# THE ROLE OF MOTIVATION IN BEHAVIOR CHANGE

# How Do We Encourage Our Clients To Be Active?

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#### LEARNING OBJECTIVES

- Understand the basics of self-determination theory.
- Develop some ideas of how to create exercise contexts more likely to support self-determined motivation.

#### **Key words:**

Self-determination, Exercise Persistence, Social Context Intrinsic Motivation, Extrinsic Motivation, Well-being

ost clients willingly come to us, so they already have an intention to exercise and we will focus on how to keep them going. As personal trainers, group exercise instructors, or lifestyle coaches, motivation is one of our key roles, but it is also an area where we receive the least specific education. This may be due to the complexity of motivation itself, as well as its complex role in behavior change and maintenance.

An overwhelming number of textbooks and articles have been written on motivation, and practitioners have to grapple with how to choose and apply motivational theories. A theory is a set of assumptions about key variables and their relationships that help us explain and predict behavior. Settling on one theoretical approach can be useful in guiding practice by allowing professionals to develop a deeper understanding of that approach over time and discovering new ways to put the particular theory into action.

#### WHAT IS MOTIVATION?

A useful definition of motivation comes from Ed Deci, Ph.D., and Richard Ryan, Ph.D. (1), the authors of self-determination theory. Motivation concerns energy, direction, and persistence. Motivation is the energy that directs our behavior. That energy can come from different sources. We can be motivated to pursue outcomes we want such as a pay check or a better body. We can be motivated to avoid outcomes we don't want such as pain, boredom, or criticism. We also can be motivated to do things because we like and enjoy them. These examples reflect the direction of motivation. That is, are our efforts directed toward avoiding something or doing something? From a selfdetermination perspective, it is both the "amount" of motivation we have and the quality of that motivation that is important. We are interested in the quality of motivation that is most likely to result in exercise persistence. Lots of things that can get people started exercising will not necessarily keep them going for the long term.

#### THE SELF-DETERMINATION CONTINUUM

Self-determination theory proposes a continuum. The self-determination continuum represents the idea that our motivation can be of a more extrinsic quality or of a more intrinsic quality, with several intermediate steps along the way. The lowest point on the continuum is amotivation. This is when a person does not even know why he or she is engaging in a behavior and sees no personal relevance in it. The next point is external regulation, when

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people engage in a behavior only for some outcome separable from the behavior itself. They still see no personal value or relevance of the behavior; they only do it to get something else such as payment or a reward. Reasons like losing weight are external. This is something we get because we exercised, whether or not we liked the exercise itself. Next is introjected regulation, when a behavior is performed to avoid guilt or shame or due to pressure from others. These are "should" reasons and might include "I should exercise more, it would be good for me" or "my spouse thinks I should exercise more." Then we come to identified regulation, when the exerciser values the behavior and its outcomes but still does not actually enjoy doing it. This includes reasons like "exercise is a key part of my healthy lifestyle," but there is no "should" or guilt. The next level is integrated regulation, when the person exercises because it is a part of his or her identity and is congruent with his/her life goals and core values (7). So a person thinks "I am an exerciser" or "I am an active person." Finally, internal (or intrinsic) regulation is when a person exercises only for the value and enjoyment of performing the behavior itself. They like exercise and do it for its own sake and not because of what they might get as a side effect. Many fitness professionals will exercise just because they like it. These terms are presented and further described in the Table.

These different qualities of motivation are associated with worse to better behavioral persistence and with worse to better psychological outcomes such as wellbeing and personal satisfaction (1). It is possible for a single behavior like exercise to be simultaneously motivated by all of these qualities of motivation. It is our job to try to focus more attention on the motives further along the continuum in terms of self-determination. That is, whereas everyone might have a bit of "I exercise to look better" going on, we want the primary reason to be "I exercise because I want to, I think it's important, and I like it." These are the motives most likely to be associated with positive outcomes like better persistence and feelings of personal satisfaction (6).

In a research summary, Professors David Markland and David Ingledew (3) reported that people who begin exercising for external reasons like weight management have more body dissatisfaction, regardless of their actual body size (especially women), lower self-esteem, and lower adherence. Weight loss and improving appearance, which are external regulations, are common reasons for beginning exercise, so we have work to do to focus our clients on more self-determined reasons! This might be especially true for individuals who are reluctant to begin exercise; they will often think about beginning for external motives like weight loss. We have found, however, that exercisers reporting identified regulation do almost as well as those reporting internal regulation in terms of well-being and satisfaction (9,10). We think it's possible that many people might never come to actually enjoy exercising, but they can

come to value it. If people can come to value exercise and think of themselves as exercisers instead of using exercise to achieve an external, separable goal (like weight loss), it might be sufficient to produce enduring, personally rewarding exercise and, of course, physical health benefits. People will often hang on to a weight loss goal, but it's important to focus on other goals that are more internal like enjoyment to achieve longterm adherence.

