Thinking about illness: How illness makes us think

Health Psychology (CMED2006)
LKS Faculty of Medicine
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Learning Objectives

At the end of the lecture, student should be able to

- Explain people's illness behaviour using the self-regulatory model
- Describe how illness cognition can impact health-related behaviours
- Apply the theory of illness cognition to explain people's behaviour towards different diseases
- Suggest ways to improve people's health-related behaviours using the theory of illness cognition

Part 1
Thoughts About Illness

Introduction

Psychology is the science of mind and behaviour

What one thinks can determine how one behaves

Behaviours (including health-related behaviours) can be the result of rational thoughts, as well as preferences, errors, biases, distortions, and misunderstandings in general

Aspects of Illness (and things surrounding it)

Thoughts about the nature of health and diseases

Thoughts about the experience of illness

Thoughts about how to prevent illness

Thoughts about trying to recover

Thoughts about the how and whether to seek help

Thoughts about healthcare systems and professionals

et cetera

Health-Related Behaviour

Everyday Definitions of Health

Physiological / physical / psychological

Behavioural (being able to do something) /

Future consequences

The absence of [a sign / symptom / illness]

Formal Definitions of Health

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1948)

“A resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities.” (WHO, 1986)

Illness, Disease and Sickness

Sociologists (and sometimes psychologists)
often differentiate between these 3 terms

Illness – the personal, subjective experience of unwellness

Disease – the objective presence of pathology/abnormality

Sickness – the occupation of sick role assigned by the society

Part 2
Self-Regulatory Model

Tool 22: Common-Sense Model (of Self-Regulation)

According to the self-regulatory model, illness can be regarded as a problem – and therefore people mostly try to solve the problem of illness in the same way that we solve other problems

Interpretation—Coping—Appraisal

Interpretation is about perceiving and deciding whether there are symptoms/illnesses and whether they are serious

Coping is about trying out different ways to deal with the symptoms/illnesses – including seeking professional help

Appraisal is about evaluating whether the coping method works

How do People Solve Problems

If illness is a problem, we can employ general problem-solving strategies to help solving it

Try to solve the following problems/puzzles;
describe how you try to solve them;
and try to convert them into general strategies for solving problems

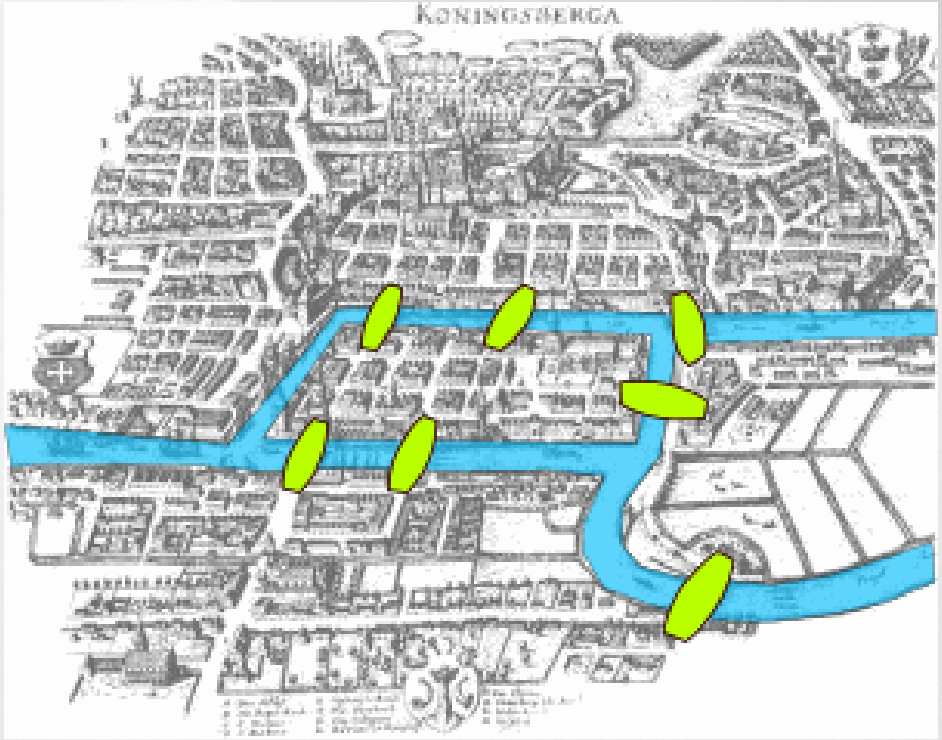
Problem 1

Once upon a time a farmer went to a market and purchased a fox, a goose, and a bag of beans. On his way home, the farmer came to the bank of a river and rented a boat. But in crossing the river by boat, the farmer could carry only himself and a single one of his purchases - the fox, the goose, or the bag of beans

- If left together, the fox would eat the goose
- If left together, the goose would eat the beans
- The farmer's challenge was to carry himself and his purchases to the far bank of the river, leaving each purchase intact.

