

Lesson 2: Changing Physical Activity Behaviour

Introduction

This lesson focuses on the Stages of Change model, which has been used to help people adopt new healthy behaviours and dispense with unhealthy behaviours. Identifying where we are along the Stages of Change continuum can assist us in making desired change. The learning experiences in this lesson will help students understand their own stage of change in relation to physical activity and the processes they have used or could use to facilitate their desired change.



Specific Learning Outcomes

11.FM.2 Examine factors that have an impact on the development and implementation of and adherence to a personal physical activity plan.

Examples: motivation, barriers, changing lifestyle, values and attitudes, social benefits, finances, medical conditions, incentives, readiness for change

11.FM.3 Examine and evaluate factors that affect fitness and activity choices.

Examples: intrinsic and extrinsic motivation, personal interests, personal health, family history, environment, finances, culture, level of risk



Key Understandings

- People progress along a continuum known as the Stages of Change when changing their behaviour.
 - Each stage of change is associated with specific characteristics.
 - There are specific approaches to assisting individuals with adopting healthy behaviours, depending upon where they are along the Stages of Change continuum.
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Essential Questions

1. What are the stages in the Stages of Change model, and how can you move from one stage to the next?
 2. In the processes of change, what two cues can be used to move from one stage of change to another? Why are these cues important?
 3. How do the processes of change support the Stages of Change model?
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Background Information

Physical Activity and Exercise Behaviour

We are all born with a need and a desire to be physically active. This need and desire are kept alive through successful participation in physical activity, the freedom to explore various movement experiences, and having fun. Staying active will do more than promote the essential fitness behaviours that have been shown to add years to life. Staying active will maintain the physical vitality that adds life to the years.

Unfortunately, many changes have taken place in our society, such as increased consumerism, conveniences, and wealth orientation, which have reduced the necessity to move or to be active. Along with the movement toward relative inactivity come the increased risks of illnesses and diseases. This general trend toward inactive (sedentary) and other unhealthy lifestyles (e.g., over-consumption of food) has led to a crisis in the health care system, an increase in personal health-related tragedies, and an “obesity epidemic.” There is an urgent need to address this trend. In other words, we need to change our attitudes, giving higher priority to physical activity and exercise behaviours in our lives. We must move physical activity from a “want to do” to a “must do.”

Stages of Change

Changing our attitudes and behaviours is a process that occurs over time, and we are all at different stages of readiness to change. The Stages of Change model, as outlined by Prochaska, Norcross, and DiClemente, provides a framework for explaining how behaviour change occurs in people. The stages of change have been applied as a model of how people change in relation to a variety of problem behaviours (e.g., related to substance addictions, eating habits, disease prevention). The model helps identify where people are along the continuum of change and provides specific approaches or types of assistance for each stage of change to facilitate individuals in moving through the stages.

The Stages of Change model consists of five stages, which can help determine where individuals are in the process of changing their attitudes and behaviours related, for example, to increasing physical activity:

1. **Pre-contemplation:** People in this stage are not thinking about changing their inactive or sedentary behaviour and are not aware of their problem. They have not considered changing.
2. **Contemplation:** People in this stage have thought about their problem, can identify that they are inactive, and have devoted some thought to changing. They have not taken action to change, or they may be beginning to consider options for change.
3. **Preparation/decision:** People in this stage have begun the process of change by examining possibilities and options, such as considering a gym membership, looking at new exercise clothing, wanting to start using a pedometer, or contemplating a noon-hour walking program.

4. **Action:** People in this stage have taken steps to overcome their sedentary lifestyle by modifying their behaviour, experiences, or environment in order to overcome their problem. Action involves the most overt behavioural changes and requires a commitment of time and energy. Early indicators of the action stage include steps such as evaluating different exercise facilities and costs, purchasing a gym membership, purchasing exercise equipment, joining a walking group, and using exercise equipment for physical activity rather than as “furniture.”
5. **Maintenance:** People in this stage consolidate the gains attained as a result of initial action through sustained involvement in the new behaviour, in this case an active lifestyle (or avoidance of the old behaviour – physical inactivity). Adoption of the new behaviour usually requires a period of many weeks to months.

With this model, behaviour change is viewed as a process. An individual’s readiness for change is related to how far along the person is in the Stages of Change continuum. People can enter and exit a stage at any point, and some people may repeat a stage several times. They can move both forward and backward between the stages. Generally, the goal is to have a person move along each stage from pre-contemplation to maintenance (the new behaviour). Once a person is identified as being at a specific stage for a certain behaviour (e.g., increasing physical activity or decreasing sedentary behaviour), an approach is adopted to aid the person, specific to that stage.

