Lesson 1: Mental Health, Health Habits, and Exercise

Introduction

Mental-emotional health and physical health affect each other. People with physical health problems often experience anxiety or depression that affects their recovery and overall well-being. According to Health Canada ("Mental Health – Mental Illness"), mental health factors can increase the risk of developing physical problems such as

- diabetes
- heart disease
- weight gain or weight loss
- gastrointestinal problems
- reductions in immune system efficiency
- blood biochemical imbalances

This lesson defines mental health and discusses how exercise and other healthy lifestyle practices can positively affect mental health. Students learn about ways to help themselves or to seek help when dealing with their feelings and emotions from day to day.

REFERENCE



For additional information, refer to the following article:

Health Canada. "Mental Health—Mental Illness." *It's Your Health*. Ottawa, ON: Health Canada, 2006. Available online at

< http://hc-sc.gc.ca/iyh-vsv/diseases-maladies/mental_e.html>.

For website updates, please visit Websites to Support the Grades 11 and 12 Curriculum at <www.edu.gov.mb.ca/k12/cur/physhlth/>.



Specific Learning Outcome

11.MH.1 Identify and apply positive health strategies to deal with issues such as stress, anxiety, depression, and eating disorders.



Key Understandings

- Mental-emotional health is a critical component of overall well-being.
- The stigma regarding mental-emotional health issues needs to be removed so that people with mental health concerns engage in help-seeking behaviour.
- Healthy lifestyle practices support positive mental-emotional health.



Essential Questions

- 1. How is mental-emotional health different from mental illness?
- 2. How do active lifestyle practices affect mental-emotional health issues (e.g., anxiety, depression, stress, eating disorders) and vice versa?



Background Information

As indicated by Health Canada ("Mental Health—Mental Illness"), most people will likely experience feelings of isolation, loneliness, sadness, stress, or disconnection from things during their lifetime. These feelings are often short-term, normal reactions to difficult situations, such as the death of a loved one, the loss of a job, a romantic breakup, or a sudden change of circumstances. Learning to cope or deal with these "ups and downs" or the good and bad times is part of life.

What Is Mental or Emotional Health?

Mental wellness, or good mental health, "is feeling, thinking, and interacting in ways that help you enjoy life and deal effectively with difficult situations" (Manitoba Healthy Schools).

Good mental health, more recently referred to as mental wellness, is not just the absence of mental health problems. Although different cultures have differing expectations for health, many of the following characteristics are likely to be present in individuals with good mental health in many cultures:

- sense of well-being and satisfaction
- ability to enjoy life, to laugh, and to have fun
- ability to deal with life's stresses and to bounce back from adversity

DEFINITION

mental-emotional health

The state or balance of a person's thoughts, feelings, and actions. Mentalemotional health relates to how people look at themselves, their lives, and the other people in their lives, how they evaluate their challenges and problems, and how they explore choices. This includes handling stress, relating to other people, and making decisions.

- participation in life to the fullest extent possible, through meaningful activities and positive relationships
- capacity to change, grow, and experience a range of feelings, as life's circumstances change
- sense of balance in own life between solitude and sociability, work and play, sleep and wakefulness, rest and exercise, and so on
- self-care that attends to the needs of the whole person mind, body, spirit, creativity, intellectual development, health, and so on
- ability to care for others
- self-confidence and good self-esteem

Why Is Mental-Emotional Health Important?

Our minds are not separate entities from the rest of us. When we are distressed, our physical health is also affected negatively, and our spirits decline. Many physical conditions are actually rooted in a state of mind (psychosomatic illness), or in a history of stress that has never been balanced. Hence it is important to take care of the body, mind, and spirit.

"Mens sana in corpore sano (a healthy mind in a healthy body)"

-Juvenal (Roman poet)

What Is Mental Illness?

Mental illness, by definition, is quite different from everyday feelings and reactions to difficult situations. People who suffer from a mental illness may experience a serious disturbance in thinking, mood, or behaviour, which may have an impact on their ability to function effectively over a long period of time. Mental illness may affect people's ability to cope with the simplest aspects of everyday life. Many people need help in regaining balance in their lives.

