

CHANGING THE QUALITY OF MOTIVATION OVER TIME IN HEALTH AND FITNESS SETTINGS

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Apply It!

- Try to understand your clients' motivation by asking *why* they exercise
 - o Your clients should feel understood
- Listen carefully to your clients' barriers while trying to establish an exercise routine and ask about exercise facilitators
 - o Your clients should feel accepted rather than judged
- Help your clients establish meaningful bridges between what they find important, what they value, and what they want to accomplish
 - o Your clients should start to personally value and discover new meaning for exercising
- Provide optimal challenges
 - o By offering exercises that are suitable for their competence, your clients will feel more confident in their own abilities and will seek progress to new levels of competence

Key words: Self-determination Theory, Exercise Behavioral Regulations, Motivational Dynamics, Need-Supportive Climate

Most people are not engaging in physical exercise at a level consistent with current recommendations (5). Although the numerous health benefits of regular exercise are well known, for many inactive or irregular exercisers, this knowledge is insufficient to ensure long-term persistence. Although some people do not intend to exercise at all, others express some personal motivation to exercise, yet fail to sustain it over time. To understand exercise behavior, both the quantity and quality of a person's motivation should be considered because it is not only a matter of a lack of motivation (*i.e.*, the person does not see any reason to exercise, or feels that he or she is not capable of doing it properly), but also of differing *types* of motivation that influence exercise behaviors. It is easy to comprehend that beginning to exercise to please others (or even due to internal pressure in the case of guilt) will have potentially different consequences than exercising because it is interesting, fun, or challenging. In the case of the former, the probability of sustained exercise adherence is unlikely, unless something changes and the person finds exercising meaningful (*e.g.*, "while at the gym, I discovered an indoor cycling class that I enjoy doing... I liked the instructor; he or she made me feel good about my skills and challenged me in a good way. He or she also cared about my doubts and fears... I will definitely continue to attend this class"). This article will focus on how individual reasons/motivations for exercise may change from exercise initiation to persistence and how health and fitness professionals can support their clients throughout that process.

Both quantity and quality need to be considered to understand exercise behavior because both the extent of motivation and type of motivation influence behavior.

UPS AND DOWNS IN MOTIVATION TO EXERCISE

Sustaining physical activity and exercise has been shown to be highly challenging, with exercise research over the past 30 years reporting that up to 50% of exercise initiators drop



CHANGING MOTIVATION OVER TIME

out within three to six months (3). The success or failure of individuals to adhere to an exercise routine is down largely to their motivation, whereas one's motivation to begin and persist with exercise is multidimensional and dynamic in nature (1). These *motivational dynamics* can be described as the processes by which individual reasons to initiate and/or sustain an exercise routine change over time (15). Ideally, these fluctuations in motivation would result in stronger internalization, wherein the individual reasons for exercising become “part of the self.” A strong internalization of a given behavior is desirable because the more a behavior is internalized and integrated, the more likely it is to be maintained over time (2).

Motivational dynamics can be described as a process in which individual reasons to begin exercising fluctuate over time (15).

There are many different reasons that underlie exercise initiation and persistence, although not all of these motives will ensure sustained behavior in the long run. It seems, therefore, that not all personal reasons to exercise truly are self-chosen and deeply committed to (*i.e.*, “I want to exercise”) but rather self- or other-imposed (*i.e.*, “I should exercise”). In other words, not all personal reasons to exercise are of the same motivational quality.

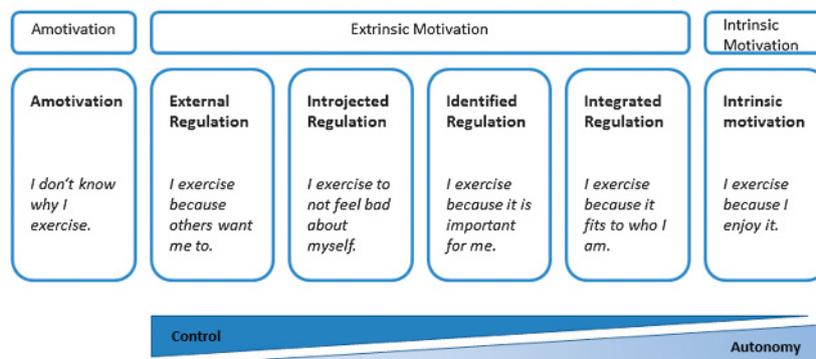
UNDERSTANDING REASONS FOR EXERCISING FROM A SELF-DETERMINATION THEORY PERSPECTIVE

