

Mind-Muscle Doctrine Theoretical Concepts of Strategization Part I



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Abstract

Progressive hypertrophic/hyperplastic expansion is paramount in the sport of body building. Designing a strategy built upon visions, goals, and objectives will create a firm cornerstone to achieve these purposes. A vision is more than a goal; it is a larger explanation of why the body builder exists, and where he or she is trying to advance to. A vision gives the body builder a sense of purpose and a set of principles.

Goals are broad, long-term accomplishments a body builder strives to attain, while objectives are short-term statements detailing how to achieve the goals.

Research has revealed much higher success rates for athletes whom have established a vision, a set of both short- and long-term goals, as well as plans for achieving those goals (4, 5, 9, 10, 11, 12, 52-55).

Recommended Reading:

[X-Ray Vision Part I](#)

[X-Ray Vision Part II](#)

[How To Asses Yourself As A Bodybuilder Part One!](#)

[How To Asses Yourself As A Bodybuilder 2 - Nutrition!](#)

[Monumental Masterpiece - Creating A Cerebral Portrait](#)

Perception

Let us begin by analyzing the word Body Building. The portrayal of the utterance seems, at first, plainly self-descriptive.

"The building up of one's body".

However, it is not that straightforward. We know that the application of the expression "body" is a more detailed depiction than the word would otherwise imply. "Body," in reference to the visual picture this word creates, implies structure and, for our more detailed purposes, the size, shape, organization, and detail of that structure.

HyperPlasia Research Journal has gone to great lengths (and will continue to do so) to give its subscribers the latest tools of the trade to adequately coach them for applying such a definition to their own physique.

The concept of the Mind-muscle Doctrine series will attempt to dissect the second word of the phrase... "Building"

What imagery accurately portrays the "building" aspect of the phrase body building? For all intents and purposes we could impress synonyms on the word "building" for further analysis.

Body "constructing," body "configuration," body "structuring," body "formation," "composition," "arrangement," "creation," and the list could go on and on. But the question still remains, what is the tool of the "construction" or of the "formation?"

Does the "building" characteristic of *body building* occur because of the body's physical responses to resistance or because of the mind's implementation of strategy?

The answer is both: the corporal load constraints applied to the physical body, along with the psyche's acceptance of those constraints as they are applied to the mind's eye.

The mental aspects of body building are self-evident. The mind controls everything about your success or failure, including your ambitions in the gym.

Your rejection or acceptance of your psychological perception is the initial factor determining your success.

It is the intention of this series to explore these very topics. It is both physical and mental aspects that control your own progress in the gym. Bringing these two areas into equilibrium is the ambition of every athlete. Without a doubt, enhanced mental focus can produce unbounded gains that will only be constrained by your self-induced limitations.

Learning to use the intellect effectively to plan, strategize, and manipulate problem solving strategies is a vital necessity in a sport where the athlete is broken, or created, by his or her own cerebral confines.

Physique Psychology

What drives you? Many describe this sensation as the "eye of the tiger." But where does that gleam in the eye originate?

What is it about the architecture of the body builder's mind and the longing to endure countless days and nights of pain, discipline, and rigorous self-inflicted beatings?

The key factor in understanding this timeless question is *motivation*.

To understand what motivation is, and why we are motivated, let's begin by understanding what motivation is not. Many people incorrectly view motivation as a personal trait—that is, a trait that some people have and others do not.

Motivation is the result of the interaction between a person and the situation. Certainly, individuals differ in motivational drive, but overall motivation varies from situation to situation (23).

Motivation is simply the willingness to exert high levels of effort to reach desired goals, conditioned by the effort's ability to satisfy some individual need or needs (1).

Three key elements can be seen in this definition: *effort, organized goals, and needs* (29).

The effort element is a measure of intensity. A motivated person tries intensely! But high levels of effort are unlikely to lead to favorable performance unless the effort is channeled in a direction that fulfills the benefits ascribed to the goal. Therefore, we must consider the quality of the effort as well as its intensity. Effort that is directed toward, and consistent with, organized goals is the kind of effort we should be seeking. Finally, motivation can be seen as a need-satisfying process (50).

A *need* refers to some internal state that makes certain outcomes appear attractive. An unsatisfied need creates tension that stimulates drive in an individual. These drives lead to a search behavior to find particular goals that, if attained, will satisfy the need and reduce the tension (29).

