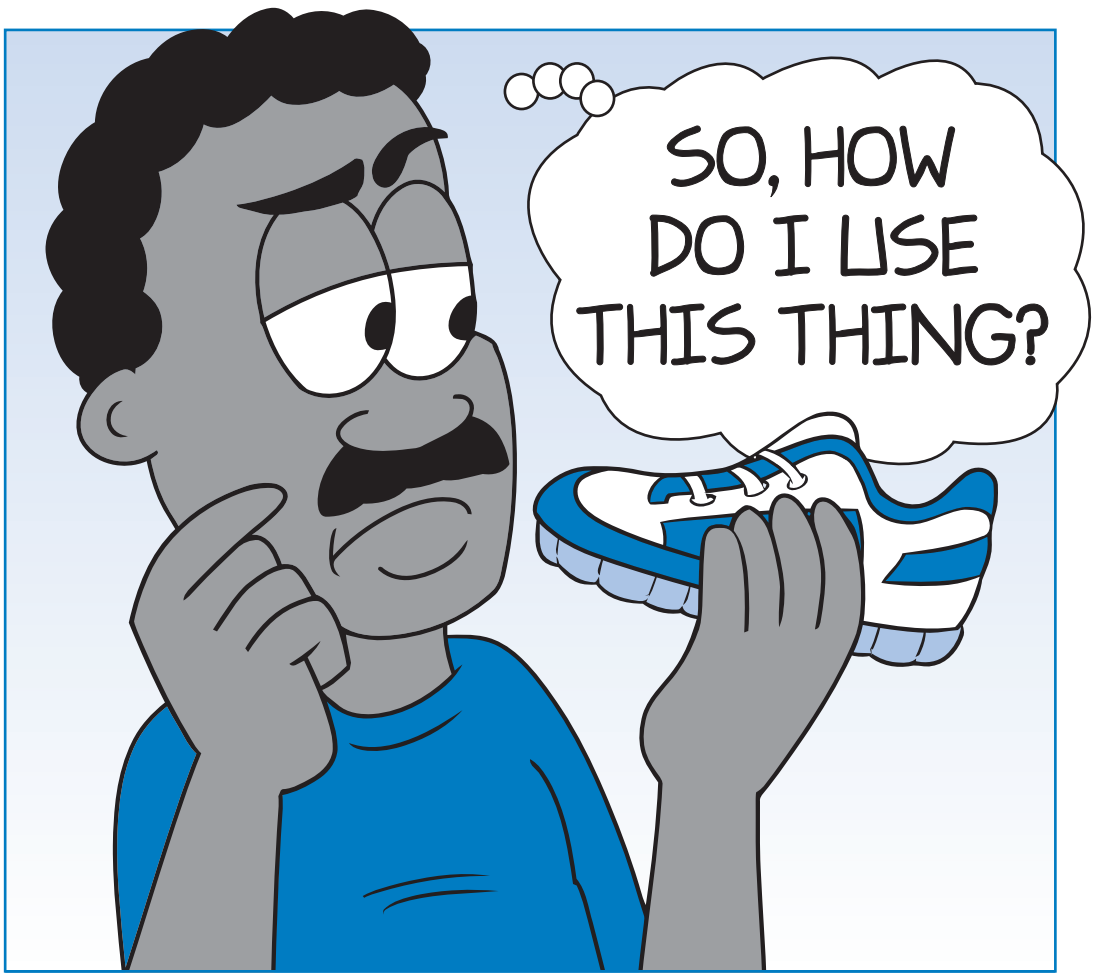
CHAPTER 3

Building Skills to Promote Physical Activity

Ryan E. Rhodes and Kristina Kowalski



CONCEPT OVERVIEW

Our understanding of the factors that influence physical activity has shifted over the last 20 years (116). Initially, there was considerable focus on the individual-level factors responsible for why some people were active, while others were not. The reasons were considered within the realm of personal responsibility, motivation, and self-discipline. Over time, this focus for understanding physical activity has shifted to ecological models (129) that include individual, social, environmental, and policy factors that all contribute to physical activity participation. While this approach is far more likely to yield an overall accuracy in understanding physical activity, the focus on personal responsibility remains no less important. Clearly, an individual holds a great amount of agency over whether they engage in physical activity. Environmental access to exercise equipment and recreation facilities is very high in most developed countries (27,42) and the social norms regarding the benefits of physical activity are very positive across all ages (56,130,133). Indeed, personal motivation is described as the critical barrier among people who are inactive (26).

Therefore, the skills and strategies that people can use in order to promote their own physical activity is still of paramount importance to trainers and of key interest to clients. This chapter outlines the most essential personal level strategies for building and sustaining physical activity motivation from prior research efforts. We begin by outlining the findings from individual-level theories used to understand regular physical activity behavior and then apply this evidence base to guide practitioners and users with skills and strategies to improve or sustain motivation. Throughout this chapter, we refer to worksheets to assist in these approaches. These worksheets can be found in From the Practical Toolbox 3.1 through 3.6. See also Table 3.2, a decision tree for appropriate uses of these strategies, and the sample case scenarios presented toward the end of this chapter.

EVIDENCE: THE INTENTION-BEHAVIOR GAP

Most of us can immediately understand the gap between our good intentions and behavior by thinking about New Year's resolutions. Getting more exercise or eating healthier are often our most popular "self-promises," but they can also include other areas of personal improvement, such as spending more quality time with loved ones, quitting smoking, exercising restraint over spending, or learning something new. Most of us also know only too well that those initial intentions do not always pan out as planned. Psychological/behavioral theories that have been used to guide physical activity intervention initiatives and explain behavior also include an intention concept (12,46,90). Indeed, in almost all of these models, intention is viewed as the proximal determinant of action (see Figure 3.1), much like our New Year's Evening hopes.

Intention represents the decision to act on a behavior in its most modest conceptualization (96), to the motivation required to act and organizational planning in its most conservative definitions (11,104). Overall, intention has been validated as a dominant predictor of physical activity in adults (131). Clearly the intention construct is important and, in any consideration of skill building or strategy, it would be prudent to consider all critical factors that may influence intention. Our current intervention research and theoretical tests in the physical activity domain have yielded a sound understanding of intent. Thus, the first part of our chapter follows the best practice research on how to increase physical activity intentions.

From the Practical Toolbox 3.1

BEHAVIORAL PALATE WORKSHEET

Your belief in your ability and your attitudes toward an activity influence whether you are physically active. Belief in your ability to perform an exercise is an important part of both adopting a new activity and adhering over the long term.

Step 1: What Types of Exercise?

Instruction: Think about the physical activities you can do as part of your new exercise regime. List the type of exercises you prefer doing and your experience with each of these activities under COLUMN A. Then, list some NEW AND EXCITING MODES OF EXERCISE that you would like to try under COLUMN B, and lastly, list some CHALLENGING MODES OF EXERCISE under COLUMN C. Now that you have brainstormed activities, rate your confidence in your ability to perform/engage in each activity. Under EACH activity in EACH column also record your experience with these activities.

Please use the example provided to help you.

