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The Value of Mental Rehearsal in Strength Training

Bill Starr explains how you can use your mind to get the most out of your body in the gym or in any athletic endeavor.

By Bill Starr

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“So much of a successful life is preparation.” —Nancy Pickard, *The Blue Corn Murders*

Strength training is an individual activity. While an athlete might have the benefit of a coach to advise him on the various aspects of the discipline, he is strictly on his own when doing an exercise. Or he should be. If someone, out of good intentions, helps him move a weight thought a sticking point, which often happens on the flat bench and incline, that person is doing the athlete a disservice.

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In the final analysis, an athlete has to be his own coach and advisor. He must learn not to depend on others in his quest for greater strength. If he does, odds are he will never succeed, simply because no one can understand how he feels better than he can. He has to do whatever he can to develop confidence in his own abilities to improve himself. This generally comes through experience, but not always.



Confidence is learned over time, and mental skills are often just as important as physical skills.

It's not automatic. I've watched competitors at power and Olympic meets crumble under pressure, and they all had been participating in their chosen sports for a very long time. Conversely, I've seen athletes lifting at their very first meets who were as poised and confident as some of the best in the country. Building confidence is a learned skill, and it does not happen overnight.

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Anyone just starting out on a strength program will make progress if he's consistent, learns good technique, eats right and gets his needed rest. But once he's been training for some time and knocking on the door of the high-intermediate or advanced levels, progress comes much more slowly. This is true for the competitive weightlifter as well as those who are strength training to become more proficient in their respective sports. Those who continue to break through barriers are the ones who pay close attention to all aspects of training.

They know what exercises work best for them and what set and rep formula brings the most results. They understand the importance of rest and diet. They take supplements and build their meals around protein. They keep accurate records of all workouts and figure out their daily, weekly and monthly workloads. Then they use these numbers to identify weaker areas and make sure they spend time making those weaker groups stronger. They continue to hone their form while slowly but steadily increasing their overall workload and top-end numbers.

And they become more self-assured. Many believe that the quality of self-assurance is innate. You either have it or you don't. I don't agree. While I do believe some people are more self-confident by nature, I have also seen countless young, under-confident men transform into extremely self-assured athletes. It's a trait that can be improved over time. It's very much a skill, and like any other skill, the more it's practiced correctly, the better you will become at utilizing it in your daily workouts and in the competitive arena.

The Mind of the Individual

I began this piece pointing out that training with weights is an individual activity, in contrast to team sports. In any team sports, the athlete has a coach, and in some cases several of them. One of the main jobs of coaches is to instill more confidence in their players because they know this attribute is critical for success. So they supply the motivation and hand out the rewards. If the sports team happens to win championships of some type, every member of the team feels elated, even if he never actually played in a game all season. If the team failed, no one in particular was blamed, other than perhaps the head coach of a D1 football team.



Confidence is especially important in individual sports such as weightlifting, where you compete alone.

This is not the case in an individual sport or in strength training. An individual-sport athlete—wrestling, boxing, swimming, fencing, track and field events, etc.—has to rely solely on his skills in order to taste the sweet nectar of success. And if he fails, there is no one else to share the disappointment with. Some athletes don't care for this at all. However, I found it extremely desirable. The end results were due to what I had done, not what a teammate had done. I played and enjoyed just about every team sport there is, but I still get more satisfaction from winning a game of racquetball than a volleyball match.

By the way, what I'm about to present on mental rehearsal can be useful to someone participating in a team sport as well as those in individual sports. At Johns Hopkins, all the members of the Olympic weightlifting team played team sports. What I taught them in terms of mental preparation, they easily used prior to an Olympic meet and before a game of baseball, football or lacrosse.

There's nothing complicated about learning self-confidence, but it does require a large dose of patience. It isn't going to happen overnight, and it has to be practiced diligently and with a great deal of total concentration. This is something that doesn't come easy to everyone, so for some, it may take a fairly long time before everything falls nicely in place. This, too, explains why many are never able to master the skill. Becoming proficient in a mental skill is much more difficult than learning a physical one because a mental exercise has to be done precisely every single time you do it. With a physical skill such as squatting, you might get stronger even though you use faulty form on some occasions.

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And it goes without saying that some athletes will learn this skill faster than others. I've found that those who have participated in an individual sport at some time in their lives have an easier time dealing with mental preparation than those who have not. This is due to the fact that they had already done some type of mental rehearsal in conjunction to their participation in strength training. And if they had taken part in competition in an individual sport, they understand the concept that they're on their own. This is not always the case with someone who has only been a part of a team sport.