We can say that motivated body builders are in a state of tension. To relieve this tension, they exert effort. The greater the tension, the higher the effort level. If this effort leads to satisfaction, it reduces tension, and vice versa. Channeled tension is a powerful instrument of motivation (50).

Contemporary Theories of Motivation

In 1911, Thorndike established that for a change in behavior to take place, one must be motivated—to see a need or have an interest in the task (readiness), practice that task (exercise), and have his or her response in that task reinforced (effect) (3).

Motivation may be intrinsic or extrinsic. Intrinsic motivation is when one recognizes a need and performs or trains to satisfy oneself, rather than for someone else or to gain some external reward, while extrinsic seeks to satisfy others. Reinforcement is closely linked to motivation. When feedback is positive, it reinforces one's approach to performance. When criticism is negative, it makes one question what is being done and possibly try a different approach (15).

Because of this, people are interested in and gravitate to an area in which they perceive competence and avoid areas in which they do not (which is why assessment of goals is a necessity).

The outcome of competition may be winning or losing, but these terms are not always synonymous with success and failure. Success and failure are subjective psychological states. Success motivates people to continue; it is synonymous with realizing goals, satisfying needs, and an interest to continue: motivation.

Although everyone is unsuccessful at times and we can all learn from our mistakes and improve, people are not motivated to continue in activities in which they perceive continuing failure. These perceptions are sometimes based on misdirected or misunderstood goals (16).

Motivation to train requires accepting the need to train and an interest in working to satisfy that need. A lack of motivation to train can be usually attributed to not recognizing or accepting the need or to finding training to meet the need too difficult and unrewarding in itself. It is always more difficult to bring about motivation in some athletes than in others.

What provides motivation? Many theories have been proposed, including older theories, such as Maslow's hierarchy of needs, Mc Gregor's Theories X and Y, and Herzberg's motivational-hygiene theory. While each of those theories has its valid points, more valid philosophies have been developed in recent years (29).

David McClelland (45) and others have proposed the *Three-need theory*, which states that there are three basic needs which account for the major motivators in effort.

These three motives are:



1. The need for achievement: This includes the drive to excel, to achieve in relation to a set of standards, and to strive to succeed (20).
2. The need for power: The need to make others behave in a way that they would not have behaved otherwise.
3. The need for affiliation: The desire for friendly and close interpersonal relationships.

People with a high need for achievement are striving for personal achievement rather than for the trappings and rewards of success. They have a desire to do something more efficiently than it has been done before. An important concept of this theory is that high-achievers avoid what they perceive to be very easy tasks (7).

The other two variables, the need for power and affiliation, have not been researched as extensively as the need for achievement.

However, it is shown that the needs for affiliation and power are closely related to leadership success (7).

Before a large task at your job, has your boss ever told you, "Just do your best?" What does that vague statement, "do your best," mean? Would your performance on the project have been higher if your boss had said you needed to function at an error-free level of 93% to ensure maximum efficiency?

Research on *goal-setting theory* (19) addresses these issues, and the findings are impressive in terms of the effects that goal specificity, challenge, and feedback have on performance.

There is substantial support (24) for the proposition that specific goals increase performance and that difficult goals, when accepted, result in higher performance than do easy goals.

For example, body building can (a) increase gross body weight, (b) increase strength, (c) redistribute lean body weight, (d) increase muscular endurance, (e) burn calories while working, (f) increase energy metabolism at rest, and (g) help to realize potential for speed (31).

Intention to work toward a goal is a major source of motivation. Studies on goal-setting have demonstrated the superiority of specific and challenging goals as motivating forces. Specific, hard goals produce a higher level of output than does the generalized goal of "do your best." The specificity of the goal itself acts as an internal stimulus (10).

Are there any contingencies in goal-setting theory, or can we just assume that difficult and specific goals always lead to higher performance? In addition to feedback, three other factors exist to influence the goals-performance relationship (20).

These are goal commitment, adequate self-efficiency, and national culture. Goal-setting assumes that the individual is committed to the goal. Commitment is more likely to occur when the athlete has an internal locus of control, and when the goals are self-set rather than assigned (28).

Self-efficiency (41, 20, 2) refers to an individual's belief that he or she is capable of performing a task. The higher your self-efficiency, the more confidence you have in your ability to succeed in a task. In difficult situations, we find that athletes with low self-efficiency are likely to reduce their efforts or give up altogether.