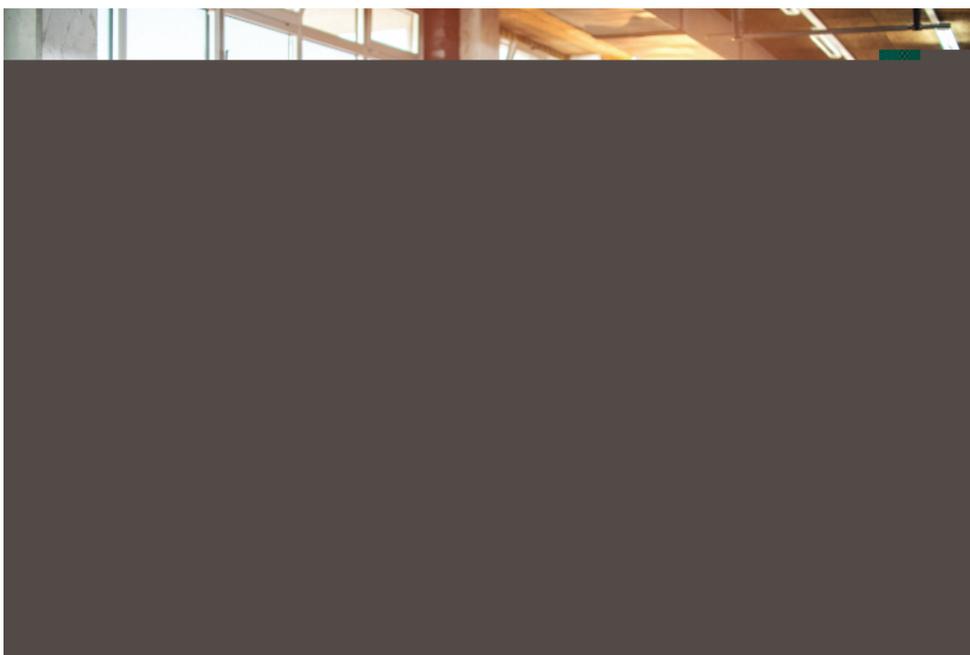
Deci's and Ryan's Self-Determination Theory (SDT) (2), a contemporary theory of human motivation, presents a suitable

theoretical framework for investigating the various reasons people have for engaging or disengaging in exercise and the extent to which these reasons are their own or imposed (*i.e.*, degree of internalization). The theory assumes that different types of motivation (or reasons) lie on a continuum that varies in the degree of self-determination or autonomy (Figure). From the lower end of the continuum, the motivational types are as follows: *Amotivation* reflects a lack of intention to engage in exercise (*e.g.*, I don't know why I should exercise). *External regulation*, a quite controlling type of motivation, refers to exercise engagement that occurs to obtain external rewards or to avoid punishment (*e.g.*, I exercise because I don't want to upset my physician). *Introjected regulation*, a slightly less controlling type than external regulation, reflects engagement in exercise that occurs because of internal pressure and feelings of guilt and shame (*e.g.*, I exercise because otherwise, I would feel guilty). *Identified regulation*, a fairly autonomous type of motivation, represents exercise engagement that occurs because of a perceived meaningfulness and valuation of exercise-related outcomes (*e.g.*, I exercise because it is important for me to feel energetic). *Integrated regulation*, an even more autonomous type, reflects exercise engagement not just because of its importance but also because exercising is congruent with important individual values (*e.g.*, I exercise because it is a part of who I am). Finally, *intrinsic motivation*, the most autonomous type of motivation, represents exercise engagement that occurs because the activity itself is inherently pleasurable, challenging and meaningful (*e.g.*, I exercise because it is “my moment”; because it challenges me; because it is fun). As mentioned previously, these differing types of motivation (regulations) are situated along a continuum of relative autonomy (Figure). The greater the relative autonomy of one's behavior, the more likely the person is to maintain the behavior (even in the face of barriers), to have more positive experiences regarding an activity, and to perform better (2).

Figure. The self-determination continuum shows the six behavioral regulations. Although perceived control is high on the left side of the continuum, it decreases the more behavioral regulations become internalized (toward the right side of the continuum) and are being perceived as autonomous.

