

A Comparative Study of an Eight-Week Nordic Hamstring Programme on Eccentric Strength and Hamstring Strain Incidence in Professional Footballers in Abuja, Nigeria

C, h, i, n, w, e, O, k, o, n, k, w, o, ,, T, u, n, d, e, A, d, e, b, a, y, o, ,, I, b, r, a,
h, i, m, S, u, l, e, i, m, a, n, ,, A, m, i, n, a, E, z, e

DOI: <https://doi.org/10.5281/zenodo.18534619>

| Abstract

Hamstring strains are a common and recurrent injury in professional football, resulting in substantial player absence. While the Nordic hamstring exercise (NHE) is advocated for injury prevention, its effectiveness within the specific environmental and training milieu of West African professional football is not established. This study compared the effects of an eight-week Nordic hamstring exercise programme against standard training on eccentric hamstring strength and the incidence of hamstring strains in professional footballers in Abuja, Nigeria. A comparative study was conducted. Professional male footballers from two clubs were allocated to an intervention group (n=26) or a control group (n=24). The intervention group completed a structured, progressive NHE programme twice weekly for eight weeks alongside regular training. The control group maintained their standard regimen. Eccentric hamstring strength was measured with a dynamometer before and after the intervention. Hamstring strain incidence was monitored prospectively for one full competitive season. The intervention group showed a 31% greater improvement in normalised eccentric hamstring strength compared to the control group. During the subsequent season, hamstring strain incidence was 3 cases in the intervention group versus 11 cases in the control group, equating to a 73% reduction in injury rate. An eight-week Nordic hamstring exercise programme significantly enhanced eccentric hamstring strength

and was associated with a substantially lower incidence of hamstring strains in this cohort of Nigerian professional footballers. Structured NHE programmes should be incorporated into the regular strength and conditioning regimens of professional football clubs in this region. Further research should examine long-term adherence and effects across different playing surfaces and climatic conditions. Nordic hamstring exercise, injury prevention, football, soccer, eccentric strength, muscle strain, Nigeria This study provides comparative evidence for the efficacy of a Nordic hamstring exercise programme in improving strength and reducing injury incidence within the context of West African professional football.
