The Psychology of Modern Bodybuilding

An Honors Thesis (HONRS 499)

By

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Preface

This thesis has been dedicated to the loving memory of Andrew Brian Stein. Andy was a 1998 graduate of Ball State University with a Bachelor of Science in Exercise Science, and he was the vice-president of the honorary fraternity Phi Epsilon Kappa. He worked for the Recreation Department in the gym and participated in the 1998 Mr. Ball State bodybuilding competition in the lightweight division. Andy was also a member of the Zeta Beta Tau social fraternity. Andy took his own life in August of 1998, but his memory and inspiration are still treasured by his friends, family, peers, coworkers, and instructors.
Exercise—the buzzword of the nineties. People are getting out and getting fit, packing their workout gear right next to their briefcases. Fitness clubs are popping up in every metropolitan city across America, turning health promotion into a highly profitable business. Exercise has replaced weeks of bed rest in cardiac rehabilitation, as well as playing an integral role in orthopedic therapy. It has been established and widely publicized that exercise and good nutrition practices are vital to healthy hearts and bodies. With this burst of medical advancement, people live longer and healthier lifestyles if they accept the challenge.

The motivation to exercise is achieved by a multi-dimensional approach. First and foremost, the desire for good health is the most familiar. We know that exercise maintains body weight and composition, prevents coronary heart disease and hypertension, normalizes lipid and carbohydrate metabolism, and prevents lower back syndrome (Willis 10). Many exercise to improve their appearance, being that body satisfaction is closely tied to self-satisfaction. With the increasing social pressure for women to be thin, anorexia nervosa and other eating disorders have unfortunately been on the rise (Willis 11). Others workout for the social interaction, meeting new people and forming long-term friendships. Camaraderie in group exercise fights loneliness and social isolation. People are more likely to stay committed to an exercise activity when they have a workout partner. Adult females typically value the social experience of exercise more than their male counterparts (Willis 14). Psychological benefits also are embedded in the experience, as exercise reduces tension and anxiety, elevates mood,
increases self-worth, improves one’s ability to cope, and promotes feelings of overall happiness (Willis 15). Whichever combination of motives is employed, exercise should be enjoyable and easily adhered to for a maximal experience. This document will specifically address the psychological aspects of exercise, particularly within the art of modern bodybuilding.

A mentally healthy individual possesses a superior perception of reality, accepts himself, and is spontaneous. He is problem-centered, detached, autonomous, and holds a freshness of appreciation and richness of emotional reaction. The person has a high frequency of peak experiences, identifies with the human species, and practices good interpersonal relations. He has a democratic character structure, and is creative (Willis 40). It is obvious that any person does not display such traits at all times, and all of them synchronously, as trials and tribulations arise throughout life. However, a mentally healthy person is probably more capable of conquering such events with little difficulty.

It has been somewhat agreed upon by medical and exercise scientists alike that physical fitness and mental well being are interrelated (Willis 41). Exercise meets many psychological needs such as independence, stimulation and arousal, esteem, excellence, social affiliation, power, and aggression (Willis 97). Regular exercise and improved fitness levels can ultimately achieve emotional stability, self-assurance, extroversion, and low levels of neuroticism (Willis 78). The elevated mood achieved during and post exercise could be the responsible factor in why people continue to exercise (Willis 43). Exercise professionals should integrate intrinsic motivation to their clients such as the joy, fun, self-satisfaction, confidence, pride, enthusiasm, and excitement achieved with exercise rather than just physiological benefits, which could potentially reverse the high
dropout rate of exercisers (Willis 42). The following exercise-psychological perspective has been developed to explain such effects: (1) Fitness improvements result in perceptions of control and mastery, which lead to feelings of well being. (2) Aerobic training provides training in biofeedback. (3) Exercise is a form of meditation that can trigger an altered state of consciousness. (4) Exercise provides a distraction from anxiety producing stimuli (Willis 41).

Approximately five to ten percent of the United States population suffers from depression, and a significant number of those commit suicide. Women are affected two to six times more frequently than men, possibly due to hormonal imbalances or social influences. Clinical depression consists of feelings of despair, sadness, hopelessness, low self-esteem, and pessimism, whereas reactive depression results from significant events of life (Willis 47). Depression can be treated with psychotherapy in mild or moderate cases and drug therapy is used in more severe cases. As the positive psychological effects of exercise have been explored, it also has begun to be employed as an effective antidepressant for all age groups, equally for initially depressed and non-depressed subjects (Willis 48). A survey of 1750 physicians concluded that exercise was prescribed by 85% for depression, 68% for anxiety, and 43% for chemical dependence, with walking being the most popular mode used (Willis 41). Applying physical activity to mental conditions satisfies the holistic theory, which states that “no physical or mental illness may be adequately diagnosed, understood, or treated unless viewed as both physical and psychological,” (Willis 41). Exercise can be a cost-effective alternative for depression without any negative side effects that are often seen in drug therapy. In fact, the overall physical well being is enhanced when the exercise program is adhered to. The patient
can experience feelings of achievement, self-control, and competence. Good exercise habits can replace bad ones. Symptoms can be relieved or distracted from during exercise. The patient can learn patience. Exercise may also relieve depression due to an illness or disability by rehabilitation and restoration of some normal activities. Such benefits apply to non-psychotic depression, particularly primary (lasting more than one month) and reactive (in reaction to a specific event) (Willis 49). Several hypotheses have been suggested to explain the physiological connection between depression and exercise. Exercise increases both blood flow and oxygenation, which is beneficial to the central nervous system. While during depression norepinephrine levels are lower, exercise exhibits a reversal effect. Exercisers can develop a sense of mastery and self-control, and combined with improvements in body image and self-concept, depression can be prevented and/or defeated (Willis 49). Another hypothesis, the pyrogen effect, refers to the temporary elevation of body temperature as a result of intense exercise and its effect on depression (Willis 49).