Healthy Lifestyle Practices

Examining healthy lifestyle practices or coping mechanisms to deal with everyday living is an important part of developing mental-emotional health. The engagement in healthy lifestyle practices contributes to both the quality and duration of life. The health habits or healthy lifestyle practices explored in the following Suggestions for Instruction/Assessment can significantly affect a person's life.

DEFINITION

healthy lifestyle practices

Any behaviour that has an effect on a person's health and well-being. (The level or amount of the behaviour engaged in will determine the degree of the positive effect.)

REFERENCES



For information on mental and emotional health, refer to the following websites:

Health Canada. "Mental Health—Mental Illness." *It's Your Health*. Ottawa, ON: Health Canada, 2006. Available online at

http://hc-sc.gc.ca/iyh-vsv/diseases-maladies/mental_e.html>.

Helpguide. "Mental and Emotional Health."

<www.helpquide.org/mental/mental_emotional_health.htm>.

Manitoba Healthy Schools. "Mental Health: What Is Mental Wellness?" *Mental Health*. www.gov.mb.ca/healthyschools/issues/mental.html.

For website updates, please visit Websites to Support the Grades 11 and 12 Curriculum at <<u>www.edu.gov.mb.ca/k12/cur/physhlth/</u>>.



Suggestion for Instruction / Assessment

10 Basic Health Habits

Using the active learning strategy Think-Pair-Share (see Appendix E), have students think of 10 basic health habits individually. Students then work in pairs to share their ideas and to check for similarities and differences. Two pairs then join to form a small group of four to develop consensus on 10 basic health habits as a group.

To help guide the group discussion, encourage students to include health habits related to

- physical activity (see Public Health Agency of Canada, Canada's Physical Activity Guide to Healthy Active Living)
- healthy eating (see Health Canada, Eating Well with Canada's Food Guide)
- sleep
- substance use, including tobacco and alcohol
- body weight
- personal and dental hygiene
- stress
- building healthy relationships
- general safety

Students could also develop an advertising campaign promoting one or more health habit(s) using different media.

REFERENCES



For additional information on basic health habits, refer to the following article:

Zamora, Dulce. "13 Health Habits to Improve Your Life." WebMD—Features Related to Health and Balance. 2004.

< www.webmd.com/balance/features/13-healthy-habits-to-improve-your-life>.

The following guides are available online:

Health Canada. Eating Well with Canada's Food Guide. 2007.

< www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html>.

---. Eating Well with Canada's Food Guide: First Nations, Inuit and Métis. 2007. www.hc-sc.gc.ca/fn-an/food-quide-aliment/index_e.html.

Public Health Agency of Canada. *Canada's Physical Activity Guide for Youth.* 2002. www.phac-aspc.gc.ca/pau-uap/fitness/downloads.html.

---. Canada's Physical Activity Guide to Healthy Active Living. 2004. www.phac-aspc.gc.ca/pau-uap/fitness/downloads.html>.

For website updates, please visit Websites to Support the Grades 11 and 12 Curriculum at www.edu.gov.mb.ca/k12/cur/physhlth/>.



Suggestion for Instruction/Assessment

Influences on Mental-Emotional Health

Provide each student with a copy of RM 1–MH (with the Mental Health Benefits left blank). Using the Think-Pair-Share strategy again, ask each student to identify and record mental health benefits of healthy lifestyle practices on RM 1–MH. After students have completed the task individually, they work with a partner to expand their list of benefits. Finally, students form small groups to share all the mental health benefits they have identified. Have each group present their top 10 mental health benefits.



Refer to RM 1-MH: Influences on Mental-Emotional Health.

REFERENCE



For additional information, refer to the following article:

Nieman, David C. "The Health Continuum." *The Exercise-Health Connection*. Champaign, IL: Human Kinetics, 1998. 5.



