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ORIGINAL ARTICLE

Does the chronotype distribution vary between different level football leagues? Insights gained from Czech elite football players

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ABSTRACT

Chronotype refer to individuals' time-of-day preferences for activities, which can be classified as "morning types = (M-types)", "evening types = (E-types)", and "neither types (N-types)". The primary aim of this study was to compare the chronotype distribution of Czech First League (1L) and Czech National Football League (2L) male elite football players, which was divided into two secondary aims: (i) statistically identify and compare the number (presence) of particular chronotypes in 1L, and (ii) statistically identify and compare the number (presence) of particular chronotypes in 2L. The present cross-sectional study employed a self-reported standardized questionnaire, the Composite Scale of Morningness, to study the chronotype distribution among the male elite football players. The chronotype distribution of 139 (85 from 1L with mean age ± S.D. = 25.5 ± 3.7 years and 54 from 2L age = 24.4 ± 4.5 years) players was assessed. Overall, 61 (71.8%) of the participants from 1L were mainly N-types, followed by M- and E-types. Similarly, 40 (74.1%) participants from 2L were mainly N-types, followed by M- and E-types. The statistical analysis of the 1L players showed a significantly higher presence of N-types compared to M- and E-types ($\chi^2_{(2)} = 57.62$, $p < .05$, $V = .58$). The same results were detected in 2L, where the N-type was identified in the majority of football players ($\chi^2_{(2)} = 57.62$, $p < .05$, $V = .58$). The statistical comparison of the number of presented chronotypes did not show a significant difference ($F = 3.29$, $p > .05$, $V = .16$) between players of the 1L and 2L. Thus, N-types are dominant among Czech elite football players, and the chronotype distribution of male elite football players from the Czech First League and the Czech National Football League does not vary.