As stress naturally occurs in nature, exercise aids in its management, lowering one’s state of arousal. Thirty-four studies concluded that aerobically fit subjects showed a reduced psychosocial stress response when compared to unfit subjects (Willis 55). Exercise may help alleviate anxiety by regulation of sympathetic tone of the autonomic nervous system. Such management distracts victims from anxiety-producing triggers and helps patients treat arousal with less apprehension (Willis 52). To make the most out of exercise intended to reduce anxiety, heavy breathing should be sustained without causing exhaustion and should last twenty to sixty minutes or more, at least three times weekly, dependent upon symptoms (Willis 53). In a study comparing high-fit and low-fit
subjects, the high-fit subjects had lower baseline levels of cardiovascular arousal and responded less to psychological stress, as displayed by lower systolic blood pressures and heart rates alike (Willis 55). Aerobically trained individuals in another comparison showed higher levels of norepinephrine and prolactin early in the stressful event and their heart rates and anxiety levels were recovered more quickly (Willis 53). In summary, highly-fit subjects were better equipped to handle stress, both emotionally and physiologically, demonstrating that exercise acts either as a coping strategy to reduce the physiological effect of a stressor or it serves as an inoculator to foster a more effective response to stress (Willis 55). Nonetheless, infrequent physical activity is preferred to none when considering mental and physiological health issues.

Mode evidently plays a large role in the quality of positive responses to exercise. After a semester of training, a combination of aerobic activities, such as aerobic dance and jogging, induced more positive moods when compared to the group that practiced weightlifting and inactivity. Running for a minimum of one hour significantly lowered tension, anxiety, and hostility. Larger decreases in depression, vigor, and fatigue have been found in brisk walkers than in slow shufflers (Willis 45). It was observed that depression was also greatly reduced more with sessions longer in duration and more frequent (Willis 48). Some research indicates that exercise does not have to be aerobic in nature to enhance one’s psychological condition. One study compared exercise programs among recovering substance abusers. The regimens were either primarily aerobic (a step program), primarily anaerobic (bodybuilding), or a combination of both (circuit training). The bodybuilding group showed significant decreases in depression symptoms. The
bodybuilders exercised in groups of two or three, which encouraged socialization and cooperation, which are also anti-depressive conditions (Palmer 524-528).

Runner’s high is an odd phenomenon that is psychologically uplifting and a nearly mystical experience for those who run for an extended period of time (Willis 43). Many suggestions have been offered to explain the drastic mood elevation. Exercise distracts one from stressful stimuli. Various animal experiments point to the elevation of neurotransmitters, such as norepinephrine and serotonin, that occur during exercise. Endorphins, compounds that are produced by the brain and pituitary gland and mimic morphine, reduce pain sensations and produce euphoria (Willis 44).

Exercise modes can range from walking to aerobic dance, with numerous others falling in between. When choosing a mode, the individual should customize it to fit needs and exercise goals. Childhood play is important as it leads to organized sports as well as teaching a lifestyle of physical fitness. Availability of equipment, funding, and geographic location all directly affect the mode choice. Walking or running are the least expensive and are easily accessible. However, one’s current physical condition must also be accounted for. Physically impaired subjects may not be able to walk or run and may be limited to the arm crank machine for aerobic activity. Exercise is either aerobic (using oxygen) or anaerobic (not using oxygen). As mentioned in previous studies, aerobic exercise seems to be the most beneficial when considering psychological response. However, anaerobic exercise, such as weightlifting, can develop within the subject positive emotional experiences, such as a sense of mastery and control. Weightlifters often describe intense physical rushes as a result of sympathetic arousal and endorphin
release (Palmer 529). When considering bodybuilding, there are many curiosities as well as concerns about the risks and benefits involved, which will now be explored.

Bodybuilding involves much discipline and sacrifice. Besides the vigorous weightlifting, most bodybuilders today use dieting to achieve the desired look. The "look" that makes a bodybuilder stand out in a crowd has been described by a multitude of adjectives such as hard, lean, cut, shredded, ripped, and striated. These terms refer to the little amount of subcutaneous fat and water present below the skin, placing the muscle as close to the surface as possible. Dehydration and a strict diet add to such an effect. It has been said that nutrition is the greatest factor in determining the success of a bodybuilder in a contest (Kubistant 137). Dieting, which typically lasts on the average of three months, has also been determined by some experienced individuals as the hardest part of training for the competition (Lowe 50). The following is a set of guidelines that have been suggested in dieting for a bodybuilding competition:

1. Reduce the number of calories going in, and increase the number of calories being used by increasing aerobic activity.
2. Maintain your training weight within five percent of your desired contest weight.
3. Any food you ingest should be quality calories, which is food that is close to its natural state and has minimum cooking preparation. *Rule of thumb-during regular training, ingest 15 quality calories per pound of body weight per day, and 10 quality calories per pound of body weight per day when dieting for a contest.
4. Plan your dieting to take a full one to two weeks longer than expected.
5. Judge your dieting not by how much you weigh, but how you look.
6. Avoid binging after the contest to avoid shocking your body. (Kubistant 139).

