This article was downloaded by: [Kraska, Peter B.]

On: 12 August 2009

Access details: Access Details: [subscription number 913842552]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House,

37-41 Mortimer Street, London W1T 3JH, UK



Justice Quarterly

Publication details, including instructions for authors and subscription information: http://www.informaworld.com/smpp/title~content=t713722354

Trafficking in Bodily Perfection: Examining the Late-Modern Steroid Marketplace and Its Criminalization

Peter B. Kraska; Charles R. Bussard; John J. Brent

First Published on: 11 August 2009

To cite this Article Kraska, Peter B., Bussard, Charles R. and Brent, John J.(2009)'Trafficking in Bodily Perfection: Examining the Late-Modern Steroid Marketplace and Its Criminalization', Justice Quarterly, 99999:1,

To link to this Article: DOI: 10.1080/07418820902814013 URL: http://dx.doi.org/10.1080/07418820902814013

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Trafficking in Bodily Perfection: Examining the Late-Modern Steroid Marketplace and Its Criminalization

Peter B. Kraska, Charles R. Bussard and John J. Brent

Illicit steroid and human growth hormone use by professional athletes has received significant media and political attention in the last five years. The resulting political pressure has compelled federal law enforcement to prosecute serious new control initiatives. To date, no academic research inquiring into the nature of this illicit industry exists. This study fills this void through the mixed methods approach—employing both ethnographic field research and quantitative content analysis. The ethnographic data demonstrate a fascinating late-modern trafficking scheme where the central informant established an apartment-based manufacturing operation, converting raw steroid chemical compounds ordered off the Internet into injectable solutions. Content analysis of 186 websites that supply anabolic androgenic steroids (AAS) demonstrates that these grounded findings are indicative of a much larger phenomenon. Our final analysis examines the broader theoretical relevance of the ethnographic findings through contextualizing them within macro-structural (supply) and macro-cultural (demand) social forces.

Keywords late-modern; drug trafficking; criminalization; steroids; mixed methods

Peter B. Kraska is a Professor and Graduate Program Director at the Criminal Justice and Police Studies Department, Eastern Kentucky University. His recent academic interests include mixed methods research, criminal justice theory, and various trends associated with late-modernity, such as criminalizing negligence and accidents, the rise of human sport fighting, and the trafficking and state regulation of body enhancing drugs. Charles R. Bussard is a recent graduate of Eastern Kentucky University's criminal justice master's program. He currently works for the Kentucky Department of Juvenile Justice as a counselor. John Brent is a recent graduate of Eastern Kentucky University and is currently a first year doctoral student at the University of Delaware. He is coauthor of *Theorizing Criminal Justice: Eight Essential Orientations* (2010) with Peter Kraska. Correspondence to: Peter Kraska, Eastern Kentucky University, CJ, Richmond, KY 40444, USA. Email: peter.kraska@eku.edu



Introduction: Waging War on Body Enhancing Drugs

Most drug war analysts cite the death of Len Bias in 1986 as the tipping point in the decade-long drug war of the mid-1980s and 1990s (Inciardi, 1992; Trebach, 1987). Bias was a young and highly talented African-American pro-basketball player who overdosed on powder cocaine while partying with friends. His death was the direct catalyst for the U.S. Congress in 1986 to enact the landmark federal drug legislation known as "mandatory minimums" (Sterling & Stewart, 2006).

Professional sports again take center stage in the emergence of another potential drug war. This time the spotlight is not on people using psychoactive drugs that alter their state of consciousness; rather, the concern is on drugs designed to enhance athletic performance, body aesthetics, life span, and healing after an injury—an entire class of drugs that are referred to by most as "steroids."

Numerous performance enhancing drug scandals have rocked both professional and Olympic sports. A few examples include Marion Jones (Olympic track star) who has been sentenced to a six-month prison sentence for lying to a steroid investigative body, the constant turmoil surrounding Tour-de-France cycling race over positive drug tests, and numerous high-profile baseball players being accused of and admitting to using anabolic steroids and human growth hormone (HGH).

The attention on professional sports has also generated a more general concern about the extent to which everyday athletes (both young and old), weightlifters, bodybuilders, and people interested in losing weight or living longer are buying and using these illicit substances (McCallum, 2008). The media (particularly the sports media) has adopted it as a part of their daily news cycle. The U.S. Congress has launched hearings, conducted in-depth investigations, and passed new steroid control legislation (Shipley, 2007; Tucker, 2007). The moralizing about steroids reached the presidential level during a State of the Union Address in 2004:

The use of performance-enhancing drugs like steroids in baseball, football, and other sports is dangerous, and it sends the wrong message—that there are shortcuts to accomplishment, and that performance is more important than character.

Whether these empirical indicators will materialize into an actual "war on steroids" is unclear. However, several moral panic criteria are evident including: expert and political outrage and moral condemnation; law enforcement interest in expanding into this arena; new federal and state legislation; a difficult to refute trend in an increased use of these substances; yet, an exaggeration of the likely dangers of these drugs (Cohen, 2002; Goode & Ben-Yehuda, 1994). In short, we may be witness to a significant new development in our society's long history of waging drug wars.

Criminal justice/criminology has yet to provide any research or scholarly discussion about this increasingly important phenomenon and issue. Moreover, while other disciplines have conducted some noteworthy epidemiological studies (particularly on youth steroid use), no research in any field has been published on the illicit steroid marketplace or steroid trafficking. The central purpose of this study, therefore, is to provide some much needed data, analysis, and theoretical contextualization of the steroid trafficking industry. The various sports scandals have revealed—at least to the media, politicians, and the government—a potential thriving black market (Cramer, 2005).

Aside from shedding empirical light on an important crime and justice issue, two sub-objectives are pursued. First, we demonstrate that the study of the illegal body enhancement drug industry harbors significant theoretical and crime control implications. For example, this research points to a significant shift in the general nature of illicit drug trafficking: a fluid and quite new form of criminality based in a virtually unregulated, Internet-based global marketplace. Second—through a mixed methods approach that includes both ethnographic field research and quantitative content analysis—we attempt to link the micro-interactive and the macro-structural/cultural dimensions of this phenomenon.

Brief Context: Defining and Criminalizing Steroids

Steroids are pharmacologically referred to as "anabolic-androgenic steroids" or AAS. They are manufactured substances related to male sex hormones, and are legally available through a doctor's prescription for the purpose of treating various medical conditions. They are often used to treat individuals with wasting disease, serious illness, and malnutrition. Those suffering from diseases such as HIV/AIDS seem to benefit the most because of the increase in lean muscle mass and the positive effect on the body's immune system (Lenehan, 2003). These same medical benefits make AAS attractive to athletes and non-athletes alike who harbor a desire to gain strength, speed, and lean muscle mass (Hoberman, 2005). The more popular varieties of illicit AAS fall are Testosterone Enanthate ("Test"), Deca, Sustanon, Dianabol, and Anadrol. The method of application ranges from intramuscular injection, oral administration, and even transdermal application (topical cream form).

However, framing AAS as merely performance enhancing drugs fails to capture the expanding motivations for using these drugs. While bodybuilders, power-lifters, and athletes attempting to boost their athletic performance likely comprise the core of AAS users, there is strong evidence that their appeal is broadening to include those who want to lose weight, lengthen life-span, heal more quickly from injuries, or to simply feel and look younger.

^{1.} The only exception we could find is an informative piece that reports on the attitudes and rationalizations of steroid users written by Fuller and LaFountain (1987). We found no articles in the literature which actually researched steroid trafficking.

The other difficulty with the AAS label is that it excludes numerous other performance and body enhancement substances that are not actually steroids. An example of these is a broader class of drugs called "ergogenic aids" or sometimes "steroid accessory drugs." These substances "enhance energy production, control, and efficiency" and include a large array of substances, both legal and illegal (Silver 2001). The most well-known include blood doping drugs (such as EPO (erythropoietin) used by some competitive cyclists to dramatically boost aerobic capacity) and HGH.

