

## Medical Education Research

### ***'Qualitative Analysis of Collegiate Athlete Performance in Medical School'***

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**Background:** Few studies have formally assessed qualitative factors affecting medical school performance. We previously published data showing students with prior collegiate athlete experience significantly outperformed their peers in USMLE Step exams, third year clerkships, and Honors designation.

**Objective:** Our objective was to utilize qualitative research methods to explain performance differences between prior collegiate athletes and their medical school peers.

**Methods/Design:** We conducted semi-structured interviews with current medical students who had collegiate sports experience, medical school faculty who have served as team doctors or extensive experience with collegiate athletes, and collegiate coaching staff. Interview transcripts were coded and analyzed using grounded theory and triangulation.

**Results:** A total of twenty-three subjects participated in the study (15 students, 5 faculty from family medicine, psychiatry, and orthopedics, and 3 Wake Forest University coaches). Non-cognitive factors (NCFs) were identified across all three groups as being critical to medical student success: goal setting and pursuit; time management; teamwork skills; interpersonal or communication skills; resiliency when faced with adversity; and commitment to personal wellbeing. Participants developed these skill sets while engaged in their college athletics and then applied them to medical school with positive results.

**Conclusions:** Based on this qualitative research, we felt the Kendellen and Cammire framework of life skills transfer best explained how the students developed a number of intrapersonal and interpersonal skills through college sport participation, recognized opportunities to apply these skills in the medical school context, appraised their application of these skills in medical school as beneficial to their performance in that setting, and adapted their future behaviors accordingly toward successful outcomes. While some of the NCFs described in this study may in part represent innate traits among

student athletes that predated their matriculation to college, most of the NCFs discussed represent knowledge and skills that can be learned and applied by any medical student. Medical schools can screen for pre-matriculation activities that encourage development of these NCFs, and student advising can use these strategies to support students, via peer mentoring or other methods.