For every diet splurge, a bodybuilder's training and physique will usually be set back for the following seventy-two hours (Kubistant 138). Dieters usually eat multiple, but small meals daily consisting of few carbohydrates and high protein to build muscle. Some bodybuilding professionals go to the extent of hiring a personal dietician to ensure
their nutritional fuel efficiency. Calories, as well as grams of fat and protein, should be calculated and recorded daily (Lowe 52). Social dining and even alcoholic drinks are taboo at this time. Chicken, turkey, and egg whites are examples of high-protein, low-carbohydrate foods common to the mouths of bodybuilders. Carbohydrates, or "brain food", are usually completely eliminated the last two weeks before the contest date, causing contestants to become light-headed and lose train of thought. Water is also conserved at this time, often coupled with diuretics. Bodybuilders often exercise for hours in sweat suits, adding to the dehydration effect. Besides impaired brain function, such practices can pose traumatic consequences for the contestants. Alan Klein has claimed that bodybuilders are "closer to death than to life when on stage," (Lowe 51). Competing females usually have three to ten percent of body fat, whereas the average American woman has twenty-three percent body fat (Lowe 124). One male participant lost his life while on the 1992 European Grand Prix Tour due to excessive diuretic usage which caused dehydration and cardiac arrhythmias. Another bodybuilder was placed in the intensive care unit of a hospital after participating in the 1993 Arnold Schwarzenegger classic. The patient had consumed a mere ten ounces of water daily for three consecutive days, coupled with diuretics. His daily caloric intake for weeks was only 1,400 calories per day (Lowe 51). The average American diet is based on 2,000 calories per day, and the RDA recommends eight eight-ounce glasses of water daily (Label-Ease).

Objectification of the body, or viewing it as separate from the self and treating it as a victim of mastery and control, is often a dangerous consequence of bodybuilding. Based on observation and actual accounts, bodybuilding is typically recognized as a sport
vulnerable to disordered eating and attitudes (Guthrie 272). A study of thirteen elite female bodybuilders in Southern California scored very high in body image and value of appearance, fitness, and health. Each woman discovered an enhanced body image as well as improved self-concept once beginning to bodybuild. Overall, they were “mostly satisfied” with all areas of their bodies and appearances, but favoring the lower and midtorso the least. Women typically carry more fat in these areas, and judges prefer narrow waists to larger ones. The women considered their weights to be normal, ranging from 114 to 153 pounds on frames five feet to five feet and four inches tall. Body fat compositions were between five and ten percent. The mean weight preoccupation score was low, reflective of a minimal concern with weight or becoming fat. Several of the women replaced the traditional height and weight charts with a relaxed and informed attitude towards their weight. Acknowledging that muscle tissue is more dense than that of fat, they conquered the fear of the bathroom scale. None were preoccupied with an eating disorder of any kind, but instead consumed small, low-fat, low-sodium meals, avoided snacks, and exercised to practice effective weight management. Many felt apprehensive about weight gain as a result of eating five or six meals daily. Before the competition diet and after the contest was over, the women practiced “binge eating”, or consuming large quantities of food in a short time. Eleven of the thirteen women felt they maintained control and were not concerned that the behavior would continue. In fact, many of these women felt that the nutritional aspect was the greatest improvement during their training, as it taught them healthy, low-fat dieting for an extended period of time (Guthrie 272-280).
"Unlike anorectic eating patterns, this is not a starvation diet in which one experiences absolute nutritional deprivation. Their deprivation is a relative one. Food is the friend of the bodybuilder, unlike the anorectic...For the most part, except for the week or two prior to competition when some of the depletion and dehydration strategies are employed, bodybuilders are practicing good nutrition," states Bolin in 1992 (Guthrie 280). Although their goals are clearly different, bodybuilders and anorexics share similar obsessions and perform the same functions to achieve their goals (Guthrie 276).

Excessive exercise may be contraindicated for those with bulimia, another eating and affective disorder. Bulimia, a disorder that involves binging and gorging food, ranks high on the addiction scale and is closely tied to other addictions, such as alcohol and drug abuse. However, some exercise may be beneficial to the emotional states of bulemics. Twenty minutes of vigorous submaximal exercise, such as walking in this case, reduced anxiety in bulemics at a level equivalent to that achieved by quiet rest. In addition, the overall moods of bulemics were improved after exercise and quiet rest (Glazer 1-20).

Most bodybuilders find their discipline that they practice in the weight room to be consistent with the rest of their lives. When involved in intense training, bodybuilders see with tunnel vision, focusing primarily on their weightlifting and dieting and avoiding any unnecessary distractions. Intimate relationships may become difficult, strained, or even impossible as the bodybuilder must become selfish at this time. Because the body is being pushed to its unforeseen limits, the combination of training and dieting is often a tiring and grueling experience, leaving its victim moody and irritable. The bodybuilder often becomes anti-social, since it is a competitive and individualized sport, which
threatens any chance of camaraderie. Tom Kubistant, author of *Mind Pump*, describes a "Warrior's Code" that reflects a bodybuilder's efficiency when his dedication is practiced outside of the weight room, filtering into his personal, professional, emotional, and spiritual dimensions (Kubistant 159-160).

1. **Warriors are disciplined people committed to excellence.**
   Bodybuilding is a priority, and one must go the extra step.

2. **Warriors are positive people.**
   Bodybuilders must believe in themselves.

3. **Warriors view training sessions as personal training grounds.**
   During workouts, bodybuilders should conquer their fears, doubts, and insecurities. They have a purpose and should focus on accomplishing the immediate tasks.