Mental rehearsal also has benefits far beyond the realm of sports. It's a valuable asset in daily activities. Currently, I use it more for my everyday chores than for my weight training. The day before I do my grocery shopping, I make a list and then mentally rehearse where I should go first, what comes next, and so on until I have gone through the entire supermarket and am at the check-out line. I try to run all my errands on one day, and some days they add up to four or five stops. The night before, I put them all in order, so that the next day I don't have to think about whether I should go to the library or the post office first. I already have my route mapped out in my head. This, I fully understand, isn't such a big deal, but at the same time, it makes my life slightly less complicated and leaves my mind free to think about other things.

While I don't employ mental rehearsal now as I did when I was competing, I still use it for my upcoming sessions. When I was driving to Baltimore while working at Hopkins, I would use the time to mentally review what I planned to do that day. I do the same thing now when I walk because the walk serves as one of my warm-up activities for my lifting. I go over what's on my routine for the day and then think back to my last session using those exercises.

Which ones went easy? Time to push them harder. Should I add another set to the seated presses or continue to add more reps? Would today be a good day to try out a different exercise for my deltoids? Stuff like that. Nothing earth-shaking, yet I'm much better prepared for the workout than I would be if I hadn't taken a few moments to think through the upcoming session. Keep in mind that it's usually the little things that make a difference in our training, and in life in general.

This process goes by many names: "mental rehearsal," "mental preparation" and "visualization" are the most common, but some disciplines have others. They're basically all the same. What you're attempting to do is form a mental image of something you wish to occur in the future. While mental rehearsal most certainly can be utilized for a wide range of activities, I will restrict this piece to strength training and competitive lifting.

Mind Over Matter

Even before I learned the proper method of doing mental rehearsal, I always did a form of mental preparation before I began competing in Olympic meets. Prior to becoming enchanted with that sport, I boxed and wrestled, two



Some of the most impressive athletes aren't the strongest physically but dominate the competition with intense focus and drive.



The pre-competition period is an important time. Use it wisely to set yourself up for success.

individual sports that require the athlete to be mentally ready or suffer dire consequences. In the ring, a dumb mistake can put your lights out. Before a bout or a match, I would mentally go over all the important aspects of what I was about to try and do. At the same time, I would give myself a pep talk to elevate my self-confidence.

When I turned my full attention to Olympic lifting, I discovered that mentally preparing for a contest was a great deal easier than it had been for the combative sports. Now I didn't have to be concerned what my opponent did, because it didn't directly affect me, other than making me select a different attempt. I would write out all my warm-ups and my intended attempts on platform and go over them again and again, mentally paying attention to all the key form points.

Then, at the contest, I would review what I needed to do for each of the three lifts—press, snatch, and clean and jerk—right after weigh-in and then prior to each individual event. Most of the other lifters used a similar method, and I know that in my case it helped a great deal. This system worked out well enough for me to win some regional-level meets, but when I moved to York and began competing

with the York Barbell Club team, it wasn't providing what I needed. In Texas, Oklahoma, Louisiana, Ohio, Kentucky, Illinois, Wisconsin and Indiana, there were usually two and sometimes three competitors in my class who could beat me or, on a good day, I could handle them, but on the East

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Coast, I would enter meets where there were 10 or more lifters capable of knocking me out of a medal. Usually two or three held some national title. It was as if I had gone from the minor league to the majors in one fell swoop, and I wasn't prepared.



You can use a variety of techniques to calm yourself before a lift. Bill Starr recommends deep breathing as a way to clear your mind for the upcoming effort.

Plus, lifting in regional and local contests was a far cry from being onstage at the North Americans, juniors, seniors and Olympic trials. I would get so nervous when I tried to do my mental rehearsal before a major show that I couldn't focus my thoughts, so I'd stop and start over. Same deal. My pulse rate would go up and I could tell that just thinking about the numbers I planned on doing was making me very nervous. I needed someone to tell me what I was doing wrong, but there wasn't anyone around who knew the answer to my problem. Most of them were experiencing the emotions that I was.

Then, while going through a book on Aikido, I came across what I was searching for. I had already gone through several other books on martial arts and one on yoga, but none had what this book had: a section on breath control. According to the author, it was in this martial art that the discipline of breath control was originally founded. So I began practicing the procedure outlined in the book and knew I was on the right track. The first time I used the breathing control while I was mentally preparing for the contest, I had a very good showing, doing much better than my training had projected.

