

WORLD CLIMATE TEACH-IN DAY

The collage consists of several overlapping images. In the foreground, there's a close-up of a young man smiling, and next to him, another person looking thoughtfully at a wind turbine. In the background, there's a classroom scene with students and a teacher, and a large field of solar panels under a blue sky with white clouds. A curved arrow points from the top left towards the bottom right across the collage.

Climate Change: Facts, Problems and the Search for Solutions

Klimawandel: Fakten, Probleme und die Suche nach Lösungen



心理學與氣候變遷

Psychology and Climate Change

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世界氣候教育論壇日之教學資源

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 NTNU
100 skapende år



大綱

- 為什麼心理學與氣候變遷有關？
- 理解氣候變遷的困難
- 氣候變遷相關知識
- 氣候變遷的情緒反應
- 氣候變遷相關風險的知覺
- 行為動機
- 直接 v.s. 間接經驗
- 結論
- 問題與討論





為什麼心理學 與氣候變遷有關？



- 當人們想到氣候變遷時，往往僅考慮技術上的解決之道
- 然而氣候變遷影響人類的感覺與行為，且受人類行為影響
- 心理學可以幫助理解
 - 為什麼人們難以理解氣候變遷
 - 人們如何形成氣候變遷的知識
 - 氣候變遷的現象及其報告如何影響人類的情緒
 - 人們如何建立氣候變遷與相關風險的評估
 - 與氣候變遷相關的人類行為是如何被激發的



理解氣候變遷的困難

- 世界氣候是極端複雜的體系
 - 成因與作用在地理上與時間上是分開的
 - 大部分的過程是緩慢、間接且非線性的
 - 創造氣候與穩定氣候系統時，有大量的變數交互作用





理解氣候變遷的困難



- 人類的頭腦只能處理簡單、線性的系統。
 - 導致過度簡化氣候變遷（即使專家亦如此）
 - 理解變數系統通常會成功的策略—試誤學習，並不適用於氣候變遷
- 像氣候這樣的複雜系統通常是跟人的直覺作對的。
- 假如隱喻跟比喻正確地描述氣候變遷的基本機制，可以增加理解。



氣候變遷相關知識



- 人們將新資訊整合並調整至他們的知識結構
 - 意味著資訊在儲存過程中已經改變
- 人們對氣候變遷的成因知道得最多，其次是當前的氣候狀態，最後才是未來的後果
- 人們對於氣候變遷的知識通常是片段的
- 人們經常將氣候變遷與其他問題混淆在一起，如臭氧層破壞
- 更重要的是：人們混淆「氣候」與「天氣」
 - 導致例子如：寒冬時更多人懷疑氣候變遷





氣候變遷的情緒反應



- 情緒反應通常是立即的，且導致特定的行為反應
- 對氣候變遷後果的恐懼，會使人們採取保護行動，但只在他們知道可以採取哪些行動的情況下
- 由於氣候變遷影響的時間性與地理性分布不明確，人們對氣候變遷的情緒反應仍然很薄弱
- 以令人印象深刻的畫面呈現氣候變遷可能的結果，比書面資訊引發更強的情緒
- 象徵有助於人們情緒上與氣候變遷連結，如受歡迎的動物（北極熊）





氣候變遷相關風險的知覺



- 一般公眾對氣候變遷相關風險的知覺仍很溫和
- 人們通常覺得別人比他們自己更危險
- 假如人們對氣候變遷有情緒反應，風險知覺會更高；假如人們接受人類對氣候變遷的影響，風險知覺會更高；假如人們抱持眾生平等的價值觀，風險知覺會更高
- 風險的高度知覺與對抗氣候變遷可採措施的知識，可促使採取行動對抗氣候變遷