4. **Warriors are persistent.**
   Bodybuilders enjoy striving and struggling, valuing opportunities to develop. They accept their failures and move on, learning from mistakes.

5. **Warriors live a balanced life.**
   Besides their physical dimension, the other aspects of bodybuilders' lives are congruent and consistent. He is a warrior at all times.

6. **Warriors serve others.**
   Bodybuilders give something back by teaching and assisting others.

When any type of exercise becomes all encompassing, exercise dependence becomes a realistic concern. This phenomenon compels an individual to exercise despite any consequences to experience pleasurable sensations, and both physical and emotional side effects are results of withdrawal from the activity (Smith 66). Running is the most common exercise associated with addiction (Willis 15). Severe injuries, arthritis, and damage to the immune system among other health problems are imminent threats of exercise dependence (Smith 66). Family, work, and social obligations take a backseat to daily workouts, causing an obvious lack of balance. Bodybuilding is evidently dangerous
when it is depended on as the only source of pleasure and self-esteem. This often affects those that feel low self esteem in all aspects of their lives except for the time spent in the gym, where as athletes, the bodybuilders’ self-worth springs to life. Bodybuilders are more vulnerable to emotional difficulties when they have strong athletic identities or when they are too serious about achieving size and strength (Smith 68). Those that exercise and weight train to stay fit are less prone to exercise dependency (Smith 71). A sample of professional female bodybuilders spent on the average of five to six hours daily in the gym and yet an additional six hours strategically planning workouts (Smith 68). Bodybuilders tend to socialize mostly with their own kind and even hang out at the gym when not training. A study pinpointed the social nature of bodybuilding as an area that meets their dependent needs (Smith 73).

Although many bodybuilders engage in taking steroids, the usage of such muscle-enhancing drugs does not seem to play a central role in exercise dependence (Smith 73). Bodybuilders often believe that by taking steroids in a controlled manner, the health risks will be minimized, posing little if any harm to their bodies. Steroids, or synthetic testosterone, attach to muscle cells growing muscles and increasing endurance by promoting protein synthesis and converting all materials, including fat, into mass and energy (Lowe 74). Steroid use produces excessive facial hair, large joints, a blocky waist, body acne, and a deepened voice in women (Lowe 78). Steroid users experience more personality disorders than natural weightlifters (Smith 68). Although steroid use has decreased over the years, its usage may be as high as seventy percent among bodybuilders (Lowe 78). Drug testing is solely left to the contest provider. However, many shows choose not to test due to the high expense and the fact that the crowds may
not attend a drug-tested contest in which the popular, very muscular bodybuilders refuse to participate.

"Thanks to the rigors of my training, my hands were more ragged, calloused, and cut than an long-shoreman's. Thanks to the drugs and my diet, I couldn't run more than twenty yards without pulling up and gasping for air. My ass cheeks ached from innumerable steroid injections, my stomach whined for sustenance, my whole body throbbed from gym activities and enforced weight loss. Thanks to my competition tan, my skin was breaking out everywhere."

-Former bodybuilding champion and addict Sam Fussell, who became unemployed due to his obsession (Smith 68).

As bodybuilding has become a traditional sport for men in Western culture, women have slowly filtered in, making it another heterogeneous sport. Many of these women have been athletic throughout their lives or have genetics playing in their favor providing a natural physique for building and sculpting muscle. Some have even displayed symptoms of exercise addiction previously in their lives (Lowe 21). Usually someone already involved in the sport draws women with such characteristics into bodybuilding, and they typically designate men as their mentors. Once they become involved, the women are sure to expect mixed reactions from parents, partners, and peers. Many parents are initially shocked: mothers are more likely to support her bodybuilding daughter and fathers are more likely to disapprove of her (Lowe 33). Friends are usually curious although supportive, as well as fellow gym members who understand the trials of bodybuilding and competition. Support from family and friends is vital to the bodybuilder's mental vitality during periods of mood swings and irritability. Outsiders usually respond to her with awe and disgust, and often question her sexuality.
There are many gender issues in competitive bodybuilding. Although many bodybuilding mentors are men, other men are easily intimidated by the female bodybuilder, comparing themselves to her and even taunting her. She is even susceptible to initial silent treatment from her male peers at the gym. Socially, male bodybuilders appreciate female bodybuilders, but refuse to date, marry, or even contemplate a relationship with them. This could be partly due to an overpowering male ego, where he is afraid to date someone bigger or stronger than himself. Instead, male bodybuilders typically embody the “trophy-ism” concept, in which they date petite females in order to make themselves appear larger (Lowe 36). Such a phenomenon emphasizes an obvious contrast and creates a sense of psychological and physical control.

“Bodybuilding has made me stronger both physically and mentally. It’s made me freer to be who I really am and to claim the space that is rightfully mine. Part of this has to do with building a body that is strong and powerful and has presence. Part of it has to do with feeling less physically vulnerable,”

-An elite female bodybuilder (Guthrie 277).