Problem 2

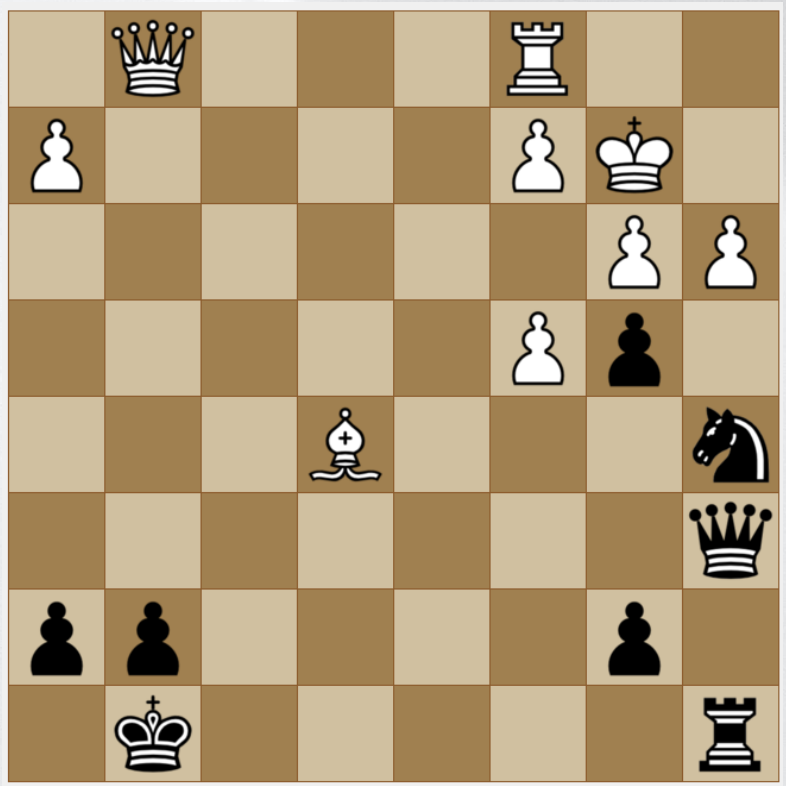
In the town of Konigsberg there is a river and seven bridges. Can you find a path where you can cross all 7 bridges once and only once?



Problem 3

Black to move

How can Black checkmates White?



Problem 4

Interactive Fiction “Suveh Nux” by David Fisher

https://ifdb.org/viewgame?id=xkai23ry99qdxce3

https://iplayif.com/?story=https%3A%2F%2Fifarchive.org%2Fif-archive%2Fgames%2Fzcode%2Fsuvehnux.z5

Can you finish the game?

You can try to use these commands

look -- look at your surroundings ("l" for short).

examine -- look closely at an object ("x" for short).

search, find -- look all around something, or look for something.

inventory -- check what you are carrying ("i" for short).

take -- pick something up.

drop -- put something down.

listen, touch, smell, taste -- use your various senses.

north, up, out, etc. -- try going in a direction ("n" etc. for short).

open, close -- open or shut something.

wait -- do nothing ("z" for short).

think about -- contemplate something ("t" for short).

Even if you do not have time to solve every problem/puzzle, do you have a working strategy?

In other words, is there a general approach that can help us solve similar problems in the future?