HGH received significant media and political attention in 2007-2008—particularly within the aforementioned baseball scandal and with disclosures that some celebrities use the drug for cosmetic reasons (Lyons, 2008). It is not a steroid because it is chemically unrelated to testosterone. Several research studies document its ability to rapidly drop fat deposits, increase muscle mass, bone density, and cognitive ability, as well as make older users feel significantly younger (Mattingly & Estrada, 2008; McCallum, 2008; Peter, 2007). Both EPO and HGH are not currently listed under federal law as controlled substances (Caruso, 2007). For purposes of simplicity, we will be using the labels AAS or steroids, while keeping in mind the caveat that this study includes numerous other ergogenic aids such as HGH.

A Short History of Steroid Criminalization

Until 1990, AAS in the USA were not scheduled as controlled substances and were simply regulated as any other prescription drug by the U.S. Food and Drug Administration. In the mid to late 1980s, during the escalation of the war on drugs, politicians also become increasingly concerned with reports of high school and Olympic athletes using steroids to gain a competitive edge (as in the case of Ben Johnson testing positive for steroid use in 1988 after winning a gold medal in track). Between 1988 and 1990 Congress held hearings to determine if the Controlled Substances Act should be modified to include AAS alongside addictive psychoactive drugs such as heroin and cocaine. Even though the Food and Drug Administration (FDA), Drug Enforcement Administration (DEA), and American Medical Association all argued vehemently against their inclusion, the U.S. Congress passed the Anabolic Steroid Control Act of 1990 (ASCA), which classified AAS as a Schedule III drug (the same category as amphetamines, opium, and morphine). Many states soon followed suit, with New York even classifying steroids as a Schedule II drug—a higher standard than found in federal law. This increased attention was compounded by the media's discussion of "roid rage" in the early 1990s, associating AAS use with "uncontrollable aggressive violence" (Waskul & Vannini, 2006). Steroids were viewed increasingly as a "social problem."

On 22 October 2004, due to a new wave of media/political attention on the use of AAS in sports, the Anabolic Steroids Act of 2004 was signed into federal law (Hoberman, 2005). This Act amended the Anabolic Steroid Control Act of 1990, by altering the definition of AAS to include a range of specific chemicals

known as "steroid precursors." These chemicals act to boost the production of testosterone by the user (e.g., "Andro" or androstenedione). Additionally, it directed the U.S. Sentencing Commission (USSC) to review the federal sentencing guidelines with respect to anabolic steroid-related offenses resulting in significantly increased punishments (Hoberman, 2005).

As of this writing, more restrictive legislation is being considered by the U.S. Congress as a reaction to the baseball steroid controversy (McCallum, 2008; Shipley, 2007). As will be discussed later, it also appears that law enforcement officials have recently gone from taking a very passive role in the enforcement of steroid laws to more aggressive efforts.

The heightened media/political/police attention to this illicit phenomenon has exposed a potentially significant and fascinating new AAS marketplace. While most people envision someone at a gym selling these illegal substances out of the trunk of their car, in actuality the emerging picture of today's AAS marketplace is a decentralized and highly complex mix of local and foreign doctors, internet prescription sites, internet supply houses, mid-level distributors, and a vast array of different types of customers. Perhaps the most significant feature of today's ASS marketplace, yet not examined empirically in the academic literature, is the growth in suppliers outside the US borders. These substances are often legal to obtain and unregulated in numerous foreign countries and are readily available for purchase over the counter or Internet.

Mixed Methods

Two primary research methods were employed to shed empirical light on the AAS marketplace.

Ethnographic Field Research Methods

The first research method used was 15 months of ethnographic field research conducted in 2005 through the first four months of 2006. Fieldwork began at a commercial gym where several nationally recognized bodybuilders trained. Contact was made with numerous bodybuilders but the closest rapport was established with a bodybuilder, referred to as "Mike," who competed at national events. Mike became the central informant for this research.² Research sites included the gym, the primary informant's home, local bars, and at numerous strength and bodybuilding competitions. The total geographical area encompassed in this study (including the range of illicit drug distribution

2. Clearly this study employs the traditional ethnographic field research approach. However, it became apparent when sorting through field notes derived from over a thousand fieldwork hours with our 13 informants, that the most efficacious and instructive way to present our findings would be to key on our main informant, "Mike." It would be inappropriate, therefore, to label our research a "case-study," yet we recognize our approach risks blurring the distinction.

associated with this regional operation) was a 60 square mile radius that included one city of 50,000 people and another of almost 300,000.

The central informant's status as a national-level bodybuilder translated into a complex array of contacts within the entire weight training community in this region—which included collegiate athletes, law enforcement officers and firefighters, recreational weightlifters, amateur power-lifters, and other professional bodybuilders. Even though this study centered on illicit steroid use and trafficking, and the participants were made aware of the nature of the research project, all the primary research subjects used in this study (twelve in total) were cooperative (due in part because of the main informant's high status). These additional contacts were made through snowball sampling, and the study group consisted of 10 men and 2 women. Fifty-three additional individuals were also included in the study, but our encounters with them were too brief to consider them true informants.

Due to the large size of the community under study, and the extended time length of this ethnography, we decided that the most constructive way to reduce our data into a presentable form was to concentrate our analysis primarily on our central informant, as he was the center point of a large network of AAS distributors and users spread out over a large geographical area. (See note 2, which makes the point that focusing our analysis on Mike's central role in this drug trafficking operation does not render our ethnographic research a "case-study.")

The informants were made aware numerous times of the nature of this research project, and each participant was promised confidentiality and anonymity. Various steps were taken to ensure our promise was honored, and the protocol was approved by Eastern Kentucky University's IRB. It would have been inappropriate and counterproductive to have the participants sign a voluntary consent/participation document. As discussed in the literature on sensitive ethnographies, this formal step would have very likely resulted in a termination of the project due to non-participation (Kraska & Neuman, 2008; Miller & Tewksbury, 2001).

The research was conducted through direct observations and numerous informal interviews that were initially pre-arranged and face-to-face, but developed quickly into more informal and loosely structured settings. All data collected in this research were initially in the form of jotted and direct observation notes. Analytic memos, maps and diagrams, and transcriptions of interviews were also completed. These transcripts, notes, and observations were then coded using the open coding and axial coding technique. This process involves several passes through the data in an attempt to both reduce a high volume of information into manageable form and to also tease out patterns, themes, noteworthy ideas, strategies, and causal relationships.

Quantitative Content Analysis Methods

Armed with an in-depth understanding of the inner-workings, nomenclature, and operations of the underground steroid marketplace, the authors then attempted

to collect quantitative data that would assist in placing these micro-level findings within the larger steroid marketplace. The idea was to mix ethnographic field research with quantitative content analysis for the purpose of testing whether the phenomenon under study was contained to the geographical area under study, or reflective of something much larger. In a sense, then, an attempt to render the ethnographic findings more reliable. The underlying premise of the mixed methods research approach "is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone" (Creswell & Clark, 2006, p. 5; see also Kraska, 2008). The value in our mixed methods approach is that it can shed some additional quantitative light on our findings and adds to the larger relevance of our ethnographic findings.

As detailed below, a key finding exposed by this ethnography is the central role the Internet plays in obtaining, manufacturing, and distributing steroids as well as a treasure-trove of information about how to traffic in and use AAS. Fortunately, access to these Internet sites, while sometimes quite difficult to locate and infiltrate, was made easier due to the researchers extensive knowledge gained during the ethnography. A total of 230 illicit AAS Internet sites were examined - with 186 sites operational enough to allow for coding. This of course is not necessarily an exhaustive population of Internet sites. Indeed, the more we learned about how this underground marketplace works, the more we realized how deeply underground one can go into this maze with encrypted communication systems, sites that are off-limits to only trusted clients, and sites that sell AAS chemicals and paraphernalia without any obvious indication they do so.

We made differing levels of contact with each of the 186 Internet sites to ensure that they were indeed active and willing to selling AAS-related products. This never involved actually purchasing ASS-related products, but did include being sent emails with details about costs, products, methods of payment, etc. Variables coded included the site name, IP address, useable contact info, products sold (e.g., testosterone precursors, injectable HGH), ease of access to the site, how they characterized the business (e.g., prescription drug, longevity clinic, bodybuilder supplies), number of pages associated with the website (printer pages), payment methods accepted, and shipping methods.

