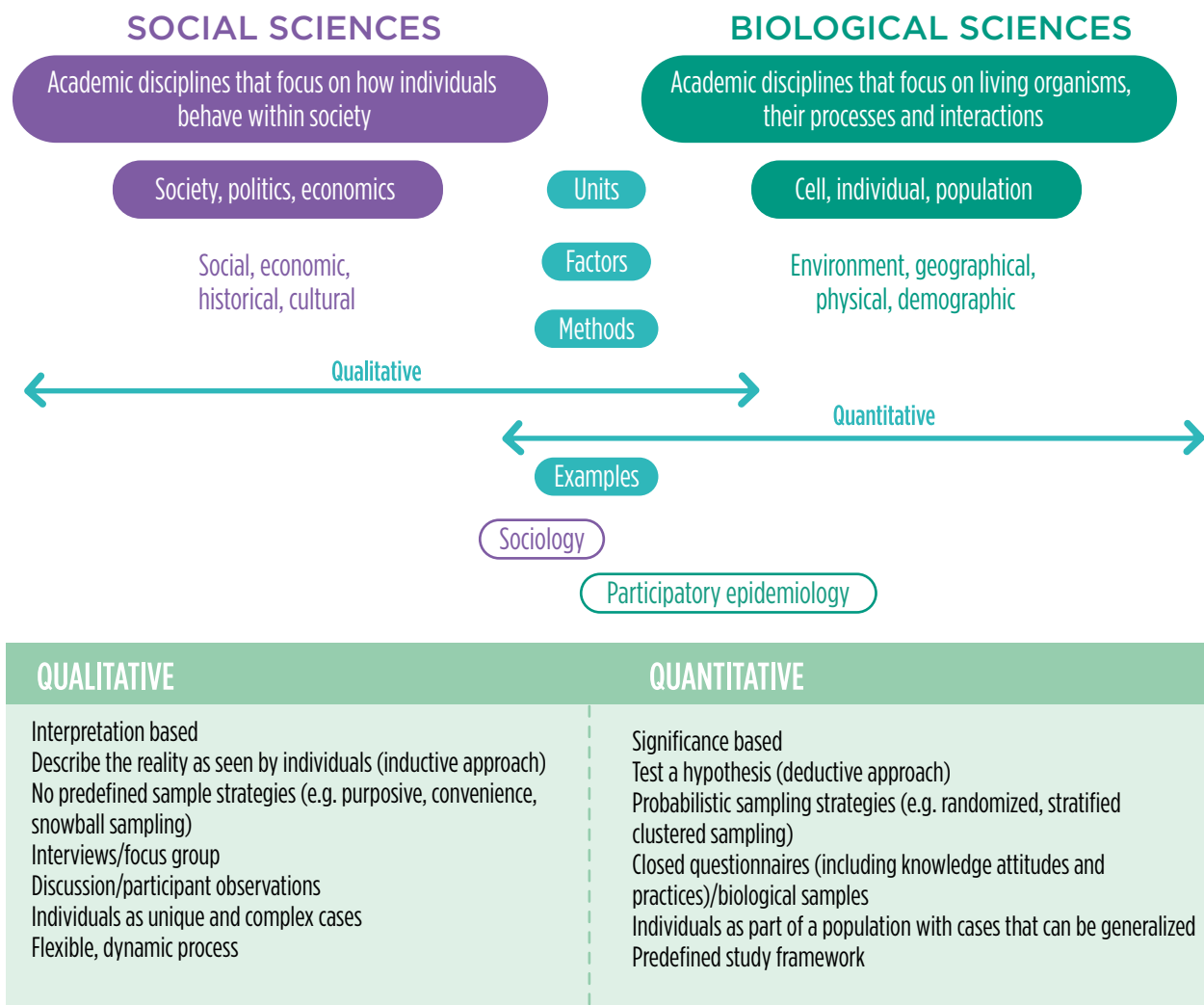


Figure 2. Differences and similarities between the social sciences and the biological sciences.