COLUMN A Exercise Preferences	COLUMN B New and Exciting Modes of Exercise	COLUMN C Challenging Modes of Exercise
Example Exercise: Walking **Confidence/experience:** Extremely confident. I walk my dog several short walks each day.	**Example Exercise:** Wii Fit **Confidence/experience:** Moderately confident. I've never been a videogamer, but it looks like fun.	**Example Exercise:** Swimming **Confidence/experience:** Slightly confident I haven't been swimming since swimming lessons when I was a kid, but I think a masters swim club would be a great way to meet new friends.
Exercise #1:	Exercise #1:	Exercise #1:
Exercise #2:	Exercise #2:	Exercise #2:
Exercise #3:	Exercise #3:	Exercise #3:

continued

From the Practical Toolbox 3.1 *continued*

You will be more likely to persist in activities that you find enjoyable and interesting. Consider the activities you brainstormed about in the preceding chart. What factors contribute to your enjoyment of EACH OF THESE EXERCISES? How could you enhance your enjoyment of exercise? Please write down the factors that influence your enjoyment of exercise in the following table.

Step 2: Exercise Enjoyment and Strategies to Enhance Enjoyment

Instruction: Under COLUMN A, list where you will exercise and its PROXIMITY to your home. Under COLUMN B, list the AESTHETIC factors of the environment where you plan to exercise that are pleasing. Under COLUMN C, list the ways to enhance your engagement in exercise, including factors that increase your INTEREST in exercise, opportunities for SOCIAL interaction, and other aspects that provide VARIETY to your exercise routine (*e.g.,* listening to music).

COLUMN A **Proximity**	**COLUMN B** **Aesthetics**	**COLUMN C** **Interest**
Where will I exercise? Is the location where I plan to exercise close to my home?	Is the location a pleasant environment for performing exercise?	How can I. . . - make exercise more interesting/stimulating? - involve friends and family or others in exercise? - incorporate variety, and other aspects such as music to enhance my engagement in exercise?
Location #1:	Factor #1:	Interest:
Location #2:	Factor #2:	Social:
Location #3:	Factor #3:	Variety:

From the Practical Toolbox 3.2

DECISIONAL BALANCE WORKSHEET

A helpful strategy when considering behavior change is to think about the benefits and the costs of your current behavior and of changing your behavior. Record the costs and benefits of your current behavior and of changing your behavior in the following table. Then, compare the costs and benefits of your current behavior and the new behavior. Ask yourself: Why do I want to change my behavior and become more active? What are the most important reasons?

Step 1: Costs and Benefit Analysis		
	Current Behavior _____	**Behavior Change**_____
Benefits		
Costs		

Step 2. Take a look at your decisional balance worksheet. Ask yourself. . .

1. Why do I want to change my behavior and become more active?

2. What are the most important reasons for changing your behavior?

From the Practical Toolbox 3.3

GOAL SETTING WORKSHEET

Step 1: Think about your goals.

Think about what you want to achieve for your physical activity and fitness. Brainstorm a few goals that you want to get out of your new physical activity program. Write down the two or three goals that come to mind on the lines below.

1.
2.
3.

If you want to increase your chances of being successful, you should:

1. **Set goals that you personally value and that reflect your personal interests.** Strive to do something that you like doing and/or are interested in doing.
2. **Set goals that are not only challenging, but are also achievable.** Your goals should not be too hard or too easy.
3. **Set goals that are clear and specific.** Research shows that people are less successful when their goals are vague.
4. **Set both short- and long-term goals.** Make short-term goals along the way to reaching your long-term goals.

To help you set goals that meet these guidelines, make them SMART.
SMART goals are **specific (S; describe when, where, how, what), measurable (M; quantifiable), achievable/realistic (AR),** and include **time frame considerations (T).**

Step 2: Evaluate your goals.

Instruction: Take a look at your above goals. Are these goals SMART? Use the form below to help you evaluate your goals.

	Is your goal specific, measurable, and achievable/realistic, and does it include time frame considerations? Why? Why not? How so?
Goal 1	

From the Practical Toolbox 3.3 *continued*

	Is your goal specific, measurable, and achievable/realistic, and does it include time frame considerations? Why? Why not? How so?
Goal 2	
Goal 3	

Step 3: Reframe your goals using the SMART technique.

Instruction: Revise your goals below using the SMART technique. Remember SMART goals are **specific (S; describe when, where, how, what), measurable (M; quantifiable), achievable/realistic (AR),** and include **time frame considerations (T).** Design both short- and long-term goals.

		Short-Term Goals	Long-Term Goals
Goal 1	**S**		
	M		
	A/R		
	T		
Goal 2	**S**		
	M		
	A/R		
	T		
Goal 3	**S**		
	M		
	A/R		
	T		

Still, there are several advances in intention research within the physical activity domain that suggest some modifications to our theoretical and practical use of intention may be necessary. Though intention is a powerful predictor of physical activity, at least 70% of physical activity is not explained by intent. The intention-behavior gap so well known to students of New Year's resolutions is also present in our current theories. Some of this gap may be due to the waxing and waning of intention strength. A recent review of the moderators of the physical activity intention-behavior relationship showed that the temporal consistency of intention is the most reliable and largest moderator (111). Thus, many people don't really hold fast to their intentions and have a strong sense of resolve. More problematic to the intention-behavior relationship proposed in current theories, however, is the experimental evidence. For example, Web and Sheeran (141) conducted a meta-analysis of experimental evidence

From the Practical Toolbox 3.4

PLANNING WORKSHEET

Most people fall short of achieving their goals because they don't establish an adequate ***plan of action***. Research tells us that people who plan out how they will reach their goal are more likely to succeed. This means that after you set a SMART goal you must then plan ***what you will do, how you will do it, where you will do it, and when you will take action.***

Step 1: ACTION PLANNING – What, where, and when will you engage in exercise?

Instruction: List the SPECIFIC EXERCISES you plan on doing under COLUMN A. Describe the LOCATION where this exercise will be performed under COLUMN B, and then describe WHEN you will perform that exercise under COLUMN C.

Please use the example provided to help you.

COLUMN A **Exercise Activity**	**COLUMN B** **Where I will engage in this activity?**	**COLUMN C** **When I will engage in this activity?**
Example Exercise: Walking	**Where?:** The park in my community	**When?:** Monday, Wednesday, and Friday evenings between 6:00 and 7:00
Exercise #1:	Where?	When?
Exercise #2:	Where?	When?
Exercise #3:	Where?	When?

Now that you have established an action plan, it is important that you anticipate and manage situations associated with performing unwanted behaviors and overcome barriers to the desired behavior using effective coping strategies. Effective problem solving and coping strategies are essential for translating intention into action and for maintaining a desired behavior or activity over the long term.

Step 2a: Coping Planning – Exercise Barriers and Strategies to Overcome Them

General Instructions:

Please think about ***each exercise activity*** you listed in Step 1: Action Planning. Which obstacles or barriers might interfere with the implementation of ***each of your exercise plans***? How could you successfully cope with these barriers? Please write down your ***strategies to overcome EACH exercise barrier*** in the following table.

From the Practical Toolbox 3.4 *continued*

Instructions:

1. In COLUMN A, list the exercise activities you identified in Step 1: Action Planning.
2. For EACH ACTIVITY you listed in column 1, identify EXERCISE BARRIERS that may prevent you from performing the exercise activity under COLUMN B and STRATEGIES TO OVERCOME the exercise barriers under COLUMN C. Try to think of the main barriers that could get in the way of each activity and then strategies to overcome them.