Diagram 1 summarizes the logic and approach taken in this mixed methods study.

Ethnographic Field Research: "Dude, Where Can I Get Some?"

The central informant for this study was a nationally ranked level bodybuilder living in a medium-size mid-western community and married with no children. He had been interested in growing extraordinary amounts of lean muscle on his body since he was 21, and began using an array of illicit ergogenic drugs when he was 22. His reasons for getting involved in bodybuilding were typical among the many weightlifters and bodybuilders we encountered in this study: a "skinny

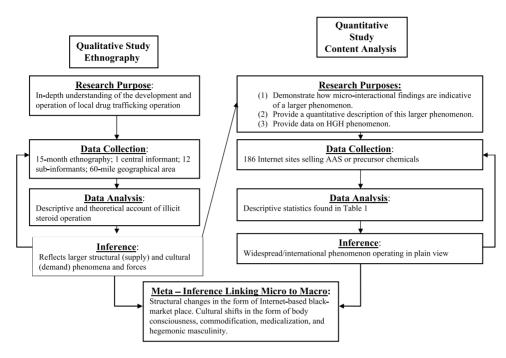


Diagram 1 Visual representation of mixed model approach. *Source*. Modified from work found in the "Sequential Mixed Model Design" (Tashakkori & Teddle, 2003).

kid" searching for an avenue to obtain a high level of masculine and/or athletic status (Hoberman, 2005; Monaghan, 2002). As demonstrated by Mike's own words, his quest for the "perfect" physique is intense.

I want to be a freak walking around. I want little children to see me walking down the street and bury their little faces in the shirttails of their parents crying while their parents wonder what in the hell happened to this person! I want them to say I didn't think a person could actually look like that ... like a living and breathing cartoon character that walked right out of a comic book.

The 12 other informants in this study shared Mike's rationale—although most were less extreme in their descriptions. Most framed their desires more in terms of "getting hard," "being ripped/shredded," "being massive," "looking scary," "being scary strong," "wanting the ultimate body," and "wanting to intimidate my opponents at first glance."

The Beginnings of an Internet-Based Growth Industry

The weightlifting subculture studied here is fascinating and rich with theoretical possibilities. However, it became obvious within the first month of this

ethnography that the most noteworthy aspect of this fieldwork would be steroid manufacturing and distribution. The long learning process our central informant went through to establish a lucrative steroid trafficking operation is instructive. We (the authors) were able to observe first-hand some of the latter stages of this operation due to the duration of our study (15 months).

Of course that was in the beginning ... when I was a newbie. You would go and buy some stuff from a buddy of yours that you met in the gym that might have a bottle of this or a bottle of that. Today though it is a totally different game. Most people have no clue as to where we get our stuff. They probably think we are traveling to Mexico and filling our bags full of the stuff and crossing the border.

Mike began as an AAS user. He bought his drugs from a fellow weightlifter and friend at his gym (one of the 12 sub-informants for this study). He could barely afford the prices he was paying, and started to purchase a surplus of drugs from his dealer so he could make a small amount of money off his friends to off-set his expenses. Mike explained, though, how he grew weary of "paying out the ass" for AAS he knew that the same people he was competing against were getting their drugs for much cheaper. He finally expressed being "fed up" with only being able to afford such small amounts of drugs at a time.

I basically came to the conclusion that there was no way I was ever going to get to where I wanted to be with the small amount of drugs I could buy. Regardless of whatever genetics I had. It's just that simple. The farther along I wanted to go in bodybuilding, the larger my body had to be and the more drugs I have to take to get there.

Mike surmised that the only way he could compete at a high level in body-building was to purchase a much larger supply at a lower price. Notice that securing a profit was only a means to the end of "getting huge." As found with other types of drug dealing, involvement is often initially motivated by a desire to have someone else off-set the costs of their own use (Adler, 1985; Atkyns & Hannenman, 1974; Tunnel, 1993; VanNostrand & Tewksbury, 1999).

He recalled that the guys he originally bought his drugs from referred to "placing an order." He knew these orders were going to people that were connected somehow to foreign pharmacies. He figured his suppliers were probably paying less than half the price he paid, and concluded: "I always sat there after I bought something [more AAS] and thought to myself that if these fucking idiots could do it so could I." Our central informant explained how he searched the Internet fervently for a long time looking for these overseas pharmacies.

^{3.} As found throughout this ethnography, the informal social network of this drug marketplace (found both on-line and in his immediate social circles) helped recruit, train, provide information, and aided in the success of Mike's illicit business. This same pattern for other types of drug dealing is well-documented in the literature (Adler, 1985; McCarthy & Hagan, 2001).

"Everywhere I looked it said you could get this or that ... but I had to pay some price to get the address of one of these places," he said.

Then I started paying more attention to these bodybuilding message boards. That is how I found the first overseas place to buy from. It's amazing. These forums have lists of places that include scammers and everything. It just makes it a lot easier to figure out basically who to buy from.

"Scammers" were domestic and foreign businesses that did not deliver on a paid-for AAS order, and were then placed on blacklists found on Internet message boards. The researchers for this study visited several of these scammer lists and websites. In some cases jilted customers would post pictures of where the alleged "scammer" lived, worked, the type of car they drove, the name of their spouse, and sometimes even listing the schedule of the daily routines of the person—a type of informal ebay-like feedback system. Mike viewed this tactic as an effective deterrent and claimed to have never been the victim of a "scammer."

After several months Mike decided on a website operation based out of Yugoslavia. He expressed a sense of "awe" when viewing the prices. The "Sustenon 250" that he recently purchased from a friend at close to \$32 an ampoule was just \$7. "I couldn't believe my eyes and about fell out of my chair when I saw how cheap it was" he exclaimed. It now appeared to our central informant's dream of becoming even bigger and truly competitive was now economically within reach. "I was in heaven," he said. "I found the fucking Holy Grail!"

Mike decided he would only make a \$100.00 order the first time. In order to complete the transaction he had to purchase and send a western union money order.

The cool thing about sending out the western union was that I had a friend working at a store that sent them. He told me that if I placed orders under \$1,000 that I would not have to provide identification and could just sign a name.

In just a few days the order came wrapped in brown paper with no markings. He had read on some websites that he needed to wait a couple hours before opening it just to make sure that it wasn't being tracked by law enforcement. "Man I was a nervous wreck ... I thought my heart was going to explode sitting there waiting." When he finally opened it up there was a single VHS tape inside. "I remembered in the email they mentioned that they wouldn't reveal the way they would package it, but I would find it funny when I saw it."

We (the authors) examined numerous websites (as part of the content analysis research) that gave explicit instructions and rationale for their shipping protocols. One read:

- We ship our products world wide and all packages are shipped very discreet.
- Our organization name or anything else that would imply pharmaceutical contents of the package is never used in our shipments.

- The size of our packages are never larger than what would cause unnecessary suspicion. If the order is too large to fit one of these packages, the order will automatically be divided into two or more packages (always included in the S&H-charges).
- Shipments are made from various shipping points in different European countries.
- With custom we have 99% success to the USA and Canada, 100% success to any country of EU and 90% success to Australia. Problems with custom are only in New Zealand.

After taking the shrink wrap off the VHS box, Mike found that all the AAS he ordered were sorted neatly and taped together along with the boxes that the drugs were originally packaged in at the pharmacy and neatly flattened out and placed along the bottom. "I wish I had a picture of me sitting there ... I must have looked like a kid on Christmas day ... this was it," he said.

Home-Brewed/Globally Obtained: Taking the Next Step

Our central informant immediately made additional orders: "I started making more and more purchases not really thinking about it at all. But then it hit me what I was getting myself into." He started getting a little worried about the whole idea of buying in-tact steroids through the Internet, knowing his chances of getting caught were increasing as he became more involved in selling to other people. This pattern of becoming more cautious and even paranoid as the drugdealing operation grows is noted by Alder (1985) and Desroches (2007). He came across a solution to this dilemma, again through postings on the Internet. He read about a method to convert legal steroids used for cattle into an injectable solution for humans. The specific AAS Mike was referring to is called Trenbolone Acetate, and is commonly known as "Tren" or "Fina." Because it is used to promote rapid muscle growth in cattle, it can be purchased at any farming supply store without a prescription.