Reinforcement theory is in contrast to goal-setting theory, stating that behavior is a function of its own consequence. Goal-setting theory proposes that an individual's purpose directs his or her behavior. Reinforcement theory argues that behavior is externally caused (38). What controls behavior are reinforcements, which are consequences that, when given immediately following a behavior, increase the probability that the behavior will be repeated.

The key to reinforcement theory is that it ignores factors such as goals, expectations, and needs. Instead, it focuses solely on what happens to a person when he or she takes some action.

Equity theory (28, 52) is based on competition, or what you interpret to be fair or equitable. The term equity relates to the concept of fairness and equal treatment or results compared with others who behave in similar ways.

This theory, developed by J. Stacey Adams, proposes that persons perceive what they want from a task (outcomes) in relation to what they put into it (inputs), and then compare their inputs-outcomes ratio with the inputs-outcomes ratios of relevant others.

However, if the ratio is unequal, inequity exists and the viewer sees him or herself as under-rewarded or over-rewarded. When inequities occur, the person will attempt to do something about the situation.

Equity theory (28, 35) proposes that the athlete might (a) distort either their own or other's inputs or outcomes, (b) behave in some way to induce others to change their inputs or outcomes, (c) behave in some way to change their own inputs or outcomes, (d) choose a different person of comparison, (e) quit the task altogether.

These types of reactions have generally proved to be correct (35).

A review of the research consistently confirms the equity thesis: Athlete motivation is influenced significantly by relative rewards as well as by absolute rewards. Whenever an athlete perceives inequity they will act to correct the situation. The result may be higher or lower productivity, improved or reduced quality, or abandonment.

Equity theory is not flawless. It does not define inputs or outputs, change over time, and other factors, despite the fact that it does have some impressive research support and offers insight into motivation.

The most comprehended and widely accepted explanation of motivation to date is Victor Vroom's *Expectancy theory* (50).

Expectancy theory states that an individual tends to act in a certain way based on the expectation that will be followed by a given outcome and on the attractiveness of the that outcome to the individual.

It includes three variables (27):

1. Expectancy of effort-performance linkage
2. Instrumentality of performance-reward linkage
3. Valence or attractiveness of

reward

This may sound complex, but it is really straightforward and can be summed up by addressing the following questions: *How hard do I have to work to achieve a certain level and is that level attainable, what reward will performing at that level get me, how attractive is that goal to me, and how does it help me achieve my long-term goals?*



Whether you are motivated to put forth effort at any given time depends on your particular goals and your perception of whether a certain level of performance is necessary to attain those goals.

Table 1:1 Simplified Expectancy Model



- A = Effort-Performance linkage
- B = Performance-reward linkage
- C = Attractiveness

The key to expectancy theory is understanding an individual's goals and the linkage between effort and performance, between performance and rewards, and finally, between rewards and individual goal satisfaction. It emphasizes rewards (50).

Integrating Contemporary Theories of Motivation

Comparing and contrasting these different theories reveals that the "eye of the tiger" is relative to each person. Creating an environment conducive to motivation is a necessity in the sport of body building.

As such, a combination of all motivation theories is practical for the broad sense of this journal.

Table 1:2 Motivation factors

Recommendations for Training Motivation

- Recognize Individual differences
- Use Goals
- Match yourself to Goal-Specific Tasks
- Ensure that goals are perceived as attainable
- Personalize your rewards
- Link rewards to performance
- Check the competition for equity
- Do not ignore resources

Almost every motivation theory recognizes that athletes are not homogenous (16, 10, 27, 28).

They have different needs. They also differ in terms of attitudes, personality, and other individual elements.

The research on goal-setting theory suggests that hard, specific goals and feedback on the pursuits of those goals is necessary. This entails matching the individual athlete to goal-specific tasks in regards to challenge.

Regardless of whether goals are actually attainable, athletes who see goals as unattainable will reduce their effort.

Because athletes have different goals, what acts as a reinforcer for one may not for another. The athlete should use rewards that are of their individual preference.

Linking the completion of those goals to performance will deepen motivation of continual success in the long term.

Likewise, competition on the stage or in the gym should be perceived in terms of equity. On a simplistic level, experience, ability, effort, and other inputs should explain the differences in overall physique differences.

