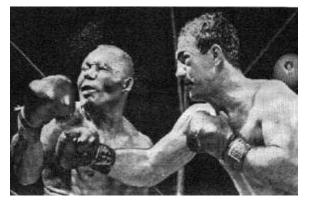
Punching Power - Some Misconceptions and Conceptions By Michael Hunnicutt



Great punchers are born, and in some cases made. No matter how proficient the balance, leverage, follow-through a boxer may or may not have; unless born with the rare ability to hit hard with terrific force, that said boxer will never be able to hit with extraordinary force. Conversely, no boxer ever walked into a gym and was ever to hit as hard as any man of his weight in the world unless certain abilities are very well honed. The boxer may be a "real" banger" but will never develop into a puncher of frightening power.

There are two gauges that some may use to help determine a boxer's power that does need greater exploration. Both a boxer's knockout percentage (KO %), as well as his weight have been held as fairly accurate indicators of all boxer's punching power.

It is the object of this article to try to put both KO % and weight in a more objective and balanced frame of reference, as well as to investigate further into various factors in regards to great punching power.

Knockout Percentage

In approximately the last 26 years, circa 1980 - present, 41 of the top 100 boxers since 1890 have had the highest knockout percentages. From this single statistic one may conclude that many of the hardest hitters since the gloved era have been developed during this time frame. This may or may not be a reasonable indicator. Since there have been few, if any, instances when a boxer's punch has been compared with another boxer's punch from other eras judging a fighter's punching power strictly on percentage can be very misleading. In this large lack of scientific data, there are statistics which can be of some accuracy, and KO % is one such statistical measuring stick. Still, statistics in any sport or domain do need to be evaluated by various conditions historical or otherwise to have significance.

In the July 1984 issue of Boxing Illustrated, boxing historian Herbert Goldman evaluated some of the conditions that would influence a boxer's KO %. "Knockout percentages of the oldtimers are low compared to that of 'modern' fighters it has been observed. But there are definite reasons as to why." Just explained by Mr. Goldman was that during the no-decision era "most champions near champions were content to simply 'box through' their no decision fights without trying to kill themselves looking for a knockout. A second factor in the low kayo percentage of the old-timers was defense. The boxer of that era may not have had the brilliant combinations of the fighters of the post WWII generation, but they were well schooled in the ins and outs of self defense. There were countless fighters in New York, the Mecca of the fight game, and every gym had at least 4 trainers teaching at one time – trainers with decades of experience behind them." Another variable was physical toughness. "Fighters, especially in the 1890s, were taken from the ranks of 'tough men' – 'Tough' in the sense they could take it better than the average man." Boxers always range in the ability to receive many repeated blows and the average fighter today is just plain "really" tough. Film and record analysis may tend to suggest that the "average" fighter of a few decades ago or more, may have been by necessity, even slightly tougher. Whether or not all of the above speculation is accurate, a fourth very important variable as well as a more measurable condition was, the great fighters of the 1910's did not tend to avoid each other in order to remain undefeated and lose a big TV payday. Check the record of a Battling Levinsky or a Harry Greb and you'll see it studded with the names of top contenders and champions of that era - often outside of the fighter's own weight class. One problem in determining a fighter's real punching power is no different than determining a fighter's real ability – the caliber of his opposition."

Ted Carroll wrote in 1956: "Tony Canzoneri was beaten more than 20 times, but who questions his greatness? Very few if any. In his particular case the cognoscenti are well aware that in his long career Tony Canzoneri took on all comers. Rarely if ever did he have a "soft touch" and this is the prime consideration in appraising his worth." By the same token, Tiger Jones will never be ranked with Greb or Ketchel, but he didn't become a hero of the TV lanes fighting soft ones or no-decision bouts. Future generations, noting the number of losses in the Tiger's record, may incorrectly infer that he was a toothless tabby cat, yet the names on the list tell another story. They were the top notchers of the time."