COLUMN A Exercises/Activities	COLUMN B Exercise Barrier	COLUMN C Strategy to Overcome Exercise Barrier
1.		
2.		
3.		

Having trouble deciding how to reach your goal? There are a number of ways to reach a goal. Try brainstorming as many ways to reach your goal as you can. Don't worry about coming up with the perfect plan. Instead, just get those creative juices flowing and write down all the options that come to mind. You can use the following worksheet to eliminate options and to choose the method that is most suitable for you.

Step 2b. Coping Planning: Substituting Alternatives

Instruction: There is more than one method to reach your goals, each with its own advantages and disadvantages. Record your SMART GOAL below and generate a list of ways to meet this goal in COLUMN A. Brainstorm the advantages and disadvantages for each option in COLUMNS B and C. Compare the advantages and disadvantages for each option and assign a rank for each (*e.g.,* 1 = most likely to be successful, 3 = least likely to be successful).

continued

From the Practical Toolbox 3.4 *continued*

What is your goal?

COLUMN A Options	COLUMN B Advantages	COLUMN C Disadvantages	COLUMN D Rank
1.			
2.			
3.			

in 47 studies linking intention and behavior. The findings demonstrated that a large change in intention subsequently resulted in a small change in behavior. This demonstrated that while intentions and physical activity are correlated, a change in intention does not always create a change in behavior. This meta-analysis was recently replicated with physical activity behavior exclusively (112), and the results showed that changes in behavior, from changes in intention, may be even smaller than other health behaviors. The results cast considerable doubt that raising intention alone will result in increases in physical activity behavior.

Recent research that has separated the intention-behavior relationship into quadrants provides an explanation for the discordance (52,122); see Table 3.1. Specifically, intention-behavior relations are asymmetrical. Only three of the four possible quadrants yield ample sample sizes: those who did not intend to be active and subsequently are not active (nonintenders), those who intended to be active yet failed to meet these intentions (unsuccessful intenders) and those who intended to be active and succeeded in following through with their intentions (successful intenders) (109). These results demonstrate that intention is a pivotal construct but not sufficient to explain behavioral action on its own.

With this evidence in tow, the second half of our chapter is dedicated to the skills and strategies of translating good intentions into behavior. Several recent theories have been postulated and tested for closing the intention-behavior gap (53,54,98,126). We draw upon those findings to illustrate the best practice for translating strong physical activity intentions into actual behavior.

BUILDING INITIAL INTENTIONS

Understanding critical determinants of intention to exercise and subsequent exercise behavior is essential in helping clients maintain their positive intentions. Current research clearly identifies significant correlations between many psychological constructs and intentions to exercise (17,66,134,136). Most of these variables, however, are well represented under different names by two constructs contained within Social Cognitive Theory (self-efficacy, outcome expectancy), the Transtheoretical Model (self-efficacy, decisional balance), and the Theory of Planned Behavior (perceived behavioral control, attitudes) (11). For the purpose of this chapter, these overlapping behavioral determinants of exercise will be

From the Practical Toolbox 3.5

EXERCISE CONTRACT

For each SMART GOAL you create, complete the following contract to show your commitment to your goal. Refer to the contract regularly to remind yourself of your commitment.

1. Goal

My goal is to _____.

2. How will I know if I have successfully reached my goal? List specific measurable behaviors necessary to reach my goal. Also, describe when and how often these behaviors will be measured.

- *To achieve this goal, I will* _____.
- *To achieve this goal, I will* _____.
- *To achieve this goal, I will* _____.

3. Support Team or Resources

I will do this with the support of _____

_____.

4. Rewards and Time Frame

As a reward for accomplishing the above goal by _____, *I will*
Insert date

_____

_____.

This contract and my progress toward it will be revised on _____.
Insert date

5. Signature

By signing below, I, _____, *commit to*

_____
Rewrite the details of above commitment here.

_____

_____

_____ _____

Signature and date Witness signature and date

From the Practical Toolbox 3.6

SELF-MONITORING WORKSHEET

Journal and Tracking Log

Instruction: Each time you participate in your exercises, write down WHEN you did them in COLUMN A, WHAT you did in COLUMN B, WHERE and WITH WHOM you did them in COLUMN C, and HOW it felt in COLUMN D. In COLUMN E, write down any other important comments or observations you made while exercising. Use the example provided to help you.

COLUMN A Date and Time	COLUMN B What did you do (type of activity, intensity)?	COLUMN C Where did you do it? Who did you do it with?	COLUMN D How did it feel (before, during, after)?	COLUMN E Other Comments/ Observations
Example: September 23 7:00–8:00pm	**Example:** I went for a brisk walk.	**Example:** Around the park by my house.	**Example:** I felt less anxious afterward about work and it gave me a boost of energy.	**Example:** Walked by a group participating in a boot camp in the park. It looked like fun. It was sunny out. The beautiful weather made me smile.

TABLE 3.1 Intention-Behavior Relationship

		No Intention of Being Active	Intention of Being Active
Active?	**N**	Nonintenders	Unsuccessful intenders
	Y	N/A	Successful intenders

TABLE 3.2 Decision Tree for Choices of Worksheets and Strategies

Type of Client	Choose Course of Action	Useful Worksheets	Other Useful Strategies	Example of Appropriate Client for These Tools
Low intention / resistant	Major focus on building intent; minor focus on goal setting and action planning	Behavioral palate worksheet (FTPT 3.1); decisional balance worksheet (FTPT 3.2); goal setting worksheet (FTPT 3.3); planning worksheet (FTPT 3.4), focusing on Step 1: Action Planning	• Review benefits of exercise with focus on affective experience • Behavior modification (contingency management, reinforcement) • Self-monitoring	See Case Scenario 3.1 at the end of this chapter
High intention / problems translating intention into action	Major focus on goal setting, action planning, and coping planning	Goal setting worksheet (FTPT 3.3); planning worksheet (FTPT 3.4), focusing on all steps	• IDEA approach to problem solving • Building automaticity • Building social and environmental support • Self-monitoring	See Case Scenario 3.2 at the end of this chapter
Moderate intention / problems main-taining behavior	Focus on planning, especially coping planning; minor focus on building intent	Planning worksheet (FTPT 3.4), focusing mostly on Steps 2a and 2b; behavioral palate worksheet (FTPT 3.1)	• Review benefits of exercise with focus on affective experience • Behavior modification (contingency management, reinforcement) • Consideration of cross-behavioral conflict • Self-monitoring	See Case Scenario 3.3 at the end of this chapter

FTPT, From the Practical Toolbox.

FIGURE 3.1. Intention is viewed as the proximal determinant of behavior.

grouped into the following two key constructs: (1) the expected outcomes of exercise, and (2) perceptions of control over exercise. Related evidence-based strategies or skills that the fitness and health professional can use with their clients to help them maintain their positive intentions to be physically active will also be discussed.

EXPECTED OUTCOMES OF EXERCISE

A recent review among nonclinical populations demonstrated that one of the most common approaches for promoting physical activity is to focus on increasing expected outcomes (117). The client's expected outcomes toward physical activity may represent a variety of factors, such as the expected outcomes/consequences of participating in physical activity behaviors, the advantages and disadvantages (pros/cons) associated with engaging in physical activity, and the anticipated benefits and barriers to participation (46). The value or significance the individual places on that desired outcome may also be important (*i.e.,* if improving fitness is highly valued by the individual, they will be more likely to engage in that behavior).