Tool 23a: Setting Sub-Goal(s)

We can try to deal with illness by setting sub-goals

E.g. when facing a broken limb, we can divide the ultimate goal of normalcy into sub-goals of reduce pain, restore function, regain mobility, and so on

Tool 23b: Eliminating unimportant aspects

Unimportant aspects can confuse us and overload our brain, therefore we can try to get rid of them

E.g. deciding on whether to get mammography screening probably should not be based on the radiation exposure

Tool 23c: Establishing Extra Limitations

We can try to deal with illness by giving ourselves extra rules that help us limit our choices

E.g. when deciding between treatment options, one can decide to eliminate options that are not provided for free in the public sector

Tool 23d: Learning/Teaching a New Language

For many patients – even very intelligent patients – medicine is a completely new language

In order to help a layperson navigates the health system and make medical decisions, we need to help them understand certain terms and concepts

Tool 23: Problem-Solving Strategies

People's behaviour might be the result of them employing or failing to employ suitable problem-solving strategies

This is a tool that can be used to understand how patients deal with illness, and predict their struggles

We can also suggest these strategies to our patients to help them solve problems about illness

Part 3
Illness Cognition

Illness Cognition

What one thinks about an illness affect how they would behave;
this affects both adherence, prevention, treatment,
and even research and finance

It therefore helps to understand what a person (a patient, a potential patient, a healthcare professional, or a policy maker) thinks about an illness – in order to understand how they act

5 Dimensions of Illness Cognition

Identity; perceived caused of illness; timeline; consequences; curability & controllability

Think about COVID-19 – if you ask a layperson to tell you 5 things about COVID-19, what do you think they would tell you? And how would their thoughts affect what they do towards the pandemic?

Tool 24a: Identity

The name of the illness/disease or the symptom

Identity helps people organise information about illnesses, and a wrong identity might lead to other wrong cognitions

Tool 24b: Perceived Cause

How or why a person get the illness/disease

Perceived cause helps people understand their own suffering and helps people to prevent future illnesses

Tool 24c: Timeline

How long does an illness/disease last

Timeline helps people to evaluate how long the illness would impact their lives, and what changes might need to be made to accommodate the illness

Tool 24d: Consequences

What would happen as a result of having the illness/disease

Consequences helps people plan how to minimize the negative impact and promote the positive impact of the illness

Tool 24e: Curability and Controllability

How and whether one can recover from an illness/disease, or its symptoms and impact can be minimized

Curability and controllability helps people decide what to do with the illness – whether they want to cure it or make effort controlling it

Tool 24: Illness Cognition

People's behaviour towards illness can be the result of their cognition towards that illness in terms of their identity, perceived cause, timeline, consequences, curability & controllability

We can also use it to inform our health communication and in turn encourage health-enhancing behaviours

Part 4
Applying Illness Cognition

Scenario 1: COVID-19

Name, to you, the following aspects of COVID-19:
Identity, (perceived) cause, timeline, consequences, curability & controllability

How did you come to these cognition?

As someone who is currently not suffering from COVID, how does each of these aspects affect how you act (towards COVID)?

Scenario 2: Diabetes Mellitus

Albert, 30, is relatively healthy and does not have diabetes. He also does not know much about diabetes.

Suggest how Albert's inaccurate illness cognition about diabetes could increase the risk of behaviours
(e.g., poor diet, lack of physical exercise, smoking)
that in turns increase his risk of having diabetes

Scenario 3: Breast Cancer

Billie, 40, recently developed breast cancer in one of her breast, but she does not know about it yet.

Suggest how Billie's inaccurate illness cognition about breast cancer could affect her behaviour (e.g., health-seeking, management and treatment) towards the disease

Scenario 4: Depression

Charles, 25, is a nurse working in a medical (non-psychiatric) ward. He does not know a lot of mood disorders, but suspects that one of the patients, Mr Chan, is suffering from depression.

Suggest how Charles's illness cognition about depression might affect how he behaves towards Mr Chan.

Part 5
Behavioural Change

Case 4

The WHO recently started to monitor the BA.2.86 (a.k.a. the "Pirola variant") of SARS-CoV-2 around the world.

Given the similarities and differences between BA.2.86 and earlier variants, suggest how the HK government should try to educate the public (as in a campaign) in order to reduce people's risk of developing COVID through BA.2.86?

Case 4 Focuses

What are the behaviours you want to change/reinforce?

What are the similarities and differences between BA.2.86 and earlier variants? What aspects of illness cognition need to be changed? To be reinforced? To remind people of?

What are your actual messages in this campaign?

Conclusion

Similar to other aspects of life, people's cognition about illness largely determines how they act towards illness – the five main aspects of illness that people think about are identity, cause, timeline, consequences, and curability & controllability

Similarly, people treat illness as a problem just like any other problems in their life – and they try to solve it in similar ways

Reading / References

- Taylor, SE & Stanton, AL (2021) Health Psychology (11th ed.). Chapter 8.1: Recognition and Interpretation of Symptoms. McGraw-Hill.

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