The Self-Determination Continuum





In addition, SDT assumes that the continuum is supported by the extent to which the three basic psychological needs for autonomy, competence and relatedness are satisfied. The *need for autonomy* is satisfied when people feel they are the origin of their own behaviors, (e.g., I choose to exercise). The *need for competence* is met when people perceive that they effectively interact with the behavioral context (e.g., I am good at exercising). Lastly, the *need for relatedness* is satisfied when people feel connected and cared for by others in the behavioral context (e.g., I feel accepted and related to others). Furthermore, according to SDT, the social context (e.g., a fitness class) can either support or thwart these needs and therefore determines how autonomously regulated one is toward a given behavior. Thus, to the extent that a client feels his or her psychological needs for autonomy, competence, and relatedness are supported (e.g., in a discussion with an exercise instructor about modifying his or her exercise plan), the client feels self-determined regarding exercising (7).

HOW DOES MOTIVATION CHANGE FROM EXERCISE INITIATION TO PERSISTENCE?

Quite frequently, the behavioral regulations of health behaviors such as exercise occur *outside* rather than *inside* a person, especially in the initial weeks of the behavior. External agencies, which could include physicians, instructors, friends and family, remind us, offer advice, or even urge us to be more physically active, while at the same time exert some kind of social pressure (or social control) on us. This *social control* can be particularly detrimental when the drive to respond to it is predominantly associated with obtaining rewards, avoiding punishment, or to obtain the approval of others and maintain one's self-worth. Social control, however, also can occur implicitly (i.e., without awareness).

A prime example of this is complying with previously learned societal rules and norms (e.g., being fit and lean). Furthermore, apart from relying on external (i.e., external regulation) or internal (i.e., introjected regulation) pressures, socially controlled motivation does not reflect a clear appreciation of the behavior itself. The behavior is simply seen as a means to achieve/avoid certain externally regulated incentives/pressures or to avoid internal discomfort.

Many people engage in exercise, and sometimes persist with it, not because they inherently enjoy it, but rather because they have something to gain from it (e.g., improved appearance) or want to avoid an unfavorable outcome (9). This internally perceived pressure also might slightly increase within the first few months of exercising (15). Pressure, whether external or internal, represents a very strong motivator, and experiencing a “bad conscience” or receiving advice from a significant other can be quite energizing, not least because people have a natural tendency to reduce unpleasant feelings such as guilt and shame. Nonetheless, although pressure might be motivating for a time, the cessation of this pressure (e.g., an urging physician, the worried wife) or the failure of the pressure to be internalized will likely result in the cessation of the exercise behavior. Moreover, research has shown that exercise behavior that is purely based on controlled regulations is associated with maladaptive outcomes such as lower self-esteem, negative affect, and feelings of shame and guilt (2).

It is not yet entirely clear why some people sustain their exercise behaviors whereas others do not. When experiencing the positive effects of exercise, such as feeling full of energy, people might continue to exercise because they value these exercise-related outcomes, rather than because they think they should exercise. At the point at which people experience this shift in their

CHANGING MOTIVATION OVER TIME

motivational focus and establish a personal and meaningful connection with the exercise behavior and its outcomes, they develop a different type of motivation that is no longer characterized by external or internal pressures.

YOU DON'T HAVE TO LOVE IT: HOW HEALTH AND FITNESS PROFESSIONALS CAN PROMOTE CHANGES IN MOTIVATION

It seems that different types of motivation (*i.e.*, controlled and autonomous) operate simultaneously in motivating us to act, although the variation in their endorsement is dependent on the situation we are in. The behavioral context (*i.e.*, the context in which exercise is engaged in) also needs to be accounted for when explaining shifts in motivation. Indeed, the context can either facilitate or impede the development of more autonomous motivation by either supporting or thwarting the basic needs (2,14). Furthermore, persistence and dropout also are influenced by the interplay of need-supportive/thwarting contexts and behavioral regulations (13).

Previous issues of this journal have been devoted to illustrating exactly what health and fitness instructors can do to create need-supportive contexts that support their clients in further integrating personal reasons for exercise into their sense of self (4,6,8). All of these issues highlight the importance of firstly establishing why a new exerciser wants to exercise. Understanding the *why* (or *whys*) behind an exerciser's motivation is essential to effectively manage the various motivational reasons to exercise. Making an initial "motivational diagnosis" represents an important step to select the most effective strategies to support clients in becoming more self-determined. We will now discuss

specific examples of how instructors can optimally support clients' motivation based on their reasons for exercising.