The construct, in various guises, is present in most of the theoretical models used in physical activity promotion and explanation. For example, in the theory of planned behavior (5), the attitude construct represents the summary thinking of expected outcomes of performing physical activity (*e.g.,* good vs. bad). According to meta-analyses of the theory of planned behavior, attitude is the strongest predictor of exercise intention (Symons Downs & Hausenblas, 41,60). This provides some evidence that our intentions may be influenced by what we expect to occur from being regularly physically active. Recent research also suggests that expected outcomes can be reliably distinguished in terms of either instrumental or affective properties (48,79,103,106), and these affective properties may have greater impact on physical activity intentions than instrumental properties. Affective expected outcomes refer to judgments about the pleasure/displeasure, enjoyment, and feeling states expected from engaging in a behavior, while instrumental expected outcomes refer to judgments about the costs and benefits of engaging in physical activity (79,114). Outcomes from regular exercise that do not directly involve feeling states, such as improvements in fitness and physical appearance, and reduced risk of chronic disease are instrumental; whereas outcomes that involve feeling states derived directly from the exercise experience such as enjoyment, boredom, pain, exhilaration, stress-relief, and satisfaction are affective. These two domains are also divided generally as proximal (affective) and distal (instrumental) in terms of their derived outcomes (11,58). In support of this distinction, recent studies have shown that affective attitude has better predictive ability than instrumental attitude in the physical activity domain (48,100,114).

CHANGING EXPECTED OUTCOMES TOWARD PHYSICAL ACTIVITY

Best Practice Strategies

Expected outcomes are thought to derive most of their foundation from the individual's knowledge base via education or a cost-benefit weighing process. Decisional balance, a construct from the Transtheoretical Model (96), is a decision making behavioral change

strategy that may best encompass the weighting strategy. It involves having the client weigh the pros and cons of changing their physical activity behavior (25,86) and evaluate their beliefs about the benefits and barriers to becoming physically active.

Generally, weighing the pros and cons of engaging in a new behavior is particularly important in the initial stages of engaging in an activity when an individual is likely to perceive greater costs and barriers to physical activity than benefits. In support of the view that individuals are more likely to initiate a behavior if they perceive favorable outcomes associated with it, a recent review found that providing information to participants about the costs and benefits of engaging in physical activity produced significantly greater improvements in physical activity than those that did not (143). Being satisfied and valuing these favorable outcomes likely plays a greater role in sustaining physical activity behavior over time than the mere presence of positive outcomes.

A decisional balance worksheet (see From the Practical Toolbox 3.2) is one tool that can be drawn upon to help clients change their expected outcomes toward physical activity. Specifically, a decisional balance worksheet can be used to help individuals identify their perceptions about the pros and cons of adopting a physical activity behavior and the barriers (actual and perceived) to engaging in physical activity. Decisional balance worksheets, in which the benefits and costs of physical activity are written down, have been found to significantly increase exercise class attendance (*e.g.,* 62,89). Once benefits and barriers are identified, possible strategies aimed at enhancing benefits and minimizing barriers and shifting decisional balance in favor of physical activity (*i.e.,* so the benefits outweigh the costs) can be implemented.

When working through the benefits and barriers to engaging in physical activity with a client, it is recommended that affective properties of physical activity are the focus. Focusing on instrumental/distal outcomes such as weight loss, reduced risk of chronic conditions, improved function, fitness, and health will likely have more limited influence on whether the client chooses to adopt physical activity into his or her routine. Despite the negligible effects of instrumental attitude on physical activity (73,117), briefly educating clients on the benefits of regular physical activity is an appropriate course of action and is typically a more accepted approach than focusing on the hazards of inactivity. In fact, messages that are framed positively (*i.e.,* benefits of regular physical activity) are typically better received than those with negative framing (65,72,92). A handout briefly outlining the benefits of physical activity has been found to be effective in changing instrumental expected outcomes toward physical activity (68). See Chapter 3 for an example of such a handout.

When taking on the challenge of changing a client's expected outcomes toward physical activity, place more effort on helping clients to consider and focus on the exercise experience and the positive affective properties associated with the exercise experience (*e.g.,* enjoyment, intellectual stimulation, pleasant body states, mental health). Despite the reliable and robust association between affective attitude and physical activity, few studies have focused on modifying affective attitudes and the impact of these changed attitudes on physical activity intention and behavior (83,114). Several recent studies found that, in participants randomly allocated to either a control (no message), an affective message group, or a cognitive message group, individuals in the affective message group reported greater self-reported physical activity than other groups (34). Interestingly, the impact of affective messages on self-reported physical activity was greatest in those with a high need for affect or a low need for cognition suggesting that individual characteristics like preference for emotion or thinking may be important when targeting attitude change. In addition, a recent study with adolescents found that in inactive participants only, the affective message group had significantly greater increases in physical activity compared to the instrumental messages, combined messages, and control groups (124). Although confirmation of this finding and further exploration with different populations is needed, it appears that interventions targeting affective expected outcomes may have a greater impact on physical activity in inactive individuals.

In addition, print materials including messages targeting the stress-relieving and antidepressive qualities of physical activity has been effective in changing affective attitude and exercise behavior (33,92). Parrott et al. found that print material targeting exercise enjoyment and mental health benefits of exercise was successful for improving exercise among those individuals with higher baseline levels of affective expected outcomes (in this case, attitude) but not effective for those with lower baseline levels. Caution needs to be exercised when choosing to use print materials to persuade clients to exercise. Personality characteristics and previous experience with physical activity should be considered. Focusing on the affective properties of physical activity (*e.g.,* enjoyment) may work as a useful prime or reminder for those who have found it fun and appealing in the past, but it may be a futile approach with individuals whose affective experience with physical activity has been negative (*e.g.,* boring, unpleasant, tiring).

Substantial evidence points to the importance of enjoyment and psychological well-being in motivating people to exercise (17,19,20). As such, creating opportunities for positive experiences with exercise, where people can learn to reinterpret physical activity as enjoyable and good for mental health may represent a more effective means to change expected outcomes. A second means of creating positive experiences with exercise is through manipulating the physical activity environment. Research also suggests that individuals should engage in physical activity in an environment that is aesthetically pleasing (*e.g.,* exercising outdoors (93)). Environmental aesthetics have been associated with both physical activity (64) and affective expected outcomes (105,108). Having the client focus on environment, rather than on the affective experience (*e.g.,* boredom, fatigue), may also improve the exercise experience through distraction. The behavioral palate worksheet found in From the Practical Toolbox 3.1 can help you with this task.

A third means to improve affective expected outcomes toward physical activity is through the introduction of novel, enjoyable, and engaging exercise activities. Rhodes and colleagues have demonstrated that interactive videogame bikes result in better adherence to exercise prescription than standard exercise due to an increase in affective expected outcomes (118,119). Thus, the selection of fun activities is paramount when possible. The behavioral palate worksheet found in From the Practical Toolbox 3.1 can also be used to help guide the choice of enjoyable activities.