Example

A sedentary individual is disgusted with the rise in diabetes in society and the associated health care costs, but he does not realize that his own inactivity is leading to increased health risks, including the development of diabetes. He sees the problem in others but not in himself (*pre-contemplation*).

Recently he applied for long-term disability insurance, and his insurance broker told him he needed a medical check-up to get the preferred customer discount. His doctor informed him of his high blood pressure, high triglycerides, and high blood sugars (pre-diabetic). He was declined insurance. He realized it was time for a change and recognized that he was part of the problem and needed to get his life in order for himself and for his family’s future (*contemplation*).

He looked into many options and decided to sign up with a certified exercise physiologist at a private gym (*decision*). He paid for a one-year membership, bought exercise gear, and met his trainer for the first session (*action*). Despite advice from the trainer, he now tries to change his life too quickly by setting unrealistic goals and relapses after a week, but then realizes that the effective way to change takes work and patience (*contemplation and action*). With encouragement from his family and a new training partner he met at the gym in the same circumstance, he keeps his personal activity plan and nutrition plan (*decision*). After eight weeks, his body has changed and he has a new life, with activity every day (*maintenance*). He knows that winter is coming, and he and his trainer have established a new winter routine (*prevent relapse*).

REFERENCES



For additional information, refer to the following resources:

Prochaska, James O., John C. Norcross, and Carlo C. DiClemente. *Changing for Good: A Revolutionary Six-Stage Program for Overcoming Bad Habits and Moving Your Life Positively Forward*. New York, NY: Avon Books Inc., 1994.

Spencer, Leslie, Troy B. Adams, Sarah Malone, Lindsey Roy, and Elizabeth Yost. "Applying the Transtheoretical Model to Exercise: A Systematic and Comprehensive Review of the Literature." *Health Promotion Practice* 7.4 (Oct. 2006): 428–43.



Suggestion for Instruction / Assessment

Physical Activity Stages of Change—Questionnaire

Using the Think-Pair-Share strategy (see Appendix E), have students consider which stage of change they are currently in as it relates to their own physical activity:

- Working individually, students complete the questionnaire provided in RM 1–FM. They then use their results on the questionnaire and the information and examples from this lesson to forecast what steps or strategies they could apply to advance along the Stages of Change continuum toward the *maintenance* stage.
- Students then discuss their results and ideas with someone else who is currently in the same stage as they are.
- Finally, the student pairs share their ideas with the class.



Refer to RM 1–FM: Physical Activity Stages of Change – Questionnaire.



Background Information

Processes of Change

Moving through the Stages of Change model is a process that requires both cognitive and behavioural changes, such as

- changes in attitude and awareness of one’s circumstances (cognitive – the way one thinks)
- changes in actions to decrease the occurrence of undesirable activities, such as overeating, and actions to engage in new, desirable activities (behaviour – the way one acts)

Both cognitive and behavioural aspects are necessary for people to change from one stage to another.

The Stages of Change model works simultaneously on multiple attitudes and behaviours; that is, a person could be in one stage for one behaviour and in a different stage for another. Seeking and maintaining a healthy lifestyle involves many behaviours, and it is unlikely that we will be in the maintenance phase for all healthy behaviours. We may have a particular problem behaviour, or we may wander in and out (e.g., from maintenance to relapse to maintenance) of a certain behaviour. For healthy lifestyles, being physically active and having a nutritious diet are both key behaviours. It is quite common to have someone doing well in one area, but not in the other. Very active athletes, for example, can have a poor diet, even though they “know better.” Some inactive people may think that all they need to do to be healthy is to eat well. To live healthy, active lives, we all need a tailored approach to keep us in a given stage or to shift us to another stage.

The two cognitive keys to shifting through the Stages of Change continuum successfully are motivation and self-esteem:

- **Motivation** is a state of readiness or eagerness to change, which may fluctuate from one time or situation to another. This state can be strongly influenced by internal and external factors. Motivation is the likelihood that a person will enter into, continue, and adhere to a strategy of change.
- **Self-esteem** can be defined as the likelihood to see oneself as competent to cope with life’s challenges and to be deserving of happiness. To improve self-esteem, a person must experience success relative to expectations. Specifically, the more realistic the expectation or goal is, the higher the degree of success will be. This success, in turn, leads to an improved self-esteem in a shorter amount of time.

A Tailored Approach to Change

Successful approaches to the change process adhere to the following principles:

- Tailor your approach to each stage of change.
- Move one stage at a time.
- Be patient and allow time to change.

Tailoring our approach to each stage of change requires specific cognitive and behavioural cues, which are outlined in RM 2-FM. Specific approaches can be used to assist individuals with adopting healthy behaviours, depending upon where they are along the Stages of Change continuum.