The difficulty, though, was the drug came in pellets that were shot into the back of the animal's ear with an implant gun. In order to actually get the drug out of the implant pellet you have to physically break the pellet down. When asked about how he went about this process our central informant said, "Dude they sell all that shit on the Internet also. There are these kits they call 'aromatherapy kits' that contain all the things you would need in different size kits to make different amounts." With regard to its legality:

Well yeah I guess it is [legal]. The kits can be used to make those aromatherapy products ... you know all the aromatherapy massage oils and shit, but really you just use all the chemicals to break the pellets down instead.

We (the authors) checked several supply sites and found a ready supply of these kits which came in 2g, 4g, 6g, 8g, and 10g sizes, depending on the amount of

animal pellets to be broken down, or the amount of "aromatherapy" product one planned to make.

Converting this product involves adding chemical solutions to the pellets which cause them to separate the active drug from its binders and fillers, yielding multicolored layers that exposed the actual steroid. After the solution was allowed to sit for a while Mike used a syringe, and what is called a syringe filter, to draw the actual drug out of the layered solution and place it into another vial along with a small amount of oil. The vial is then placed into the oven and cooked for a period of time in order to sterilize it. "Of course you do not want to leave it in there too long or else it will oxidize," he said. "And then it is no good at all." After baking the vials are removed, allowed to cool, and then crimped with a rubber stopper.

Besides lowering his risks of arrest, Mike explained that Tren was a superior steroid and very popular. "Man, it [Tren] is like three times as potent as 'test,' with basically none of the side effects. Plus you do not have to use as much ... but the downside is that you have to inject it roughly three times a week and you can only use it for short periods of time to minimize any damage done to your body." All seven of the sub-informants in this study that sold Mike's home manufactured drugs cited "Tren" as one of the most popular AAS.

"Home brewing" is the term given to the process of manufacturing AAS and or other illicit performance enhancing drugs. Manufacturing Tren at home in a small desktop operation with few legal risks compelled him to learn more about the possibilities involved in home brewing. He figured out that almost any AAS, or other ergogenic aid, could be purchased very discreetly in its raw, precursor form. All it took was a little home chemistry acumen, and some basic pharmaceutical supplies to convert these very cheap precursor chemicals into potent and profitable steroids.

"So I looked around the Internet," he said.

I must have spent three days or more looking non-stop and BAM ... the supplier was right there. It was kind of hard to find at first, the link to the supplier was on a normal business website. I spent roughly around \$1,500 myself, which when I made the actual drugs that I would use would have a street value of around \$50,000 or so.

Again Mike had purchased these precursor chemicals through the Internet—usually from Chinese-based websites—but this time he would be able to manufacture a much larger amount of AAS himself. "The raw material that came was disguised as plastic chip samples," he said, "and there is no way in hell they are going to seize that!"

In order to home manufacture AAS efficiently and safely, the central informant had to acquire certain lab supplies. "There is nothing illegal about ordering any of these manufacturing supplies, they just tend to add slightly to the cost of everything and well other people's money basically covers those costs." The lab supplies included sterile empty vials, crimpers used to seal the bottles, and the solutions to which the raw material would be added. This

method was easier than the Tren conversion kits. "You just take the powder and weigh it out and then add it to this, and then add this solution and follow somewhat of the same process as the 'Tren,' but without having to separate the pellets, and there you have it." These new opportunities not only allowed Mike to create whatever AAS he could hope for at a greatly reduced price, but at the same time provided a much larger and varied marketplace to the surrounding, and growing, weightlifting community that used AAS.⁴ As a result, his drug trafficking scheme grew exponentially and he began to incorporate many more sub-dealers that helped him "move" his product.

This "homebrewing" drug operation allowed our central informant to manufacture nearly any AAS on the market, and at whatever strength he needed to get impressive results. He routinely bought the necessary supplies for over 20 different types of steroids, fat cutting compounds, and other drugs that help to mitigate the effects of heavy AAS use. He further explained that by making large purchases of precursor chemicals he could drastically limit the volume of transactions taking place, thereby reducing his risk of "getting busted." It also meant more product for his money. "Why would anyone look at the small tiny silver packages and think ... Oh that's steroids. They wouldn't which is so awesome. Never in million years would someone think that powder is going to be made into steroids." It is also unclear whether even possessing the precursor chemicals in this particular form is illegal.

Bodily Perfection through Illicit Pharmaceuticals: A Community Service

During the entire 15 months of ethnographic work, our central informant and his drug-dealing associates never even hinted that they viewed themselves as illegal drug dealers: they were merely trying to afford the high costs of being competitive athletes and helping out their friends. "But it's hard not to help friends out here and there, or have somebody else paying for your drugs basically."

What became apparent, however, in interviewing and spending time with the 12 sub-informants in this study, and the 53 other contacts, was that Mike was supplying a large number of the individuals in the research area with AAS. This included approximately 25 mid-level dealers (who were also users), and each of these mid-level dealers had anywhere from 5-15 customers themselves (approximate customer base of 250 people over a 60 square mile area). These people

4. The purity and strength of the AAS manufactured are critical to understanding this phenomenon. Just like in legal medications, AAS typically come in certain strengths per drug by their manufacturer. For example, the AAS Trenbolone Acetate, or simply "Tren," was one of the more sought after AAS. "Tren" is manufactured in a 76 mg strength from the pharmaceutical company producing it. This means that for every 1 ml of the injectable solution, there is 76 mg of drug in that injection. Mike altered the strength of the original solution drastically. Instead of 76 mg/ml, he was producing 150 mg/ml strength and even greater. Of course, this requires experimenting sometimes with the solution to see if it would hold such an amount without ruining the formula. When this happens the formula is too concentrated which is called "falling out." The remedy for this is enhanced dilution.

included college students that wanted to make faster gains in their weightlifting, numerous police officers using steroids and HGH, firefighters, fellow bodybuilders (both male and female), power-lifters, and collegiate athletes. The network of buyers even included middle-aged men who were using home-brewed HGH for its "health benefits." Despite this, he still perceived his role as fulfilling a need among friends—almost a type of community service.

I don't really see it that I am a drug dealer. I mean ... ok I sell steroids to people I know and all but we all help each other out from time to time. So I might have gotten stuff from someone a while back and they are dry now ... well I will help them and get them what they need. Hell it's not like I don't have plenty of it and since I am making plenty off of it they are just paying for my next go around is how I see it.

Meeting Demand or Cultivating a Need? The Role of Availability and Price

Given that our central informant was managing to build an underground business, and making available what was previously completely out of reach, he was definitely performing a "service," albeit illicit (see Kelly, Maghan, & Serio, 2005; Stares, 1996; VanNostrand & Tewksbury 1999). What this new market-place offered most of all was an unprecedented level of availability. All the sub-informants in this ethnography agreed that neither themselves nor the many other people Mike sells to could ever afford the quality or wide selection of ergogenic aids to enhance their bodies and performance.

The biggest thing of using steroids is not actually wanting to use them ... I mean you can see what it does (physical development) and who wouldn't want that? The biggest problem is trying to find what you want to use. Even the basic stuff sometimes was hard to find. And if you are ever going to do a show (Competition) unless you have a good source, or stockpile of drugs it will be even harder to do good without certain ones and those are expensive.

Poor to no supply, limited selection, and high prices kept many of those people who wanted to try AAS from doing so. Our central informant developed a black market business, due to the Internet and a shrinking worldwide market-place, his service provided unprecedented availability and opportunity to those wanting a competitive edge in sports, bodybuilding, a shortcut for the recreational weightlifter, and in several instances, a perceived method of battling the effects of aging (HGH use). As one female AAS user who routinely bought from Mike said:

I never questioned it. I knew the guys ... they were the ones helping me with my diet and everything and I just never gave a second thought about getting caught or anything. Sorta just like going to the doctor ... they'd tell me what I needed and what to take as I got closer to my show ... and they would have it for a reasonable cost. It's not hard at all.

