



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Toni M. Ward	Project Number S0328
Project Title Differences in Personality between Non-Athletes and Athletes and between Athletes Participating in Selected Sports	
Abstract Objectives/Goals The purpose of this experiment was to determine if there was a significant difference in measures of ambition, perseverance, self-esteem, and power motive between non-athletes and athletes, and also between different sports such as soccer, volleyball, basketball, softball, baseball, football, track/cross country, and cheerleading. Methods/Materials 118 high school students were tested using a 40-question personality test composed of four different tests published in The Big Book of Personality Tests (Salvatore V. Didato, 2003). The personality traits measured were ambition, perseverance, self-esteem, and power motive. 32 subjects were non-athletes (they did not play any of these sports: soccer, volleyball, basketball, softball, baseball, football, track/cross country, and cheerleading) and 86 subjects played one or more of the sports. Results On average the athletes scored 9.25% higher than the non-athletes on the personality test as a whole. According to the data, the athletes# ambition scored 6% higher than the non-athletes# level of ambition. Athletes scored 7% higher in perseverance than non-athletes. The athletes# healthy self-esteem was 17% higher than the non-athletes#. The need for power in the athletes was only 7% higher than the need for power in the non-athletes. Out of the eight selected sports, cheerleading has the highest level of ambition: 27% of the cheerleaders were #intensely ambitious# (they scored 8-10 points on questions 1-10). Soccer had the highest level of perseverance with 20% of the participants who are #very tenacious and work hard to achieve their goals (a score of 8-10 points on questions 11-20). Soccer had 87% of their participants with a #healthy and robust# self-esteem (a score of 6-10 points on questions 21-30). Baseball had the highest power motive: 29% of the participants are #motivated by a compulsive drive for power# (they scored 23-30 points on questions 31-40). Conclusions/Discussion The data support the hypothesis: the athletes have a higher ambition, more perseverance, higher self-esteem, and a higher power motive than non-athletes. The results of the experiment can be applied to children: if parents encourage sports participation at an early age, the kids will have a better chance of having more ambition and self-esteem later on in life. This could enable children to be more successful in school and personal goals.	
Summary Statement The purpose of this experiment is to see if athletes are more ambitious, persevering, have a higher self-esteem and higher power-motive than non-athletes.	
Help Received None	