MORE THAN SKILL:

AN INTRODUCTION TO BICYCLING BEHAVIOUR CHANGE STRATEGIES FOR CYCLING SKILLS PROGRAMS

TORONTO CYCLING
THINK
& DO TANK

1

ACKNOWLEDGMENTS

2

INTRODUCTION

This training takes a public health perspective to understand how to create more cyclists across Ontario, or in any community where cycling skills training or "learn to ride" programs are offered.

Often, cycling training programs are based on the idea that simply teaching and practicing cycling skills will help participants make bicycling a part of their lives, whether for recreation or for transportation.

This idea recognizes that not having the practical skills to ride a bicycle is a major barrier to "becoming" a cyclist. It does not address other complicated barriers or motivations individuals may experience in relation to participating in a cycling training program, for example, social barriers (friends or family discouraging the behaviour), social motivations or benefits (seeking new social relationships that involve the behaviour), or economic barriers (costs to own and maintain a bicycle).

OVERVIEW

In this workshop, we will:

1. Provide a brief overview of **theory** that informs how we think about behaviour change and how to use current evidence

2. Describe **evidence** on cycling behaviour change and how it can be applied to cycling program development through a program mapping tool

3. Provide basic tips on program **evaluation**

TORONTO CYCLING THINK & DO TANK

Who we are:

The Toronto Cycling Think & Do Tank is a multidisciplinary, multi-sector research group that studies cycling for transportation. Funded primarily by Social Sciences and Humanities Research Council of Canada (SSHRC) grants, our work focuses on:

Mapping cycling patterns

Exploring the economic benefits of cycling for transportation

Integrating understanding from several fields to develop a suite of tools for increasing cycle use in daily transport

Led by Principal Investigator Beth Savan at the University of Toronto School of the Environment, we are an organization of expert practitioners who are addressing an important gap in knowledge: How active transportation, and cycling in particular, can best contribute to urban sustainability.

CULTURELINK

CultureLink provides innovative services and creates new programs to respond to the needs of newcomers and Toronto's diverse communities.

CultureLink has over 25 years of experience in the field. Their team of 60 staff speak more than 30 languages.

CultureLink undertakes several cycling initiatives in collaboration with Toronto Cycling Think & Do Tank, Cycle Toronto and others.

CULTURELINK'S BIKE HOST PROGRAM

Bike Host promotes cycling as a practical, affordable, healthy and convenient mode of transportation.

Furthermore, Bike Host uses the bicycle to foster community connections. The program falls within CultureLink's civic engagement mentorship stream.

CULTURELINK'S BIKE HOST PROGRAM

We will reference the Bike Host program throughout this training module. The intention is not to help you design a copy of Bike Host. Instead, we will describe the broader behaviour change ideas at the heart of Bike Host which could be applied to many different types of cycling training programs.

WANT TO LEARN MORE ABOUT BIKE HOST?

Visit www.culturelink.ca/bike-host for media coverage and participant stories.

Photo by: Rubeen Chauhan

PART 1: BEHAVIOUR CHANGE

A BRIEF INTRODUCTION TO MODELS AND THEORY

10

"ALL MODELS ARE WRONG, BUT SOME ARE USEFUL"

George Box, Statistician

EXAMPLES OF "USEFUL" THEORETICAL MODELS

This is a very brief and simplified overview of two theories that relate to our work on changing people's travel behaviour and encouraging cycling for transportation.

Theory of Planned Behaviour

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control* (pp. 11-39). Springer Berlin Heidelberg.

Useful because it provides an understanding of what elements to target to change behaviour

Social Practice Theory

Shove, E., Pantzar, M., & Watson, M. (2012). *The dynamics of social practice: Everyday life and how it changes*. London: Sage.

Useful because it considers the social environment more and provides an understanding of how social learning works