Background Information

Effect of Exercise on Mental Health

As a result of exercise, the body releases different chemicals that affect the brain. One group of chemicals is called *endorphins*. During exercise, the release of the beta-endorphin by the pituitary gland increases and produces an analgesic effect on the body as well as a feeling of elation or euphoria.

In his article "Exercise is a State of Mind," Miller states that "for several decades we've known about one effect of exercise on the brain, the 'endorphin high' that makes us feel good during and right after exercise" (48). He goes on to say that more recent scientists have discovered some longer-lasting effects of exercise on the brain, such as

- decreased anxiety
- reduced depression
- improved ability to cope with stress
- raised self-esteem
- improved mood
- improved sleep
- increased cognition (mental functions such as the ability to think, reason, and remember)

With exercise, several biological changes occur that make nerve cells more active or increase the ability of neurons to communicate with one another. The way this works is that the exercise fuels the body with blood, which carries energy and oxygen to the brain, which in turn tells the body to produce more proteins called neurotrophic factors or growth factors. These substances stimulate nerve cells to grow and connect with one another (neuroplasticity) or to develop new nerve cells (neurogenesis).

The hippocampus, a seahorse-shaped region in the temporal lobe of the brain, is involved in regulating mood and storing memories. Studies have shown that "exercise caused an increase in the production of neuropeptide Y (NPY) in the hippocampus . . . [and] induced an increase in brain-derived neurotrophic factor (BDNF) in the same region. These two proteins—NPY and BDNF—are important prerequisites for nerve growth and survival" (Miller 49). These proteins can be thought of as the "fertilizers" for the brain. BDNF is a natural substance that enhances cognition by boosting the ability of neurons to communicate with one another.

The release of other chemicals such as serotonin, dopamine, norepinephrine, melatonin, and insulin are also affected by exercise, which in turn can affect mental and emotional health. Because activities such as going for a walk or a run, shooting baskets, skateboarding, participating in a sport, or doing yard work can contribute to better functioning of the mind and the body, exercising is a healthy lifestyle practice for everyone to do every day.

REFERENCE



For additional information, refer to the following article:

Miller, Michael Craig. "Exercise is a State of Mind." *Newsweek* 149.13 (26 Mar. 2007): 48–50, 52, 55.



Suggestion for Instruction / Assessment

Healthy Lifestyle Practices for Mental-Emotional Health

Have students describe, by completing the chart in RM 2–MH, how healthy lifestyle practices (health habits) affect selected mental-emotional health issues.



Refer to RM 2-MH: Healthy Lifestyle Practices for Mental-Emotional Health.

After students have completed the chart, lead a class discussion on questions such as the following:

- How do the identified lifestyle practices affect mental-emotional health?
- How does mental-emotional health affect lifestyle practices?
- Which lifestyle practice has the greatest impact on mental-emotional health, and why?



Background Information

Is It Important to Seek Help for Mental-Emotional Problems?

People encounter stressful situations that could range from minor to major on a day-to-day basis. Depending on the circumstances, individuals may need to seek help if their reaction to stressors (e.g., loss, conflict, illness) becomes long term or interferes with other aspects of life.

Most people who experience mental health problems can overcome them or learn to live with them, especially if they seek help from a qualified source soon enough. Although people usually do not hesitate to seek medical advice for a physical problem, some believe it is shameful or a sign of weakness to seek help for an emotional health problem. There is

often a stigma of weakness associated with seeking help when encountering a mental or emotional health problem.

Students need to be reminded that it is OK to seek help and should learn how to access help for mental-emotional problems when needed.

REFERENCES



For information on getting help for a mental health problem, refer to the following website:

Manitoba Healthy Schools. "Mental Health: Where Can I Go For Help?" *Mental Health.* < www.qov.mb.ca/healthyschools/issues/mental.html>.

For website updates, please visit Websites to Support the Grades 11 and 12 Curriculum at <<u>www.edu.gov.mb.ca/k12/cur/physhlth/</u>>.