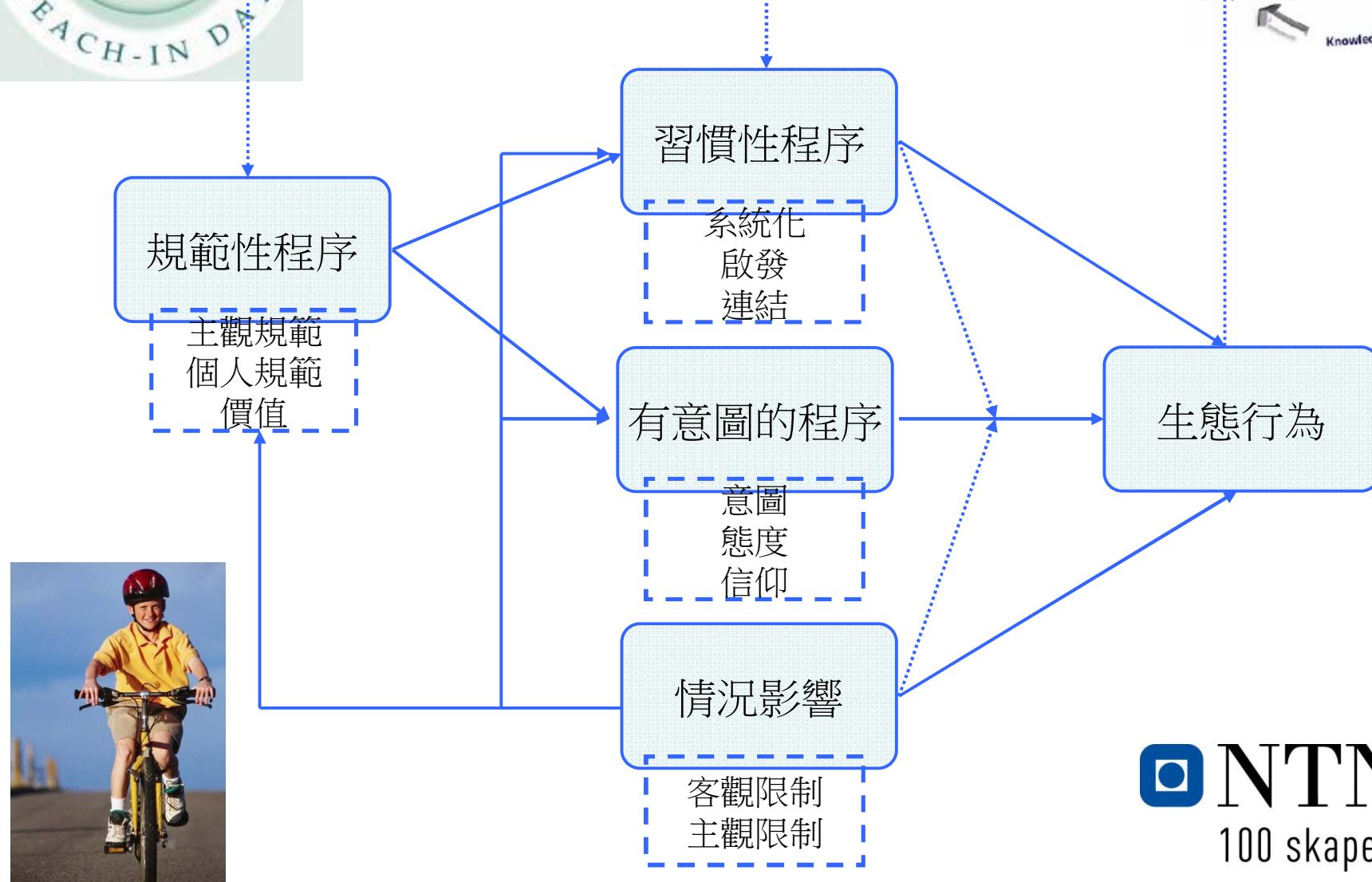
行為動機



- 減緩與調適行為是不同的
- 許多不同因素影響氣候變遷行為
 - 動機（我想做些什麼嗎？）
 - 態度（評估行為有多正面？）
 - 知覺控制(**Perceived control**)
(我是否有能力實行該行為？)
 - 個人規範（是否符合我的價值觀？）
 - 社會規範（別人對我有何期待？）
 - 習慣（該行為有多自動化？真的有經過我思考嗎？）
 - 需求認知（是否真的有問題？）
 - 後果認知（對該問題我應該做些什麼？）
 - 情況（什麼行為是可行的？）



減緩行為的可能模式





調適行為

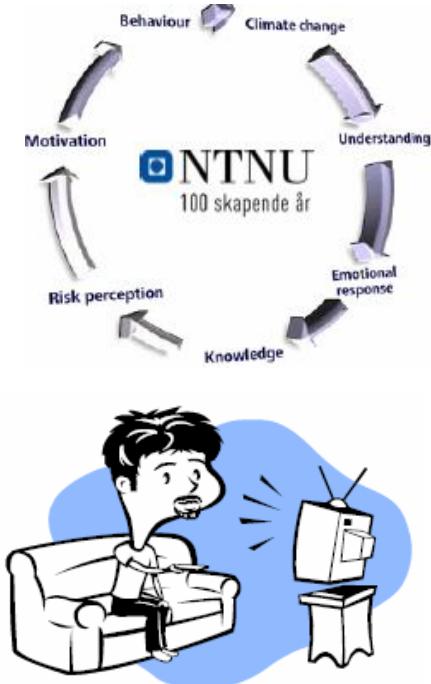
- 假如人們對於風險有高知覺且知道可採取的行動，他們能保護自己
- 當人們認為氣候變遷的影響是嚴重的，並感覺個人是脆弱的時，風險知覺是高的
- 風險高但處理能力低導致宿命論、否定論或僥倖想法（不會打擊到我）
- 認知偏見(cognitive biases) 導致簡化而不真實的風險評估