Boxing historian Dan Cuoco, Director of the International Boxing Research Organization (IBRO), has studied various statistics with respect to Knockout Percentages. While explaining his research with me, Mr. Cuoco used Tony Canzoneri's power or lack of (KO %) as an example that percentages can be deceiving: Regarding Canzoneri's lack of punching power. Tony engaged in 175 professional fights (1925-1939) and scored 44 knockouts, a percentage of 25%. One could easily conclude that a fighter with a 25% KO ratio is not a puncher. But lets delve deeper. One only has to look at the level of his competition to realize that opponents such as Barney Ross, Jimmy McLarnin, Lou Ambers, Andre Routis, Bushy Graham, Bud Taylor, Johnny Dundee, Benny Bass, Kid Chocolate, Jackie Kid Berg, Billy Petrolle, Johnny Jadick, Wesley Ramey, Battling Shaw, Baby Arizmendi, Sammy Fuller, Leo Rodak, Al Roth, California Joe Lynch, Joe Ryder and Davey Abad were no pushovers. His impressive knockouts of Kid Chocolate, Jackie Kid Berg, and Al Singer indicate a fighter who could punch. He fought them more than once (a total of 40 fights) and recorded 3 knockouts for a very low KO ratio of 7.5%. But, again, consider the level of competition. Now lets look at modern renowned power puncher Felix Trinidad who engaged in 44 professional fights and scored 35 knockouts (1990 – 2005), an impressive KO percentage of 79.5%. The level of Trinidad's competition includes quality fighters such as Hector Camacho, Pernell Whitaker, Oscar De La Hoya, Bernard Hopkins, Ronald (Winky) Wright, William Joppy, David Reid, Fernando Vargas and Ricardo Mayorga. He fought each once (a total of 9 fights) and recorded 3 knockouts for a KO ratio of 33%, well below his career stats. If he fought Camacho, De La Hoya, Hopkins and Wright several more times (as is the case with Canzoneri and his opposition) his ratio would be even lower.

Fighter	<u>Total Fights</u>	<u>KO</u>	KO PCT	Level of Opposition
LaMar Clark	51	45	88 %	Е
Felix Trinidad	44	35	79.5 %	В
Tony Fulilangi	42	33	79 %	D
Benny Leonard	213	69	32.4%	А
Jimmy McLarnin	69	21	30 %	А
Tony Canzoneri	175	44	25 %	А

Here are some examples of fighter KO percentages and their level of opposition.

Level of Opposition Symbols

- A Consistently fought world class fighters
- *B* Consistently fought world class fighters and serious contenders
- C Consistently fought serious contenders and fringe contenders
- D Consistently fought fringe contenders and trial horses
- *E Consistently fought average to below average fighters*

Lew Eskin wrote in 1959: "There have been a number of fighters built up on ballyhoo and set-ups. The lost art of the "big build-up" has been revived by Marv Jensen with his new protégé, LaMar Clark who took on from 1 to 6 foes in a single night. In a six months period Jensen gained world-wide fame for his protégé with his ring carnival. All of his victims have been has-beens, never wases, unknowns, and untested novices."

Boxing historian Hank Kaplan gave his opinion on KO% and punching power; "Power and KO% will have little significance unless it involves class fighters, obviously."

Boxing historian Mike Silver commented on KO% and power correlation as "KO% means nothing unless it involves top-tier opposition."

There are and has always been terrific punchers in boxing history. Just how to attempt to gauge this requires a fair degree of examination and historical investigation.

Punching Power and Weight

A boxer's weight and consequently, his power have an obvious correlation. Generically, and with many exceptions, an experienced and well conditioned boxer at a heavier weight will tend to hit harder the opponent who weighs less. This is a tendency, not a rule. Boxers, trainers, experienced experts all have observed that many times boxers who weigh less than their opponents do hit harder than the heavier man; as well as boxers whom at the same exact weight have varying degrees of punching power.

During the 2000 Olympic Trials all the American boxers routinely worked on a heavy bag with power measuring sensors. Jeff Lacy (165 pound entrant) had the highest scores. Unfortunately, few such large studies exist.

Nevertheless, the tendency of the heavier man to hit harder is there! However, this article is consigned to those boxers who possessed terrific power of legendary ability in this aspect of boxing and how much of sheer weight may or may not influence this particular talent.

