# How to Motivate Lifters to Continue to Strength-Train

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### PEOPLE WHO STRENGTH-TRAIN

can reap a variety of benefits. It is well known that muscular strength and endurance, athletic performance, and injury potential are favorably affected by training. In addition, strength training may reduce the likelihood of experiencing heart disease, diabetes, osteoporosis, and colon cancer (14). These beneficial effects are obtained and maintained only through a long-term commitment to hard work. Unfortunately, approximately 50% of the people who begin a physical activity program drop out within 1 year (8). One of the most frequently reported reasons for quitting is a lack of interest (13).

Interest in an activity is often considered an indicator of intrinsic motivation (7). Those who are more interested are more intrinsically motivated. For example, people who are more intrinsically motivated toward exercise engage in exercise more frequently and are more confident they will continue to exercise (17). Therefore, it is logical to assume that if we, as strength and conditioning professionals, can increase lifters' in-

trinsic motivation toward strength training, then they will continue to lift weights and thus reap the associated benefits.

There are numerous theories, too many to be reviewed here, that attempt to explain how intrinsic motivation is cultivated. Although some of these theories have been the topics of previous articles published in this journal (11, 12, 18-20), this article will focus on one that has not, Bandura's theory of intrinsic motivation (1).

According to Bandura's theory, self-motivation results from the implementation of 3 processes: (a) self-observation, (b) judgment, and (c) self-evaluative reaction (1). First, people observe what they are doing and extract relevant performance feedback from the environment. Second, they judge the caliber of their performances in relation to personal standards. Finally, they produce self-evaluative reactions that are based upon how well their performances measure up to corresponding standards. When performances are judged to have met or exceeded the corresponding standards, people reward themselves with positive reactions (e.g., self-satisfaction, enjoyment). Conversely, when performances are judged as substandard, people experience negative reactions (e.g., self-dissatisfaction, disappointment).

Self-reactions, both positive and negative, serve as motivators. People are motivated to obtain certain levels of achievement when the granting of self-satisfaction is contingent upon reaching those levels of achievement. Likewise, people are motivated to expend effort and persevere until their performances match standards in order to avoid self-dissatisfaction.

Unlike traditional incentives such as praise and trophies, which are supplied by other people, self-reactions are supplied by the lifters themselves. This distinction of who supplies the incentives is important, because lifters can spend many hours in the weight room without receiving praise or trophies for their accomplishments. Rather than becoming discouraged and losing interest in strength training while waiting for someone else to recognize their accomplishments, lifters can motivate themselves to continue strength training by making the self-bestowal of desired positive reactions conditional upon achieving valued standards.

Can strength and conditioning professionals do anything to help lifters who do not find strength training intrinsically motivating (i.e., satisfying, enjoyable)? Fortunately, intrinsic motivation can be cultivated, even toward activities that are devalued (1, 5).

The following sections address each process of self-motivation and describe how professionals can assist lifters to become more intrinsically motivated.

# ■ Self-Observation

In order to motivate themselves. lifters must first attend to appropriate environmental factors (1). Although there are numerous factors in weight rooms that can attract and hold lifters' attention (e.g., other lifters, music, televisions), many of these factors do not provide relevant information on how well they are performing. Therefore, lifters must learn what aspects of the environment provide feedback on their performances. Often, the determination of these factors is guided by the internal standards lifters possess. For example, if standards stress the use of correct exercise technique, then technique will be the focus of attention.

Although the factors that are considered important will vary from lifter to lifter, strength and conditioning professionals can help with the identification of these factors. For example, incorrect exercise technique can lead to injuries, so professionals teach lifters how to lift properly. Each exercise is composed of numerous subskills that must be blended together to create the final movement. Many lifters would quickly

become confused and discouraged if they had to consciously learn and observe every subskill of every exercise. Professionals streamline the observation process by identifying and emphasizing the most critical subskills of each exercise (e.g., keeping the torso as upright as possible during the squat). Lifters then focus their attention on the critical subskills.

With some exercises, such as the squat and bench press, it may be physically impossible for lifters to observe the critical subskills. In these cases, professionals can videotape workouts and strategically position mirrors to provide lifters with performance feedback (6).

In addition, professionals can act as a source of information and supply an accurate description of the lifters' performances.