Training is often referred to as "working out." "Work" (16) is providing a force over a distance. Force is provided by muscle contraction sufficient to overcome resistance. Distance is the linear distance on an arc about a joint, or in a line, the resistance travels. Distance in a line depends on the length of the body extensions. Distance on an arc depends on the length of the radius of rotation (17, 18).

For example, the radius of rotation is the length of the resistance arm of a lever, the long bones in the body. Taller people have long segmental lengths and longer bones. Taller people move greater linear distance in both a straight line and about an arc. Because of this length, tall people work harder ($w = f \times d$) to move the same resistance than short people do. Moving a resistance requires a concentric isotonic contraction.

Resisting being moved requires an isometric contraction to eliminate movement or an eccentric isotonic contraction to compromise some of the movement caused by an outside force. The body moves or resists moving through leverage.

A lever (18) is a rigid bar that revolves about a fixed point known as a fulcrum or axis. Long bones are the body's levers, and joints are their axes. The lever is moved by effort, which is supplied by muscle force. The lever moves resistance, which is external weight or force. It does this through the application of the law of levers.

The effort arm is the length of the bone (lever) from the point the muscle force (effort) is applied (tendon of insertion) to the joint (axis). The resistance arm is the length of the bone from the point the external force or weight is applied to the joint. Almost all body movements are characterized by short effort arms and long resistance arms.

The amount of muscle force required to move or resist movement is directly proportional to the amount of resistance and the length of the resistance arm.

Taller athletes have longer resistance arms and must provide greater muscle force to move the same resistance or to resist being moved by it. If the same effort (muscle force) is applied by a tall (long) athlete as by a short athlete, the amount of external force (weight moved) will be less, the "out" (output) in workout. His or her ability to move an outside weight or to resist movement by an external force is less (16, 17, 18).

This can be discouraging when comparing oneself or when being compared with others with greater anatomical predisposition for success in these areas (shorter extremities).

Conversely, the law of levers defines the opposite effect on velocity (16). Long resistance arms have the potential to move external resistance through greater linear distance in the same elapsed time than shorter ones can.

Ego orientation and an ego-oriented training (39) (extrinsic motivation) climate may accentuate the perceived lack of competence and create negative reinforcement and a perceived lack of success.

The athlete may not be motivated to train or to train hard enough.

Findings suggest that one person's equity is another person's inequity. So an ideal reward system should weigh inputs differently in arriving at proper rewards for each athlete.

It is easy to get caught up in setting goals, creating interest, providing opportunities, participation, etc. that the athlete does not allot for resources such as time, effort, and investment (28).

Keep those variables in mind when planning for goals.

Also of concern when discussing motivation factors is over-training. Over-training can have a dramatic influence on motivation, thus making any motivating factor of null effect. As such, identifying the symptoms of over-training is a necessary criterion.

Over-training (51) has been defined as excessive overload of training stress without adequate rest or recovery from this stress, which results in excessive fatigue,

performance decrements, psychological/emotional disturbances, and an inability to train (13,14).

Smith (43) has outlined the 5 stages of training fatigue, beginning with training stress (acute training stress), overstrain (muscle soreness), training overload (fatigue associated with medium volume and intensity), overreaching (excessive training with recovery opportunities), and finally, over-training (51).

An athlete who experiences these regressive stages has coping systems that are progressively getting taxed, jeopardizing the athlete's adaptive mechanisms (body and mind) (51). Athletes who continue to experience excessive training stress can regress beyond this over-trained stage into distress.

Raglin (36) also detailed that distressed athletes can still maintain adequate performance and train at customary levels, yet training is perceived as being more effortful than it used to.

Research has shown that approximately 30% of female and male college varsity swimmers became distressed at some point during a competitive season (37). It is believed that distress is an acute response to being overtrained, and thus could be treated by short-term interventions. If appropriate, short-term interventions are not implemented at this distress stage and, if overtraining continues, athletes can regress into the staleness syndrome.

Staleness (51) is a serious manifestation of overtraining that is associated with numerous negative effects, especially behavioral, mental, emotional, and technical symptoms. According to research, the primary psychological feature of staleness has been reported to be depression (32).

Distress and staleness (51) are primarily caused by the physical and mental demands of increased training. Once stale, athletes who are exposed to greater increments of stress (physical, mental, and emotional) may begin exhibiting symptoms of burnout, which represents a more severe reaction to overtraining and an advanced form of staleness.

