



National Academy of Sports Medicine

# Psychological Strategies for Weight Loss

By

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*Jane experimented with a variety of different diets promising quick solutions to her weight challenge. While initially motivated by these promises and experiencing some impressive weight loss during the first few weeks, her weight loss usually seemed to plateau around the fourth week. These setbacks began to demoralize her, lowering her motivation and belief in her ability to lose weight. Ultimately, her inability to continue losing weight triggered drastic dietary actions and behaviors resulting in her quitting and regaining the weight.*

### **Fogg Behavioral Model**

Jane is not alone as approximately 33 million Americans participate in some form of a diet each year, spending over \$40 billion annually on weight-loss products (1). The unfortunate reality is that most dieters regain about one-third of the lost weight during the next year and typically return to their pre-diet baseline within three to five years (2).

Multiple reasons are cited for diet relapses, but one cause points to a poor strategy focused primarily upon food that largely ignores exercise and activity, and more importantly, behavioral and lifestyle change. Typically these practices involve rigid diets orientated around single or specific nutrients, or the removal of specific or entire food groups that trigger enjoyable experiences. Considering how eating is a human behavior, and the fact that at a simplistic level, we are motivated by pleasurable experiences and generally avoid unpleasant experiences, it comes as no surprise to read statistics on weight loss failures. Without any attempt at understanding and modifying behaviors around eating and activity, there can never be sustained success.

While numerous models and theories exist to help understand human behavior, one model proposes that human behavior is simply a product of three factors; motivation, ability and triggers, each containing individual sub-components (3). This model, called the Fogg Behavioral Model (FBM), asserts that desirable behaviors require (a) one to be sufficiently motivated, (b) have the ability to execute a desired behavior, and (c) be appropriately triggered to perform the behavior. Furthermore, all three factors must occur at the same instant for the behavior(s) to occur.

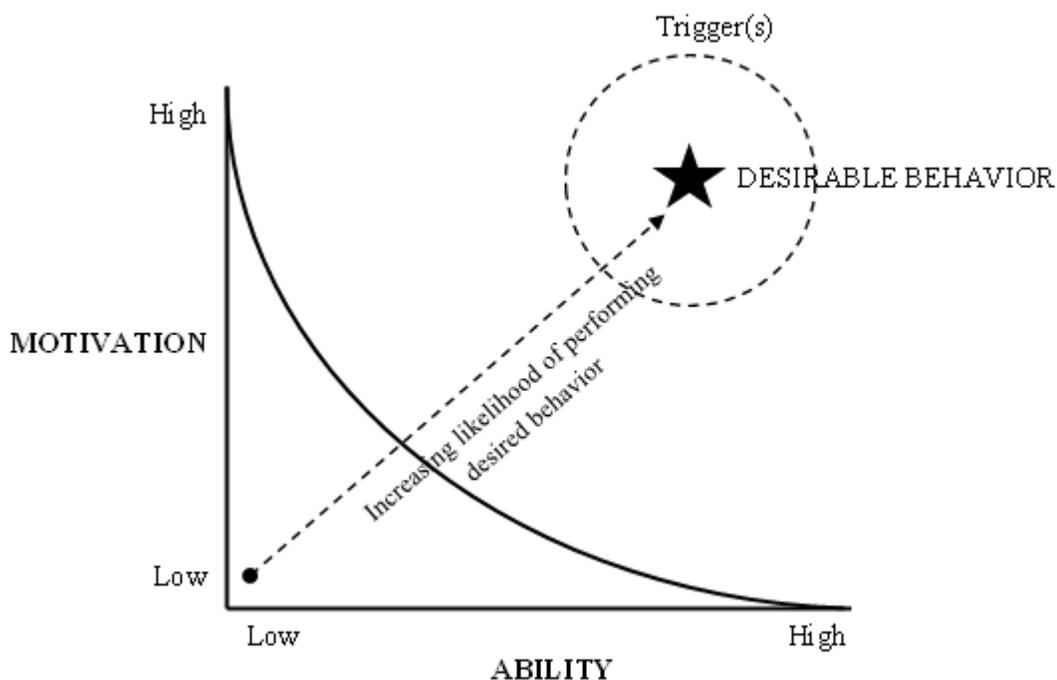
**Reflective Thought**

Reflect back upon a diet or health behavior you have attempted to adopt, but did not succeed for a sustained period of time. Using the following list, identify your primary reasons you believe may have attributed to this lack of success.