For information related to working with students on the thinking, feeling, behavioural cycle, refer to the following text:

Vernon, Ann. *Thinking, Feeling, Behaving: An Emotional Education Curriculum for Adolescents, Grades 7–12.* Rev. ed. Champagne, IL: Research Press, 2006.

What Increases the Risk of Mental-Emotional Health Problems?

Mental health problems can be the result of many different kinds of experiences in a person's life, from early childhood to later life. These life experiences may relate to a person's environment, hereditary history, psychological factors, and/or sociological factors. People may or may not have control over these factors.



Suggestion for Instruction / Assessment

Life Experiences Leading to Mental Health Issues

In a class brainstorming session, have students identify life experiences that they think could lead to mental health issues. Encourage students to think of situations or factors over which they have control and situations over which they have no control.

NOTE TO TEACHER

Please indicate to students that issues identified in this learning activity are not required to be personal.

Once the class has identified numerous life experiences, have students classify which

- situations they do not have control over (e.g., biochemical issues, family history)
- situations they can have some control over (e.g., by getting support, making good choices, or learning more about their situation)

Some situations or factors may fit into both categories.

Check student responses against the list provided in RM 3–MH and add to the list any areas identified by students in the class discussion (for future reference).

- Review the list of things over which students have some control. Discuss ways they can control a given situation.
- Reflect on the list of things over which students usually do not have control. Talk about ways they can get support and improve their mental health outcomes even if they have experienced situations they could control.



Refer to RM 3-MH: Life Experiences Leading to Mental Health Issues for additional suggestions and/or information to support this learning strategy.



Background Information

Helping Oneself

Each of us must learn to deal with our own feelings and emotions from day to day. All life experiences, whether positive or negative, are character building. The key is to develop skills for coping and managing our feelings and emotions and to learn from all experiences.

Resilience is the capability of an individual or group of individuals (such as a family, a group of friends, or a community) to cope with significant adversity or stress in ways that are not only effective, but also tend to result in an increased ability to respond constructively to future adversity (Resiliency Canada). Research tells us that despite growing up in high-risk environments, the majority of young people not only become successful by societal standards, but also become self-confident, capable, and caring persons. This is most often due to people's ability to bounce back from challenging times (resiliency), to use self-help or self-care measures (healthy behaviour choices) to help them through, and to talk to someone who can offer support, as needed.

Many minor mental health problems can be relieved by self-help or self-care measures. If we are feeling "blue," "out of sorts," or "stressed out," healthy lifestyle practices such as the following can help us to feel better:

- Get enough rest and sleep.
- Eat a well-balanced diet.
- Avoid caffeine, alcohol, tobacco, or other drugs, and avoid mixing alcohol and drugs.
- Participate in physical activities.
- Do something that is enjoyable or relaxing (e.g., go to a funny movie, take a walk for enjoyment, listen to music, read a good book, talk to a friend, engage in an activity that is safe and appealing).

- Attend to spiritual needs (e.g., by meditating, visualizing, praying, appreciating a beautiful sunset).
- Make a list of the things that are troubling or causing tension, and then put away the list for the rest of the day.
- Prioritize personal challenges and deal with the ones that are either most stressful or easiest to check off the list.
- Spend ample time with people whose company is enjoyable, generally those who have a positive and respectful attitude.
- Talk to a trustworthy friend or family member about own feelings and concerns, and discuss possible reasons for those feelings. Ask them just to listen if advice is not desired.

If students continue to feel down, depressed, or anxious to the extent that these feelings are interfering with school work or personal life (friends and family), they will need to talk to people who can help. School guidance counsellors can provide a safe place for students to share their feelings and develop problem-solving strategies for challenging situations. Guidance counsellors also have connections to resources outside the school that can provide help.

REFERENCES



For further suggestions on ways to develop and maintain positive mental and emotional health, refer to the following websites:

Health Canada. "Mental Health—Mental Illness." It's Your Health. 2006.

< http://hc-sc.gc.ca/iyh-vsv/diseases-maladies/mental_e.html>.