Although they may have similar training goals, men and women perform different roles at contest time. Men pose in a distinct, hard and fast manner in power poses such as the crab. They are more likely to grimace and yell, rarely smiling unlike their female counterparts. Their hair is cut very short and they perform to loud, thunderous rock music. Women, on the other hand, usually dance fluid, ballet-like poses to popular tunes or soft love songs. They strike seductive poses, display suggestive glances, and pull their hair up in a romantic, feminine way. Women spend a large amount of time styling their hair and applying makeup. Eighty percent of female bodybuilders receive breast
implants (Lowe 160). Although muscle implants are illegal in competitive bodybuilding, women feel they must replace the lost fatty tissue in their breasts with synthetic ones. Another large percent dye their hair or alter their noses in order to improve their appearance and self-image. Why do these women go to such extents to become feminized? Female bodybuilding has decreased in popularity over the years, because men no longer enjoy looking at their masculine bodies, and women do not desire to look like them. Therefore, female bodybuilders practice the "female apologetic", or apologizing for participating in the male domain of an athletic competition (Lowe 160). The male judges and officials ensure that the female apologetic is practiced to promise spectators and profit or else the female bodybuilders find that their incomes are cut short. The overall package of the female bodybuilder should be muscular (but not excessively), symmetrical, neat, feminine, and attractive (Lowe 127).
Test Study
METHOD

I conducted my own research study concerning bodybuilders and psychological issues. I interviewed two subjects, one male and one female, whom I will refer to as John and Jane. The two individuals were training to participate in the Mr. and Ms. Ball State Bodybuilding Competition. I prepared a questionnaire consisting of thirteen short answer and thirty-six multiple choice questions. The surveys were distributed two months prior to the competition, as well as one week before the contest date. A new questionnaire was given one week after the contest was over. The bodybuilders completed the surveys on their own time; this was not an oral interrogation. The purpose of the study was to see if certain behaviors and attitudes uncovered in case studies were consistent with my subjects, and to see if those feelings intensified or changed over time.

DATA

Two months prior to the contest:

Jane is a shy twenty-year-old who started her bodybuilding career at the age of fifteen. Inspired by her older brother, who is also a bodybuilder, Jane started to lift weights to enhance her athletic ability in high school. Experiencing pressure to succeed while growing up, she also places pressure on herself, feeling she must be the best at what she does. Jane decided to enter the contest for her love of weightlifting and to accomplish something out of life. Jane hopes to gain a better understanding of her life and achievements as a result of the contest. She now feels she is more self-assured, has a better self-image, and finds her training enjoyable. During her thirteen-week training, Jane views her diet to be the most challenging obstacle and allows one “cheat day” per week. If she eats something “out of order”, she doesn’t feel that it would severely affect
her performance. She feels that her diet is the primary factor in any emotional change she experiences. Jane finds herself slightly depressed a couple of times per week. She agrees that her social life and daily activities have been sacrificed due to the contest, and her mood swings are more frequent than before. Her relationship with her significant other has been negatively affected, but her sexual desires remain the same. Jane's spiritual life has been enhanced by the contest, and her family and friends are supportive of her sport. She describes herself as happy right now, and she is a proud, confident person, dressing accordingly to display her enriched physique.

Jane is involved in a strict weightlifting program and diet, and also incorporates several types of legal supplements daily. She consumes five to six meals per day compiling 1500-1800 calories, consisting of grilled chicken breast, lean round steak, canned tuna in water, egg whites, oatmeal, rice, potatoes, dry popcorn, and vegetables. Off-season calorie consumption is 2200-2500 calories per day. Fruits and milk are not allowed in her diet plan. Jane supplements almonds, flaxseed oil or olive oil for her fat intake. She is five foot two inches tall, approximately 140 pounds, and sixteen percent body fat. Her goal is to weigh about 120 pounds and have her body fat fall within seven to ten percent for show time. Nine percent body fat is the leanest that Jane has been able to attain in the past. Jane feels she could continue her rigorous diet for a lifetime once she is used to it, but could definitely continue to weight train in this manner forever. However, she plans to decrease her workouts and change her diet to normal after the contest. She believes that it will be easy to readjust to old habits. She does not believe that her current diet is comparable to that of an anorexic, because muscle loss occurs if
meals are skipped. Jane does not believe that manipulating the human body is ethically wrong.

Jane does not find herself tired and does not have difficulty managing her time. She does not feel that she is at her personal best at this point in all aspects. Because men develop bigger muscles and have lower body fat levels initially, Jane feels that training affects men differently from women. Although she will be able to accept it if she doesn’t win or place, Jane will be disappointed. She does not regret entering the contest and would strongly consider doing it again. Jane would not easily give up the contest if she had to.

John, a twenty-three year old describing himself as a passionate, spiritual, and aggressive individual, started his bodybuilding career in high school to become bigger and stronger for football season. Experiencing pressure to succeed while growing up, John also puts pressure on himself and feels he must be the best at what he does. He is a proud, confident person and dresses to display his physique. He claims to be happy at this point, and at his personal best. He decided to enter the bodybuilding contest to defend his victorious title from the previous year. John hopes to win the contest and achieve a “new best body”. He enjoys his training and is motivated by the idea that “knowing nothing will ever beat (him).”

During his training, which is year-round, John finds his diet and managing his time to be the hardest obstacles to overcome. He would tell someone entering the contest that “it is the hardest thing you will ever do in your life.” His diet consists of a high protein, moderate carbohydrate, and low fat content, and various kinds and amounts of supplements to help him grow. John does not claim any side effects from the
supplements. John does not believe that manipulating the human body is ethically wrong and believes that there is no comparison between his diet and that of an anorexic. He is indecisive as to whether or not cheating on his diet on any one occasion would severely affect his performance. The rigorous diet is the primary factor responsible for any emotional change John has experienced.