- Lack of motivation
- Too challenging or complicated
- Too many distractions
- Poor experience

Keep these thoughts in mind as you read through the next sections, which are intended to help shape the path for behavioral change.

**Figure 1. The Fogg Behavior Model**



*Ability*

Figure 1 provides an illustration of the Fogg model. To help understand this model, let's use an example of jogging for 30-minutes as a desired behavior. Jogging is a basic



movement pattern and many of us have the ability to run, our physical ability to perform this action should therefore be relatively high, positioning the desired behavior (star) in the right sector of the illustration. It is important to remember however, that ability is not simply a reflection of physical competence, but includes any variable that may impact the ability to complete a task or challenge (e.g., time, money, perseverance, etc.).

To increase levels of ability, the goal should be to *simplify* the desired behavior in terms of activity type, time commitment, cost, physical or cognitive effort required, etc. Simplicity is defined as a function of a person's scarcest resource at the moment that the behavior is triggered (3). What this means is that health and fitness professionals should strive to identify their client's scarcest resource (e.g., time, money, effort, etc.) and work to reduce those barriers to promote participation. With our example, if the individual believes that 30-minutes is too fatiguing or challenging, we may need to resort to initial actions that are more appropriate, more familiar or better enjoyed, even if they do not directly reflect the desired behavior (e.g., walking the dog 2x / week at a leisurely pace for 15 minutes initially may prove effective to helping someone start to believe they can attain a 30-minute of running 4x / week). Remember this ... behavioral change will occur more effectively with simplified behaviors rather than elevating levels of motivation.

### ***Theory to Practice.***

- *Identify what behavior you'd like to change then think how you could simplify that behavior.*
- *Identify any barriers that may negatively impact your ability to perform that task.*

### ***Motivation***

While ability is relatively straightforward, it is motivation that proves more challenging and oftentimes impedes action. It varies tremendously between people and will determine whether the star (desired behavior) is positioned in the lower right (not ideal) or upper right (ideal) sector. The challenge lies in finding ways to increase levels of motivation. In their book '*Switch*', authors Chip and Dan Heath use the metaphor of a rider on an elephant (borrowed from Dr. Jonathan Haidt – '*The Happiness Hypothesis*') (4). This analogy helps



explain the differences between, and influences of, our rational brain (rider) and our emotional side (elephant) when it comes to changing behavior. In our example, instructing an individual to run for 30-minutes is a clear, logical and simple action, and this usually satisfies the rider's needs for clear direction unless we overanalyze or overthink the process (e.g., when are we walking, what pace do we need to maintain, are there hills I need to climb, how much time do I have, etc.). This over-analysis may paralyze the rider (paralysis by analysis) and reduce the ability to perform this behavior. The key is to direct the rider with simple, clear instructions.

How we motivate the elephant is to connect the desired behavior with an outcome that evokes some kind of emotion. It may involve tying the behavioral outcome or benefits to their core values (i.e., what they deem important in life) or to an emotion or experience they value dearly. After all, when something is perceived as being important, it motivates us to act. How else do we explain why an individual who states they are pressed for time is willing wait in line, overnight for the latest release of a smart phone or tablet? Why? Because to them, at some level (e.g., convenience, social acceptance, pleasure) that technology holds value they deem important.