Understanding the why (or whys) underlying the exerciser's motivation is essential to effectively work with clients' various motivational reasons to exercise. Making an initial "motivational diagnosis" represents an important step to select the most effective strategies to support clients in becoming more self-determined.

Working with clients who display controlled reasons to exercise: Clients who are predominantly motivated by controlled motivation are subject to pervasive internal or external pressures, which can inhibit the establishment of a connection between the person and the exercise behavior. Clients who hold controlled reasons for exercise may look at exercise behavior as a "chore" that they have to complete; thus, it is especially important to help these clients find personal meaning associated with exercising. However, it is not enough to simply explain the benefits of regular exercise because this will only have a marginal impact; there also must be an individualized rationale for exercising provided. For example, if a client struggles with poor sleeping patterns (insomnia), highlighting that exercise has proven benefits for sleep quality





will be more helpful than offering the full range of benefits. An important strategy in this regard will be helping the client establish a meaningful connection between what is important to him or her, what he or she values, and what he or she wants to accomplish (not only in terms of health but also for life in general). For example, if a client states that he or she was offered a new job position involving a lot of responsibility, simply raising the question “In what way can going to the gym help you with this new challenge?” can induce important reflections regarding the role of exercise, helping him or her to attach new meaning to exercise (“it would help me to manage the stress”; “It allows me to think” etc.). Inviting clients to experience different types of exercise also can be important. Sometimes, people have very little previous experience with exercise, thus they cannot know which exercises they prefer, and neither can they know the quality of their experience. Inviting the client to experiment with a certain catalogue of different activities could be beneficial for novice exercisers.

The aforementioned strategies will make it more likely that a client chooses to exercise because of more autonomous, self-determined reasons (*e.g.*, identified regulation), which increases the willingness and readiness to exercise. As such, the motivational quantity and, most importantly, quality will have improved in that the client exercises not because one *has to* but because one *wants to*. Furthermore, to be able to value exercise, the client needs to feel competent enough to engage in a given exercise. Perceived competence can be achieved by setting realistic goals collaboratively with the client and by reflecting what the client may expect in terms of exercise-related outcomes (11). Furthermore, instructors should build on the abilities that their clients already have before introducing new challenges. A client who enjoys cycling can be challenged by prolonging his

or her route and by cycling uphill. Furthermore, clients should be able to acquire new skills, such as learning to observe their progress (self-monitoring) by tracking their behavior through smart watches or other wearables. Finally, teaching clients how to deal effectively with barriers (*e.g.*, when it is raining, wear waterproof clothes or go indoor cycling instead) as well as providing informational feedback (*e.g.*, on goal progress) and instrumental skill training enables the client to feel more effective.

Working with clients who identify with exercising but still do not really enjoy it: Clients who identify with the benefits of exercising are already heading in the right direction because they have found some personal meaning in the exercise behavior. To make exercise more enjoyable for them, it is important to identify not only which exercise activities the client already enjoys and finds compatible with their other values but also other activities that the client would look forward to engaging in. Fortunately, the exercise context offers numerous opportunities to satisfy one’s basic needs, for example, by offering choices and providing optimal challenges in terms of exercise goals or type of exercise and also regarding the context and social interactions (*e.g.*, meeting new people, new trails, new classes, new devices to track exercise, new cities to visit by foot, etc.). Nonetheless, and despite the fact that enjoyment (intrinsic motivation) is a strong predictor of continuous exercise adherence, it is not an absolute prerequisite. Research has shown that autonomous regulations, in general, increase and are sustained over time (leading to sustained behavioral adherence (10,12,15)). It seems that having highly integrated reasons for exercising (even without the fun and enjoyment components) are enough to keep an individual engaged with his or her chosen behavior (10) (*e.g.*, I don’t absolutely enjoy going to the gym, but it is important for me because it allows me to be fit enough to play football twice a week with

CHANGING MOTIVATION OVER TIME

my friends without incurring injury, which is something that I really value! I've done this for the last 3 years and I realize that is something worth keeping).