#### **HOW DO WE INFLUENCE THE QUALITY** OF THE MOTIVATION?

The self-determination continuum is underpinned by the extent to which people experience the satisfaction of three basic psychological needs: competence, autonomy, and relatedness (1,5,9). The theory proposes that by targeting these three needs and by developing contexts that satisfy them, we can produce more self-determined motivation. The need for competence is satisfied when people feel effective in the behavioral context. They feel they can control outcomes and experience success. The need for autonomy is satisfied when people feel that they have personally endorsed or chosen the behavior and do not feel pressured or controlled by others. The need for relatedness is satisfied when people feel connected to and appreciated by others in the behavioral context. They don't feel out of place or socially excluded.

Most fitness professionals are good at explaining to people that exercise is good for them and are excellent at teaching people how to do exercises, particularly one on one. This is where most professionals stop. We tend to focus on competence but perhaps a bit too narrowly, and we do not develop autonomy or relatedness. In fact, in our zeal to convince people that they should exercise, we might (for all the best reasons) actually be undermining need satisfaction and producing introjected rather than identified regulation. In our experience, we have heard professionals say to each other and, more unfortunately, to clients "if it was important enough, you'd do it." Such statements come across as unsympathetic and controlling to new exercisers with full-time jobs and family commitments. The clients probably do think exercise is important but they are unskilled at balancing all the various commitments in their lives, and exercise will generally lose when competing against the needs of children, for example. Similarly, stressing weight loss or appearance related goals might be associated with higher body dissatisfaction and lower self-esteem (3). Focusing on doing the behaviors themselves, health, and identity motives are better than focusing on expected outcomes.

A reluctance to exercise might reflect feeling incompetent or socially excluded. An approach such as "clearly this is important to you, so let's discuss why it's difficult to accomplish" might create a better opening for clients to present their real concerns. Such an approach is autonomy supportive,

TABLE: Examples and Descriptions of the Qualities of Motivation

Quality of Motivation	Amotivation	Extrinsic Motivation				Intrinsic Motivation
Type of regulation	nonregulation	external regulation	introjected regulation	identified regulation	integrated regulation	intrinsic regulation
Quality of behavior	completely controlled	externally controlled	internally controlled	mixture of external control and internal values	behavior is seen as consistent with personal goals and values	completely volitional; internally controlled
Description of regulation	basically a complete lack of motivation to perform a behavior; no value seen in activity at all; sometimes happens when activity is forced (e.g., PE classes)	behaviors performed for reasons not related to the behavior, like payment or valuable rewards or social recognition or improved physique	behavior is based on internally managed rewards such as feelings of pride or avoiding feelings of guilt for not doing a behavior	behavior is based on personal value of the purpose and outcomes	behavior is associated with identity; behavior is more stable	behavior is performed for enjoyment and no other reward or outcome external to the actual performance of the behavior
Long-term effects in exercise	associated with negative outcomes such as negative self-image, negative emotions	sometimes useful for short-term adherence but not long term; associated with dropout and negative emotions	useful for short-term adherence; not associated with positive emotions or positive self-image	associated with good long-term adherence and some positive emotions like personal satisfaction	associated with good long-term adherence; associated with positive self-image and self-congruence; feeling "together" and consistent	associated with best long-term adherence, very positive outcomes including fun and enjoyment, high personal satisfaction, and feelings of vitality
Example motives	I would not do this if someone didn't make me or if I had a choice	to look good; to lose weight; to get a reward (like a free TV for joining)	because I think I should; because I feel guilty if I don't; to avoid disapproval	for personal values like good health; to increase strength and fitness (which are still separable outcomes from the exercise itself)	because it's consistent with my self-image; "I am an active person"; "I am a healthy person"; "I am an exerciser"	because I love exercise; it's fun and I feel great when I exercise
Competence?	do not feel at all competent	feel a little competent	feel a little competent	feel competent	feel competent	feel very competent
Autonomy?	no autonomy; no sense of having chosen to do the behavior	very little autonomy; reason for doing the behavior is outside the self; to get something	very little autonomy; reason for doing the behavior is to please others	moderate autonomy; feel sense of having chosen to engage in the behavior	high autonomy; definitely chose to engage in the behavior	very high autonomy; would choose to do this behavior anytime
Relatedness?	no relatedness; do not feel connected to others in context of behavior; possibly feel alienated or unwelcome	very little or negative relatedness; do not feel connected to others in context; feel pressured to be in context	very little or negative relatedness; do not feel connected to others in context; feel pressure from others to be in the context	positive relatedness; feel connected to others in context; sense of belonging	more positive relatedness; feel meaningfully connected to others in context; feel comfortable and feel belonging	high relatedness (mostly but not strictly necessary for runners, e.g., others in context might not matter); for group situations; feel meaningfully connected to others in context
Things the instructor can do to support these motivations	force people to participate; give no explanations; provide a controlling atmosphere	focus on external motives: weight loss, looking good, getting a date, proving themselves	focus on social pressure and guilt; "won't your partner be impressed if you do this"; "you'll feel bad if you don't finish"; "you'll feel good if you do finish"; these are external contingencies	focus on personal values; "exercise promotes health"; "exercise increases your strength"; "exercise is a good activity"; you feel good when you exercise	focus on personal identity; "think of yourself as an exerciser"; "you are a health-conscious person, health conscious people exercise"	focus on fun and enjoyment of actually performing the exercise