The takeaway message with motivation is to connect with those core values or emotions that hold importance and even relevance in a person's life (i.e., impact their life immediately or in the near future). Take time to identify which behaviors are associated with pleasure, acceptance or hope (positive approach), and start using these as a motivator initially, rather than working to eliminate undesirable behaviors by using pain, fear or rejection (negative approach). Although the negative approach is powerful, it should be used cautiously at first, to avoid building any negative associations between the desired behavior and the overall experience (thoughts and feelings). For example, if getting into shape so you can play with your kids is important, then use that as your motivator. Use a positive motivational approach initially (i.e., you will connect more closely with your kids and gain acceptance or belonging) rather than a negative approach (i.e., if I don't get into shape, I will die at a young age). While both are powerful, you're better off associating exercise with playing with your kids, rather than associating exercise with death.



### *How then do we raise motivational levels?*

- **Sensation:** *Immediate or near-immediate motivators are **pleasure** and **pain**, both being quite powerful. Exercise that leaves an individual feeling energized or euphoric will motivate continued participation whereas exercise that leaves individuals with large amounts of muscle soreness the next day can decrease motivation.*
- **Anticipation:** ***Hope** and **fear** are both anticipations of a behavioral outcome and can be more powerful than pleasure and pain as they guide many of our everyday actions. We work to earn money to spend on nice items, we visit our doctor for an annual medical in the hope of preventing morbidity and mortality, and we exercise hoping to improve health or aesthetics.*
- **Belonging:** *Social acceptance and social rejection is the third core motivator and controls much of our social behaviors (e.g., what we wear, where we work out, what car we drive, where we buy our coffee, and the vernacular or language we use with our friends). Generally, we are motivated to behave in ways that gain social approval and avoid behaviors that result in social rejection.*

### *Triggers*

Although ability and motivation represent the two axis of Figure 1, timing a trigger(s) is essential for behavioral success. A trigger can take on many forms; from a feeling, thought or physical sensation; reminder in your planner; to a friend or environmental signal.

Triggers must capture our conscious attention; they must connect with the desired behavior; and they must be timed to occur when both motivation and ability are high. For example, a reminder in your phone to stop working in 30-minutes in order to run or play with your kids captures conscious attention. The reminder is connected with the behavior - in this case exercise/activity; and if the trigger occurs at the time when the combination of ability and motivation are high, you are likely to perform the desired behavior. On the other hand, if an email pop-up comes through from someone you aren't really motivated to respond to, you have conscious awareness, you have ability to respond, but your motivation is low, therefore you may ignore the email.

### *Your Turn to Practice*

- *Using the behavior you'd like to change, reflect upon why this change is important or relevant to you, and how it connects to your core values.*
- *Next, think of positive motivators (pleasure, hope, social acceptance) and how you can use them to raise your motivational levels.*

If the trigger occurs at the time when both the combination of ability and motivation exceed the Behavior Activation Threshold (BAT), illustrated in Figure 1, then we are likely to perform the desired behavior. BAT is defined as the minimal level of ability and motivation needed to activate a behavioral response. If motivation at the time of the trigger is low, we may find that trigger to be distracting or irrelevant, and not perform the behavior. On the other hand, if at the time of the trigger our ability is low, we may get frustrated or disappointed by our inability to execute.

As mentioned, triggers can occur as prompts, reminders, cues, or calls to action, but all are catalysts that drive behavior and are most effectively used when behavioral goals are harder to attain (i.e., draining the rider's self-control). Three basic triggers exist and should be used strategically to increase motivation and / or ability above the BAT:

- **Spark triggers:** They inspire and motivate people to action, and are used best with individuals demonstrating low motivation levels. An email alert on your phone is perhaps a classic example of a spark trigger to perform an action (i.e., check emails). When trying to motivate yourself to stop working and play with your kids or complete that 30-minute run, find strong triggers that motivate such as your kids calling you, a running partner asking you whether you're ready to go, reading an inspirational quote, or even receiving a supportive email. A picture of a deceased loved one who died from complications associated with inactivity may instill fear and also motivate you (negative approach), but remember to use negative approaches cautiously at first.
- **Facilitator triggers:** They are best used with individuals demonstrating high levels of motivation, but struggling more with ability (low ability). The intent is to trigger the desired behavior by helping the individual believe the task is simple and easy to complete. For example, if you feel that 30-minutes of running is too challenging, a



trigger to build ability may be to divide the run session into three, separate 10-minute segments that can each be completed with some other activity in between.