Boxing coach Steve Acunto (former boxer, sparring partner to many top contenders and champions such as Lou Ambers, Henry Armstrong, Tony Canzoneri, Barney Ross, and author of instructional boxing films with Muhammad Ali, Rocky Marciano, and Willie Pep) gave his opinions of weight and power as such: "Boxing has been my whole life, and as in any livelihood to be successful you need to analyze, analyze, and analyze – observe, observe, and observe. Nothing should be taken for granted especially in such a sport as boxing. In regards to pure punching power there are degrees of everything. There have always been terrific punchers in every weight class. The hardest hitting lightweight that ever lived, will probably not hit that much less than the hardest hitting middleweight or bantamweight. It will be a few degrees less, but not as much as many would think. These are the exceptions, boxers born with this incredible ability and then polished up. There have been so many terrific punchers through the years and

most have weighed less than 200 pounds. They often go unnoticed because that was about all they could do and it's taken for granted because there are simply more fighters who weigh less than 200 pounds than more. Once a heavyweight weighs 180 lbs., that is all that is needed. Whether the boxer is 180 or 280 lbs. makes little difference if the boxers are born for it and well taught. The problem with a 280 pounder is that although they may be a gifted puncher with excellent potential; is that he may be slightly clumsy or sloppy in his punches. That slight lack of coordination can and will prevent him from hitting with incredible force. He may hit like hell, but I have yet to see a boxer near that weight whom I would consider in the top echelon of heavyweight power punchers with either or both hands."

Boxing historian Mike Casey gave his opinion on power and weight. "Punching power is a gift that needs to be continuously and fully developed. Once you have a natural at this like a Shavers or Foreman, the other components of proper punching such as snap, timing, leverage, etc. has to be all strung along on a seamless string to acquire maximum results; and only proper teaching with extreme discipline and experience can pull that particular string together. Weight has little to do with these natural born highly developed killers. Langford, Satterfield, Marciano, Louis, all hit with devastating results. Certainly, Liston, Foreman, Tyson and Shavers did also, but it was more of a consequence of gift and dedication rather than weight that constituted most to all of this. Does the hardest hitting 230 pounder hit harder than the hardest hitting 185 pounder, not necessarily. Its individual makeup and ability to precisely bring all punching and technique to the fore no matter at 185 or 285 pounds."

Dan Cuoco had his impression on power of punch and weight as such: "In my opinion weight isn't a factor for punchers weighing between 180 to 210 pounds. Most of the dreadnaughts fighting today do not hit with devastating power because they lack proper punching technique consisting of proper balance, leverage, timing and snap. The problem with a fighter as big as Nickolay Valuev is that although he weighs more than 300 pounds, he does not have the proper coordination to hit with terrific force. Fighters in the 180-210 pound range such as Jack Dempsey, Bob Satterfield, Joe Louis, Rocky Marciano and Joe Frazier all hit with devastating results. Besides possessing natural punching power they also possessed proper balance, leverage, timing and snap."

Hank Kaplan gives his opinion on punching power, as "Weight is vastly overrated by today's fans. Certainly it means something, but when you run all the killer punchers from lights to heavies that I have seen, you know weight is overrated as far as a real killer puncher is concerned. There have always been more devastating punchers less than 200 pounds than above. Once a fighter weighs 180 to 185 pounds or so, that god given gift must be supplemented by excellent balance and leverage, positioning, timing, accuracy, and plenty of snap – especially in the left hand."

Mike Silver succinctly gave his opinion on punching power. "Once a fighter weighs from 175-185 pounds, that's all he needs to really, really, hit. Science has yet to determine why certain men hit harder than others and nobody really knows why. Nevertheless, there have been men who weighed 180 pounds and hit as hard and perhaps harder than any whoever lived. The hardest hitter that I know of weighed 190 pounds."

Tracy Callis recently sent me information from a statistical study he did years ago on winning and hitting capability.

Winning and Hitting Capability

"There are a number of views on what it takes for a boxer to be a true power hitter. Below are a few opinions and the results from a statistical study conducted on the physical measurements of heavyweight boxers.

George Foreman once said, on <u>National ABC-TV</u>, that the super-punch is a gift. A fighter can work to improve his overall strength, stamina and techniques of fighting but the "real thing" when it comes to hitting is a God-given talent.