THEORY OF PLANNED BEHAVIOUR

A psychological theory of the factors that affect how people behave.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control* (pp. 11-39). Springer Berlin Heidelberg.
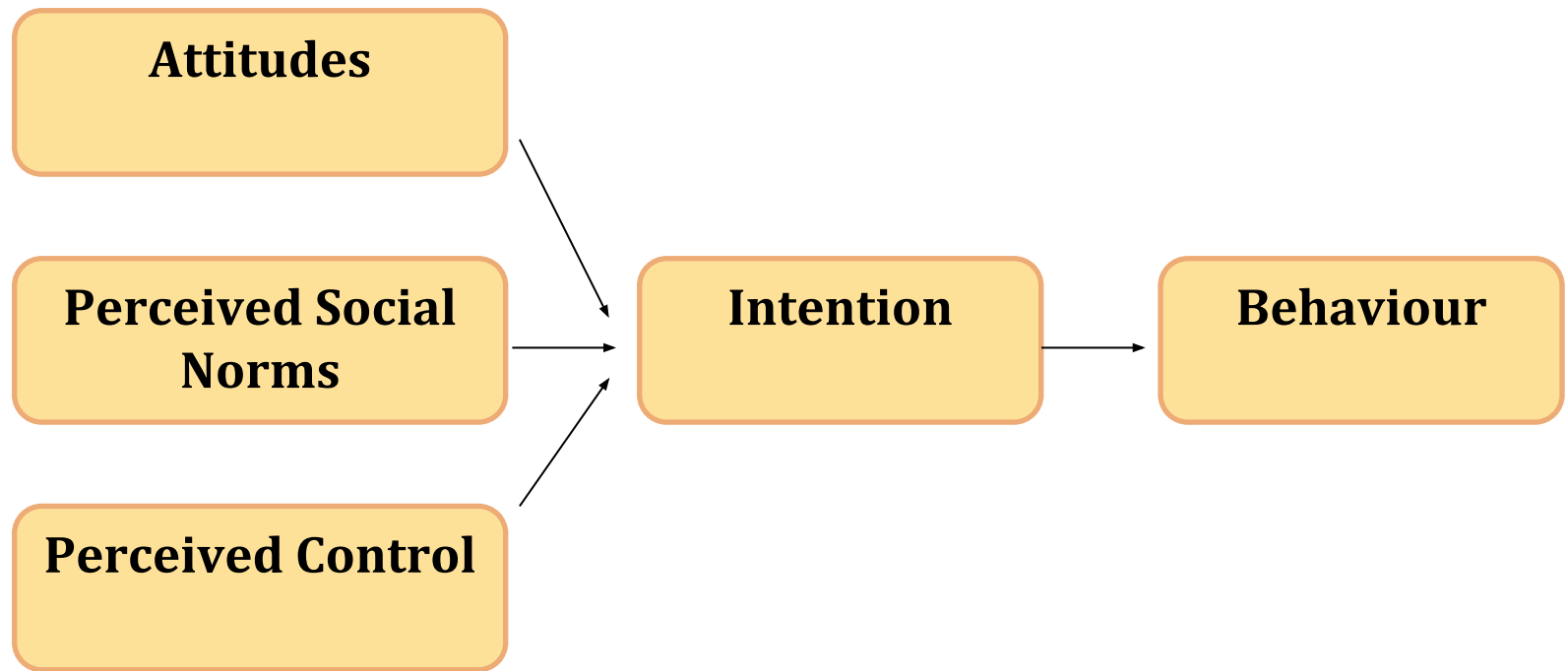
13

Behaviour

The theory of planned behaviour describes how performing a specific behaviour

THEORY
OF
PLANNED BEHAVIOUR

Diagram adapted from: Ajzen, I. (1991). The theory of planned behavior.
Organizational Behavior and Human Decision Processes, *50*(2), 179-211.