Low price and top quality was mentioned repeatedly as major motivating factors for both Mike and his customers (also found in Adler, 1985; Pearson & Hobbs, 2001). Buying cheap precursor chemicals from foreign websites and home-brewing them into potent AAS was the point at which Mike's drug manufacturing and distribution scheme really took off.

The price is crazy. What I was getting stuff for before and how much I pay for it now is unreal! [Chuckling] While I sit there and make it sometimes I just keep grinning and thanking the China man.

Moreover, Mike was using the same product he was manufacturing—ensuring in the customers' minds that these drugs were "clean"—in other words, they were receiving the product they paid for and it was manufactured in a safe manner (i.e., top quality).

The typical black market price for some of the basic AAS used varies from region to region and depends largely on the availability and demand of the drug itself. The following prices are the typical. They were derived from field data and cross-validated on several popular steroid-oriented websites (e.g., www.steroid.com) (see Table 1). In Table 2 we see the prices of the same drugs when they are home-brewed using ingredients from foreign Internet businesses.

The chemical compound prices do not of course include the lab supplies needed to manufacture AAS. The operation purchased these in bulk lots in order to cut

,,F		
Description	Black market price	
1-200 mg 10cc/ml bottle	\$85.00-120.00	
1-200 mg 10cc/ml bottle	\$20.00-30.00	
1-5 mg tab ¹	\$.50-1.50	
1-50 mg tab	\$3.00-5.00	
1-2 mg tab	\$1.50-2.00	
	1-200 mg 10cc/ml bottle 1-200 mg 10cc/ml bottle 1-5 mg tab ¹ 1-50 mg tab	

Table 1 Typical black market steroid prices

¹The price for a 1,000-package lies around \$500-1,000 on the black market.

Drug	Description	Chemical compound price
Testosterone enanthate	1-200 mg 10cc/ml bottle	\$1.70
Deca-durabolin	1-200 mg 10cc/ml bottle	\$3.00
Dianabol	1-5 mg tab	\$.008
Anadrol	1-50 mg tab	\$.08
Winstrol tabs	1-2 mg tab ¹	\$.0015003

 Table 2
 Typical prices informant paid for chemical compounds

¹These are usually made in higher dosages (i.e., 20 mg-50 mg) when being manufactured by individuals.

down on the costs. It routinely converted \$15,000 of raw chemical compounds into \$50,000 of sellable product (a 3,333.00% profit), and its customers were obtaining these drugs for far less than they would from any other source.

The final market incentive Mike's operation supplied was a wide selection of products (Monaghan, 2002). While for decades the staple steroids were "test" and "deca," today's AAS marketplace provides a broad assortment of cuttingedge and designer drugs—some of which are formulated so as to not be detectable by drug tests. Typically, the individuals using AAS and or other drugs switch the specific drug(s) they are using during different time periods. Many of these products are no longer even manufactured by the pharmaceutical companies that originally produced them. As Mike explains:

Man, five years ago there were a number of drugs that I wanted to do but I couldn't get them when I needed them ... either you couldn't get them anymore or you were either getting some other drug or Wesson oil because some idiot didn't want to sell his own stash. Now I never have to worry ever about not having this or that ... every steroid I could ever hope for I can get the powder to make it. The last order I made I got 10 different types of steroids ... you know ... just in case me or anybody else wants to try something different for a change.

So even though pharmaceutical companies have discontinued many of these products, the distributors of the powdered drugs have found outlets through other means and resurrected the market. The AAS market fueled the recreational use of these drugs—demonstrating the adaptability and ingenuity of those involved in this global underground marketplace.

Ethnographic Contributions: Linking the Micro and Macro

Micro-Level Findings: An Overview

Ethnographic field research is a valuable tool for collecting ground-level qualitative data that help us to develop an empathetic understanding (Weber's Verstehen) of research subjects' behaviors, activities, rationales, and motivations. Several findings are worth highlighting.

Our central informant's development of a drug trafficking scheme revealed an intriguing process. He went from not being able to afford the drugs he needed to become a competitive bodybuilder, to supplying himself with all the variety and volume AAS necessary to keep him competitive at a national level. He went from selling his extra supply to a few friends to off-set his own drug use, to supplying an entire local community of weightlifters and athletes the same volume and selection he benefited from—as well as making a handsome profit. Mike initially experimented with two avenues to obtain steroids—buying smuggled drugs from a local dealer and remanufacturing cattle steroids from vet supply stores—before settling on his third technique of purchasing raw chemicals from foreign websites and home-brewing them into a useable product.

This informant's ability to progress as a trafficker was made possible in large part by an international underground communication system (found on the Internet) that provided him with the technical knowledge to construct an apartment-based pharmaceutical manufacturing lab. Sutherland's idea of learning from "significant others" takes on an interesting new meaning in this regard; indeed, the extent to which the Internet-based marketplace is impacting the nature of drug dealing has not been explored in criminological studies.⁵

Mike was also able to rationalize his activities in two ways. First, Mike's central goal in life was to be a more competitive bodybuilder. His manufacturing and dealing were all viewed as a means to this end. The profits he incurred were viewed as a nice side-benefit. Second, he saw himself as performing a type of community service—which seems on the surface perhaps a more justifiable position as compared to someone manufacturing and selling methamphetamine from home. Brewing and selling AAS was a way to help out all those people in his local community who shared his same general goal of body and performance enhancement. One can certainly understand how Mike might see a distinction between trafficking in addictive psychoactive drugs such as methamphetamines, and helping his friends become better athletes, get leaner, look more in shape, and get stronger. As explored further in the conclusion, this finding points to the ambiguous ethical foundation for criminalizing AAS use.

This study also suggests that this underground operation was instrumental in cultivating AAS use and helping to construct a drug using subculture. The data demonstrate that it created a high level of AAS availability—in terms of access, quality, and price. The weightlifting community demonstrated a strong desire to enhance their strength, aesthetics, and athletic ability—even if it meant using home-brewed drugs. This novel operation exploited this desire by providing an unprecedented access to a quality supply of illicit ergogenic aids.

Expanding the Relevance of Micro-Interactional Data

As noted, the ability of ethnographic field research to add to our body of knowledge is still not clear for many researchers. The extent to which ethnography instructs beyond the micro-interactive level has led to some confusion. A common misconception is captured in the following hypothetical retort: "sure, this is all interesting, but the cannons of science disallow us to see its relevance beyond this one geographical area." This position might be accurate if a researcher somehow discovered a micro-phenomenon that indicated little to nothing about larger social forces or trends. However, this is rarely if ever the case. Most solid ethnographic work strives to be relevant beyond the micro-interactional setting studied (Ferrell, Hayward, & Young, 2008; Kirk & Miller, 1986; Kraska & Neuman, 2008). It has two options in doing so.

^{5.} For a thorough discussion of the influence of globalization on late-modern drug trafficking, see Kelly, Maghan, and Serio (2005).

Steroid Trafficking Websites: A Content Analysis

The first way to expand the relevance of ethnographic research is to produce supporting quantitative data using accepted positivist social science methods (see Diagram 1 in methods section). The goals are to:

- first, demonstrate that the ethnographic findings are likely reflective of a larger phenomenon (hence, in a way providing a measure of reliability to the qualitative data) and
- second, shed a broader empirical light on this phenomenon beyond the qualitative data.

This research, then, employs a sequential mixed model design (qualitative study leads to research questions best answered through quantitative methods) (Kraska & Neuman, 2008; Tashakkori & Teddle, 2003). The initial qualitative study exposed an important local phenomenon that raised the question of whether it indicated a larger societal phenomenon—something traditional ethnographies have difficulty addressing.

It was investigate journalists who first started researching and reporting on Internet sales of steroids and steroid chemical compounds on a national level (Kovner, 2005; Kovner & Doyle, 2005; Shipley, 2005). The *Washington Post* and the *Hartford Courant* were two of the most aggressive in pursuit of this story; journalists even posed as customers buying and then testing the quality of various ergogenic aids off Internet sites. This work eventually caught the attention of politicians—specifically US representatives Tom Davis and Henry Waxman—who then ordered the Government Accounting Office (GAO) to conduct their own research into the matter.