Refer to RM 2-FM: Process of Change: Tailoring Your Approach.



Suggestion for Instruction / Assessment

Role Playing Stages of Change

Have students work in pairs to role play the stages of change. One student adopts a particular stage of change using his or her own circumstances (as identified in RM 1-FM) and the other student attempts to use appropriate behavioural and cognitive cues to move the partner along the Stages of Change continuum. Have students role play each stage of change, record methods that were suitable for assisting in each stage and circumstance, and explain the rationale for each method.

NOTE TO TEACHER

If there are any concerns about how particular students may feel about using their personal circumstances in the role play, teachers may want to provide the students with a scenario of a given stage of change rather than having them use their own circumstances.

Students may consider using the cognitive and behavioural cues from RM 2-FM to formulate their questions or to guide their discussion.



Refer to RM 1-FM: Physical Activity Stages of Change – Questionnaire and RM 2-FM: Process of Change: Tailoring Your Approach.

RM 1–FM: Physical Activity Stages of Change—Questionnaire*

For each of the following questions, please circle **Yes** or **No**. Be sure to follow the instructions carefully.

Physical activity or exercise includes activities such as walking briskly, jogging, bicycling, swimming, or any other activity in which the exertion is at least as intense as these activities.

	No	Yes
1. I am currently physically active.	0	1
2. I intend to become more physically active in the next six months.	0	1

For activity to be *regular*, it must add up to a *total* of 30 minutes or more per day and be done at least five days per week. For example, you could take one 30-minute walk or take three 10-minute walks for a total of 30 minutes.

	No	Yes
3. I currently engage in <i>regular</i> physical activity.	0	1
4. I have been <i>regularly</i> physically active for the past six months.	0	1

SCORING

If question 1 = 0 and question 2 = 0, then you are at stage 1 (*Pre-contemplation*).

If question 1 = 0 and question 2 = 1, then you are at stage 2 (*Contemplation*).

If question 1 = 1 and question 3 = 0, then you are at stage 3 (*Preparation*).

If question 1 = 1, question 3 = 1, and question 4 = 0, then you are at stage 4 (*Decision/action*).

If question 1 = 1, question 3 = 1, and question 4 = 1, then you are at stage 5 (*Maintenance*).

* Source: Adapted, with permission, from B. H. Marcus and L. H. Forsyth, 2003, *Motivating People to Be Physically Active*, (Champaign, IL: Human Kinetics), page 21.

RM 2–FM: Process of Change: Tailoring Your Approach

Stage of Change	Cognitive and Behavioural Cues (with Explanatory Notes)
Pre-contemplation	<ul style="list-style-type: none"> ▪ “Raise doubt” about resistance to physical activity. <ul style="list-style-type: none"> ▪ Raise doubt about people’s resistance to changing physical behaviour by providing information and explaining why it is wise to adopt an active lifestyle. Simply providing pamphlets is not enough. People need to understand the real risks of being sedentary and that the risks apply to them personally, not only to others. ▪ Many people think they don’t have the time or the finances to become active. Cast doubt on the lack-of-time excuse by “talking a person through” a weekly schedule or calendar. With patience, a few hours will be found in almost everyone’s schedule for physical activity. When financial problems are cited as the reason for inactivity, it may be possible to illustrate either that someone does have the funds (e.g., by spending money on physical activities rather than on luxuries such as a new TV, car stereo, or game system) or that becoming active may not require a large amount of money. ▪ When people feel helpless, they may give up trying to be active. Support them by helping them to understand how they could do things they might enjoy by becoming active. Raise doubt about their helplessness by helping them to realize that they <i>can</i> change and that although it may take time to change, the benefits will be almost immediate. ▪ In providing information, be as factual and unbiased as possible, and encourage people to seek more information. ▪ Increase awareness of risks and problems of inactivity. ▪ Keep in mind that tolerance and patience are needed when resistance to change is high.
Contemplation	<ul style="list-style-type: none"> ▪ Provide additional reasons to change. <ul style="list-style-type: none"> ▪ People often focus on one reason to make a change (e.g., “I’m going on a vacation and I want to drop 5 kg.” or “I want to run my first marathon.”). When people add other reasons why a change may be beneficial, they don’t need to rely on only one outcome to gauge success. Adding other reasons to engage in physical activity (e.g., strengthen bones, improve ability to do work or to keep up with others, learn to play a sport) can help individuals create new process goals (e.g., buy new running shoes, get a gym membership) or performance goals (e.g., keep a daily step-count log), which often aids them in feeling successful. Simply listing additional benefits of change is OK, but finding benefits that individuals “buy into” is important. ▪ Discover reasons for ambivalence to change. <ul style="list-style-type: none"> ▪ The feeling that “something is holding one back” from acting derives from the coexistence of positive and negative feelings toward a new behaviour. To help someone move forward, it is important to discover what the holdback is and to identify whether there are enough positive feelings to outweigh negative ones (e.g., a concern about not having the right clothing is a common negative that can be overcome). ▪ Weigh the pros and cons. <ul style="list-style-type: none"> ▪ There are always positive and negative aspects to any new behaviour. It is important to recognize that negatives exist and that the positives, once weighed, will likely outweigh the negatives. Simply listing and discussing the pros and cons is helpful. ▪ Recognize when intent is high but desire to work is low. <ul style="list-style-type: none"> ▪ Clearly, exercise is work. However, people almost invariably feel much better when they work out, and especially afterwards. As small increments in exercise or physical activity intensity and duration are recommended, encourage individuals to start small and work their way up (e.g., a 10% increase per week accumulates quickly).