14

| Intention | → | Behaviour |
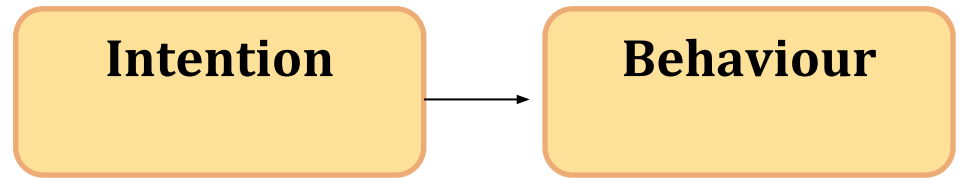
The theory of planned behaviour describes how performing a specific behaviour is more likely if a person sets out the intention to do the behaviour first.
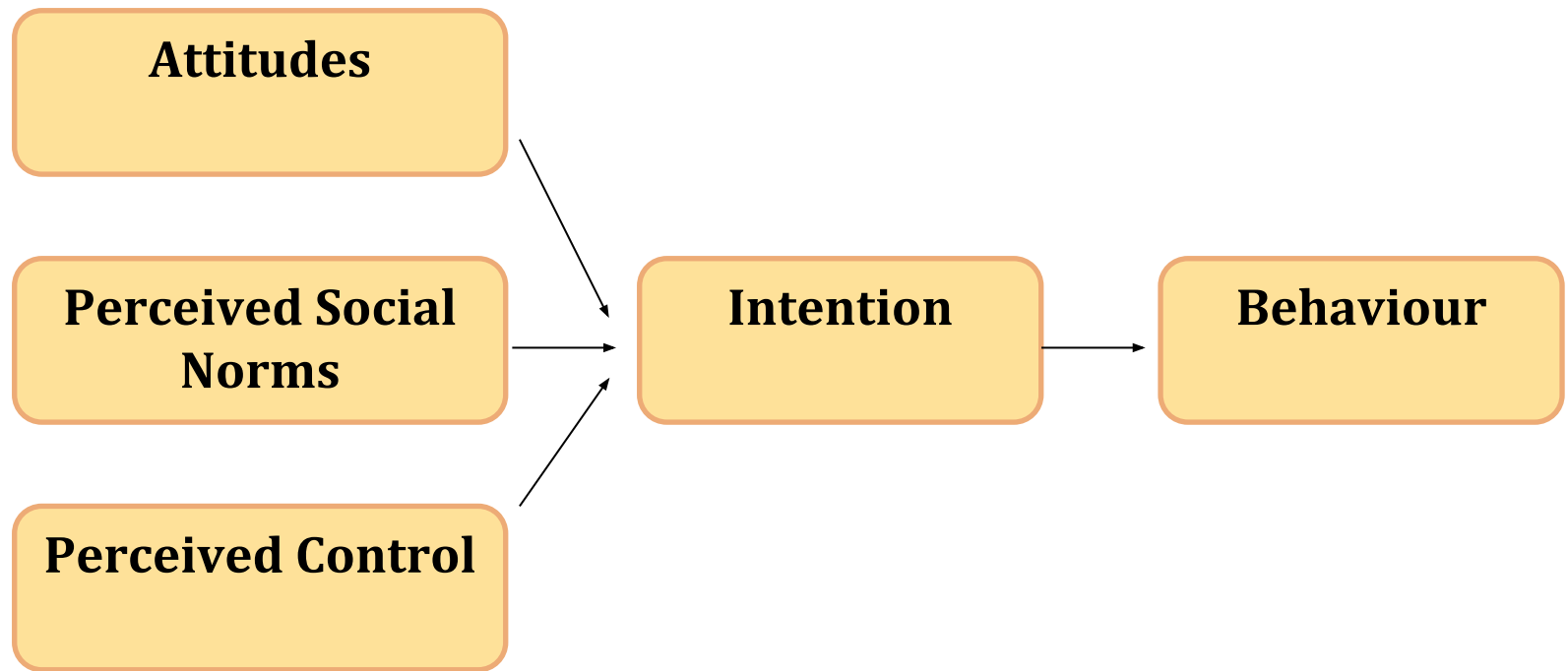
THEORY
OF
PLANNED BEHAVIOUR

Diagram adapted from: Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211.

It also describes how intentions are shaped by: attitudes

A person's individual attitudes toward the behaviour

THEORY
OF
PLANNED BEHAVIOUR

Diagram adapted from: Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211.

