Title:

Human joints impact measurement and optimization (HJIMO)

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Short Description:

Humans evolved to run, jump and dance thousands years ago. However, the impact of such activity on human joints is still unclear yet. Pain and wear are induced by the effect of intensively practicing such activities. Moreover, recent studies have shown a significant dependence of the shoes shape, dimensions and size on the induced joints pain. Therefore, we are proposing this project to study the effect of impact due to activities on the induced forces and deformation in human joints. A typical application is the Dabke dance, an unstudied niche of the Lebanese society creating many injuries for the professional practitioners