# Judgment

After observing their performances, lifters judge the adequacy of those performances against referent standards (1). Social cognitive theory states that the information lifters use to develop standards is obtained from 3 primary sources: models, direct teachings, and the social reactions of others to lifters' performances (1).

### Modeling

Strength and conditioning professionals influence lifters' standards by acting as models. When professionals demonstrate an exercise, they provide lifters with visual images of how a properly executed exercise looks. These images become the criteria by which lifters judge the adequacy of their own performances. Another way that professionals model standards is through personal behavior. When professionals consistently subscribe to demanding personal

standards, lifters are apt to adopt demanding standards as well.

## **Direct Teaching**

Professionals also influence lifters' standards through direct teaching. For example, professionals often teach novices that to become stronger, strength training workouts should be conducted at least 3 days a week with a day of rest between workouts. Lifters then incorporate this workout schedule into a standard.

### Social Reaction

The final way professionals influence standards is through their reactions to lifters' performances. The reactions convey the professionals' expectations. For example, when professionals congratulate lifters for outstanding performances or express disappointment in mediocre performances, lifters develop more challenging standards.

Once information is obtained from models, direct teachings, and social reactions, it is transformed into standards. For many reasons, this transformation should result from a collaborative effort between lifters and professionals. First, standards that are challenging, realistic, specific, and personally important; that stress personal mastery of skills; and that incorporate a proximal time frame are effective in cultivating intrinsic motivation (1-5, 15). Together, professionals and lifters can ensure that these characteristics are incorporated into standards.

Second, collaboration can have a positive effect on intrinsic motivation by promoting a sense of autonomy (7, 9). People who perceive that they have a voice in making decisions that affect them report being more intrinsically motivated.

Third, because personal capa-

bilities vary between individuals and even within individuals toward an activity, collaboration enables standards to reflect each lifter's unique abilities. For example, a lifter may be very competent with exercise machines but not have any experience with free weights. Thus, the standards for squatting with a Smith machine can be quite different from those related to squatting with a barbell.

Lastly, collaboration allows standards to be responsive to changing circumstances, such as when a lifter incurs an injury that impairs his or her performance. To accurately reflect the new circumstances, the lifter and professional must work cooperatively to alter the old standards.

### ■ Self-Reactions

Finally, lifters reward or punish themselves based upon the adequacy of their performances (1). Generally, lifters experience selfsatisfaction when their performances meet or exceed expectations and dissatisfaction when their performances fall short of expectations. It is important to realize that self-evaluative reactions depend on the relationship between performances and corresponding standards and not the absolute level of performances. Therefore, even though 2 lifters may lift the same amount of weight, because of differences in personal standards, one may be satisfied while the other is dissatisfied.

Depending on how dissatisfied and efficacious (confident in their abilities) they are, lifters may pursue one of 3 courses of action (3, 4). First, if lifters meet or exceed internal standards but are efficacious and would be dissatisfied with a repeat performance, they will develop more demanding standards. However, if performances are severely deficient and lifters are not confident in their abilities to reach the desired levels of performance, they will adopt lower standards that better reflect their capabilities. In both of these courses of action, professionals can assist lifters with the development of new standards. In the third course of action, lifters who are dissatisfied because they fall short of expectations but who are efficacious will exert more effort and persevere in their pursuit of standards.

# ■ Self-Efficacy

Based on the previous paragraph, perceptions of self-efficacy appear to play an important role in selfmotivation. The role of self-efficacy in cultivating intrinsic motivation has been amply demonstrated (1-5, 10, 16). As people become confident in their abilities to perform an activity well, they set more challenging standards, persevere until those standards are met, and enjoy the activity. Enjoyment leads to motivation to continue to participate in that activity. Thus, professionals need to structure weight room environments to promote a strong sense of self-efficacy.

Professionals can strengthen lifters' sense of efficacy by manipulating the 4 sources of efficacy information: performance accomplishments, vicarious experiences, verbal persuasion statements, and physiologic signals (1, 2). For example, providing a strength training environment where lifters (a) successfully master progressively more difficult skills, (b) watch professionals model correct exercise techniques, (c) receive verbal statements from professionals that indicate belief in the lifters' abilities to perform exercises correctly, and (d) learn that fatigue and physical discomfort are natural consequences of strength training and not causes for alarm results in a stronger sense of efficacy.