Attitudes

Perceived Social Norms

Perceived Control

Intention

Behaviour

It also describes how intentions are shaped by: perceived social norms

Their own perception of how others view the behaviour, including family, friends and the wider community
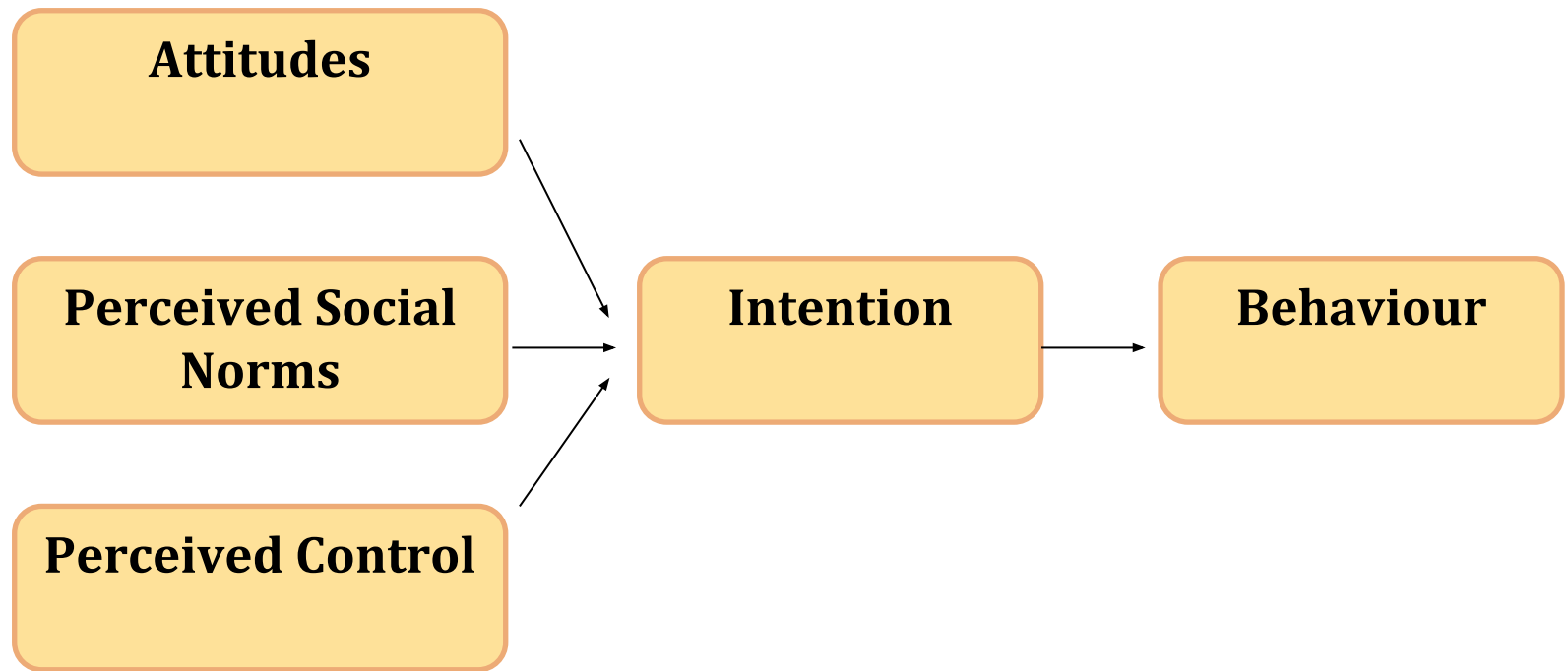
THEORY
OF
PLANNED BEHAVIOUR

Diagram adapted from: Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