Henry Cooper in his book, <u>The Great Heavyweights</u>, 1978, p. 155, wrote "Punching is a natural thing, and it often follows that the faster the boxer is the weaker his punch might be." He adds, "Punchers are born and not made. And it isn't anything much to do with muscles."

L.E. Eubanks, writing in <u>The Boxer's Physique</u>, 1921, pp. 11-14, 44, downgraded pure bulk in favor of proper distribution of weight (location of muscular development). The "ideal" boxing physique, he contended, should be a trifle top-heavy; not as much as Bob Fitzsimmons perhaps, but along the lines of Jack Dempsey.

Nat Fleischer, in <u>Training for Boxers</u>, 1972, p. 99, stated that the shoulder muscles play an important role in delivering a punch. Any boxer with a well-developed back and shoulders is likely to be a good hitter.

Morton Sharnik, writing about Earnie Shavers in <u>Sports Illustrated</u>, September 12 1977, p. 77, described Shavers as follows – "This ability to disintegrate folks seems to come from his enormous back and shoulders which seem much too big for Shavers' frame."

"A few years ago, I collected height and weight data on some 470 heavyweight fighters and had complete sets of physical measurements data on a lesser number. Using this data, I computed a number of statistical calculations such as simple counts and percentages as well as sophisticated Pearson Correlation Coefficients, Multiple Correlation Coefficients and Factor Analysis loadings to determine which physical measures accounted most for winning percentage and hitting capability (as indicated by knockout percentage) among these fighters.

Results indicated that weight, girth (height/weight), reach and thigh measures correlated strongest across most of these computations. From one statistical calculation to another, other measures sometimes correlated moderately but these four measures always had fairly high correlations.

When computing winning percentage and knockout percentage for all 470 fighters, the heavier men, in fact, had greater winning and knockout percentages. Also, men with the greater reach had higher winning and knockout percentages. Remember, this was a study of heavyweights but findings may be equally true for boxers of lighter weight classes.

These correlation coefficients were not so strong as to be overwhelming indicators of a man's capability and the conclusion was drawn that although size is a factor – favoring the heavier man with the greater reach – other capabilities are required to win and to knockout an opponent.

Caution must be exercised in considering the traits that account for winning capability and hitting power because - it is clear to most boxing fans that - true skill offsets the physical advantages provided by size. Coordination, quickness, stamina and other attributes <u>must</u> figure into making a man a winner and a power hitter."

Weight and incredible power, similar to knockout percentages, does need further introspection within historical, individual, and scientific framework. From the middleweight to

the heavyweight classes there have been such legendary punchers as Bob Fitzsimmons, Sam Langford, Tiger Jack Fox, Joe Louis, Bob Satterfield, Rocky Marciano, Curtis Sheppard, etc. All of whom may have hit as hard or harder than Jim Jeffries, Max Baer, Sonny Liston, George Foreman, Earnie Shavers, Mike Tyson, etc. Whichever boxer hit with the hardest impact will never be known. What does seem to be the most important correlation of punchers of this caliber is that once 180 pounds of lean weight is reached, individual natural born power and development are the most important factors determining sheer impact in one or both hands within the weight of the boxer of less significance. As Mike Silver previously stated, "no one really knows why some boxers hit with terrifying force; but there are a number of components that are involved."

The author will list some of these components and some can be subtracted and others added as to the reader's judgment. The reader can also weigh the importance of each factor differently; be it to all boxers, or individually as boxers do tend to punch differently and utilize their particular assets differently. It is the author's observation that natural born power to an extreme degree is the most important component of power punching. Yet, there are skills needed to "polish up" and further augment that given power. These include: balance, leverage, and speed of body turn, follow through, snap, timing, positioning, punching attitude [re. Mike Silver], accuracy and reflexes. The physicality of a boxer can have a degree of influence on his power. bone structure [hard, large hands, wrists, forearms], long arms which may gain momentum at the end of a punch [i.e. Bob Foster], sloped shoulders that may automatically lower the center of gravity and increase leverage, and a very strong back, effective boxing weight and strength with excellent body to hand coordination, is a must

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