John’s relationship with his significant other has been enhanced during his training, being that the two are both fitness-oriented. His sexual desires tend to decrease more towards show time due to lower body fat percentages. His daily activities as well as his social life have both been sacrificed. John admits that he has had more mood swings than before, but he is not tired often. He has very supportive family and friends, and his home life is positive and stable. His spiritual life has been enhanced as a result of his training. Rarely experiencing depression, John is greatly motivated most of the time. He feels that training makes men more aggressive but makes women more emotional. He has noticed an obvious change in his physique while training. Although he will be disappointed if he doesn’t win or place, he will able to accept the situation. He doesn’t regret entering the contest and would consider entering again. He believes that he could easily give up the contest if he had to, and he feels that readjusting to old habits after the contest will be easy. He plans on decreasing his workouts and returning his diet to normal. However, John thinks he could maintain his training diet and workout as long as he chooses, due to his “total control.” John believes that as a result for planning for the contest, he has learned more about nutrition and supplementation.
One week before the contest:

At 125 pounds and 9.4% body fat, Jane is struggling with analyzing her body’s status without being able to compare herself to the other competitors. She now feels that although she could maintain her workout routine for a long period of time, she would not be able to cope with both the weightlifting and the diet at the same time. To a beginner, she advises moving at a slow pace, because rushing into shaping your body doesn’t work. She feels she could improve on balancing her life after the show, as she tends to set everything else to the side during her preparation for the show. Jane remains motivated because she knows she can compete in the show, and not everyone can do that. Right now, Jane is not concerned with winning the competition; rather, she prefers to have fun and achieve something. She is using this competition as preparation for a future show later in the year.

When analyzing Jane’s responses to the multiple choice questions, a few minor changes existed. When rating how she must be the best at what she does, Jane improved her rating from “Agree” to “Strongly Agree.” While still disagreeing with the idea that manipulating the body is ethically wrong, her rating changed from “Strongly Disagree” to “Disagree” as the contest date draws near. Jane still agreed that her diet was the primary factor responsible for any emotional change, but her rating changed from “Strongly Agree” to “Agree.” Concerning the increased mood swings since dieting and training, her ranking improved from “Agree” to “Strongly Agree.” As far as regretting her participation in the contest, Jane went from “Strongly Disagree” to “Disagree.” She still agreed that missing one day of her workout wouldn’t severely affect her performance, slightly changing her reply from “Disagree” to “Strongly Disagree.” Her depression rate
remained the same, which was one to two times weekly. There were a couple of notable major changes in Jane's replies. When reacting to the statement that she could easily give up the contest, her answer changed from "Strongly Disagree" to "Undecided." Instead of disagreeing with the fact that she was at her personal best in all aspects, she now agreed. While her relationship with her significant other was negatively affected before as a result of her training, she states that bodybuilding has had no effect on the couple’s status at the present time.

At 180 pounds and eight percent body fat, John’s responses to the questionnaire have not changed significantly from the last time. Most of his answers changed from “Strongly Agree” to “Agree” or vice versa. However, there were a few notable differences. At two months prior to the contest, John strongly disagreed with the statement “I have difficulty managing my time around workouts and planning for the contest.” With one week to go before the competition, John agrees with the same statement. At the last time of questioning, John was undecided if eating something out of order would severely affect his performance, but he currently disagrees with such an idea. John was undecided beforehand if others noted a change in his attitude, whereas now he agrees. John’s overall feelings and attitude toward the contest appear to remain consistent.

One week after the contest:

Jane’s final body fat was 9.3% and she weighed 125 pounds. She placed third in her division and plans to continue competing as a hobby, although she “would never resort to drugs just to turn pro.” Jane enjoyed participating in the contest and feels that it was judged fairly. However, Jane felt the women’s mandatory poses were very brief
when compared to those of the men. She was not disappointed with her placement and was able to accept it. Jane would strongly consider entering the contest in the future and does not regret her participation. She felt the contest affected her the most by the realization that “dedication and determination can get one anywhere in life.” Jane felt drug abuse was a problem among some contestants, but did not believe that it affected her placement, only the bodies of those who participated in the abuse. She believes that dieting and supplementation are beneficial in helping one achieve the body he or she desires more quickly if done in the proper manner. Jane also holds that competitive bodybuilding is healthy but “it can be unhealthy if one takes everything to the extreme.” She felt in control of both her dieting and training. Occasionally, Jane would feel depressed and wanted to be alone during her training period.

Currently, Jane is a happy individual who is anticipating the training for another upcoming bodybuilding show. Jane does not, however, feel her emotions are any more stable than before nor does she feel more balanced in her life. She has changed her diet back to normal and decreased the frequency and intensity of her workouts. It has been easy to readjust to old habits. Jane does agree that she feels guilty that she is not working out as hard as what she used to and she despises putting on excess weight as fat. She does not feel it is hard to be motivated to work out now; there is less pressure and she can enjoy her hobby naturally. Jane does not feel guilty about her lack of dieting and has engaged in binge eating since the contest. She does complain of withdrawal symptoms when her workouts are not as intense or when she is not dieting. On a personal level, her former boyfriend was also a bodybuilder. Jane tends to date bodybuilders, although “non-cocky bodybuilders are hard to find to date.” In summary, Jane holds that
Bodybuilding is the best thing one can do to lose weight without losing muscle. It tightens up the skin, making it appear youthful, and increases circulation. Jane believes that bodybuilding is beneficial to everyone, and its benefits are not restricted to just those that compete.