```
Attitudes ─┐
           ├──→ Intention ──→ Behaviour
Perceived  ─┤
Social      │
Norms      ─┘
           
Perceived Control
```

It also describes how intentions are shaped by: perceived control

The perceived level of control they have over performing the behaviour
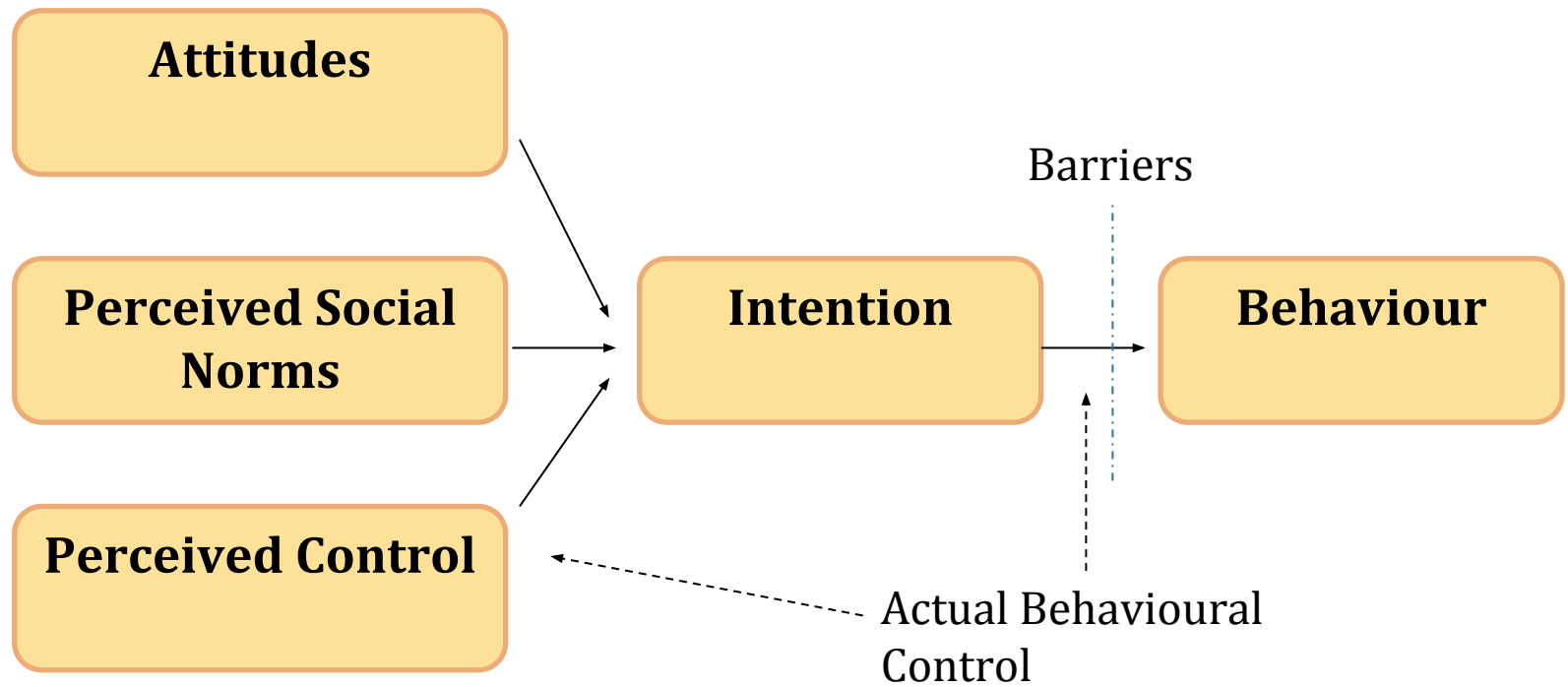
THEORY
OF
PLANNED BEHAVIOUR

