Cannabis attitudes and knowledge are associated with cannabis use in a population-based survey of active adult athletes

Joanna S. Zeiger[1], William S. Silvers[1,2], Edward M. Fleegler[1,3], Robert. S. Zeiger[1,4]
[1]Canna Research Group, Boulder, CO; [2]Univserity of Colorado School of Medicine, Aurora, CO; [3]To-Life in Peace, LLC, Wheat Ridge, CO; [4]Kaiser Permanente Southern California, San Diego, CA

With mounting evidence for medicinal efficacy of cannabis for a variety of conditions, it is important to better understand the inter-relatedness between cannabis knowledge, attitudes, and behavior in order to target educational initiatives. This secondary analysis of The Athlete Pain, Exercise, and Cannabis Experience (PEACE) Survey (n=1,161) a cross-sectional survey study in active adult athletes, aimed to determine whether cannabis attitudes mediated the relationship between cannabis knowledge and use. The primary sports were running, triathlon, cycling, and other. Cannabis knowledge was evaluated with four questions; cannabis attitudes were assessed with 11 questions which were used in the SPSS TwoStep Cluster procedure to assign group membership by attitudes. Chi-square was used to evaluate whether demographics and cannabis knowledge differed by attitudes clusters. Regression analysis evaluated whether cannabis knowledge and attitudes were associated with cannabis use (i.e. never user, past user, current user) and if attitudes mediated the relationship between knowledge and use. A three-cluster solution was the best fit to the attitudes data: Conservative (n=374, 32.2%), Unsure (n=533, 45.9%), and Liberal (n=254, 21.9%). There was a significant difference between the attitude's clusters for all 11 items (all p<0.001). Knowledge was significantly associated with attitudes (p<0.001) and use (p<0.001) and attitudes were associated with use (p<0.001). Liberal athletes tended to be younger (p<0.001), in the "other" sport category (p<0.05), had the most knowledge about cannabis (p<0.001), and were more often current cannabis users (p<0.001). Attitudes significantly mediated the relationship between cannabis knowledge and use (indirect effect: 0.08, 95% CI: 0.06-0.09). Liberal athletes showed better knowledge and tended to be current users more often than Conservative or Unsure athletes. Education regarding cannabis needs to take into consideration knowledge and attitudes about cannabis, especially in a medical setting.