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encouraging clients to make their own decisions and supporting them when they do so. The value-laden assumption that "it's not important" undermines the client's autonomy and reinforces extrinsic social pressures to exercise (so the client feels guilty for not exercising and for disappointing their instructor). It also undermines relatedness; it's hard for clients to build up a good rapport with a person they think is judging them negatively. Finally, the client will feel forced to choose between exercise and the competing alternatives rather than feeling supported in finding ways to make the alternatives more complimentary. It's not hard to see that a person, who feels somewhat incompetent and unrelated in an activity context (that she/he doesn't enjoy that much) and who knows she/he will be judged negatively for missing sessions, would be unlikely to return after an attendance lapse. So, we want to create an environment that supports the client and does not produce motivation founded on guilt.

Where more competence (perceived effectiveness) by the client might be required is in regularly scheduling their exercise and finding alternatives when they find it impossible to engage in the optimal exercise session. It's important to remember that we want clients to exercise regularly and that not being able to do the exercise is seldom the barrier; more often, it's that they can't find the time, dislike the context, or feel bad about themselves while they're exercising. Try discussing clients' overall exercise plans and offer ideas for them on how to manage their schedules better; acknowledge that many people struggle with steady attendance when adopting regular exercise. Also, by discussing actual exercise frequency, it becomes possible to help the client develop a realistic understanding of the kind of progress he or she might expect. Progress needs to be expressed in behavioral terms (e.g., sessions completed), things the client can control. If a client can only reliably exercise twice per week, his/her progress will be slower than that of someone who exercises more frequently. A lack of understanding of training effects and timelines might result in a focus on more extrinsic motives (I'm not getting the body I want; this is not working), as well as an undermining of relatedness (I don't fit in, these people are making better progress than I am). Developing a task-oriented focus rather than an outcome-oriented focus is more in line with identified and integrated motivations, which are more self-determined and so more likely to lead to persistence.

Reminding clients that others in the exercise context are like them is one step toward satisfying their need for relatedness. New exercisers often feel isolated. Especially if they are not working with a personal trainer, they might find they don't know what to do with weight-training machines for example, and this undermines both their competence (I don't know what to do) and their relatedness (I don't want to look out of place). New members need to be introduced to how equipment is used and how to get instructions if they forget. They need to know

the local social etiquette, including equipment sharing procedures, equipment cleaning, and standards of dress. Fitness center employees and other regular patrons might be able to help out the new exercisers if they have any questions. The other regular patrons can often share stories of what it was like when they started out and some strategies they used to keep going.

#### CHANGING THE QUALITY OF THE MOTIVATION:

It's also worth inquiring about the quality of the motivation. Why are they there? Starting to exercise because they think they should or will feel guilty if they don't are examples of introjected motivation (1). Watch for body-related motives because these are associated with worse well-being unless they are accompanied by some more internal motives like enjoyment and personal satisfaction (3). Yet, body-related motives are among the most common reasons for people to begin an exercise program (10). Research shows that people who begin exercising for predominantly external reasons (*i.e.*, they don't have any internal reasons) are more likely to drop out and also are less likely to experience positive outcomes such as feeling good about themselves and the exercise (1,3,9,10). Health and enjoyment related motives are associated with better persistence and satisfaction, so we need to encourage those.