The major discriminating variable between staleness and burnout is that cognitive factors, such as a loss of interest and motivation, are reported to directly relate to burnout. Another distinguishing variable from the other phases of the training syndrome is that once athletes experience burnout, voluntary or involuntary withdrawal from sport (the stressful environment) may be inevitable (42).

Generally, burnout is characterized by physical, mental, and emotional withdrawal from activities that once were sources of great satisfaction and enjoyment, and yet were replaced by physical and psychological stress. Treating burnout can consist of conventional, cognitive interventions, but often burnout treatment needs to consist of both medical and psychological attention (6).

Contemporary theories of motivation are tools available to better enhance our own understanding of bringing out the best in ourselves, goal after goal, year after year.

Organization



If you have no particular destination in mind, then you can take any road. However, if you have someplace in particular you want to go, then you've got to plan the best way to get there. Because organization exists to achieve some particular purpose, we must clearly define that purpose and the means for its achievement (28).

The *planning function* (28) involves the process of defining goals, establishing strategies for achieving those goals, and developing plans to integrate and coordinate activities.

It's concerned with both ends (what's to be done) and means (how it's to be done).

In formal planning, specific goals covering a period of time are defined. These goals are then written down and reviewed. Finally, specific action programs exist for the achievement of these goals.

We can identify at least four reasons for planning. Planning gives direction, reduces the impact of change, minimizes waste and redundancy, and sets the standards used in controlling.

Planning establishes coordinated effort. It gives direction to the organized effort.

Planning (19) also reduces uncertainty by forcing us to look ahead, anticipate change, consider the impact of change, and develop appropriate responses. It also clarifies the consequences of actions we might take in response to change.

In addition, planning reduces overlapping and wasteful activities. When workout activities are coordinated around established plans, wasted time and resources can be minimized. Furthermore, when means and ends are made clear through planning, inefficiencies become obvious and can be corrected or eliminated.

Finally, planning establishes goals or standards (27) that are used in controlling. In planning we develop the goals and the plans. Then, through controlling, we compare actual performance against the goals, identify significant deviations, and take any necessary corrective action. Without planning, there would be no way to control.

The Role of Goals and Plans in Strategizing

Goals (27) are desired outcomes. They provide the direction for all decisions and for criteria against which actual work accomplishments can be measured.

Plans (27) are documents that outline how the goals are going to be met and what typically describe resource allocations, schedules, and other necessary actions to accomplish the goals.

Plans can be broken up into many categories, such as a single-use plan, or a one-time, specifically designed plan to meet the needs of a unique situation (such as a shock routine to bring up a lagging body part), or a standing plan, which provides guidance for activities performed repeatedly.

At first glance, it might appear that body builders have a single objective: *To gain mass*.

However, this is not the case. No one single measure can evaluate whether an athlete is successful. Emphasis on one goal, such as mass, ignores other goals that must be reached if long-term success is to be achieved.

Types of Plans

The most popular ways to describe plans are by their breadth (strategic vs. operational), time-frame (short-term vs. long-term), and specificity (single-use vs. standing).

These planning classifications are not interdependent. Strategic plans are long-term, directional, and single-use. Operational plans are short-term, specific, and standing. Let's examine each of these types of plans.

Strategic plans are plans that apply to the overall goal. Plans that specify the details of how the overall goals are to be achieved are called operational plans (33). How do these two types differ?

Strategic plans tend to cover a longer time-frame. They also cover a broader view of the goals. Strategic plans include the formation of goals, whereas operational plans define ways to achieve the goals. Also, operational plans tend to cover short time periods—monthly, weekly, day-to-day.

Table 2: 1 Types of Plans

Breadth	Time Frame	Specificity	Frequency of Use
Strategic	Long-Term	Directional	Single-Use
Operational	Short-Term	Specific	Standing

One methodology of creating successful plans is the setting and succeeding of established short- and long-term goals. In doing so, a satisfactory mental conditioning can be planted deep into the subconscious mind's eye, altering one's perceived conception of themselves for the enhancement of physique-visualization and planned prediction.

We're going to define *long-term goals* as those covering a complete bulk, cut, and maintenance cycle, while we are going to define *short-term goals* as those covering an individual aspect or variable of the complete cycle (25).

The intermediate goal or objective is any period or variable in the actual phase of the short-term goal, such as specific reps, sets, load weight, etc.

