

Is Depression Linked With Cognitive Impairment? Yoann Buoro and His Study Among The Tsimane

Celia Bueno
Senior Staff Writer



[The Tsimane Health and Life History Project](#) (THLHP) is a research initiative that sits at the crossroads of anthropology and evolutionary science, drawing in particular on the tools of biological anthropology. It focuses on the Tsimane, an Indigenous population native to the Bolivian Amazon. In an interview with *The Bottom Line* (TBL), anthropologist and biologist Yoann Buoro discusses the most striking findings from his work, which examines cognitive decline

and its relationship to depressive disorders. The THLHP began in 2001 under the direction of Dr. Michael Gurven from UC Santa Barbara (UCSB) and Richard Kaplan from University of New Mexico and Chapman University. It is currently still being developed in the Department of Anthropology at UCSB, under the continued leadership of Gurven.

Yoann Buoro, a researcher and third-year doctoral student, offers a unique perspective on a specific area of investigation within this long-standing research project.

“I come from an ecology and evolutionary biology master’s,” he explained. According to the [Department of Ecology and Evolutionary Biology at Princeton University](#), this subdiscipline within the biological sciences is interdisciplinary in nature, seeking to answer complex questions about how animals, plants, and other organisms interact and behave in a constantly changing world.

Initially, Buoro focused his attention on the study of genetic diversity and the adaptation of freshwater organisms based on the shape of the rivers that made up their habitats.

However, other questions began to surface in Buoro’s mind, leading him to shift his focus to the field of anthropology. “As an ecologist, I always had small questions like, ‘But what about humans?’” As he found himself drawn to a discipline with a stronger emphasis on human evolution and development, he had the opportunity to complete his master’s in Toulouse, France. There, after taking courses with Professor Stieglitz, he came into contact with the THLHP for the first time.

“Questions like, ‘Why do so many of us suffer from mood disorders?’ and ‘If you live a different life in a non-industrialized setting (like the Tsimane), would you develop the same diseases as in an industrialized setting?’ really started to interest me, and I got the chance to become a grad student here.”

Buoro’s current research examines the link between depression and the onset of cognitive decline — a process that can culminate in conditions such as Alzheimer’s disease and other forms of dementia — while also exploring how social context shapes the development and progression of these disorders.

“My main result is that in the Tsimane, people who perceive themselves as low status see a strong association between their mood (whether they are depressed or not) and their cognitive performance.” In other words, the native Tsimane population perceives a link between their emotional state and a potential decline in cognitive performance.

The hypothesis is particularly relevant to research on the relationship between emotion and mood, examined through both physiological and psychological lenses, and to the tangible effects these internal states can have on the body.

“In our industrialized world, depression is extremely prevalent, and as people age, we see a lot of dementia emerging. People who experience repeated and/or prolonged depressive episodes are more likely to show depressive effects later in life, and chronic depression is strongly linked to brain disorders that develop later in life, such as Alzheimer’s.”

The development of this research project offers the opportunity to observe and study both the physical and mental health of populations that live lifestyles far removed from those in Western society. This is a crucial area for understanding human development from an evolutionary perspective.

“One thing I aim to explore more in detail in the future is the role of the social environment in cognitive and mental health within the very specific setting of Tsimane society.” This direction is based on findings by Gurven et al. (2017), who indicated that while education enhances cognitive performance among the Tsimane, cognitive aging patterns also reflect broader ecological and social influences beyond schooling alone.

Buoro is among the many UCSB graduate students who spend their summers working in laboratories. Though the campus grows quieter in the warmer months, research continues uninterrupted — a reminder that scientific work does not pause with the academic calendar.