# Academic background of young football coaches modulates the methodology of flexibility training

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### Introduction

The academic background of coaches in elite soccer academies is improving (Lledó & Huertas, 2012). Currently, football clubs are requiring to their coaches a greater academic background to be competent both at pedagogical and methodological level. Planning and periodization of training in football should be correctly organized according to the age and psycho-physiological development of the athletes (Partington & Cushion, 2013), specially during the earlier stages of their formation. Graduates in Physical Education and Sports Sciences have experienced during their academic formation higher academical charge related to strength and conditioning training and methodology than other coaches with different academic background (Lledó et al., 2014). Here, the aim is to describe the current situation of youth football academies related to the academic background of their coaches and the relevance that they give to the development of different physical fitness abilities in general, and particularly flexibility training

### Methods

98 Spanish coaches from different age categories (U9=27, U12=32, U14=24, U16=15) were recruited from Valencia Region. Coaches completed an online survey reporting their highest academic degree (AcB): University not related to Sport Sciences (NTDU, n=11), Coach Licensed without University Graduation (TD, n=32), University related to Sport Sciences (TDU, n=49), and Others (n=6). Moreover, they responded about the temporal distribution of the physical contents within their training organization (strength, endurance, speed, flexibility and proprioception). ANOVAs were carried out to explore the mean percentage of time (%) dedicated to each physical fitness content during the training sessions, considering the academic background as independent factor, and a descriptive analysis using frequency (N) and chi square value ( $\chi$ 2) was conducted with a significant alpha set at p<.05.

## Results & Discussion

Results revealed a non-statistical difference in the distribution of coaches according to its AcB at different ages,  $\chi 2$  (df=9, N=98) = 10.36, p = .322. Approximately half of the coaches (50%) were TDU, and 33% were TD. Only 17% of the coaches reported no education related to sports training. AcB did not modulate the weekly volume of training and % of time employed for training physical fitness abilities. Related to flexibility training methodology, we observed differences AcB in % of time employed for flexibility training in resting periods of matches (p= .048), showing the lower AcB, the higher % of time spent on flexibility training. AcB modulate the use of different methods of flexibility training: the higher AcB, the higher % of active techniques used (p= .020), without differences in the other methodologies (ballistic, passive stretching or FNP, ps> .07)

# Conclusion

The percentage of coaches with TDU has grown with respect to previous studies, Lledó & Huertas (2012) and Lledó et al. (2014) showing 60% and 52% respectively. This trend suggests a

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better awareness of the manage of the football academies for employing highly qualified coaches in order to reach higher standards of quality in the process of learning and development of young football players. Our data shows that there is not a clear long-term periodization of physical contents according to the athletes' psychomotor development. We agree that flexibility training have to be present in training throughout all categories as a mean of injury prevention (Leiva, 2014) but the methods have to be implemented according the age and sporting context of the athletes. In conclusion, our results suggest that employing coaches with higher academical background may enhance the global development of youth athletes.

## References

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