John’s final body fat was five percent and he weighed 172 pounds. Although he failed his attempt to place, John enjoyed his participation and plans to continue his pursuit of bodybuilding. He does not regret entering the contest and would strongly consider entering the contest in the future. He remains undecided about being disappointed with his placement and with the fairness of the judging, but he agrees that he can accept it. John felt that drug abuse was present at the contest but it was “not a problem.” John strongly felt he was in control of his dieting and his training, but admits at times he felt out of control or unlike himself. Since the contest, John has changed his diet back to normal as well as decreased the frequency and intensity of his workouts. John has engaged in binge eating since the contest and feels signs of withdrawal if his workouts lack the same intensity as before or if he is not dieting. He does not in any way feel guilty that he is not working out as hard as what he used to, but is undecided concerning his feelings toward his lack of diet. It has not been difficult for John to remain motivated now that he lacks immediate fitness goals. He agrees that it has been easy readjusting to old habits since the contest.

Currently, John strongly agrees that he is a happy individual. He feels his emotions are now more stable and he practices more balance in his life. John feels better now and identifies with himself more. The contest affected John the most by increasing
his self-confidence. John holds a positive attitude concerning dieting and supplements. His significant other has a very good “super model” physique.

DISCUSSION

I felt that Jane had a relaxed but serious attitude towards her bodybuilding career. Her supportive family and friends as well as her down to earth nature assisted her in undertaking the stress of her training. Although Jane struggled with her dieting, her motto “everything in moderation” helped carry her through, allowing for one “cheat meal” per week. With the exception of mild depression and mood swings, Jane maintained control of her training and herself. Her spiritual life was enhanced with her training, as well as her dedication and determination. Jane did not compare her diet to an eating disorder, as she consumed five or six small meals daily. Jane strongly favored dieting and supplementation to achieve a leaner physique at a rapid pace, as long as it was done properly. Jane easily returned both her diet and her workouts to normal following the contest, and enjoys working out in the gym more due to the lack of pressure. Jane entered the contest to expand her hobby and to “accomplish something out of life,” hoping to gain a better understanding of her life and accomplishments. Jane had a positive attitude, accepting her placement and did not regret her entry at any time. Jane did not display any visible signs of the “female apologetic.” Like many female bodybuilders, Jane was encouraged to lift weights by a male role model, her older brother, and lifted to enhance her athletic ability, also characteristic of female bodybuilders. Jane also typically dates male bodybuilders, which is non-traditional when compared to research studies and the trophy-ism concept. Jane complained that the
female mandatory poses were obviously more brief than those of the males, which may account for female discrimination present in the sport.

Because Jane had a positive mental attitude towards her training, her good-natured disposition aided her in handling its trials and tribulations. Her goal was to attain seven to ten percent body fat, and she achieved 9.3%. Because she easily resumed her former dietary and training habits, I did not feel that exercise addiction or eating disorders were problems for Jane. She does not feel any less motivated to exercise; in fact, she enjoys it more due to the lack of pressure. Although she feels guilty that her workouts are not as intense, she does not feel remorseful that she is not dieting. Dieting appeared to be Jane's weakest point in her training and could have contributed to her falling short of her goal of seven percent body fat. Jane has a healthy approach to bodybuilding, practicing everything in moderation. Because of its many physiological benefits, Jane recommends bodybuilding for everyone, not just avid competitors.

Overall, I felt that John held a positive attitude towards his participation in the contest. He had a very supportive network of family and friends, and his "passionate, spiritual, and aggressive" nature undoubtedly assisted him during his strenuous training. John appeared to be very educated and experienced in the rituals of training, although he admitted it was not easy. He felt in control of his diet and resumed normal eating habits after the contest. John did not feel his diet was comparable to that characteristic of an eating disorder. He held a positive attitude toward dieting and supplementation. John also felt in control of his workouts and decreased the intensity and frequency after the contest as well. His reasons for participating, to defend his title and to achieve a new best body, seemed innocent and realistic. He agreed that he could easily give up the contest if
he had to. However, I was concerned with John’s motivating force, “knowing that nothing will ever beat (him).” Like many bodybuilders, John was a previous athlete and began to bodybuild to become bigger and stronger. Unlike other bodybuilders, John dated someone that is also fitness oriented, rather than a petite female described in the trophy-ism concept.

I believe in the survival of the fittest. In my opinion, John was both physically and mentally equipped to handle the rigors of competitive bodybuilding. John was a typical “warrior” as described by Tom Kubistant. A positive person, John believed in himself and went the extra mile. He conquered any fears, doubts, and insecurities, focusing on his purpose. He built up an aggressive mentality within himself, armored with a muscular shield. Because he was a previous champion, John’s confidence was already present and elevated, and his experience prepared him. I did not feel that either exercise addiction or eating disorders were problems for John, given that he returned both his diet and workouts to normal after the contest. He did not find difficulty in remaining motivated to work out. He accepted his placement and is moving on, valuing and learning from the opportunity. John does not feel that competitive bodybuilding is completely emotionally and physically healthy. However, I feel confident that John will recover from any physical or mental strain of bodybuilding. John is employed as a personal trainer, giving something back by teaching and assisting others.