- **Signal triggers:** These function best when you have high levels of both motivation and ability, and the trigger simply serves as a reminder to you. For example, your alarm going off to remind you to meet your best friend for happy hour down the street from your office.

The value of a trigger resides in the fact that we are preloading a decision to behave in a specific manner, or creating an *'instant habit.'* To some degree, this passes control of the behavior to the environment (the trigger), which provides the cue to action. This minimizes conscious deliberation in your mind over whether to do something or not, or the power of influence of distractions, and helps preserve the rider's self-control (i.e., protects your goals from tempting distractions or bad habits). For example, if at the time when you are supposed to leave to go run, you are overwhelmed with other distractions (.e.g., co-worker asking you to review a memo, receiving a video link from a friend); you may lose your motivation. However, if the trigger is capable of interrupting those distractions, it will keep you focused (e.g., running partner already dressed for your run walking into your office).

### ***Theory to Practice***

*Think of an individual with whom you work professionally or use your own experiences for this task. Identify particular instances where your intention was to perform a specific behavior, but for some reason you did not manage to accomplish it successfully.*

- *Do you attribute the cause to low motivational levels? In this case, identify three spark triggers you could implement to motivate you to action (positive approach preferred).*
- *Do you attribute the cause to low ability levels? In this case, identify three facilitator triggers you could implement to improve ability for action.*
- *Do you attribute the cause to perhaps forgetting or losing track of time? In this case, identify three signal triggers you could use as reminders to perform the desired behavior.*



It is also important to remember that behavioral change in adults can rarely be forced, but must happen at one's own choosing or volition. Never assume that because an individual expresses intention to change behavior that they are fully committed to the effort required to successfully make a transformation. As health and fitness professionals, we should subscribe to the *'ready-willing-able'* mentality as our guide to assess the motivation (importance) and ability of an individual for change:

- Readiness reflects commitment for change (i.e., to be motivated to put forth the necessary effort).
- Willingness reflects their desire to change and should examine an individual's ambivalence and resistance to changing behavior.
- Ability reflects the individual's belief that they can complete the desired behaviors.

### **Application of the Model**

In helping individuals change behavior, it is helpful to identify whether they are trying to change behavior just once or for indefinite periods of time. Attempting a change just once is a perfect stepping stone to more sustained behavioral change. Consider the various changes an individual may strive to accomplish:

- Adopt a new or familiar behavior just once (e.g., get a medical exam).
- Increase the intensity or duration of a behavior just once (e.g., extend your workout by 30 minutes today).
- Reduce an undesirable behavior just once (e.g., eat less bread at dinner this evening).
- Stop an undesirable behavior just once (e.g., skip dessert this evening).
- Adopt a new or familiar behavior for a period of time or indefinitely (e.g., standing more at your workstation).
- Increase the intensity or duration of a behavior for a period of time or indefinitely (e.g., become more mindful of the snacks you eat at night).
- Reduce an undesirable behavior for a period of time or indefinitely (e.g., eat less cookies and potato chips).
- Stop an undesirable behavior for a period of time or indefinitely (e.g., stop smoking).

**Table 1: Fundamental Behavioral Change Strategies with Ability, Motivation and Triggers.**

Behavioral Change	Ability	Motivation	Trigger
New / familiar* - once	Simplify task with clear explanations	Highlights benefits	*Couple with a motivational element
Increase behavior - once	Make the task easier to perform	Build intrinsic & extrinsic rewards	Couple with a motivational element
Reduce / stop behavior - once	Make the task harder to perform	Use negative approach (pain, fear, rejection)	Remove existing triggers that lead to undesirable behavior
New / familiar - ongoing	Increase to commitment to change; reduce ability-lowering obstacles (e.g., time, money, etc.)  Break down challenge into smaller steps.	Downplay demotivating factors (e.g., fear, a negative expectation / outcome )	Deliver when motivation & ability are high  Couple triggers with existing (familiar) habits
Increase behavior - ongoing	Make the task easier to perform	Build intrinsic & extrinsic rewards, with emphasis towards more intrinsic rewards.	Increase number of triggers
Reduce / stop behavior - ongoing	Make the task harder to perform	Use negative approach (pain, fear, rejection)	Remove existing triggers that lead to undesirable behavior

