

# Running Profiles And Their Associated Behaviors: A Proposal For Chilean Runners.

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## Abstract

**PURPOSE:** Identifying different runner profiles may improve running-related injuries (RRIs) prevention, education, and management. The aim of this study was to determine Chilean runner's profiles according to socio-demographic characteristics, motivations, training factors and behaviors associated with running during 2015-2016.

**METHODS:** An email and web-based online cross-sectional survey were conducted. Runners from six different competitions and other running circuits were recruited. The survey collected information on 6 dimensions: (1)socio-demographics; (2)health; (3)motivations; (4)training factors; (5)behaviors associated with running; and (6)beliefs and perceptions. Profiles' construction was performed through a two-step cluster analysis using Bayesian Information Criterion and linear discriminant analysis to correctly assess subject classification. All statistical analyses were performed using SPSS22 with a significance level set at 5%.

**RESULTS:** A total of 821 runners (46% females), aged 36.6 ( $\pm 10.0$ ) years were analyzed. Cluster analysis allowed the generation of 4 groups (n=752) according to years-of-running-experience, volume (km/week) and hours of training (hrs/week). Main variable for runners' classification was years-of-running-experience: "Beginner"(n=163); "Basic"(n=164); "Intermediate"(n=160); and "Advanced"(n=265). Statistically significant ( $p < 0.05$ ) and clinically relevant variables among the 4 groups were: sex, age, years-of-running-experience, training factors, previous injury(PI) and technological implements used for running practice. Beginners were mainly females (63.2%), aged 28.5 ( $\pm 8.4$ ) years, having less than 1 year-of-running-experience, 32.5% reported PI, and accumulated a training volume of 18.3 ( $\pm 12.7$ ) km/week. Advanced runners were mainly males (65.3%), aged 37.4 ( $\pm 10.9$ ) years, 63.4% with more than 7 years-of-running-experience, 44.2% reported to have PI and accumulated a training volume of 38.2 ( $\pm 20.8$ ) km/week.

**CONCLUSION:** Advanced runners accumulate greater training load per week, were older, and with higher PI proportions when compared with Beginners. Future work should include a differentiated classification of runners, in order to identify clinically specific risk factors related to running injuries.