Table 2: 2 Long-Term

8 week bulk *	Long-Term	
1 week maintain	Formation of Goals	Strategic Plans
8 week cut *		

* Plus or minus 1-2 weeks, dependent on specific goals

- Gain 50 lbs. of load weight on 1 rep squat maximum- large load weight increments
- 5lbs. Lean body mass gained
- Successful accomplishment of goals over cycle stage

Long-Term is seen as going from point A to point Z.

Table 2: 3 Short-Term

8 week bulk	Short-Term/ Intermediate	
	Operational	Specific

Examples of Short-term accomplished goals:

- Increase of reps of a selected exercise
- intensity of a given exercise,
- volume of session,
- smaller load weight increments,
- DOMS (this variable will be heavily discussed in part 2)

These short-term goals could be seen as going from point A to point B and, moreover, the intermediate goals or objectives could be viewed as steps between point A and point B.

Setting Goals

A range of psychological methods has been promoted in recent years as a way of improving athletic performance (48). One of the most popular methods has been goal-setting, with research suggesting that a high proportion of athletes set goals and believe in their value (52-55).

However, goal-setting is not always used effectively (13, 14). While reviews of the research suggest goal-setting enhances performance, reviewers conclude that goal-setting needs to be implemented properly to maximize its benefits (3, 52-55).

Locke et al. (27) defined a goal as "attaining a specific standard of proficiency on a task, usually within a specified time limit." Goals help athletes focus on achieving a level of performance such as improving their personal best for the dead lift, reaching a certain total in a power lifting competition, or being selected for a particular sports team. The above definition also implies that goals will be achieved within a specified time limit such as a certain date, the end of the season, or the end of a career.

Although the definition above helps to describe a goal, it is useful to distinguish between outcome, performance, and process goals (17).

Outcome goals focus on the results of competitive events between opponents, such as winning a game or beating a rival (48). Goals that identify the end result of a performance that is largely independent of others are performance goals.

Examples include achieving a new personal best total at a weightlifting competition or reducing the time taken to sprint 200 m.

Process goals (48) specify behaviors the athlete will focus on during training and competition, such as keeping a straight back during the squat or lifting with the legs during a dead lift. Although all three types may contribute to enhanced performance, research suggests that different types of goals may have different effects (11, 4).

For example, Kingston and Hardy (11) found that process goals lead to improved performance quicker than performance goals and were also associated with lower anxiety, greater self-confidence, and concentration. Nevertheless, research reveals that setting all three types leads to superior performance (24).

A number of studies have examined the effects of goal-setting on sports performance both in the laboratory and in the field (4, 5, 11, 26, 34, 46, 47, 56, 57).

This research has also used a variety of sports and participants (48). For example, one study that focused specifically on resistance training found that females who were assigned goals by an instructor or who set their own goals made significantly greater strength gains over a 12-week period compared to the control group (4).

A meta-analysis on 36 studies demonstrated that setting goals in sport and exercise leads to improved performance (25). Moderately difficult goals lead to the greatest improvement over goals that were too easy or too difficult (25). Additional moderating variables found to be important included goal specificity, setting both short- and long-term goals, allowing individuals to participate in setting their own goals, and making goals public (25). Others who have reviewed the literature have also concluded that goal-setting leads to increased performance when properly implemented (14, 17, 48, 52-56).

Guidelines to Follow When Setting Goals

There are a large number of very experienced sport psychology consultants who have developed several guidelines that athletes should follow when setting goals (14, 17, 30, 40, 48, 52, 54). These authors have drawn from both the research and their own extensive consulting experience to develop these guidelines. This section

presents the more common and significant guidelines identified by these authors (48).

Set Both Long- and Short-Term Goals (14, 17, 30, 40, 48, 52, 54)

Long-term goals provide the direction and overall purpose to an athlete's long-term strength training. Short-term goals help to break a long-term goal into small, achievable steps. A long-term goal might be to win a first place in a body building contest, while a short-term goal may be to make a minor change to the dead lift technique. The achievement of short-term goals can inspire and encourage an athlete to persevere. Orlick and Partington (33) found that daily training goals were one variable that differentiated successful Olympians from less successful ones, thus reinforcing the value of short-term goals.