Behavior modification strategies, including reinforcement control and contingency management, represent additional methods to motivate individuals to become active through short-term modification of expected outcomes (40). Reinforcement control involves increasing the frequency of the target behavior through positive reinforcement (adding something positive) and negative reinforcement (removing something negative (25)). This process introduces changes to the expected short-term outcomes of performing the act. Carefully structuring the exercise prescription at the client's level will be an important consideration in managing the client's immediate affective experience and increasing the likelihood that a client will perceive the exercise experience as rewarding (21). Intensity of exercise is one means of influencing experiences with exercise, and in choosing a starting intensity level a client's past history with exercise and current fitness levels need to be considered. High-intensity activities for clients who are resuming activity and are unfit are often deemed less enjoyable (43). Early on in the stage of exercise adoption, the affective experience of exercise may be negative (*e.g.,* soreness, pain, discomfort, fatigue) and it may take time for the positive affective benefits of physical activity to become reinforcing in themselves. In the interim, more immediate extrinsic rewards (*e.g.,* praise, concert tickets) and incentives may be required to help support engagement in the new behavior via the placement of external expected outcomes. Thus, creation of sought-after rewards for adherences and contingency structures are important strategies to help manage the consequences of physical activity. For example, participation in other preferred leisure activities could be made contingent on performance of exercise. Some caution should be applied to the utility of expected outcomes, more specifically external rewards, and their effect on overall behavior change.

TAKE-HOME MESSAGE

In summary, the expected outcome of physical activity is a well-demonstrated construct that has a potential impact on building the intention to be physically active. Consideration of the affective expected outcomes (*e.g.,* pleasure, enjoyment) may be even more important than the instrumental outcomes (*e.g.,* reducing risk of chronic disease, improved fitness). The best strategies to improve and change expected outcomes include decisional balance worksheets, information about the benefits of regular activity, and choices of pleasant physical activities and exercise environments. It is also possible that building in short-term expectations in the form of rewards or contingency scenarios may help increase initial intentions, although caution should be employed when using these extrinsic sources because they are unlikely to be sustaining.

PERCEPTIONS OF CONTROL OVER PHYSICAL ACTIVITY

A second major construct that the fitness and health professional needs to consider when helping their clients increase positive intentions is perceptions of control (*i.e.,* their degree of confidence) over engaging in regular physical activity. Almost all theories of human behavior include a construct related to control over behavior (12,46). For instance, self-efficacy is a construct from social cognitive theory, which is defined as one's belief in his or her capacity to perform a skill or behavior successfully (10,12). Similarly, perceived behavioral control, a construct from the theory of planned behavior, represents a person's perception of their capability (*i.e.,* perceived ease or difficulty) to perform the behavior, assuming he or she wants to (4,103). This perception of control reflects beliefs regarding past experiences and current skills. Perceived behavioral control/self-efficacy is one of the most reliable correlates of intention, comparable to expected outcomes of physical activity (57,128,131). The challenge, however, is often to separate real control issues from motivation, values, or affective expected outcomes (99,107). The best example of this difficulty may be with a consideration of the most common barrier to control over exercise: lack of time (26). Most people cite lack of time as the reason they cannot exercise, but actual leisure-time hours are not reliably linked to exercise (exercisers have just the same amount of time in a day as non-exercisers), thus the statement appears to be more of an excuse or cover for different values than a real control issue (22).

BUILDING PERCEPTIONS OF CONTROL OVER PHYSICAL ACTIVITY

Best Practice Strategies

Bandura (8,10) highlights the importance of four sources of information for self-efficacy:

1. Mastery experiences
2. Social modeling/vicarious experience (observing others similar to oneself experience success/cope with challenges)
3. Verbal persuasion (*e.g.,* praise, encouragement)
4. Judgments/interpretations of physiological/affective responses to exercise

These four sources, in diminishing value, are considered the important skills to build upon control perceptions of physical activity.

Mastery experiences are probably best created through shaping (*e.g.,* 25). Shaping is a strategy where reinforcement is used to help the client gradually increase his or her physical activity levels and feelings of competence. Begin by having the client participate in a behavior that he or she is capable of doing and then gradually increasing intensity, duration, and frequency of activity (*i.e.,* principle of progression). Choosing the appropriate starting level is a tricky balancing game of managing interest and difficulty. Failure to consider the principle of progression in exercise prescription may result in early attrition. The concept of mastery is considered the most powerful influence on self-efficacy, so negative experiences and failure to achieve the program can have deleterious consequences on self-efficacy. Thus, careful consideration of an achievable program is important.

It is essential that clients feel confident in their capability to perform their physical activity program. To enhance the client's sense of control, ownership, and confidence in their behavior change, and to ensure their physical activity program is matched with their own preferences and lifestyle, the health professional should get their client's input in the development of the program or have clients write their own program with guidance and support. With the help of the health professional, generating detailed instructions on the specifics of how, when, and where to engage in the behavior is a useful additional means to enhance feelings of control (67). Moreover, we suggest creating the opportunity for the client to have at least one positive mastery experience in a setting chosen by the client (*e.g.,* meeting at the local gym and working through the prescribed exercises). Providing positive reinforcement—that is positive and specific—for small behavioral successes and progress toward the desired goal may enhance initial self-efficacy and is consistent with Bandura's (8) initial tenets.

While mastery experiences are considered essential for improving control, social modeling (by people similar to the client) may also be important. The principle underlying this approach is to gain self-efficacy via vicarious learning. In the absence of personal experience, people look to similar others in order to gain information about whether a behavior is controllable (73). Thus, it may be important to ensure that participants see others successfully engaged in the target activity. This might be achieved through videotapes, demonstrations, or by having the participants themselves model the activity. The challenge for the physical activity promoter is to have modeling relevant to the client. Trainers often do not resemble the demographics and experiences of their clients, so choosing locations and times with others who are similar to the client becomes critical.

The principal strategy that underlies the enhancement of self-efficacy through verbal persuasion is that participants are provided with considerable information about the "why," "what," and "where" of physical activity. This might be achieved through orientation sessions, pamphlets, articles, newsletters, and so on, or through media presentations (*e.g.,* videotapes, television, newspapers). Information about the ease of performing certain physical activities may help build positive intentions in the short term. A concentration on the affective benefits of physical activity, similar to that recommended in improving expected outcomes may also benefit short- and long-term control perceptions. Convincing evidence is available to show that people who do not feel confident in their performance of a task subsequently perceive it as less enjoyable (63,87). Methods described earlier for increasing positive affective experiences with exercise are equally applicable here.

Finally, the principal strategy underlying the enhancement of self-efficacy through physiological states is ensuring that participants understand the body's response to activity. Physical activity produces increases in heart rate and sweating, for example. The meaning the individual attaches to those physiological changes is important. Individuals who are frequently active expect and understand the body's response to a physical load. Participants new to physical activity may not. Therefore, they must be helped to interpret what the physiological changes mean and how those physiological responses to activity changes with training. Educating beginners about the normal physiological consequences of exercise, post-exercise soreness, and the recovery timeline should help clients understand their body states and build their confidence around what can be expected from an exercise program.

TAKE-HOME MESSAGE

In summary, control over the act of physical activity is an extremely well-validated correlate of intention and a construct that resides in most theories of human motivation. Shaping the act in achievable bouts that successively move toward a larger behavioral repertoire (*i.e.,* small, achievable steps) is considered the best strategy to improving a sense of control. Short-term improvements in control may also be fostered by displays of similar others performing physical activity and information that attempts to persuade the client about the ease of the act. Finally, consideration of the affective properties (feeling states of physical activity) and education about some of the short-term negative body states, such as muscle soreness, should improve assessments of behavioral control.

