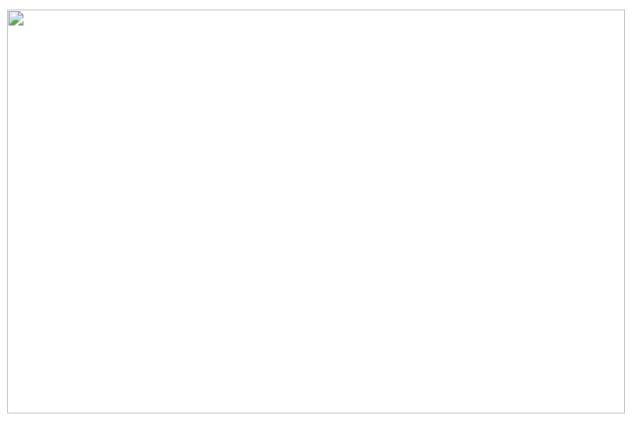
Study of hunter-gatherers suggests NFL and sports bar play fighting builds up the skills used in lethal raiding so that is why men are assholes

By ERIC W. DOLAN



(Photo credit: Dane Mo)

New research suggests that the motivation to engage in team sports may have evolved because it improved the coordination and motor skills used in warfare. The study was published in the journal *Human Nature*.

"I study the evolution of teaching and learning in humans — i.e., the skills and knowledge that ancestral humans had to acquire in order to make a living, and how they acquired these skill and knowledge sets. I do this by extrapolating from historically documented hunting-and-gathering peoples," explained study author Michelle Scalise Sugiyama of the University of Oregon.

"In both ancient and modern hunter-gatherer groups there were no schools, books, films, or internet for people to learn from. Knowledge was acquired by observing and listening to others, and by experimenting on one's own. This is where play comes in: play is widely regarded as an adaptation that develops skills that organisms need later in their lifespan."

"For example, chase play is believed to develop skills that are useful for evading predators, such as stamina, speed, and dodging. Similarly, dyadic play fighting is believed to develop skills used in actual one-on-one fighting (e.g., in mating or dominance competition). This led me to ask the question: if dyadic play fighting develops skills used in one-on-one fighting, what skills does coalitional play fighting develop? More generally, why would animals play fight in teams?"

Scalise Sugiyama and her colleagues analyzed the early ethnographic records of societies described as hunter-gatherers in Murdock's Ethnographic Atlas. They looked for evidence of coalitional play fighting in 47 hunter-gatherer cultures from North America, 23 from South

America, 12 from East Eurasia, 11 from the Insular Pacific, and 7 from Africa.

The researchers found information on team contact games for 46 of the 100 cultures.

"The lack of data for 54 of the 100 culture regions does not mean that coalitional play fighting was absent in hunter-gatherers in these regions," Scalise Sugiyama explained. "Rather, it means that we found either no information on play or no information on team play for these regions. It is impossible to tell whether this lack of information is due to the behavior not being present or due to its not having been recorded by early ethnographers."

The physical skills used in the games mirrored those used by hunter-gatherers when raiding. They included activities such as running, striking, parrying, grappling, and/or throwing objects. Mock warfare was also found in 39 percent of the cultures and boys' mock warfare in 26 percent.

"Despite changes in gender norms over the past few decades, participation and spectatorship in team contact sports is overwhelmingly male. Our study offers a possible explanation for this phenomenon: team contact sports may build motor and cognitive skills used in lethal raiding, which is also a primarily male activity," Scalise Sugiyama told PsyPost.

"People have long noted that team contact sports are similar to warfare, but no one had ever pinpointed exactly what the similarity is, and no one had ever tested this claim. When you compare these games to modern warfare (with its use of long-range and automatic firearms and explosive devices), the similarities to combat are hard to see."

"However, given that some team contact sports are known to date back hundreds or even thousands of years, it was clear to us that the place to look for similarities was ancient warfare, which largely took the form of lethal raiding," Scalise Sugiyama explained.

"Since team play fighting is a form of motor play, we reasoned that these similarities would be found in the motor patterns used in each of these activities. That's exactly what we found: lethal raiding and team play fighting recruit similar motor patterns under a similar set of constraints — namely, the use of coordinated action by one group to attain, and prevent an opposing group from attaining, a predetermined goal."

The research shouldn't be misunderstood as suggesting that playing evolved just as an aid to raiding.

"It is important to note what we aren't arguing here: we aren't claiming that the motor patterns we tested for evolved specifically for warfare. Running, throwing, dodging, etc. are important in other arenas of huntergatherer life, such as hunting and predator evasion, and almost certainly existed before the emergence of lethal raiding," Scalise Sugiyama said.

"The adaptation we are positing is psychological: it consists of (1) an emotional system that motivates engagement in play activity that (2) recruits certain offensive and defensive motor patterns (3) in the deployment of coordinated coalitional action against an opposing coalition."

It is also unclear why there is no evidence that other animals — such as chimpanzees or wolves — engage in coalitional play fighting.

"To the best of my knowledge, our study is the first to identify and describe coalitional play fighting. Dyadic play fighting has been documented in a wide range of species, including humans, but we found that no one had distinguished between dyadic play fighting and team play fighting," Scalise Sugiyama said.

"This distinction is important because, unlike dyadic play fighting, coalitional play fighting requires coordinating one's actions so that they mesh with those of one's teammates while at the same time thwarting the coordinated actions of an opposing coalition."

"Dyadic play fighting does not require that an individual track, anticipate, assist, or impede the goals and actions of multiple human agents in two opposed groups simultaneously. Coalitional play fighting is thus more computationally complex and demanding than dyadic play fighting."

The study, "Coalitional Play Fighting and the Evolution of Coalitional Intergroup Aggression", was authored by Michelle Scalise Sugiyama,

Marcela Mendoza, Frances White, and Lawrence Sugiyama.