Diagram adapted from: Ajzen, I. (1991). The theory of planned behavior.
Organizational Behavior and Human Decision Processes, *50*(2), 179-211.

18

Attitudes

Perceived Social Norms

Perceived Control

Intention

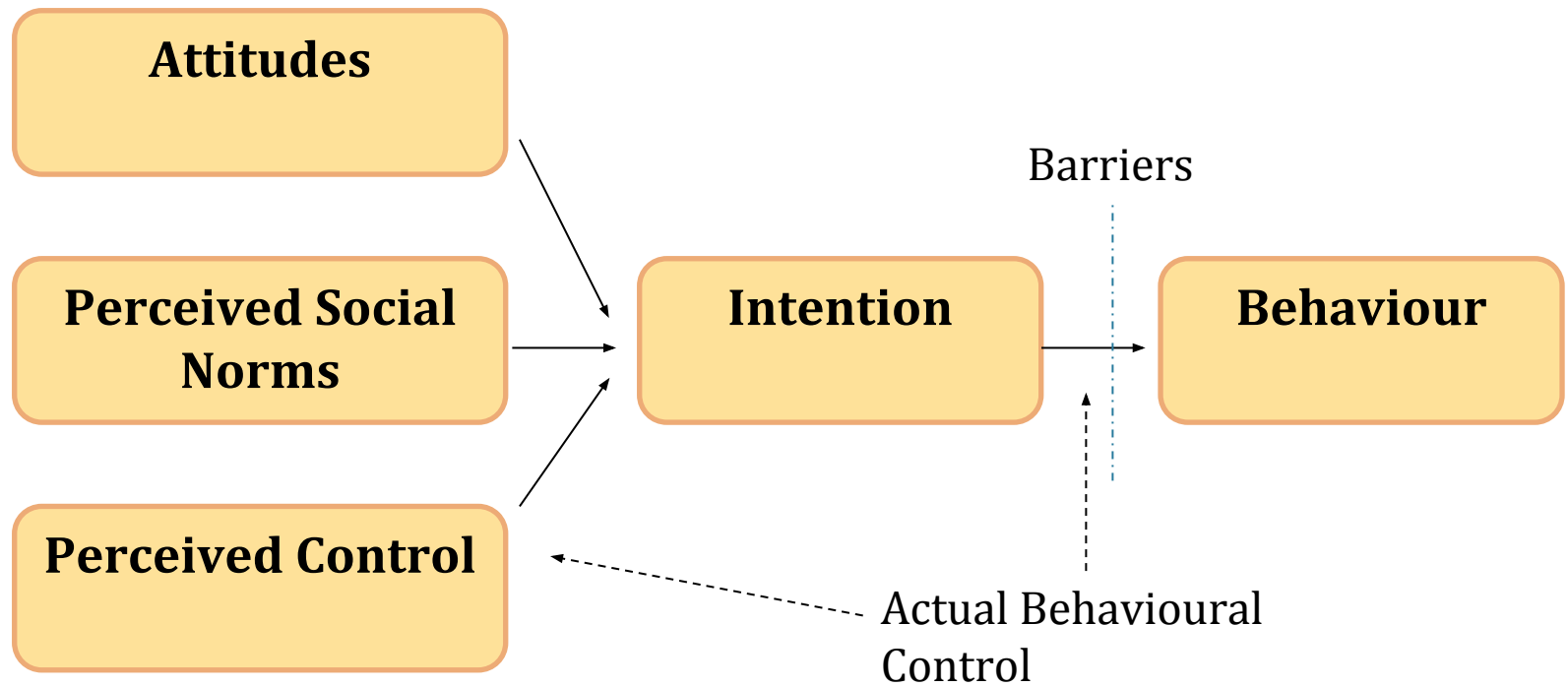**Behaviour**

Actual Behavioural Control
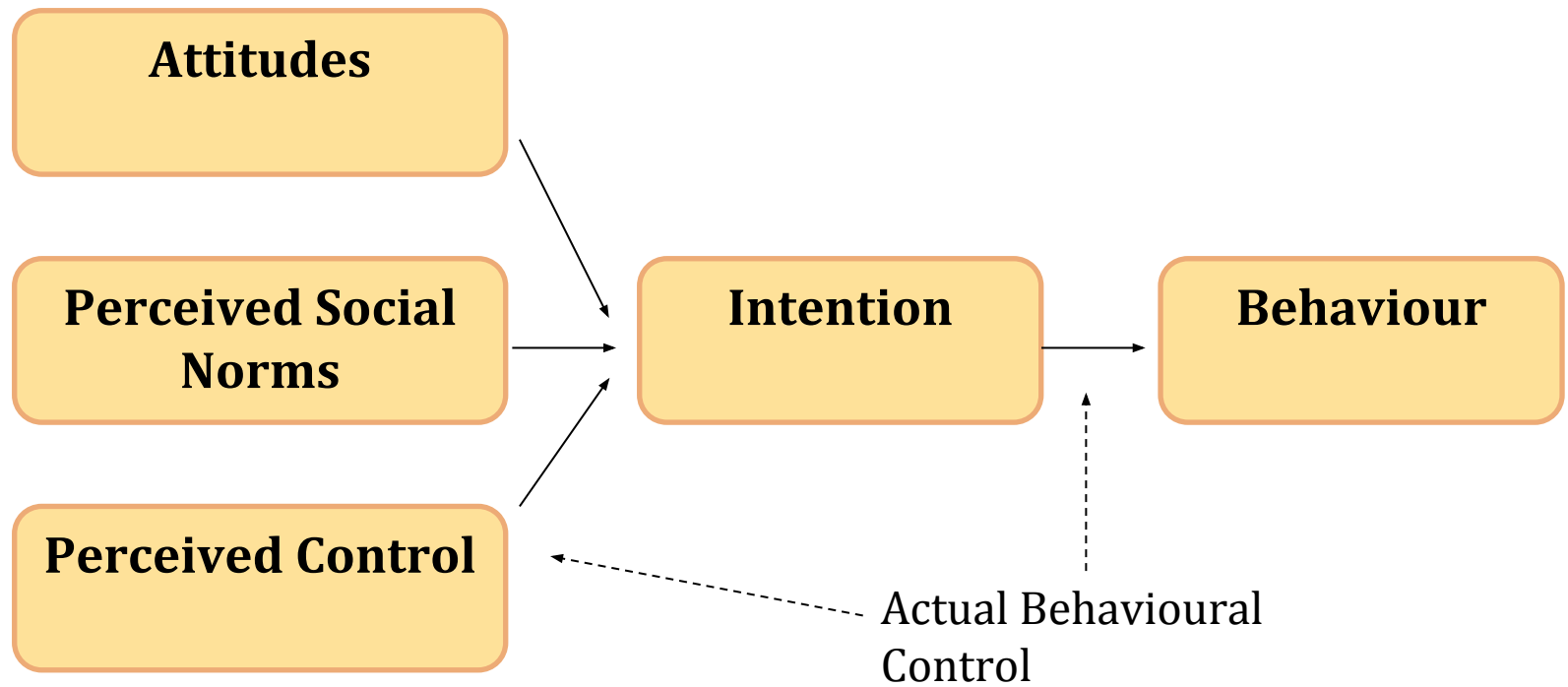
These three factors can impact each other. Along with intentions, they are all affected by a person's actual ability to perform a specific behaviour.