*\*As they are familiar with the behavior and have expectations, ability is usually not an issue. For them the challenge may be timing, so couple the trigger to coincide with times of high motivation.*

**Additional Areas of Specialization**

Although this document presents information on one behavioral model that serves to complement information presented in Module 4: Psychology of Weight Control, we highly recommend all NASM Weight Loss Specialists devote appropriate time and effort to expand their knowledge, skills and abilities in the following areas. This knowledge and

these skills will prove invaluable in helping clients and patients transform their lives through weight loss.

1. Fundamental concepts of health and lifestyle coaching.
2. Developing rapport with individuals.
3. Communication (verbal, non-verbal) and questioning skills.
4. Active listening.
5. Emotional intelligence.
6. Identifying and profiling a personality style.
7. Transtheoretical or Stages of Change Behavioral model and applications.
8. Operant conditioning; and social and individual factors that influence behavior.
9. Motivational interviewing.
10. Extrinsic and intrinsic motivation.
11. Relapse prevention; overcoming barriers.

*While working with a WLS, Jane comes to understand why she failed with her past attempts to successfully achieve and maintain her weight loss. She realizes that she never really made the commitment to this process and never fully believed in her own abilities. Her new strategy however, is one directed at a more progressive approach, beginning with simple actions that she believes she can do and actually enjoys doing. These actions are connected with values she deems important in her life and they are certainly motivating her to action. She also recognizes the need to utilize several triggers to help reduce her distractions and help her change. With this new approach, she feels more confident that she will achieve lasting success.*

### *Fundamentals of Health and Lifestyle Coaching*

In the world of customer relations, the value that products or services hold are only as good as the importance and relevance they achieve in the eyes of the consumer. In other words, if you provide a service (e.g., personal training) that only impacts a client for a few hours a week (i.e., when they think about exercise or visit the gym) the likelihood of them remaining a loyal customer or marketing your services via 'word-of-mouth' becomes diminished. However, if you can impact their life positively for 100 – 115 hours a week



(coaching) rather than being limited to just three to five hours a week (personal training), you will hold greater value (relevance, importance).

As the field of personal training merges with wellness, our menu deliverable services continue to expand to include a more multi-faceted approach that includes the multiple dimensions of wellness (e.g., behavioral, intellectual, emotional, social), which in essence resembles coaching. However, unlike training that traditionally adopts a more directive approach (i.e., leading, instructing, guiding), health and lifestyle coaching is more client-centered and founded on a principle of a non-directive approach.

Over the past 40 years, the profession of coaching has expanded from the realm of sports (e.g., strength and conditioning coach, positional coach) to business and personal development coaching, and more recently into the area where one specializes in enhancing quality of life through health and lifestyle choices (5). Health and / or lifestyle coaches facilitate psychological or emotional growth, but this is different from the therapeutic and counseling disciplines, because the clients are considered healthy (i.e. not sick). The purpose of health and / or lifestyle coaching is to help individuals move forward in whichever way they desire to move, and not to cure them. In brief, a good coach can wear many caps, but is essentially a facilitator, support-system, role model (mentor), motivator, educator, leader, advisor and counselor, and exhibits the following traits:

- Great rapport-building skills.
- Active listeners (doing more listening than talking).
- Strong communicators.
- Facilitate ideas and opportunities for change.
- Help clients find their own solutions (competency) and ask permission to direct or lead rather than assuming they can take it (6).
- Offer support (relatedness) to help individuals continue developing and achieve their specific personal or professional results or goals (self-actualization) (7).
- Always offer or present choices to individuals and enable autonomy (empowering clients with the right and ability to choose).

### References

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