The GAO published a research report in November 2005 in which they used simple web searches to locate websites that "openly and boldly" sold AAS (Cramer, 2005). They picked 22 at random ("out of hundreds") and placed orders, receiving 14 complete shipments. Ten of these shipments coming from foreign websites contained the advertised product, four were "scammer" sites. This GAO report had a large impact on federal politicians and police officials, resulting in numerous new law enforcement crackdowns (to be discussed further below).

Following the lead of the GAO study, we pursued a more comprehensive approach to collecting these types of data. Due to ethical constraints (and IRB difficulties), however, our research did not purchase products but instead attempted to identify and examine all websites purporting to sell AAS and other ergogenic aids such as HGH. Two hundred and thirty sites were located that purported to sell AAS or HGH. Once tested for basic functionality (e.g., was ordering information provided or was access to their products working), 186 sites were appropriate for coding, averaging 19 pages of printed materials. Diagram 2 shows some of the more important descriptive findings. These include: a sample of supply site names, types of sites (e.g., anti-aging, steroid

supply), types of AAS (e.g., HGH, fat-cutting pharmaceuticals), and payment methods accepted.

Out of the 186 sites, 173 responded to our inquiry for further information and request to purchase their products (93%)—an indication that these were active and useable websites. Our technique could not, however, determine which percentage of these were scammer sites (GAO found 28% of the 14 studied to be scammer sites). We did, however, search the Internet using Google to determine what percentage of sites were listed on various web pages as scammer sites. We found that 33% of the sites we studied were listed as a scammer site by at least one source.

These data, along with the work done by the GAO and various investigative journalists, indicate that a large and thriving on-line steroid marketplace exists—and that the drug trafficking operation uncovered in this research is most likely indicative of a much larger national and international phenomenon.

Beyond bodybuilding: HGH as the fountain of youth

As mentioned earlier, the drug trafficking operation uncovered included the drug human growth hormone (HGH). The customer base included mostly middle-aged men attempting to regain their youth (many of whom were police and firefighters). Eighty-one (or 44%) of the web-operations specialized in HGH

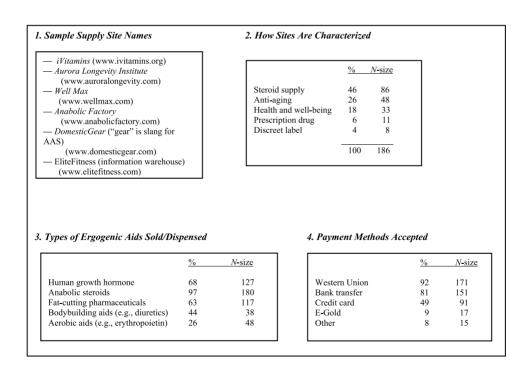


Diagram 2 Content analysis findings overview.

(along with an array of other anti-aging drugs including steroids). These sites were most often referred to as "longevity" or "rejuvenation" clinics. Most characterized the natural decrease in the body's production of HGH as a medical deficiency in need of a pharmaceutical replacement. The following website description was typical.

Hormone management is replacing the hormones that are no longer being adequately produced by the body. We are genetically programmed to reproduce and then begin to shut down. The goal of hormone management is to return our hormone levels to that of approximately 30 years of age. This is the age when our immune systems are generally the strongest, our metabolism is efficient, and we build muscle rather than fat. Human Growth Hormone (HGH) is thought to be the body's master hormone. Sometime after the age of 30, the pituitary begins to lower the amount of HGH. As the master hormone decreases, the other hormones do not get the message to function and the symptoms of aging begin to surface. If Human Growth Hormone, as the keystone is returned to its optimal level, and all the other hormones are brought back to their balanced state, the body is able to regain its vitality. Because hormone replacement therapy returns the body to its younger efficiency, with the addition of optimal nutrition and exercise, we are then able to live healthier lives longer (found at: http://www.napleslongevity.com/faqs.php).

It is important to note that these claims, although exaggerated, are not without some scientific backing (Mayo Clinic Staff, 2008). And the approach taken by medical doctors is to simply return the aging body (anyone over 30) to the "normal" level of a young person—which will require HGH injections. These websites included on-line prescription services as well as HGH-based clinics throughout the country. The authors, in fact, interviewed a member of a just such a facility near West Palm Beach Florida. The owner is an established medical doctor who has invited federal officials to tour and scrutinize his facility and operations. According to the informant in this interview: "HGH is the new BOTOX of the rich and famous. This doctor's making a killing" (see also Lemendola, 2007).

The HGH research finding documented in both the ethnography and content analysis is significant: it illustrates the enormous growth potential of the illicit AAS marketplace, beyond merely the bodybuilding, weightlifting, or athletic community.

Macro-Structural/Cultural Context

Similar to the GAO study cited above, these content analysis data indicated a large Internet supply industry; the drug operation studied here was not an anomaly.

The second method of broadening the relevance of ethnographic work lends additional support for this thesis. Here the ethnographer places her/his microlevel findings within a larger context. "Context" in presenting ethnographic

field research is essential for unpacking meaning and developing substantive understanding. This is not to be confused with the logical error of reductionism, where an attempt is made to make theoretical inferences about macro-trends and events using micro-level data. Instead, ethnographers make sense of micro-level qualitative data by contextualizing them within a larger cultural and structural context—an accepted and necessary practice (Denzin, 2000; Ferrell, Hayward, & Young, 2008; Silverman, 1997).

Structural context: the global marketplace

We have already discussed how the drug-trafficking operation studied here makes better theoretical sense if we situate it within the larger trend of a late-modern marketplace via the Internet. It is only within the *structural context* of a newly formed, Internet-based, international commerce matrix that a lone person sitting at home in her/his apartment could obtain all the necessary materials (from China) and technical knowledge (from weightlifters around the world) to set up a functional pharmaceutical lab. With a \$700.00 computer and a \$29.95 a month DSL service, this operation had its choice of dozens of websites where the central informant could buy all the chemical compounds needed to produce the most basic and advanced ergogenic drugs available worldwide for remarkably little money. Of course, the on-line AAS trade is merely an offshoot of a larger on-line illicit marketplace that peddles numerous prescription drugs such as opioid analgesics, anti-depressants ("mood-enhancers"), sedatives, and stimulants (Barboza, 2006; Peter, 2007).

Cultural context: pursuing the perfect body

In order to better understand this novel drug operation, we must examine them through the lens of larger macro-cultural forces. Put differently, situating Mike and his customers' micro-motivations and identities within macro-cultural forces provides an instructive theoretical framework. This is, in fact, the approach advocated by *cultural criminology*, where research should strive to link identity with culture, the micro with the macro, and the structural with the experiential (Ferrell, Hayward, & Young, 2008).

At the root of our analysis is the way in which late-modern society has become preoccupied with the health and aesthetics of the *body*. Recall earlier how the various research subjects characterized their goals: "being ripped/shredded," "being massive," "looking scary," "being scary strong," and "wanting the ultimate body." Clearly these subjects' personal and group identities are

6. An entire article could be dedicated to teasing out the complex and fascinating theoretical context in which this ethnography is situated. The following is meant to point out some of the initial and more obvious cultural forces at play.

constructed in large part around the pursuit of today's hyper-masculine norm of bodily perfection—the muscular, low-body fat, well-proportioned physique.

This finding coincides with the work of numerous social theorists who situate the body aesthetic as a central component of identity formation in late-modern society (Baudrillard, 1970; Petersen, 2007). As Petersen (2007, p. 132) in *The Body in Question* summarizes: "It would be no exaggeration to say that contemporary culture has become obsessed with body-related issues, activities, and treatments. ... For the individual the body increasingly provides the basis for personal and group identity...." The body has emerged, thus, as a "project of the self"—a type of late-modern identity project (Petersen, 2007, p. 132).

Moreover, the body has been converted into an object to be modified, altered, re-engineered, and perfected—not just for reasons of health or increased athleticism, but maybe just as important, for visual imagery. This cultural obsession with the body-aesthetic is fueled by a pervasive commodification of the ideal body-image as found in the health, beauty, fashion, and sports industries (Baudrillard, 1970; Petersen, 2007; Featherstone, Hepworth, & Turner, 1991).