THEORY
OF
PLANNED BEHAVIOUR

Diagram adapted from: Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211.

Attitudes

Perceived Social Norms

Perceived Control

Intention

Barriers

Behaviour

Actual Behavioural Control

Finally, people's ability to move from intention to action and perform the behaviour is limited by the individual barriers that exist for them.

THEORY
OF
PLANNED BEHAVIOUR

Diagram adapted from: Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211.

Attitudes

Perceived Social Norms

Perceived Control

Intention

Barriers

Behaviour

Actual Behavioural Control

With this theory, we are given a number of factors that can be acted upon within a program to encourage a specific behaviour: Intentions, attitudes, social norms, perceived and actual behavioural control, as well as barriers to the behaviour.

THEORY
OF
PLANNED BEHAVIOUR

Diagram adapted from: Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

PROS AND CONS OF THIS THEORY

+

Widely used and historically useful theory. Relatively straightforward and easy to understand. Provides several key entry points for facilitating behaviour change.

-

Has been heavily criticized. The model appears to over-emphasize the power of intentions. Our own work has found: barriers, perceived control and perceived social norms are the key factors that help people change their cycling behaviour. We also found that behaviour change appears to lead to attitude change, instead of a change in attitudes causing a change in behaviour.

THEORY
OF
PLANNED BEHAVIOUR

SOCIAL PRACTICE THEORY

A sociological theory that describes the practice of behaviours in social context.

Shove, E., Pantzar, M., & Watson, M. (2012). *The dynamics of social practice: Everyday life and how it changes*. London: Sage.

BEYOND INDIVIDUAL BEHAVIOUR

Individual theories of behaviour change don't put enough emphasis on the social environment that people live in.

Social practice theory suggests that learning can be more effective when it takes place in a social environment and when we focus on the social practices that occur, rather than an individual's choices. It highlights the way that learning new "practices" depends on how materials, like bicycles, are used to improve a person's competence or skills while they develop new social norms with peers in the conditions of their everyday lives.

Social practice theory does not put all the responsibility of taking action on the individual alone. It recognizes other forces that affect people. This includes systemic barriers and facilitators which exist beyond the individual who is trying to change their behaviour.

SOCIAL
PRACTICE THEORY

BEYOND INDIVIDUAL BEHAVIOUR

It is different from a behavioural approach because it suggests that learning takes place in dialogue with the social environment. This provides an opportunity for everyone involved to learn from each other about how knowledge can be applied meaningfully within their lives.
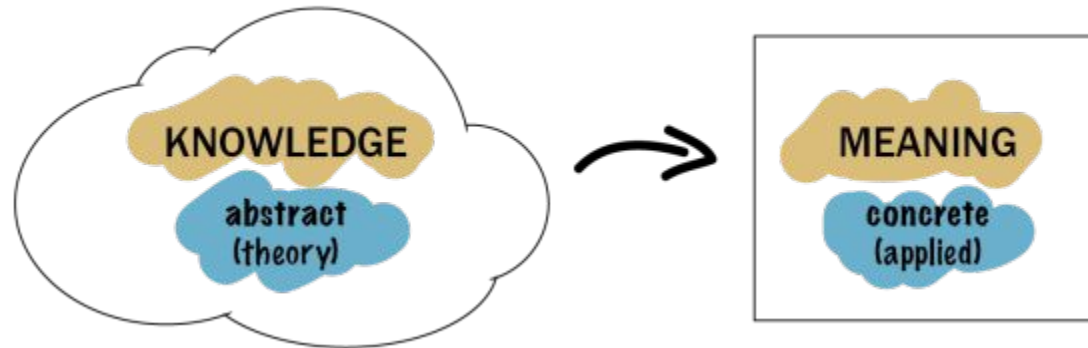
SOCIAL
PRACTICE THEORY