Helpguide.org. "Mental and Emotional Health." Mental Health.

<www.helpquide.org/mental/mental_emotional_health.htm>.

Manitoba Healthy Schools. "Mental Health: What Is Mental Wellness?" Mental Health.

<www.gov.mb.ca/healthyschools/issues/mental.html>.

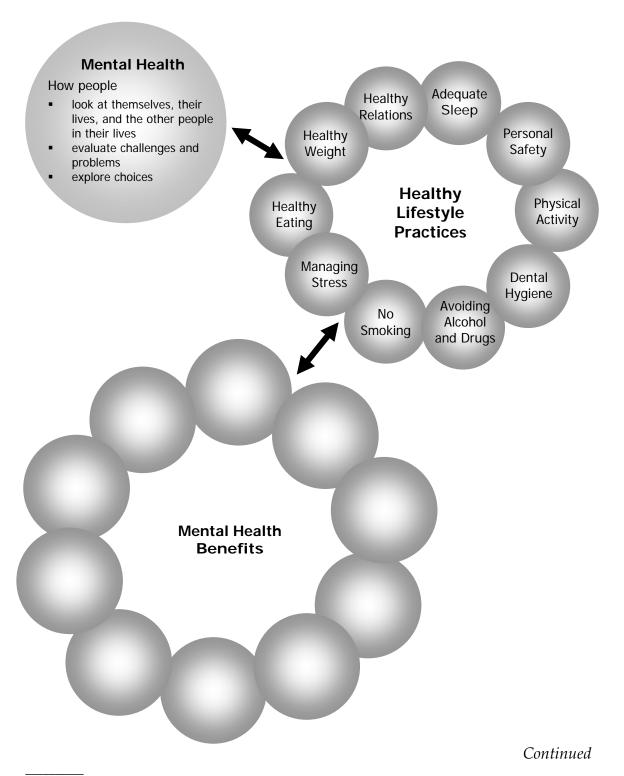
This site lists 10 tips for good mental health provided by the National Canadian Mental Health Association.

Resiliency Canada. "Understanding Resiliency."

<www.resiliencycanada.ca/index.php?option=com_content&task=view&id=17&Itemid=37>.

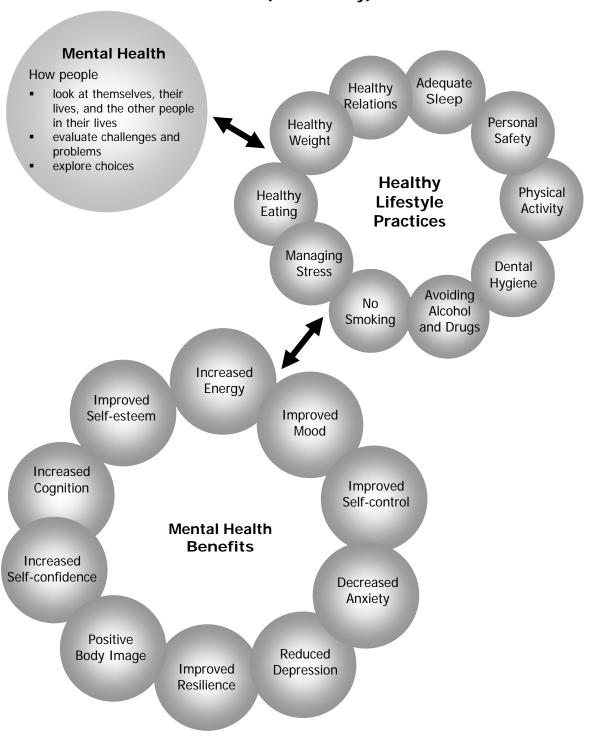
For website updates, please visit Websites to Support the Grades 11 and 12 Curriculum at <www.edu.gov.mb.ca/k12/cur/physhlth/>.