Continued

RM 2–FM: Process of Change: Tailoring Your Approach *(Continued)*

Stage of Change	Cognitive and Behavioural Cues (with Explanatory Notes)
Preparation/ Decision	<ul style="list-style-type: none"> ▪ Assist in selecting the best options. ▪ Create a realistic action plan. <ul style="list-style-type: none"> ▪ Make sure that goal setting is not simply based on outcomes (e.g., time in a race, placement in an event, weight loss). Establish process or performance goals (e.g., change in step counts per week, distance run, consistency in training). ▪ Plan for “blips” in the change process. <ul style="list-style-type: none"> ▪ Deviations in plans often occur due to external and internal factors, so it is best to anticipate and plan for them before they occur, thereby minimizing the coping required (e.g., control the emotional reaction to the possibility of not succeeding at a goal). Blips in plans for physical activity may occur due to changes in seasons (e.g., transition from summer to winter), holidays, illness, or heavy stress in school. Set up activity goals that have minimums, normal values, and maximums (e.g., one workout a week is maintenance, two or three is very good, and four or more is excellent). Setting up “contingency plans” is as important as setting up the action plan.
Action	<ul style="list-style-type: none"> ▪ Support decisions by eliminating doubt in actions. <ul style="list-style-type: none"> ▪ All of us have likely felt uncertainty about decisions we’ve made. When individuals experience doubt about their decision on a course of action, assure them that they “have done the right thing” and remind them of the future benefits of following this path. ▪ Establish goals using the SMART (specific, measurable, attainable, realistic, and time-framed) goal approach. ▪ Establish a means of providing feedback on how something is working. <ul style="list-style-type: none"> ▪ Self-monitoring is often a key to success. Set up accountability frameworks such as pedometer log sheets where individuals can record and identify process or performance changes. They can evaluate their log sheets and possibly report their progress. The act of reporting makes individuals accountable and indicates the importance of their physical activities. Other useful self-monitoring tools include training diaries, calendars, and exercise logs. ▪ Reinforce overt behavioural changes. <ul style="list-style-type: none"> ▪ Use prompts to initiate a behaviour change (e.g., put up signs or posters at home as reminders to exercise). These prompts remind individuals to engage in the new activity and to work at it for some time before the effect of the prompts fades. ▪ Consider getting a training partner to help with reinforcement of and adherence to a physical activity plan. A training partner can be a person or a group, an animal (e.g., a dog), or a device (e.g., a pedometer). ▪ Having a close friend or family member “buy into” and help reinforce a change is also important. ▪ Find ways to make the activity experience a joy rather than a burden or a chore. ▪ Rewards or incentives can be helpful, if needed.
Maintenance	<ul style="list-style-type: none"> ▪ Support new behaviours. <ul style="list-style-type: none"> ▪ Continued support through this time can help people avoid going back to thinking, “I don’t have enough time” and “I have more important things to attend to.” Remind people what their health is worth and that the steps they are taking are important. ▪ Diversify behaviours and explore new ones. <ul style="list-style-type: none"> ▪ Adding to the repertoire of activities can be helpful so that a person is not entirely dependent upon one form of exercise (e.g., combining stationary cycling with bicycling outdoors adds a new dimension and the possibility of cycling through the change of seasons). ▪ Although structured physical activity plans are important, some variety in workouts can make the exercise more enjoyable and decrease boredom. ▪ Provide accountability frameworks. <ul style="list-style-type: none"> ▪ Some form of continued self-monitoring is important. Individuals can change the self-monitoring tool they use (e.g., from a calendar to a diary to an exercise log). This form of feedback helps reinforce behaviour. ▪ Realistically examine the outcome goals (e.g., weight loss). Unrealistic expectations in terms of a rapid change in outcome can sabotage success at this stage.