BEYOND INDIVIDUAL BEHAVIOUR

In other words, learning social practices links formal learning to people's everyday lives. This is useful because it accounts for social and cultural influences on groups of people better than the theories that target behaviour individually.
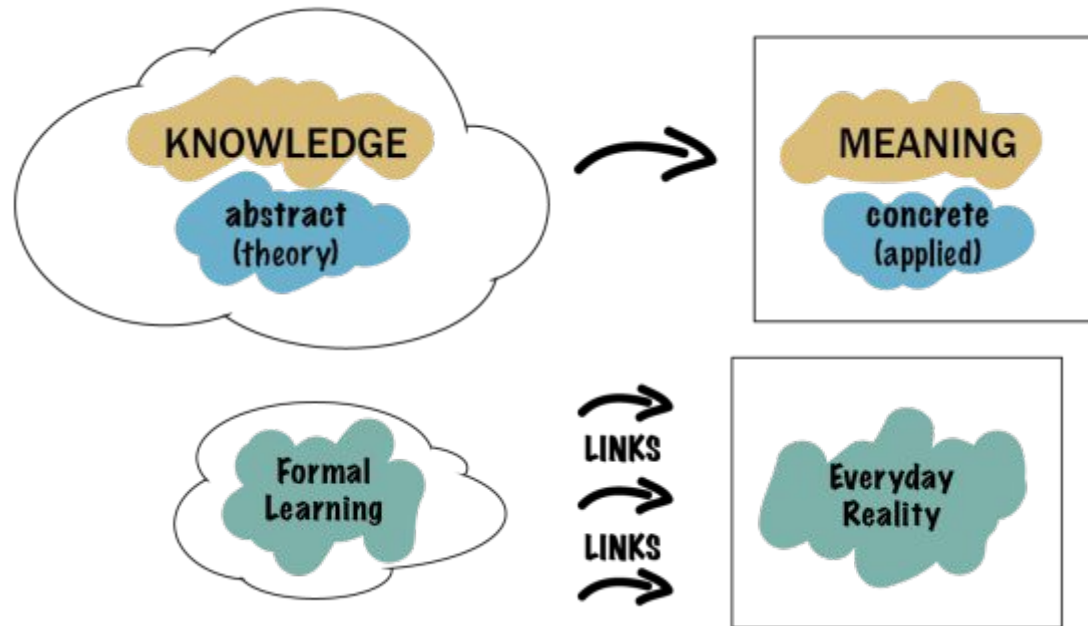
SOCIAL
PRACTICE THEORY

EVIDENCE-BASED VS. EVIDENCE-INFORMED APPROACHES

EVIDENCE–BASED VS. EVIDENCE–INFORMED

In this photo we see a crowd. A mass of people who are largely unidentifiable and appear relatively uniform as a result. We see them all as one group of "people."

This photo is a good analogy for talking about behaviour change evidence from academic literature and how it does a good job presenting the big picture, but may obscure the finer details.

EVIDENCE–BASED vs. EVIDENCE–INFORMED

 Evidence is often collected so it can be generalized to apply to populations. Sometimes these are specific subpopulations viewed to be uniform, for example, women, or youth aged 12-18.

 When reviewing evidence for program recommendations, the most consistent findings across all evidence on many subpopulations represent information that may well apply to the whole population, providing an idea of the "big picture."

EVIDENCE–BASED VS. EVIDENCE–INFORMED

But what about the specifics?

When we zoom in to a section of this photo, we see a smaller group which has a different distribution of characteristics. We can see certain faces and expressions. This group will have a different makeup than the whole group viewed from farther away.

EVIDENCE–BASED VS. EVIDENCE–INFORMED

But what about the specifics?

Most cycling skills training programs are not population-wide interventions to increase cycling behaviour. They are delivered in smaller groups. These smaller groups will have specific demographics and characteristics. And much like this zoomed-in photo, they will be a made up of a particular group of people.

EVIDENCE–BASED vs. EVIDENCE–INFORMED

So:

Making an evidence-based program - which is based on evidence from large populations - can have some pitfalls; it might not give us all the information we need to have a successful local program.

The response to this issue:

Review and incorporate the available evidence, but also include other sources of information. This could be personal anecdotes or hunches about what is important in your context. Although these may not be scientifically rigorous pieces of information, they can be very valuable because they may provide insight into the context of your program and your participants, and can help anticipate what might work best for these participants. This integrated approach is generally referred to as an evidence-informed approach.

EVIDENCE–BASED VS. EVIDENCE–INFORMED

To summarize:

An evidence-informed approach recognizes that the real-world implementation of programs may have different constraints and a context not represented in the generalizable evidence you are using to build your program. This approach validates personal information, experiences and local knowledge as well as local data that are full of rich detail. Using evidence together with local knowledge can help to address the gaps and issues that might result from relying on only one of these sources of information when you are developing your program.

A final implication of this approach is that it highlights the value of replicating a program rather than simply scaling it up to a huge size, which could run the risk of not being sufficiently targeted to the program participants.

CLICK THE BICYCLE TO SEE PART 2 OF THIS MODULE

34