Make Goals Challenging but Realistic (14, 17, 30, 40, 48, 52, 54)

Kyllo and Landers found that moderately difficult goals lead to best performance. Goals that are too easy may not inspire and motivate an athlete. Similarly, an athlete who is attempting to attain a goal that is too difficult may become frustrated and eventually give up.

Make Goals Specific and Measurable (14, 17, 30, 40, 48, 52, 54)

Specific, measurable goals are easier to evaluate than vague goals. For example, instead of setting a goal to get stronger on the bench, it is better to set a goal to increase 1 RM on the bench by 10 lbs. over the next 3 months. Specific, measurable goals provide more information to the athlete and will better mobilize effort. This may lead to more optimal strength gains.

Set Performance, Process, and Outcome Goals (14, 17, 30, 40, 48, 52, 54)

Outcome goals are important because they often summarize an athlete's motive for participating in a sport ("I want to be the most massive!"). The best way to achieve outcome goals is to focus on performance and process goals, particularly during training and competition ("focus on how to become the most massive") (17).

However, overemphasizing outcome goals may create anxiety and reduce performance because they are not entirely within the athlete's control (11).

Identify Goal Attainment Strategies (14, 17, 30, 40, 48, 52, 54)

Stage three of the framework presented above involved planning and highlighted the importance of identifying the strategies that lead to goal attainment. These strategies will help the athlete make optimal progress. For example, an athlete's strategy for increasing upper body strength will include a description of the specific exercises along with an indication of sets, reps, frequency, duration, and intensity.

Set Positive Goals Rather Than Negative Goals (14, 17, 30, 40, 48, 52, 54)

Goals can be negative ("I do not want to fail this lift") or positive ("I want to see the white lights!"). Negative goals may trigger negative self-talk, which is associated

with poor performance (49). Consequently, it is better to focus on what you want to achieve, not what you want to avoid.

Put a time Limit on Your Goals (14, 17, 30, 40, 48, 52, 54)

Locke et al.'s (27) definition of a goal stated above implies that goals have a time-limit associated with them. This is because people have a tendency to procrastinate. Placing a challenging but realistic time limit on a goal will remind an athlete to keep striving towards its fulfillment. For example, a bodybuilder might set July 1 as the date to have reduced body fat to 6%.

Ensure that the Athlete Is Committed to the Goal-Setting Program (14, 17, 30, 40, 48, 52, 54)

Commitment is a vital factor in goal attainment (47). Uncommitted athletes may not be prepared to do all that is required to achieve a goal. Making a goal attractive and developing self-confidence can promote commitment in an athlete (19).

For body builders, increasing strength, muscular endurance (time under tension), and "specific power" (13) is the goal of variable resistance training. These are short-term, individual performance goals instrumental in realizing the long-term outcome goals of competing in sport at a higher level, making individual improvement in skill, avoiding injury, winning, and being successful. Success, however, is relative with both intrinsic and extrinsic, norm and criteria references.

Norm reference relates to status within a group, and criteria reference relates to mastery, meeting some individual or external level of achievement. Modern sport psychologists refer to this dichotomy as dispositional goal orientation, the manifestation of two different conceptualizations of ability that determine various motivational outcomes: cognitive, affective, and behavioral.

Body Building Logos

Organizing, or structuring, an analysis of our training goals, can best be done by looking at the problems we encounter. Whether these variables include plateaus, injuries, lack of intensity, or mental restraints, proper structuring of analysis of our goals can have a dramatic impact on our potential to defeat those confines.

Our minds frequently mislead us, giving us a false understanding of events and circumstances, and causing our analysis of events and circumstances to be flawed (21).

By learning about the mental barriers and pitfalls that impede effective analysis and acquiring skills and techniques to overcome them, our successful strategization of problem-solving can be improved, and significantly so.

That improvement might be the determining factor in a decision that is crucial to personal self-awareness, body building success, or even life itself.

But what exactly does structuring one's analysis mean? The word analysis (20) means separating a problem into its constituent elements. Doing so reduces complex issues to their simplest terms.

To structure one's analysis means separating the constituent elements of a problem in an organized way. An example of structuring is an IRS form 1040, which breaks down the process of computing one's taxes into manageable, yet complex, series of steps.

If we are to solve problems, we must learn to identify and break out of restrictive minds-sets and give full, serious consideration to alternative solutions. We must learn how to deal with the compulsions of the human mind that close the mind to alternatives.