RM 1-MH: Influences on Mental-Emotional Health*



^{*} Source: Adapted, with permission, from D. C. Nieman, 1998, *The Exercise-Health Connection*, (Champaign, IL: Human Kinetics), 5.

RM 1–MH: Influences on Mental-Emotional Health* (Continued)
(Answer Key)



^{*} Source: Adapted, with permission, from D. C. Nieman, 1998, The Exercise-Health Connection, (Champaign, IL: Human Kinetics), 5.

RM 2-MH: Healthy Lifestyle Practices for Mental-Emotional Health

Complete the chart below by providing a description of how the healthy lifestyle practices (health habits) from the first column affect one of the selected mental-emotional health issues found along the top row (determined by the student).

- Place a plus sign (+) in the corner of the box for a description that represents a positive or beneficial effect.
- Place a minus sign (-) in the corner of the box for a description that represents a negative or detrimental effect.
- Place a zero (0) in the corner of the box for a description that could have **both a positive** and a negative effect.

Haalahaa 196	Mental-Emotional Health Issues								
Healthy Lifestyle Practices	Stress	Anxiety	Depression	Disordered Eating	Othe	er)			
Physical Activity									
Healthy Eating									
Quality Sleep									
Substance Use									
Stress Management									
Smoking									
Weight Management									
Personal Safety									
Dental Hygiene									
Healthy Relationships									

RM 3-MH: Life Experiences Leading to Mental Health Issues

The following lists identify factors or situations that students usually do not have control over and situations that students usually have some control over. Check student responses against the lists provided below.

Situations Students Usually Do Not Have Control Over

Life experiences that may contribute to mental health issues that teenagers usually do not have control over could include the following:

- Inheriting genetic causes. (People with a history of mental health problems in their family may be more likely to develop problems themselves.)
- Experiencing biochemical causes. (An imbalance of neurotransmitters, such as serotonin, is known to affect the processing of thoughts and emotions.)
- Undergoing hormonal changes (that are a natural part of puberty and life transition)
- Having a low income or being homeless
- Living with a family member who has a mental illness or an addiction
- Experiencing violence, abuse, or other trauma
- Living in an environment that is chaotic, unsafe, or dangerous (e.g., living in a violent home, or living in a house with shedding asbestos, peeling lead paint, or toxic drinking water, living in a community where drug use or gang violence is widespread)
- Experiencing chronic illnesses (whether born with or developed)
- Growing up in a homeland of unrest (e.g., witnessing or experiencing war, violence, or fear)
- Experiencing racism or other forms of prejudice (e.g., because of sexual orientation, age, religion, culture, class, body type)
- Dealing with the death of a family member or a close friend
- Experiencing a change in parental relationships (e.g., separation, divorce)
- Encountering a change in living environments (e.g., moving from one home to another due to a change in parental relationship, foster home, job transition of a parent or guardian)

Continued

RM 3-MH: Life Experiences Leading to Mental Health Issues (Continued)

Situations Students Usually Have Some Control Over

Life experiences that may contribute to mental health issues that teenagers usually have some control over could include the following:

- Using or abusing substances. (Alcohol and some drugs are known to have depressive
 effects or to increase anxiety. Some drugs such as crystal meth can cause symptoms that
 resemble those of schizophrenia. The negative social and personal consequences of
 substance abuse can also be a contributing factor to depression.)
- Using violence to solve problems (resulting in problems at home and/or at school and involvement in the justice system)
- Under-eating or overeating. (Restricting food intake below what the body needs or eating beyond comfort to cope with problems or difficult feelings can cause additional mental and physical health problems.)
- Being in an unhealthy relationship. (The long-term toll of staying in an unhealthy relationship or peer group is greater than the short-term turmoil and stress involved in leaving it.)
- Overdoing it by taking on too many things at one time to the point that it causes additional stress (e.g., working too much while going to school, being involved in too many activities)
- Not sleeping enough for what the body needs. (On its own, sleep deprivation will not cause a mental health problem, but when combined with other factors, including stress, insufficient sleep puts people at risk of poor health and a decreased coping capacity.)