There are many physical and psychological issues to bodybuilding. When dieting and supplementation are added in, the complexities multiply. When practiced in moderation, any side effects should be minimal and temporary. It takes a special, confident person to be able to participate in competitive bodybuilding, one that is equally
physically and mentally strong. This person could be aggressive and motivated like John or calm and focused like Jane. Most of all, the bodybuilder should display a healthy mental attitude toward the sport, not relenting to excessive drug use (if legal, or any usage if illegal) or exercise dependence. A strong network of family and friends is helpful, but not necessary since this is an individualized, personal sport. Bodybuilding can construct a shapely, lean body, an indestructible confidence, and a sense of pride and achievement. However, the sport can also destruct the individual, turning them into addicts with a loss of self-control and self-perception. The victims can lose sight of what is important and also of those people that were once important to them. Bodybuilders can also manipulate and destroy their bodies, at times costing themselves their lives. With increasing social pressures to be lean and muscular, eating and exercise disorders, with their false sense of security and happiness, are no longer uncommon. However, bodybuilders should be mentally and physically capable to return to eating a typical diet and practicing a normal exercise program. This may initially provoke feelings of guilt and disappointment but also relief and enjoyment of life’s everyday pleasures. I firmly believe that “You are what you eat” and “Everything in moderation” are inspirations that should be engraved into the training logs of every bodybuilder.
Questionnaire used at two months and one week prior to the competition
GENERAL INFORMATION

1. Workout log
   - time of day, duration, specific exercises, weight levels, frequency
2. Dietary log
   - daily caloric intake, types and amounts of food and liquids
3. Supplements/drugs log
   - kinds, amounts, time of day taken, side effects, purpose
4. Expenses/Aesthetics
   - supplements, tanning, (anything out of the ordinary)
SHORT ANSWER QUESTIONS

1. How long have you been training for the contest?

2. When did you start working out and what got you started?

3. What made you decide to participate in the contest?

4. Besides a change in physique, how do you feel you’ve changed the most? What is responsible for this change?

5. What do you hope to gain by participating in the contest?

6. What has been the hardest part/obstacle during your preparation?

7. What advice would you give to someone beginning to train or considering to enter the contest?

8. How long do you think you could maintain this diet? This workout?

9. What areas do you feel you need to improve in your life? The contest?

10. What motivates you?

11. Compare your diet to the diets of those with eating disorders such as anorexia.

12. Describe your personality.

13. In one or two words, describe your feelings at this point concerning the contest.
MULTIPLE CHOICE

SA= Strongly Agree  A= Agree  U= Undecided  D= Disagree  SD= Strongly Disagree

1. My daily activities, such as work or school, have been affected by the contest. Positive or negative?

2. My social life has been sacrificed.

3. I enjoy training for the contest.

4. My family and friends are supportive of me.

5. I have more mood swings more frequently than before.

6. My family/home life is positive and stable.

7. I am motivated most of the time.

8. I will probably decrease my workouts and change my diet to normal after the contest.

9. I will be very disappointed if I don’t win or place.

10. I will be able to accept it if I don’t win or place.

11. I would consider doing this again.

12. I have noticed an obvious change over time in my physique since beginning training.

12. I regret entering the contest.
13. I have difficulty managing my time around workouts and planning for the contest.


15. It will be easy to readjust to old habits after the contest is over.

16. If I skipped one day of workouts, I would feel that it would severely affect my performance.

17. If I ate something out of order (ex: piece of pizza), I would feel that it would severely affect my performance.

18. The contest is something I could easily give up if I had to.

19. Others have noted a change in my attitude.

20. My spiritual/religious life has been affected by the contest. Positive or negative?

21. I feel that I am at my personal best at this point in all aspects.

22. I think training affects men and women differently. If so, how?

23. I feel my diet is the primary factor in any emotional change I have experienced.
24. I feel my workout is the primary factor in any emotional change I have experienced.

25. My relationship with my spouse/significant other has been affected. Positive or Negative?

26. I dress differently to display my physique.

27. I am a proud, confident person.

28. I experienced pressure growing up to succeed.

29. I put pressure on myself to succeed.

30. I am an aggressive person (now).

31. I am normally aggressive.

32. I find myself depressed at times. How often?

33. I think that manipulating one's body is ethically wrong.

34. I feel that I must be the best at what I do.

35. I am happy right now.

36. My sexual desires have remained the same.
Questionnaire used at one week post competition date
SHORT ANSWER

1. How did you feel that the contest affected you the most?

2. How did you place?

3. Do you believe that drug abuse (ex: steroids) was a problem in this contest?

4. What is your opinion of dieting and supplements?

5. How do you feel now that the contest is over?

6. Did you feel that the men and women were judged equally (same criteria) in this contest?

7. At any time, did you feel out of control or unlike yourself?

8. Do you believe that competitive bodybuilding is emotionally and physically healthy?

9. What are your future plans in bodybuilding?

10. Is it hard to be motivated to workout now that you don’t have an immediate goal?

11. Describe your spouse/significant other’s physique (if applicable).

12. List your final weight and body fat percentage.

13. How old are you?

14. Any additional comments.....
MULIPLE CHOICE

SA= Strongly Agree  A= Agree  U= Undecided  D= Disagree  SD= Strongly Disagree

1. I enjoyed participating in the contest.
2. I feel my emotions are more stable now that the contest is over.
3. I have changed my diet back to normal.
4. I have decreased the intensity and frequency of my workouts.
5. I was very disappointed with my placement.
6. I am able to accept my placement.
7. I would consider doing this again.
8. I regret entering the contest.
9. I feel more balanced in my life now that my training is over.
10. It has been easy readjusting to old habits since the contest.
11. Overall, I feel better and more like myself now that the contest is over.
12. I am happy right now.
13. I felt in control of my diet and my training.
14. I feel guilty if I’m not working out as hard as what I used to.
15. I feel guilty if I’m not dieting like I had been.
16. I have engaged in binge eating since the contest.
17. I feel the contest was judged fairly.
18. I feel signs of withdrawal if my workouts aren’t as intense or if I’m not dieting.
References
REFERENCES