Failure to consider alternatives fully is the most common cause of flaw or incomplete analysis (21).

In other words, we must learn to keep an open mind—which in turn is one of the most difficult things we can do. So any technique that we can impose on the mind to force it to open is helpful. The fact is structuring one's analysis is the quickest, surest path to opening the mind to alternatives.

Do not confuse analysis with structuring. They are not at all the same thing.

Structuring is to analysis what a blueprint is to building a house. Would you build a house without a blue print? You could, of course, but there's no telling what you'd end up with. The same imagery can be put forth with sculpting one's physique.

Building a house, building a body, building anything, without a plan is, to say the least, ill-advised. And what structuring is to a blueprint, the techniques of structuring are to a carpenter's tool—not components of a single, unified system for analyzing problems, but an assortment of techniques that can be used singly or in combination, as a problem requires. And different problems usually require different analytical tools!

By the same token, structuring is like a roadmap for a trip. Structuring (the roadmap) shows that the trip has a single beginning but many alternative endings. Where you end, which alternate path is taken, is determined not by the roadmap but by your analysis and by what you do along the way during the trip.

But what does separating elements in an organized way buy us? The answer is a number of things, all of which are necessary for effective problem solving and decision making.

First, structuring helps the mind make sense of complex problems. Most problems, even the ones we regard as fairly simple, are much too complex and ambiguous to analyze without some kind of structuring. As creatures of habit, we tend to take in the entire problem with all its complex dimensions in one gulp and try to digest it. Structuring frees us from that trap.

Second, structure allows us to compare and weigh one element against another. Instead of looking at a whole selection of exercises, we look at the individual angle and variations of the plane of motion, one at a time.

This identifies factors and relationships crucial not only to our analysis, but also to the concerns of those who will make use of our findings.

Third, structure helps focus our analysis. The mind instinctively focuses. That's how the mind works, so it's going to focus whether we want it to or not. Therefore, we are better to work with the mind than against it, in doing so, controlling what it focuses on! If we don't, it will do its own focusing, and its shortcuts can lead us down the wrong path.

Fourth, structuring focuses on one element at a time, which, compared with our instinctive scattershot approach of tackling all elements simultaneously, is more systematic, more thorough, and more productive of relevant ideas.

Fifth, by establishing rational, systematic frameworks, within which to analyze problems, analytic structuring techniques enable us to impose our analytic will on our subconscious mind, overcoming instinctive mental traits that will lead to faulty or incomplete analysis.

Sixth, visual stimuli. By enabling the brain to actually see the words or numbers or depictions of the problems, we engage more brainpower in analyzing and solving the problem and so gain added insights. (This is why a body building log book is an excellent tool of goal setting and research!)

Lastly, structure allows us to apply our intuition--the sense of knowing--to alternative decisions or solutions in an organized way, controlled not by the unconscious mind, but by the conscious. That is why the visual nature of structuring techniques is important, enabling the conscious mind to better focus on and exercise more control over the analysis. The effect is to focus our intuition into the open, so to speak, where we can consciously cross-examine it and, in doing so, protect ourselves against troublesome intuitive mental traits to be discussed later.

While structuring one's analysis is always helpful and sometimes indispensable, effective decision-making and problem-solving depends, in the end, not on how we structure our analysis but on the soundness of our thinking, and for that we have to use our mind.

Structuring is no substitute for thinking. It is rather a means of facilitating and empowering thinking. Used properly and creatively, structuring techniques will significantly enhance our ability to analyze, understand, and solve problems, lead to more effective analysis and sounder decisions, and make us feel more confident in those decisions, increasing self-awareness.

Vision



And the Lord answered me and said, Write the vision and engrave it so plainly upon tablets that everyone who passes may be able to read it easily and quickly as he hastens by. ³For the vision is yet for an appointed time and it hastens to the end fulfillment; it will not deceive or disappoint. Though it tarry, wait earnestly for it, because it will surely come; it will not be behindhand on its appointed day. Habakkuk 2: 2-3 AMP.

Writing goals and visions down is imperative to their fulfillment.

To aid you in this endeavor, a worksheet has been provided to accompany this journal.

In conjunction with this worksheet, other goal assessment sheets are available from HYPERplasia Journal:

[Self Assessment Sheet](#)
[Self Assessment Sheet 2](#)
[X-Ray Vision Part I Worksheet](#)

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