Working with clients who enjoy exercising. Clients who truly enjoy exercising can still be encouraged to challenge themselves and to make exercise continuously interesting for themselves and others. Challenges (e.g., starting a new class, training for a marathon, running/walking on a new track) might help them to further appreciate being physically active and support both their need for competence and autonomy. Furthermore, the use of digital devices (e.g., smart watches, wearables) offers the user the option of using applications for games, such as story running (interactive audio books in which the runner has a mission to accomplish and obstacles to overcome), or to follow friends' workouts and goal progress, which can make exercising more entertaining. In addition, creating exercise groups can bring in new dynamics, not least because exchanging and sharing ideas, tips, and experiences helps people to stay motivated. Similarly, teaming up with an exercise buddy may support continued physical activity because of the enjoyment and meaning of social interaction or by positive comparison also while allowing clients to see how others, similar to them, overcome barriers.

Lastly, it should be emphasized that the ultimate goal is not necessarily to get everyone shifted toward intrinsic motivation when it comes to exercise. The literature has shown that identified regulation plays a prominent role for the regulation of potentially challenging behaviors like physical activity and exercise, underlining the importance of internalizing behavior-related values (13). Because some people are never going to "love exercise," instructors are simply encouraged to help clients find meaningfulness in exercising because as long as exercising suits the clients' daily routines and feels valuable and acceptable, it is likely that it will be sustained. Furthermore, although some exercise activities might be highly recommended for everyone (e.g., core stabilization exercises), instructors cannot expect excitement and enjoyment on the part of the client in every activity because of the monotonous nature of some forms of exercise. In these cases, it is important to help the client understand their importance and support him or her in finding value in them (i.e., identified regulation), rather than aiming for fun and enjoyment.

A final note should be devoted to the exercise professional's motivation and factors that influence their own motivation because these factors also will determine the way that the instructor will motivate his or her clients and the motivational strategies he or she uses. In this regard, Silva et al. (16) analyzed a chain-like spillover effect: a pressuring work context (e.g., gym policies) caused exercise professionals to pressure their own clients, and, as a result, professionals became emotionally exhausted themselves. In contrast, work contexts that facilitate the satisfaction of the needs for autonomy, competence, and relatedness were associated with greater use of need-supportive strategies not only when working with clients but also with greater work-related personal accomplishment in the

professional. Results supported the widespread proposition that "what goes around, comes around," something that is true for the exercise professional, their work environment, and those who most influence it (e.g., managers or directors of a gym). An organizational focus along with policies from the gym or exercise facilities that target the support of clients' autonomy, competence, and relatedness, also while considering the professionals' needs, represent important working conditions that should be considered in future.

Case study: Paul, 54: "I thought I got this, but now it's pushing and pulling again."

The following case study describes the story of Paul and how he managed to deal with his conflicting motivation to become more active. This case study illustrates how the quality of motivation to exercise changes over the course of behavior change.

Paul is a teacher in his fifties. He has returned to exercise after a long period of being physically inactive just a year ago. Paul has a family history of heart disease, which has been preying on his mind in recent years. Having experienced symptoms of weakness, dizziness, and shortness of breath last year, he decided that it was time to make some major changes. He now goes to the local gym a couple of times a week and is trying, fairly successfully, to go swimming on a regular basis. He gave up smoking at around the same time that he started exercising and felt much better, both mentally and physically, after just a few weeks. Paul never particularly enjoyed exercising and usually needed to push and remind himself that he cannot risk a heart attack. Certainly, he knew that he had to provide for his family, but his wife also kept complaining that he had put on weight and should exercise a little more. Despite these pressures, he had never felt energized before and was convinced that if he continued to try hard and push himself, he could keep up his exercise regimen.

A month ago, he had a cold and needed to take a break from exercising. He felt the same physical weakness that he had experienced a year ago when he was not exercising. At around the same time, he started experiencing nagging doubts, causing him to question why he was doing the exercises if he still felt the same as last year. Why should he go to the gym next time if, in the end, all of his effort was not going to pay off? Even though he was aware of these mind games, he couldn't prevent them...

Why is Paul now experiencing this motivational setback? It seems that not all of Paul's personal reasons are truly self-chosen but rather self- or other-imposed. Paul started exercising partly because he was afraid of experiencing a heart attack, but more because he wanted to reassure his wife (i.e., external regulation). His main motivation was, therefore, predominantly based on the avoidance of external pressures (blame from his wife) rather than the expectation of positive outcomes through exercise (e.g., improved well-being). Furthermore, Paul knew that he was not taking good care of his health, and that he needed to make some changes to his lifestyle. He also might have experienced feelings of shame and guilt as he was not taking responsibility for acting health-consciously (i.e., introjected regulation). Thus, Paul's motivation was predominantly "controlled" by external or internal pressures, which might have prevented him