Even though self-efficacy toward strength training can be quickly strengthened (21), professionals need to be aware that a corresponding increase in intrinsic motivation may not occur simultaneously (1, 10). Unfortunately, researchers have not discovered how much time may elapse between these 2 events. To minimize the impact of a time lag, professionals may employ extrinsic rewards such as praise and public recognition of achievements to maintain lifters' adherence to strength training routines while intrinsic motivation is cultivated.

## Conclusion

Lifters who find strength training intrinsically motivating are likely to continue to lift and to reap benefits such as increased muscular strength and endurance. Therefore, as strength and conditioning professionals, we need to do our part to help lifters become more proficient in all 3 processes of selfmotivation. We can assist them in identifying and observing informative aspects of the environment, developing challenging personal standards, and making the selfpresentation of enjoyment and self-satisfaction contingent upon meeting or surpassing personal standards. When lifters become proficient at self-motivation and find strength training enjoyable and satisfying, then we know we have done our job.

### ■ References

1. Bandura, A. Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood

- Cliffs, NJ: Prentice Hall, 1986.
- 2. Bandura, A. Self-Efficacy: The Exercise of Control. New York: W.H. Freeman, 1997.
- 3. Bandura, A., and D. Cervone. Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *J. Pers. Soc. Psychol.* 45:1017–1028. 1983.
- 4. Bandura, A., and D. Cervone. Differential engagement of self-reactive influences in cognitive motivation. *Organ. Behav. Hum. Decis. Processes.* 38:92–113. 1986.
- Bandura, A., and D.H. Schunk. Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *J. Pers. Soc. Psychol.* 41:586–598. 1981.
- 6. Berger, C.G. The camcorder as a teaching tool in the weight room. *Strength Cond. J.* 21(6): 70–72. 1999.
- 7. Deci E.L., and R.M. Ryan. *Intrinsic Motivation and Self-Determination in Human Behavior.* New York: Plenum Press, 1985.
- 8. Dishman, R.K. Exercise Adherence: Its Impact on Public Health. Champaign, IL: Human Kinetics, 1988.
- 9. Garcia, T., and P.R. Pintrich. The effects of autonomy on motivation and performance in the college classroom. *Contemp. Educ. Psychol.* 21:477–486. 1996.
- Harackiewicz, J.M., C. Sansone, and G. Manderlink. Competence, achievement orientation, and intrinsic motivation: A process analysis. *J. Pers. Soc. Psychol.* 48:493–508. 1985.
- Holloway, J.B. Weight room psychology: Selected psychological aspects of physical strength and conditioning. J.

- Strength Cond. 16(6):56-61. 1994.
- 12. Holloway, J.B. Weight room psychology: Selected psychological aspects of physical strength and conditioning, part 2. *J. Strength Cond.* 17(1): 52–60. 1995.
- 13. Hovell, M.F., C.R. Hofstetter, J.P. Elder, P. Faucher, V.M. Spry, E. Barrington, and M. Hackley. Brief report: Lifetime history of relapse from exercise. *Addict. Behav.* 15:573–579. 1990.
- 14. Hurley, B. Does strength training improve health status? *J. Strength Cond.* 16(3):7–13. 1994.
- 15. Kavussanu, M., and G.C. Roberts. Motivation in physical activity contexts: The relationship of perceived motivational climate to intrinsic motivation and self-efficacy. *J. Sport Exerc. Psychol.* 18:264–280. 1996.
- 16. McAuley, E., S. Wraith, and T.E. Duncan. Self-efficacy, perceptions of success, and intrinsic motivation for exercise. *J. Appl. Soc. Psychol.* 21: 139–155. 1991.
- 17. Oman, R., and E. McAuley. Intrinsic motivation and exercise behavior. J. *Health Educ.* 24: 232–238. 1993.
- 18. Rahschulte, S.M. Psychological, social, and motivational factors that affect the performance of young athletes. *J. Strength Cond.* 21(6):59–62. 1999.
- 19. Wagman, D. Maximizing strength, speed, and power through self-confidence. *J. Strength Cond.* 19(3):7–11. 1997.
- 20. Wagman, D. Remotivating the motivated. *J. Strength Cond.* 19(4):60–66. 1997.
- 21. Wise, J.B., and E.P. Trunnell.

Effects of efficacy sources on self-efficacy strength. *J. Sport Exerc. Psychol.* 23:268-280. 2001.



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