While control over the act of physical activity may be important to fostering intentions, maintaining intention in the face of challenges and barriers over the long-term also requires an improved sense of control. Developing self-regulation skills is critical to developing perceived control over exercise, especially in translating positive intention into action and for long-term adherence. As such, these skills are described in the next section.

TRANSLATING INTENTIONS INTO ACTION

Most of our established theories used to aid in physical activity promotion and adherence have their main focus on the antecedents of intention. As demonstrated earlier, a robust level of evidence is present to suggest that building upon expected outcomes of the behavior and control over physical activity will result in increased intention. More recently, theories are being proposed to suggest that the translation of intention into behavior needs the same attention as building those initially strong intentions (53,54,97,126). Overall, these approaches suggest that behavior change from strong intentions depends primarily on self-regulatory skills, followed by partial automaticity of the act, environmental support for exercise, and the reduction of cross-behavioral conflict. The following subsections outline these factors and provide suggestions for successful intention translation.

Self-Regulatory Skills

According to Bandura's Social Cognitive Theory, self-regulation is defined as the strategies that an individual uses to regulate his or her goal-directed behavior or performance (9,12). A critical piece of goal-directed self-regulation is "the attempt to reduce discrepancies between current states and desired end states" (61, p. 1281). Although the term self-regulation is typically used to describe how a person regulates his or her own behavior when pursuing conscious intents or goals (*e.g.,* to lose 10 pounds), it can also occur outside of conscious awareness or "active" regulation on the part of that individual (*e.g.,* being surrounded with people who value physical activity and healthy living, 18,45). In other words, the environment, including the people surrounding the client, is also a strong shaper of his or her physical activity behaviors.

When working with clients to help them build the skills to facilitate their translating their intentions to become physically active into action, targeting self-regulatory skills is an excellent place to begin. Interventions targeting self-regulatory skills are among the most frequently used in the domain of physical activity behavior change and they also have the most convincing research support for their effectiveness in changing exercise behavior of all behavioral interventions (55,117,135).

Self-regulatory skills include, but are not limited to, *goal setting*, *planning*, and *self-monitoring* (84). Self-regulation can also involve skills such as *enlisting the support* of others and *creating environmental support* to promote physical activity behaviors. The following section will provide health and fitness professionals with the necessary tools to help their clients build skills in goal setting, planning, and self-monitoring. Building these skills with clients is an important step in helping clients translate their intention into action and to adopt and maintain a healthy lifestyle. There are many curricula available for both youth and adults—using these self-management skills—and research to support them. See "fitness for life" among others.

Goal Setting and Planning

Goal setting is a process by which an individual evaluates his or her current state or performance, creates a goal (*i.e.,* what the individual is aiming to achieve; the desired end state), and outlines the actions to be taken to reach that goal, 74,75,76–78,80,123). Goals can be described in terms of their properties:

1. difficulty (*i.e.,* difficult goals require more effort to be achieved)
2. specificity (*i.e.,* goals can vary on a continuum of specific to vague; specific goals are clearly defined, have a narrow focus, and outline the type and effort required to realize the goal)
3. proximity (*i.e.,* short vs. long term, 78,123)

Goals can also be considered process (*i.e.,* focused on the behavior being conducted, such as jogging for 30 minutes, three times weekly) and outcome (*i.e.,* focused on the end result of a behavior such as weight loss). Setting achievable, process-focused short-term goals fosters feelings of control more so than equally achievable long-term goals due to the frequency of feedback or cues regarding competence (13). Process-focused short-term goals are also valuable to avoid setting clients up for failure or disappointment by focusing only on long-term goals. Moreover, Shilts et al. (123) suggest that setting short-term goals rather than long-term goals mobilizes energy, while setting long-term goals may help with keeping the big picture in mind but they increase the likelihood of postponing efforts. Short-term goals can be used as one method of helping achieve long-term goals (13,75,80,125). Goal setting using the SMART framework is a popular approach to self-regulation (74,76,123) that incorporates many of the important properties of goal setting described earlier. SMART goals are specific (S; when, where, how, what), measurable (M; quantifiable), achievable/realistic (AR), and include time frame considerations (T).

Other important considerations when helping clients with their physical activity goals and plans are persistence (*i.e.,* "the tenacity people show in their endeavors to overcome difficulties and master challenges" (3, p. 285)) and commitment to change (*i.e.,* "the degree to which the individual is attached to the goal, considers it significant or important, is determined to reach it, and keeps at it in the face of setbacks and obstacles (71)). People have a tendency to set goals that they perceive as both desirable and feasible; however, this perception does not guarantee commitment to the goals (15). One means to enhance commitment is creating and signing an exercise contract, which serves to hold the individual accountable and is a visual reminder (*i.e.,* an extrinsic motivator) of the goal and required behavioral response (25,80). The exercise contract (*i.e.,* contingency contract, behavioral contract) should include the exercise (frequency, intensity, time, and type) the individual is committing to, how success (or lack thereof) will be measured, the consequences of not meeting the goal, and a reward (positive reinforcer) for successful completion of the desired behavior.

An individual must not only set desirable and feasible goals, but must also actively strive to achieve these strategies' goals in the face of challenges by employing effective coping responses. Goal setting is not sufficient on its own: In the absence of careful planning, many goals fail to be achieved (3). The distinction between two types of planning relevant to

translating initial intentions into action can be made: action planning and coping planning (126,127). Action planning is a plan aimed at performing goal-directed behavior that specifies the when, where, and how to turn intention into action.

Coping planning, in contrast to action planning, involves anticipating and managing the risky situations associated with performing undesired behaviors and overcoming barriers to translating the intention into action by using effective coping responses (80,126,127). Coping planning is thought important not only in translating initial intentions into action, but also in maintaining long-term behavior change. Problem solving and substituting alternatives are coping responses that can be employed to manage risky situations. Problem solving is a means of brainstorming solutions to problems that may arise. The IDEA approach is a simple problem-solving framework that can be used to generate a solution to a problem behavior or barrier. The IDEA approach to problem solving involves:

1. Identifying a barrier to being active (I).
2. Developing a list of creative solutions (D).
3. Evaluating the solutions by choosing a solution and determining how the solution will be carried out (E).
4. Analyzing how well the plan worked and revising when necessary (A; 85).

Substituting alternatives involves brainstorming alternative options for achieving a goal, evaluating the advantages and disadvantages associated with each method of reaching one's goal, and then choosing the option that is most likely to lead to successful behavior change.

BEST PRACTICE STRATEGIES

Evidence for the use of goal setting strategies for fostering physical activity and dietary behavior change with adults is moderate (69,123); however, there is a need for further research to establish the efficacy with children and adolescents (123). Research has consistently demonstrated that setting goals that are specific, concrete, and challenging rather than vague and easy to achieve results in better performance (71,77). A meta-analytic review of the domain of sports and exercise found that short-term and combined short-term and long-term goals are more effective than long-term goals alone (69). Research has also demonstrated that tenacity/persistence is a good predictor of goal attainment (3). Moreover, when commitment to goals is high, individuals are more likely to act in accordance with their goals than when their commitment to goals is low (71). In one study, frequency of goal setting, which may reflect a higher commitment to behavior change goals or possibly may reflect more provision of feedback/cues regarding performance, was found to be positively associated with use of behavioral strategies for physical behavioral change (91). To assist in goal setting with your client, you can use the goal setting worksheet provided in From the Practical Toolbox 3.3.