Motivationally, we want people to get to a point where they want to exercise because they think it is important. This is identified motivation. We want to help clients focus on health and fitness goals as well as behavioral goals (i.e., actually doing the exercises or attending a certain number of sessions per week). Giving them a realistic timeframe and behavioral goals to guide their self-evaluations, we can promote valuing of the activity for its own sake and move away from external motives (like what they'll get out of it). Markland and Ingledew (3) have found that having some external motives does not undermine self-determination as long as there also are internal motives. So, helping clients focus on feeling good after exercise and using those feelings to help them through pre-exercise inertia (difficulty getting up and going) instead of focusing on looking good or should motives will support identified regulation. Finally, professionals can develop integrated regulation by encouraging clients to think of themselves as exercisers or "recreational athletes" and to incorporate this thinking into other aspects of their lives. For example, an exerciser would choose active leisure (e.g., walking and talking rather than sitting and talking) and would give priority to exercise when possible. This will increase the probability that the new exerciser will feel self-satisfaction after exercising because it is congruent with his/her sense of self (5).

The fitness professional's role is to help people transition from "should" to "want to" motivation. It's not enough to teach people what to do. Based on the research available, it's also important to pay attention to the fit of exercise in the person's whole life. Help them with scheduling challenges by offering activity alternatives that the person is capable of and has access to. Also, and perhaps most crucially, it's important to create an environment where new exercisers feel comfortable and supported. Pay attention to the social aspect. People don't want to feel or look out of place compared to others in the context. Unfortunately, it's far easier to undermine motivation, particularly in the early stages of behavioral adoption, than it is to bolster it. Professor Mark Leary, who studies self-presentation, has found that just one bad experience can undo hours of hard work by the professional and the client because the motive to avoid embarrassment is a very strong one (2).

In efforts to avoid negative social evaluation, Dr. Kathleen Martin-Ginis and her colleagues (4) have found that new exercisers will wear baggy clothes and stand at the back of classes. These strategies can actually undermine motivation because the new client can't see or hear well, and the baggy clothes might hamper movement, resulting in the client feeling hot and uncomfortable, exacerbating negative feelings. An unsatisfying experience results because there was no offsetting effect of at least mastering some of the exercises.

#### Competence & Relatedness — a case study

Jamie went to a new fitness class. She had been active a year or so ago, but her activity had lapsed because she had a baby. Jamie had gained some weight and was less fit than before having the baby, but she still thought of herself as an exerciser and was confident she could do what was required. Her first session at her new class was stressful. It was clear that all the other participants were regulars and knew the instructor well. Jaime, who started at the back of the class, couldn't see that well and found the instructor's cues difficult to interpret and also difficult to distinguish from each other. Some of the exercises were too hard for Jamie and the instructor did not offer alternatives. The music was loud, so she couldn't hear well either. She felt out of place because the others all followed along fine. She felt incompetent because, even though she felt she could do the exercise, the instructor was so hard to follow; she was unable to perform to her own expectations. The instructor looked at Jamie a few times in the class and spoke to her one time saying "keep trying, you'll get it." She felt embarrassed, and her personal competence was undermined; maybe she was in worse shape than she thought. Jamie didn't go back to that class. The instructor could have avoided this situation by sympathizing with the client (supporting relatedness), introducing her to a regular class member (regulars are often happy to help; it makes them feel important and included), and suggesting a place to stand where she can see and hear. At the beginning of the session, instructors should introduce themselves and others to the new participants, provide the group with some general guidelines, let them know what equipment will be required, and describe any typical cues they use. Instructors should go over tricky moves or steps in progressions or in a slower sequence (perhaps as part of the warm up) and let participants know when water breaks will be given. Make sure that communication is clear and understandable. Instructors need to remember that even experienced exercisers can struggle in a new class setting.