The reason deep breathing works so well is that the mind can only concentrate on one thing at a time. Whenever I felt myself start to get anxious while I was going through

my intended lifts, I would stop and go back to deep breathing again, and I would calm down. Back to the lifts, then another pause to settle down. On and on this would go, but the more I practiced the skill, the longer I was able to focus on my technique for the various lifts. I seldom thought about the numbers. Rather, I thought in terms of warm-ups and my first, second and third attempts on platform. I knew my strength was up to the challenge on these lifts. It was the form that was going to spell success or failure.

At the contests, I began using deep breathing during my warm-ups and before each attempt on platform. This benefited me in two ways. It kept me relatively calm so I could focus on the task before me, and it helped me to conserve my nervous energy for the upcoming attempt.

Mind Over Matter

Now I will present a short course on mental rehearsal that will bring results if you're patient enough to stick with it for as long as it takes to master the various aspects of the discipline. First and foremost, you need to find a quiet place. For those who live with friends or family, this can often pose a problem—but figure it out. I had two football players at Hopkins who lived in a frat house famous for its ongoing parties, so they did their mental rehearsals in their cars.

Personally, I like a dark or dimly lit room and want it to be as quiet as possible. Some prefer soft music. Fine—whatever fits your mood. Turn off the TV and unplug the phone and fax. Turn off any electronic devices—no distractions whatsoever. The next prerequisite is to get very comfortable. You're not going to be able to give your full attention to breathing if some part of your body is in pain. Sit on a couch, lounge on a recliner or lie in bed. Sitting upright is really the best, but if you feel more relaxed in either of the other two positions, use them. After you learn the technique while lying down or reclining, you can easily use it while sitting.

Lift your head slightly. That will enable you to take deeper breaths and make sure your back is very flat. Take a few moments to allow your mind to go blank. For some, this is instantaneous. Now, slowly and steadily, inhale. While you're doing this, try and picture the air flowing into your lungs. When you're reached your limit, suck in a tiny bit more and hold it there for 8-10 seconds.

While learning the technique, you might not be able to hold the air in your lungs for that long, but after a bit of practice you will, and eventually you will be able to hold the air for two or even three times that long. Slowly release the air, making a soft whooshing sound as it leaves your lips. Don't let the air gush out. There is a soft rhythm to the inhaling and exhaling that is an important part of the whole deal. When you have let out all the air in your lungs, squeeze your diaphragm and push out just a tad more. This is the hardest part. Once all the air is released, don't take another breath right away. Wait for five or six seconds before you inhale again. The urge is to suck in mass quantities of air. Resist that urge and draw in the air slowly and steadily, just like you did on the first inhalation.

Learn to involve your diaphragm in both the inhalation and exhalation. Extend it while drawing in air and contract it when releasing the air, just as you would while running. Allow your abdomen to relax and extend when inhaling, and pull the diaphragm up into your chest cavity to create an abdominal vacuum when exhaling.

The area of your body that is the focus of your systematic breathing is where martial arts and yoga consider the source of energy, the "kin" or "chi," so as you go through the breathing drill, you're in fact pulling good energy into your body and releasing bad energy. That's another reason this breathing technique is so useful when you are about to perform a lift, either in training or at a contest.

Keep in mind that the various times I mentioned are only guidelines. Learning how to do the exercise in a controlled, rhythmic fashion is more important than how long you can hold the air in or how long you can deprive yourself of the next lungful.



The mind will race before a competition. Finding a way to calm it will allow you to focus on the task at hand.



Every athlete is different. Experiment with various techniques and find the one that helps you perform your best.

Go through as many cycles as are necessary to allow you to feel more relaxed. After you've been practicing for a while, three is usually enough. Now you're ready to mentally rehearse your next workout. It's a good idea to write down what you intend to do at that session beforehand—all your warm-ups and every set on the primary and auxiliary exercises. Otherwise, the mental preparation doesn't work nearly as well.

I had a football player at Hopkins who took the mental preparation a step further than everyone else. He erected a shrine to the back squat.

Our imaginary Olympic lifter is planning on going after a PR in the front squat at his next workout. He does a few cycles of the breathing exercise and then goes through his entire routine for that day. But the lift he's really interested in is the front squat, so he reviews that at least two more times. The first time he walks his mind through the front

squats, he thinks in terms of the weight on the bar for each set. His intended goal is 350, 10 lb. more than he's ever handled, but he knows he capable of making that number because he has been moving his 5 triples up in recent weeks, having done 335 x 5 last week.