In the domain of physical activity research, convincing evidence continues to emerge that planning is critical to translating intention into action (*e.g.,* 7,28,81,121,143). However, research also suggests that intention moderates the planning-behavior relationship, such that an individual with high intention is more likely to act on their plans than an individual with low intention (121,142). Evidence also supports the idea that action coping is more important at early stages of behavior change; whereas, coping planning is more important for adherence to behavior change (121,127). Moreover, accumulating evidence suggests planning interventions that include coping planning or both coping and action planning are effective in promoting adherence to health behavior change (6,126,144). In addition, in a recent meta-analysis, action planning was associated with increases in both self-efficacy and physical activity (143). It has also been found that people with higher self-efficacy benefit more from planning interventions than individuals who lack self-efficacy (81). A planning worksheet outlining how to make effective action and coping plans is provided in From the Practical Toolbox 3.4.

Self-Monitoring and Feedback

Self-monitoring refers to "paying attention to one's own thoughts, feelings, and behaviors, and gauging them against a standard" (80, p.154). Self-monitoring, typically through activity logs or journals (see the self-monitoring worksheet in From the Practical Toolbox 3.6), is an excellent way of keeping record of the dimensions of physical activity (frequency, intensity, type, time) and the context of physical activity behavior. Self-monitoring is a means to increase the client's awareness of their physical activity, the cues and consequences of the behavior, and the barriers standing in the way of successfully engaging in the desired behavior (25). It also provides the individual with feedback about their progress and may increase the individual's confidence in their ability to be active. According to goal setting theory, feedback regarding progress toward a goal is key to effective goal setting (77). Comprehensive psychological and exercise testing can also serve as a useful baseline for setting goals, monitoring progress/movement toward goals, and for evaluating and revising goals and the plans implemented to reach those goals (24). A more affordable tool is the pedometer/step counters, which also allows for goal setting, self-monitoring, and feedback. Ample research has shown that physical activity interventions that include self-monitoring are more effective in changing physical activity behavior than those that do not include self-monitoring (31,32,88).

Although behavior change from strong intentions depends primarily on the self-regulatory skills discussed earlier, there is emerging evidence that partial automaticity of the act, environmental and social support for exercise, and the reduction of cross-behavioral conflict also play a role. These concepts and preliminary evidence are presented next.

Automaticity

The automaticity construct has been controversial in human behavior models for almost 40 years (132), but its utility in predicting exercise has been established (49). Automaticity, in this context, refers to the performance of physical activity behavior without decision or formal thought. This automaticity is thought to develop from decisional/intended behaviors that were once conscious and motivation-based, but now are partially acted upon through environmental cues (1,2,137–139). Thus, automaticity is not random, thoughtless, action. Instead, automaticity develops from repeated, practiced, and highly motivated actions. The best example of automaticity may be in cases of driving behavior. Many people can drive to work and home without thinking about it. The behavior has become so practiced that it is essentially automatic. Indeed, when we attempt to alter this route—say to go to a store on the way home—we sometimes find ourselves home even though our initial intention was to stop at a different destination first! Certainly, in the case of physical activity, we are not suggesting that we want to build skills that create exercise robots (82); however, it does stand to reason that an efficient physical activity routine that can be performed without a constant motivational struggle is highly desirable. Based on prior theorizing and research (37,110), it has been shown that those who can act without conscious deliberation or rumination increase their chances in translating intentions into behavior. For example, it is proposed that someone who is so used to an exercise routine that they begin the act without deliberation via simple cues has a much better chance of action control than a person who has to engage in self-talk, planning, and decision making to act each time (139).

Automaticity is thought to be affected by prior history with the behavior and occur with behaviors that are highly practiced (14). Therefore, individuals with a more meager exercise history are proposed as at-risk for having low automaticity when initiating an intention into behavior. While prior physical activity experience may be an intractable determinate, skill building and prescriptions that involve exercise repetition in terms of time, acts,

location, and other characteristics may help in habit formation (70). Another intervention with considerable utility to automaticity formation may be planning via implementation intentions (53). Implementation intentions, the act of setting plans about where, when, how, and what behaviors will be performed, are proposed to partially act as mini mental links between the behavior and environmental cues (53,54). It has been proposed and supported by research that implementation intentions may foster automaticity (54).

Environmental and Social Support

While we intend to make desirable changes like adopting regular physical activity, sometimes we need help to realize the goal. In this capacity, when one views exercise as a means for maintaining or improving friendships over the long term, it increases the likelihood that exercise outcome expectations are strengthened beyond our own individual goals. Similarly, other social outcomes such as building a sense of commitment or responsibility have shown supportive findings. Research on social affiliation among friends/partners (130), children (29,56), and even dogs (23,36,59) has supported this conjecture. Therefore, it is recommended that social interventions should focus on the broader social exchange and social meaning behind the regular physical activity if possible.

The enjoyment and distractions from exertion or monotony caused by exercising with others may also aid in translating strong intentions into behavior (113). If the exercise experience can fulfill socialization (38), it should strengthen the expectations of the experience (30,44,47). Opportunities to socialize during exercise also provide a type of multitasking by combining social needs and personal health and wellness needs (38). In this sense, it can increase the opportunities to act on exercise because one can combine these objectives within a single act. Relatedly, organizing times to exercise with someone introduces a sense of accountability toward the other person. Also, social support, specifically the tangible aid from others so one can create time to exercise (35,115), is a likely influence on the opportunity to act. Others who can free up time by helping with daily chores will increase the time available to exercise and make it easier to translate intentions into behavior (30,44,47). Health and fitness professionals can also serve as a means of social support, especially at the outset of a program, by providing their clients with verbal support and encouragement. This support may increase their client's motivation and confidence in their ability to initiate physical activity.

Adjustments to the environment around people with the intention to change may also help. A focus on improving a client's opportunities for physical activity needs to be considered. Specific characteristics of the environment, such as proximity to facilities, serve as cues to action that facilitates or inhibits successful intention translation. This effect has been demonstrated consistently in past research (95,105,108). This probably aids in the ease of access of performing physical activity and helps shrink the distance between initial intentions and the time to act.

Cross-Behavioral Conflict

The successful translation of good intentions into a behavior may be determined, in part, by the amount of motivation and commitment one has placed on other leisure-time pursuits. This cross-behavioral conflict serves to thwart physical activity by acting as a negative determinant. The basis for this determinant resides in the concept of time displacement (101), whereby motivation and planning for other behaviors compete in the behavioral choices made during free time. Specifically, under the limits of free time, investments of time spent on one behavior may affect the time that can be spent on another behavior. In this capacity, one behavior can impede another. Cross-behavioral conflict has been validated in physical activity (50,51,94,100–02,120) and it is a central tenet of a theory known as behavioral economic theory (140). Television viewing, due to its high prevalence, is the most

noteworthy candidate as a cross-behavioral regulation that may thwart physical activity, but any leisure-time activity other than exercise can serve in the capacity.