#### What Can We Do To Motivate Our Participants?

- Try to understand why the new participant is there
  - Is it a should or external motive? Try to shift the client's focus to a value motive
  - Focus on integrating the exercise with the client's sense of self
- Create a context where there are opportunities to experience competence, autonomy, and relatedness
  - Competence
    - Put new exercisers in positions
      - Where they can see and hear
      - Where the instructor can unobtrusively take a moment to direct them
    - Celebrate meaningful successes
      - Don't overemphasize trivial accomplishments
    - Use clear and appropriate communication strategies
      - Review acoustic requirements
      - Use clear language and avoid jargon
    - Be respectful of the person's efforts
      - Identify reasonable progress trajectories based on the amount of effort the client is willing/able to expend

#### oAutonomy

- Give choices and options
- Relate the exercises to the client's goals
- Avoid coercive and controlling encouragement

#### Relatedness

- Introduce the person to other clients, participants etc.
- Give tips and instructions on the expected behavior in the context including the proper etiquette
- Communicate understanding of the client's perspective

#### **BOTTOM LINE**

Motivation is energy, direction, persistence, and the quality of the reasons supporting that energy. We need to pay attention to factors that create opportunities to feel competent (performing the exercises as well as managing the overall behavioral plan), feel related (connected to and understood by others in the context), and autonomous (that he or she endorsed both being in the context and the specific behavioral path). We want to encourage more identified and integrated reasons and downplay external reasons to exercise.

#### **SUMMARY**

Fitness professionals are very good at teaching people how to do exercise but spend much less time helping clients verbalize their behavioral goals, understand why they have these goals, understand what motivates them, and explore how these goals

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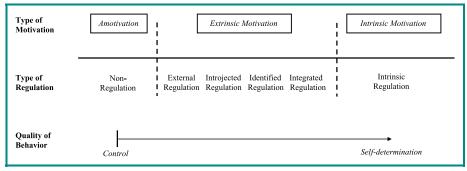


Figure. The self-determination continuum based on Drs. Ryan and Deci (6).

can be accomplished within their lifestyle. The other role of a fitness professional is to construct an exercise context that makes people feel comfortable and give them opportunities to experience competence, feel autonomous, and relate to others. We want to help them want to come back (or at least not want to avoid exercise altogether). These strategies are only some examples of how self-determination theory can be used to guide practice (Figure).



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#### References

- Deci EL, Ryan RM. The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. *Psychol Inq.* 2000;11(4):227–68.
- Leary MR. Motivation and emotional aspects of the self. Annu Rev Psychol. 2007;58:317–44.
- Markland D, Ingledew DK. Exercise participation motives. In: Hagger MS, Chatzisarantis NLD, editors. *Intrinsic Motivation and Self-Determination in Exercise and Sport*. Champaign (IL): Human Kinetics; 2007. p. 23–34.
- Martin KA, Leary MR, Rejeski WJ. Self-presentational concerns in older adults. Implications for health and well-being. *Basic Appl Soc Psych.* 2000;22(3):169–79.

- Reis HT, Sheldon M, Gable SL, Roscoe J, Ryan RM. Daily well-being: the role of autonomy, competence and relatedness. *Pers Soc Psychol Bull*. 2000;26(4):419–35.
- Ryan RM, Deci EL. Active human nature: self-determination theory and the promotion and maintenance of sport, exercise, and health.
   In: Hagger MS, Chatzisarantis NLD, editors. *Intrinsic Motivation and Self-Determination in Exercise and Sport*. Champaign (IL): Human Kinetics; 2007.
- Sheldon KM, Elliot AJ. Goal striving, need satisfaction, and longitudinal well-being: the self-concordance model. *J Pers Soc Psychol.* 1999;76(3):482–97.
- Vansteenkiste M, Simons J, Lens W, Sheldon KM, Deci EL. Motivating learning performance and persistence: the synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *J Pers Soc Psychol.* 2004;87(2):246–60.
- Wilson PM, Rodgers WM. Self-determination theory, exercise and well-being. In: Hagger MS, Chatzisarantis NLD, editors. *Intrinsic Motivation and Self-Determination in Exercise and Sport*. Champaign (IL): Human Kinetics; 2007. p. 101–12.
- Wilson PM, Rodgers WM, Fraser SN, Murray TC. Relationships between exercise regulations and motivational consequences in university students. Res Q Exerc Sport. 2004;75(1):81–91.

#### CONDENSED VERSION AND BOTTOM LINE

Motivating clients to engage in exercise regularly is one of the most challenging aspects of being a fitness professional. There are many theories that address motivation, but each one is sufficiently complex and important to be addressed separately. We will address one motivational theory, self-determination theory by Drs. Ed Deci and Richard Ryan (1). Self-determination theory proposes that by focusing on the quality of people's motivation, as well as the motivational characteristics of the exercise context that we provide, we can produce kinds of motivation that are more likely to result in enduring behavior and positive psychological outcomes such as personal satisfaction and wellbeing (8). Using this theory to guide practice can help fitness professionals motivate their clients to keep exercising.