

The present study evaluated how the combination of ego- and task-involving climate perceptions related to youth soccer athletes' perceptions of team cohesion. We hypothesized that athletes would perceive their group to be less cohesive as ego climate perceptions increased in salience relative to task climate perceptions. In addition, the factor structure and longitudinal measurement invariance of Youth Sport Environment Questionnaire (YSEQ)—Portuguese version was also analyzed. A total of 956 national level youth male soccer athletes' belonging to 49 different teams participated in the study. Using a prospective design with two time points, the polynomial regression with a response surface analysis indicated that the effect of an ego-involving climate on task cohesion varied as a function of task-involving climate perceptions. Specifically, athletes reported lower levels of task cohesion as ego-involving climate perceptions began to predominate over task-involving climate perceptions. Furthermore, a strong task-involving climate buffered against the negative effects of ego-involving climate perceptions on task cohesion. Regarding social cohesion, we only observed a positive linear association between task-involving climate perceptions and social cohesion. Our findings support the validity and reliability of two factors underlying the YSEQ and its longitudinal invariance across time in an elite youth sample. Future studies should strive to replicate these results in other sports and with female athletes. Our results provide insight into how task-involving and ego-involving climate perceptions combine to shape how elite youth athletes view their group environment.

**Keywords:** cohesion, motivational climate, response surface analysis, youth, group dynamics