Two important sub-factors underlying this fixation include the resurgence of hegemonic masculinity and society's increasing medicalization. The body aesthetic pursued by the subjects in this study is our dominant cultural ideal rooted in traditional notions of masculinity—the lean, highly muscular physique (Wienke, 1998). The criminological literature has documented the significant extent to which mainstream culture is re-embracing "hegemonic masculine ideals" (Chesney-Lind, 2006; Connell & Messerschmidt, 2005; Enloe, 2004). Mike and his AAS using community felt compelled to achieve the ideal image of this masculinist cultural value—even if their chiseled physiques provide no function beyond being a "signifier of social status" (Baudrillard, 1970, p. 131).

Drummond (2006, p. 164), in reviewing Hoberman's (2005) *Testosterone Dreams: Rejuvenation, Aphrodesia, Doping*, highlights another critical cultural factor to consider.

Contemporary western culture has evolved into one in which individuals are open to biomedical intervention where quality of life in relation to aging, sexual activity, and sports are concerned. It appears we are becoming desensitized to the use of supplements to boost various aspects of performance whether it be aesthetics or physical endeavors.

Conrad (2007) sees this greater willingness to use drugs to boost aesthetics or performance as part of the *medicalization of society*—where normal human functioning and appearance are increasingly viewed as difficulties to be overcome with pharmaceuticals and surgery. This medicalization of the populace for purposes of cosmetic and performance enhancements is most evident in the areas of weight control, sexual under-performance, aging, mood management, and undesirable aesthetic features (i.e., cosmetic surgery).

^{7.} The social forces of war and the erosion of patriarchy (at least around its edges) are important factors in the resurgence of hegemonic masculinity.

Using HGH or steroids to enhance aesthetics, strength, or muscle mass is consistent, then, with a medicalized culture that has normalized the notion that we can and should improve our bodies, lifestyles, personalities, sexual abilities, and cognitive skills through pharmaceuticals. Add to this a culture obsessed with sports performance, athleticism, and the hyper-masculine body aesthetic—along with a widespread consumerist ethic of immediate gratification to fulfill our every perceived need and desire—and it should be easier to understand why Mike's underground business had no problem finding customers.

Discussion and Analysis: Black Market Growth and Criminalization

The structural and cultural forces detailed above illuminate the huge growth potential of the illicit AAS industry. The structural dimension points to a fascinating late-modern supply apparatus: a globalized yet highly decentralized marketplace that would have been inconceivable only 20 years earlier. It is critical to recognize as well that this research documents a fundamentally different and potentially path-breaking new model for the manufacturing and distributing of illicit drugs—particularly mind-altering pharmaceuticals. The global/local dynamic involved in late-modern trafficking—where the lone individual can order pharmaceuticals in their raw chemical form, convert them though processes learned off the Internet, and then sell them locally for dramatic profits—is unprecedented. It radically alters the availability of not only the drugs themselves, but the ability to set up localized drug operations which originate not in the opium or cocaine fields of the Golden Triangle or Andean Nations but in corporate pharmaceutical labs from around the world. This phenomenon is likely indicative, therefore, of a larger on-line drug trafficking matrix that markets numerous pharmaceuticals such as synthetic opioid analgesics, anti-depressants, sedatives, and stimulants (Barboza, 2006; Peter, 2007).

On the demand side, we find a cultural milieu ideal for cultivating within a large segment of the populace a strong desire to enhance their appearance or performance through the use of pharmaceuticals—whether legitimately obtained or not. Bodybuilders represent only the extreme manifestation of this cultural sentiment—engaged in what we might call a "runaway cultural process" (Vila, 1993). The rest simply yearn to attain today's well-accepted goals—lose weight, live longer, feel better, get ripped, beat the competition, be more beautiful, and/or realize the hyper-masculine ideal of a strong, highly muscular body (Connell & Messerschmidt, 2005).

Postscript: Intensifying Criminalization in a Sea of Moral Ambiguity

These structural/cultural forces not only harbor strong potential for expansion, they also point to the distinct possibility of more intense criminal justice scrutiny. Indeed, even though the data for this research was finalized in early

2007, a final postscript series of interviews (completed in February of 2008) reveal that we may be experiencing the beginnings of a "war on steroids."

These post-script interviews found the drug operation under study had changed dramatically. Our central informant had completely given up bodybuilding, he no longer obtained raw AAS from foreign websites, his drug trafficking operation had been reduced by 90%, and he had reverted back to converting cattle steroids (Tren) in order to pursue his new weightlifting endeavor, power-lifting. His explanation for these changes was simple: he was no longer able to maintain his underground business because of a recent federal law enforcement control effort.

Recall Henry Waxman and Tom Davis' investigations into the illicit steroid problem in professional sports that led to the revelation by the GAO that an entirely unregulated AAS market existed on the Internet. One result was an intense federal law enforcement control effort dubbed, *Operation Raw Deal*. The effort simultaneously pressured the Chinese government to shut down raw AAS operations shipping to the USA (a request the Chinese did not resist given the upcoming Olympic Games) while launching a nation-wide investigation into home-brewing operations. The DEA and FDA discovered 56 such labs and seized \$6.5 million dollars (Mike's lab was not one of the 56). The DEA claimed that the customer-base associated with these 56 operations was likely 40,000 people (Buser, 2007; Drug Enforcement Administration, 2007; Larson, 2007; Raley, 2007).

As part of this new steroid crackdown, the DEA, in a classic moral entrepreneur strategy, is using sensationalistic anecdotes to construct these activities as highly dangerous for our youth. One of their featured anecdotes highlights the suicide of a high school baseball player. His father believes the son's suicide was caused by depression brought on by steroid use (notice the fallback on the traditional moral theme of the damaging properties of psychoactive drugs). The sensationalistic tone used by the DEA can also be found in the following media release associated with *Operation Raw Deal*.

"DEA successfully attacked the illegal steroid industry at every level of its distribution network—from the manufacturers in China who supply the raw materials, to the traffickers in the United States who market the deadly doses. Operation Raw Deal uncovered a clandestine web of international drug dealers who lurk on the Internet for young adults craving the artificial advantage of anabolic steroids," said DEA Administrator Karen P. Tandy. "Today we reveal the truth behind the underground steroid market: dangerous drugs cooked up all too often in filthy conditions with no regard to safety, giving Americans who purchase them the ultimate raw deal. (www.usdoj.gov/dea/pubs/pressrel/pr092407.html)

Interestingly, Mike and other AAS users on Internet forums are fully confident that once the Olympics are over, and the "hype" about steroids subsides, the AAS trafficking industry will thrive once again, albeit in modified form. Even Henry Waxman agrees that policing this industry will pose considerable difficulties.

...law enforcement authorities face significant difficulties in combating the illegal steroid trade. Challenges include little enforcement assistance from legal officers in the drugs' countries of origin, the anonymity of the Internet market-place, the inability to effectively inspect mail for illegal steroids, and weak federal penalties for steroid trafficking. (Cramer, 2005, p. 1)

Aside from the logistical difficulties in regulating the global AAS marketplace, the moral foundation on which these efforts lie may also pose problems. Consider the ethical inconsistency, for example, in defining body and performance enhancement through pharmaceuticals as morally problematic, when cosmetic surgical techniques pursue the same goal but rely on far more invasive medical procedures. Similarly, why would it be immoral for someone to add muscle, lose fat, and increase strength through pharmaceuticals when the exact same approach is used to improve sexual or mood functioning? At what point does taking a pharmaceutical drug go from being a legitimate medical "treatment" to an illegitimate medical "enhancement"? And how do we define what constitutes legitimate medical protocols for increasing our life-span (e.g., high blood pressure medication) from illegitimate ones (e.g., HGH injections to reset hormone levels)?

More so than even previous drug wars, drawing legal lines around society's pursuit of bodily perfection through drugs will likely result in a mishmash of moral inconsistencies and political hypocrisy.