In order to build the skills to decrease cross-behavioral conflict, it is suggested that increasing the knowledge base about the detriments of prolonged sedentary behavior and lowering ease/ability and scheduling/planning of these behaviors would be of benefit (100). For example, in the context of TV viewing behavior, an intervention should focus on educating clients about the health risks of continuous sitting and public health guidelines around antisedentary behavior. Lessening the ease of access (*e.g.,* removal of multiple TVs, removal of cable), and opportunity (*e.g.,* by keeping a schedule of very specific viewing times when it is less convenient to do other activities such as 9–10:30 pm) may also be effective. Another means of reducing sedentary behavior involves educating and having clients consider ways to accumulate active lifestyle activities into their daily routine (*e.g.,* climbing stairs instead of the escalator, walking to work/nearby store), rather than scheduling a session of continuous exercise (*e.g.,* strength training at the gym). Incorporating competing activities such as exercising while watching TV may also be a strategy to increase exercise without asking the client to give up things they like and does not require extra time in the day. Early research in these sedentary reduction behaviors has shown success with these strategies (39).

TAKE-HOME MESSAGE

In summary, to facilitate a client's initial intentions to be physical active, it is essential that the fitness and health professional help their clients be active in their exercise prescription. The exercise professional should aim to facilitate the self-regulatory process for the client but not to simply create the self-regulatory plan for them. The development of the client's self-regulation skills and toolbox is more important than the plan itself because goals and plans change over time and life context. Further, a plan created for the client without their input and collaboration will not result in adherence to an exercise program and is typically no different than the absence of a plan (16). The preceding section suggested that building skills for goal setting, self-monitoring, and planning are crucial to self-regulation, with the additional consideration of automaticity, social and environmental support, and lowering cross-behavioral conflict.

To assist you in selecting strategies for use with your clients, the next section provides step-by-step instructions and worksheets demonstrating how to implement these approaches. For ways to model the appropriate selection of strategies and tools to implement with your client, see Table 3.2 and, at the end of this chapter, several sample case scenarios.

STEP-BY-STEP

Follow these steps to implement the approaches discussed in the previous section:

1. Conduct a brief informal interview with your new client and establish rapport (see Chapter 5).
2. Get to know who your client is and what is important to them, as well as their history related to physical activity, fitness, and health and wellness (see Chapter 2).
3. Determine where your client lies on the intention behavior continuum. Are they. . .
   - Low intent? High intent?
   - Having difficulty translating their intention into action?
   - Having difficulty adhering over the long term?

   Take a look at Case Scenarios 3.1, 3.2, and 3.3 for examples of clients who vary on the intention behavior continuum.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Case Scenario 3.1

LOW INTENTION TO EXERCISE; HIGH RESISTANCE

Paul is a 50-year-old overweight man who has never been interested in his health and fitness. He has always been naturally slim and has never regularly engaged in a physical activity routine. However, in recent years he has put on considerable weight. He has fallen into a sedentary lifestyle. During his nonworking hours, he and his wife spend their time eating large unhealthy meals, watching television, and surfing the Web. His wife has recently taken an interest in their health as a couple, feels frustrated by their unhealthy routine, and has been pushing Paul to engage in a healthier lifestyle. In pursuit of this goal, his wife decided to buy them both gym memberships and personal training sessions with you for a Christmas present. She is determined to start living a healthy lifestyle and to age successfully; however, Paul is resistant to change and quite anxious about becoming active and finding his way around the gym. He complains that he is already tired after work and has no interest in getting hot, sweaty, and experiencing discomfort and muscle soreness.


Felix Mizioznikov/Shutterstock.com

Case Scenario 3.2

HIGH INTENTION TO EXERCISE: "LOST IN TRANSLATION"

Andrea is a 25-year-old woman with two young children aged 3 and 5 years of age. She works full time in an administrative position for the government, while her husband works long, irregular hours as a manager in the restaurant business. She was active in her youth, when physical education was mandatory and her parents had her enrolled in several extracurricular sports after school. She has found it very difficult to focus on her physical activity and fitness level after having children and returning to work. Although she is highly motivated to get active and stay healthy so she can keep up and have fun with her kids, she is having trouble translating her intention into practice. Without the structure provided by school and her parents and the demands of working and parenthood, she feels lost and has no idea where to begin. She recently signed up for the corporate gym membership at the local gym. She has come to you with a strong desire to become active and is looking for guidance on how to adopt a healthier lifestyle.

4. Based on your answers to Step 2, prioritize which physical activity skills building activities you will need to work through with your client. Possible worksheets to choose from include the:
   - Behavioral palate worksheet (see From the Practical Toolbox 3.1)
   - Decisional balance worksheet (see From the Practical Toolbox 3.2)
   - Goal setting worksheet (see From the Practical Toolbox 3.3)
   - Planning worksheet (see From the Practical Toolbox 3.4)
   - Exercise contract (see From the Practical Toolbox 3.5)
   - Self-monitoring worksheet (see From the Practical Toolbox 3.6)

   For guidance in choosing appropriate worksheets for your clients, use Table 3.2, Decision Tree for Choices of Worksheets and Strategies. The decision tree

Case Scenario 3.3

INTENTION BUT NO SUCCESS: STRUGGLES IN LIMBO

Cameron is a 35-year-old who recently graduated from Law school and got hired on at a major law firm. He is trying to make a good name for himself, and work is a high priority. He has been putting in long hours at work, is experiencing high levels of stress, his mood is poor, and he is having trouble sleeping. He makes time for physical activity infrequently and often cancels workouts for work engagements. Although he grew up in a household that valued health and physical activity and he played on many sports teams throughout his elementary and secondary school years, this is not the first time he has fallen off track. He first had difficulty engaging in regular physical activity when he went away to college at 19 years of age. He recalls being highly motivated to keep physically active when he was away at school, and intended on going to the gym regularly. He even joined a volleyball team for his first semester. During his first few weeks of school, he kept to his intention to be physically active, but then things began to unravel. He had considerable difficulty balancing his heavy course load and study schedule with his social life. He quit his recreational volleyball team in the first semester of school and he put on the "frosh fifteen." He is beginning to see a pattern and has come to you for help to break it and learn how to maintain a healthy lifestyle in the long term.

provides appropriate strategy and worksheet selection for Case Scenarios 3.1, 3.2, and 3.3. For a client who has low intention or is resistant to engaging in exercise (Case Scenario 3.1), appropriate tools include the behavioral palate worksheet, the decisional balance worksheet, and the planning worksheet (focusing on Step 1: Action Planning). Additional strategies appropriate for a client who has little intention for exercising include reviewing the benefits of exercise with an emphasis on the affective experience (*e.g.,* enjoyment, improved mood) or creating contingency structures (*e.g.,* creating rewards for engaging in physical activity). See Table 3.2 for solutions to the other sample scenarios.

5. Work collaboratively with your client on the selected worksheets. Notice that each worksheet includes steps and instructions for you to work through with your clients.
6. Sign an exercise contract based on the activities developed from the worksheets to help increase commitment to the exercise (see the sample exercise contract in From the Practical Toolbox 3.5).
7. Monitor progress using the self-monitoring worksheet (see From the Practical Toolbox 3.6).
8. Schedule regular follow-ups to evaluate progress, and revise program and sign new exercise contracts when necessary.

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