[Editorial] Shoe Power

uite surprisingly, the shock and fury over the recent college basketball/shoe scandal seems to have settled X down. After the initial series of accusations about cash payments to basketball recruits and FBI revelations from wiretaps,⁶ most bystanders figured there was a lot more to disclose. After all, it is hard to imagine that these were isolated incidents at a few universities. Most people who follow college sports thought that many major perennial powers could be involved. As in most cases, the likely answers to questions surrounding the scandal could probably be found by following the money trail. The big picture appears to be that shoe companies generating outlandish profits,⁵ supporting some college coaches who are making millions, are dependent on elite players. These players are often from meager backgrounds, thus increasing their vulnerability to monetary persuasion. It is also plausible that shoe companies were planning on contracting these athletes once they became professionals.

So how did this scenario develop? How did shoe companies become so profitable and influential in college sports? Well, shoes are not just another apparel item anymore. Next to music, shoes have become a status symbol and sign of the times. Interestingly, the Converse All Stars of yesteryear seem to be making a comeback on campus. Shoes are not just important to athletes—just check out the local high school to see what's important to today's youth! Unfortunately, stylish shoe wear has become so important in some places that highly desirable sneakers have cost kids their lives.¹

Today, no doubt, Nike and Adidas seem to be winning the shoe popularity contest, with Nike holding down the top spot. However, Adidas' history has longer roots, dating back to pre–World War II. Attempting to expand their market on both sides of the Atlantic, both Nazi and American athletes wore Adidas shoes in the 1936 Olympics.⁴ One such athlete was no other than American superstar Jesse Owens.

Nike's footwear originated from Blue Ribbon Sports in 1964 and entered the marketplace with track teams in the 1970s with the Nike waffle trainer, patented in 1974.⁸ These shoes provided a better grip on running tracks with their unique sole, which was actually made on a waffle iron. Nike shoes skyrocketed in popularity with the Michael Jordan era and continue to reign in popularity despite the price tag.

As shoe popularity grew along with financial success, many expected an ever-improving product line emphasizing biomechanically sound structure and injury prevention elements, at least in the sports competition models. It would be interesting to evaluate how much of Nike's and Adidas' resources are devoted to injury prevention. It seems like an industry generating more than \$30 billion every year should be very interested in injury research and the production of safer products.

Independent researchers of football shoes insist that the shoe is an important piece of protective sports equipment and not just an extension of athletic apparel, emphasizing the need to define optional shoe sizing, the relationship between design and mechanical load, and the interaction between cleat patterns and the playing surface.² This research has been revealing but has not yet filtered down to high schools and the general public. Researchers continue to investigate the tractionproduced torque generated by the shoe-surface interface. This lower extremity torque generated during cutting/pivoting/ jumping maneuvers is hypothesized to be a factor in both ankle and knee injuries. Some of the most problematic injuries are high ankle sprains and anterior cruciate ligament tears.⁷

A major factor in a shoe company's financial success appears to be the low cost of shoe production in foreign countries.⁹ While this model has produced financial success, it has also raised social concern and protest dating back to the 1970s when shoes were manufactured in South Korea, China, and Taiwan.⁹ Throughout the 1990s, Nike was accused of selling goods produced in sweatshops.⁹ In 2005, more than 40 universities demanded that their institutions endorse companies that use "sweat-free" labor. Team Sweat, a group of consumers and investors, now tracks Nike's production practices.⁹ In response, Nike initiated a conduct code for its factories called SHAPE, spending a reported \$10 million each year to adhere to regulations for fire safety, air quality, and minimum wage.⁹ Thanks to these revelations, labor situations in manufacturing facilities have reportedly improved.

The cheap production costs based primarily on foreign labor have helped generate the financial success of shoe companies, allowing them to become a force in college and professional sports. Their affiliations with top professional athletes and college football and basketball powers has been a major component of the shoe company strategy. With the financial implications of shoe contracts, many shoe wear decisions at the professional level appear to be governed by dollars rather than what is best for athlete injury prevention. Similarly, most Division I football and basketball schools are identified as either Adidas or Nike affiliates. These school contracts have become a

DOI: 10.1177/1941738118792874 © 2018 American Orthopaedic Society for Sports Medicine major component of athletic department funding, along with an additional windfall for coaches.³ As the financial role shoe companies play expands, it is clear how their influence and potential for abuse could increase.

To remain successful year after year, college coaches must attract top athletes to their respective teams in a highly competitive environment. This scenario is exacerbated in college basketball with the "one and done" phenomenon, which rarely sees top players remain in school for 4 years. Consequently, the yearly battle for top high school players has intensified. It is understandable how large sums of cash could influence decision-making.

It is hard to imagine how these problems in college sports can be corrected as long as these sports remain a multibillion-dollar enterprise for Division I schools and shoe companies. It will be interesting to see what legal and organizational steps are taken to reign in these problems.

> —Edward M. Wojtys, MD Editor-in-Chief

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