Acknowledgments

This research was supported in part by a research grant from the College of Justice and Safety Program of Distinction at Eastern Kentucky University. We would like to acknowledge the important contribution of Kenneth Koelster, former EKU graduate assistant, who worked on the content analysis portion of this paper. Kraska and Bussard are co-authors; Brent is third author.

References

Adler, P. A. (1985). Wheeling and dealing. New York: Columbia University Press.

Anon. (2007, September 30). Strong island underground. The New York Times.

Atkyns, R. L., & Hanneman, G. J. (1974). Illicit drug distribution and dealer communication behavior. *Journal of Health and Social Behavior*, 15, 36-43

Barboza, D. (2006, March 8). The wild web of China: Sex and drugs, not reform. *The New York Times*.

Baudrillard, J. (1970). The consumer society: Myths and structures. London: Sage.

Buser, L. (2007, November 14). Three more caught in steroid sting - Memphis firefighter to answer charges of selling drugs. *The Commercial Appeal*.

Caruso, D. B. (2007, November 10). Confusion reigns over U.S. rules on growth hormone even as crackdown is increased. *USA Today: Associated Press*.

Chesney-Lind, M. (2006). Patriarchy, crime, and justice. *Feminist Criminology*, 1(1), 6-26.

- Cohen, S. (2002). Folk devils and moral panics: The creation of the Mods and Rockers. New York: Routledge.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity, rethinking the concept. *Gender and Society*, *19*, 829-859.
- Conrad, P. (2007). The medicalization of society, on the transformation of human conditions into treatable disorders. Baltimore, MD: Johns Hopkins University Press.
- Cramer, R. J. (2005). Anabolic steroids are easily purchased without a prescription and present significant challenges to law enforcement officials. Washington, DC: United States Government Accountability Office.
- Creswell, J. W., & Clark, V. L. (2006). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Denzin, N. K. (2000). Handbook of qualitative research. Thousand Oaks, CA: Sage.
- Desroches, F. (2007). Research on upper level drug trafficking: A review. *Journal of Drug Issues*, 22, 827-844.
- Drug Enforcement Administration. (2007). *DEA announces largest steroid enforcement action in U.S. history*. Retrieved February 23, 2008 from http://www.usdoj.gov/dea/pubs/pressrel/pr092407.html
- Drummond, M. (2006). Book review, testosterone dreams: Rejuvenation, aphrodisiac, doping. *Journal of Health Psychology*, 11, 163-164.
- Enloe, C. (2004). The curious feminist: Searching for women in a new age of empire. London: University of California Press.
- Featherstone, M., Hepworth, M., & Turner, B. (1991). The body. London: Sage.
- Ferrell, J., Hayward, K., & Young, J. (2008). *Cultural criminology: An invitation*. London: Sage.
- Fuller, J. R., & LaFountain, M. J. (1987). Performance-enhancing drugs in sport: A different form of drug abuse. *Adolescence*, 12, 969-976.
- Goode, E., & Ben-Yehuda, N. (1994). *Moral panics: The social construction of deviance*. Cambridge: Blackwell.
- Hoberman, J. (2005). *Testosterone dreams, rejuvenation, aphrodisiac, doping*. Berkeley/Las Angeles, CA: University of California Press.
- Inciardi, J. S. (1992). The War on Drugs II. New York: Mayfield.
- Kelly, R. J., Maghan, J., & Serio, J. D. (2005). *Illicit trafficking: A reference handbook*. Santa Barbara, CA: ABC-CLIO.
- Kirk, J., & Miller, M. L. (1986). *Reliability and validity in qualitative research*. Newbury Park, CA: Sage.
- Kovner, J. (2005). *An rx for testosterone*; *on websites: It's the wild, wild west*. Hartford, CT: Hartford Courant Company.
- Kovner, J., & Doyle, P. (2005). Wrestling the octopus. Hartford, CT: Hartford Courant Company.
- Kraska, P. B. (2008). The third way: Teaching mixed methods research. *ACJS Today*, 23 (1), 1-8.
- Kraska, P. B., & Neuman, W. L. (2008). *Criminal justice and criminology research methods*. Boston, MA: Allyn and Bacon.
- Larson, T. (2007, October 8). Police arrest alleged myspace steroid dealers in national crackdown. *The Daily Vidette*.
- Lemendola, B. (2007, April 9). Quest for youth key anti-aging clinics' profits. *The Orlando Sentinel*.
- Lenehan, P. (2003). Anabolic steroids and other performance enhancing drugs (1st ed.). New York: Taylor & Francis.
- Lyons, B. (2008, January 13). Steroids beyond sports: Celebrities now among those linked to drug shipments. *The Times Union*.
- Mattingly, D., & Estrada, I. (2008). HGH in forefront to remain young. Retrieved January 24, 2008 from http://www.cnn.com/2008/HEALTH/01/24/mattingly.hgh/index.html

- Mayo Clinic Staff. (2008). Human growth hormone: Does is slow aging process? Senior Health, Mayo Clinic.com. Retrieved February 13, 2006, from http://www.mayoclinic.com/health/growth-hormone/HA00030
- McCallum, J. (2008). Steroids in America: The real dope. Sport Illustrated. http://sport-sillustrated.cnn.com/2008/magazine/03/11/steroids1/index.html
- McCarthy, B., & Hagan, J. (2001). When crime pays: Capital, competence, and criminal success. *Social Forces*, 79(3), 1035-1059.
- Miller, M., & Tewksbury, R. (2001). Extreme methods: Innovative approaches to social science research. Boston, MA: Allyn and Bacon.
- Monaghan, L. F. (2002). Vocabularies of motive for illicit steroid use among body builders. Social Science and Medicine, 5, 695-708.
- Pearson, G., & Hobbs, B. (2001). *Middle market drug distribution; home office research study 227*. London: Government Home Office.
- Peter, J. (2007). *Much HGH comes from China*. Retrieved February 28, 2008, from http://sports.yahoo.com/top/news?slug=jo-chinesehgh092007&prov=yhoo&type=lgns
- Petersen, A. (2007). The body in question: A socio-cultural approach. New York: Routledge.
- Raley, D. (2007, October 29). How a garage in Aberdeen became a key stop in a global steroid pipeline: Suspects sold pills online and likely met on web, agents say. Seattle Post Intelligencer.
- Shipley, A. (2005, October 18). Chemists stay a step ahead of drug testers; internet offers new steroids designed to be undetectable. *Washington Post*, p. E01.
- Shipley, A. (2007, March 2). A wider front in doping battle, law enforcement takes the lead in sports probes. *Washington Post*, p. A01.
- Silver, M. D. (2001). Use of ergogenic aids by athletes. *Journal of the American Academy of Orthopaedic Surgeons*, 9, 61-70.
- Silverman, D. (1997). *Qualitative research: Theory, method, and pratice.* Thousand Oaks, CA: Sage.
- Stares, P. B. (1996). Global habit: The drug problem in a borderless world. Washington, DC: Brookings Institute Press.
- Sterling, E. E., & Stewart, J. (2006, June 24). This legacy of Len Bias's death. *The Washington Post*.
- Tashakkori, A., & Teddle, C. (2003). Handbook of mixed methods in social & behavioral research. London: Sage.
- Trebach, A. S. (1987). The great drug war. New York: Collier MacMillan.
- Tucker, E. (2007, September 24). Feds announce Largest Steroid Crackdown. Washington Post.
- Tunnel, K. (1993). Inside the drug trade: Trafficking from the dealer's perspective. *Qualitative Sociology*, 16, 361-381.
- VanNostrand, L. M., & Tewksbury, R. (1999). The motives and mechanics of operating an illegal drug enterprise. *Deviant Behavior*, 20, 57-83.
- Vila, B. (1993). Is the war on drugs an example of a runaway cultural process? In P. B. Kraska (Ed.), *Altered states of mind: Critical observations of the drug war* (pp. 11-48). New York: Garland Press.
- Waskul, D. D., & Vannini, P. (2006). Body/embodiment: Symbolic interaction and sociology of the body. Burlington, VT: Ashgate Publishing.
- Wienke, C. (1998). Negotiating the male body: Men, masculinity, and cultural ideals. *Journal of Men's Studies*, 6, 255-282.