The second time he goes through the front squats, he concentrates only on technique: where to set his feet, the position of his torso and head, the importance of keeping his back tight and straight, pulling himself down to the deep bottom under control, staying tight in the hole and, most of all, leading with his elbows out of the bottom with a quick follow-through with his hips. He goes through the form points one more time for good measure, and when he walks into the weight room the following day, he is brimming over with confidence. When you're going after a new personal best, that's half the battle already won.

I had a football player at Hopkins who took the mental preparation a step further than everyone else. He erected a shrine to the back squat. He had photos from magazines of lifters moving huge amounts of weights tacked to a bulletin board in his room. The night before and sometimes the morning of a heavy squat workout, he would light candles (honestly), sit in front of the shrine and meditate about what he would do that afternoon in the weight room. I never saw this tribute to the squat, but a number

of his teammates told me about it. Extreme? Maybe, but he ended up making more progress in the lift during the off-season program than any other member of the team.

Focusing on a Competition

Preparing for an upcoming competition requires a great deal more in terms of mental rehearsal than it does for a single workout. That's because there are so many more variables to consider, such as pace. In a workout, you can pretty much control when you take an attempt and how much rest you can get in between sets. Not so at a contest. And at a meet, you're going to be on the platform all by your lonesome, the center of attention. Thinking about this brings on a nervous response, and that's where the breathing exercise comes in handy.

The night after your final session before the meet, start rehearsing for it. Write out all your warm-ups and intended lifts on platform. Do several cycles of breathing, then work your way through all the lifts, following the same procedure I mentioned earlier: visualize the numbers first, then go through and picture yourself using absolutely perfect form on the competitive lifts. Whenever you feel yourself start to get anxious, stop, do a cycle or two of breathing, then return your full concentration to the specifics of each lift.

The more often you do this, the better prepared you'll be. I've used lifting, either power or Olympic, as my example, but the same rules apply to every athletic endeavor, even team sports. A quarterback on a football team will be able to improve the odds of having a great performance if he takes the time to mentally go over all the small form points that are critical for that position.

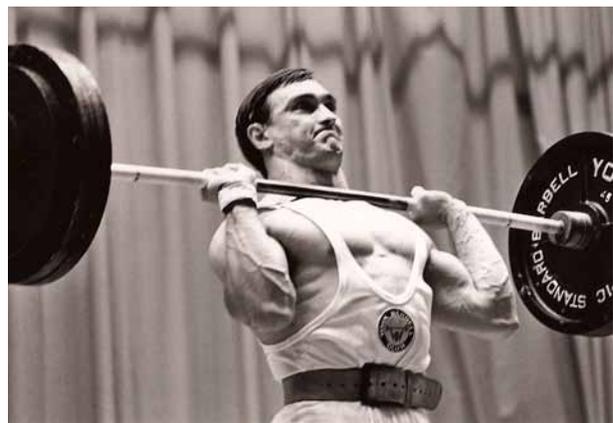
During the contest, when things get hectic and you sense you're losing control of the situation, put a towel over your head and do some breathing cycles. It will ease the tension and help you relax so that you can once again focus clearly on the task at hand.

Finally, learning how to do the breathing exercise is most useful in everyday life to reduce stress. That's what the meditation in yoga is all about. It works for both mental and physical stress.

When running was still part of my training regime, I would often end up totally spent after covering five miles in hot, humid weather. I had difficulty getting my pulse and respiratory rates back to normal, even after moving into a much cooler house. One very hot day, I was having a devil of a time recovering, and then I recalled the breathing exercise.

Within five minutes I was fine. I've also using the exercise when I'm faced with a situation that has me fuming. While I'm breathing deeply, I'm telling myself to calm down, that getting angry is only making things worse, and that in another year I won't even remember the event ever happened. I've saved myself a lot of grief by doing this.

Learn how to do the breathing exercise and practice it regularly. It's very useful to hard-charging competitive athletes, but it's also most beneficial to those who are just trying to stay physically fit so they can live a lifestyle they enjoy. With the systematic breathing, you will be able to harness more of your mental and physical energy, and that will enable you to more readily achieve your goal—whatever that may be.



About the Author

*Bill Starr coached at the 1968 Olympics in Mexico City, the 1970 World Olympic Weightlifting Championship in Columbus, Ohio, and the 1975 World Powerlifting Championships in Birmingham, England. He was selected as head coach of the 1969 team that competed in the Tournament of Americas in Mayaguez, Puerto Rico, where the United States won the team title, making him the first active lifter to be head coach of an international Olympic weightlifting team. Starr is the author of the books **The Strongest Shall Survive: Strength Training for Football** and **Defying Gravity**, which can be found at [The Aasgaard Company Bookstore](http://TheAasgaardCompanyBookstore.com).*