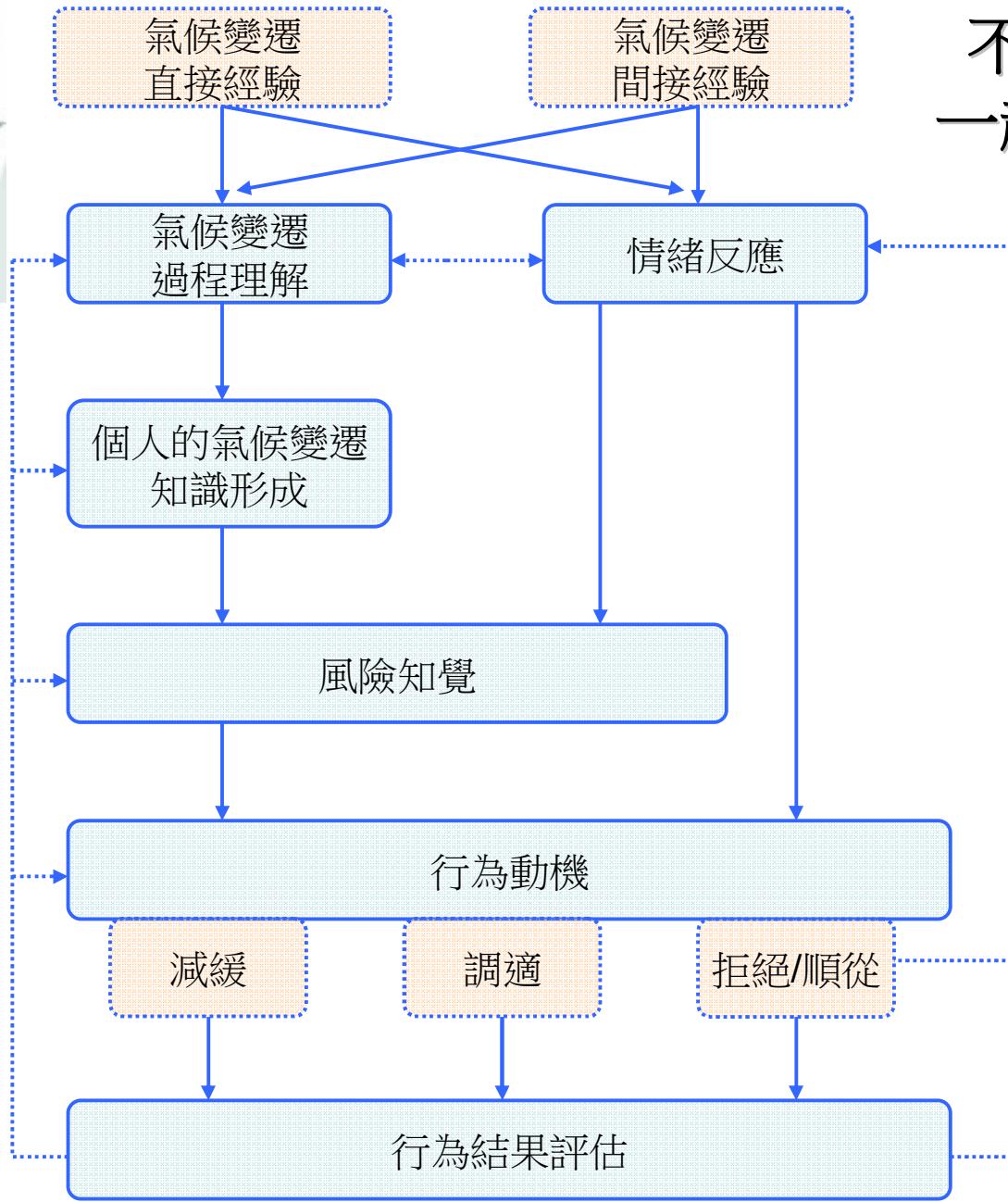




直接 v.s. 間接經驗

- 氣候變遷不能直接感知
- 人類經歷極端天氣事件並將之歸因於氣候變遷，惟此連結並不確定
- 缺乏此種直接經驗導致漠不關心
- 關於氣候變遷相關現象的電影，其影響不如預期，有時甚至造成反效果





不同面向如何
一起發揮作用？



結論

- 心理學能幫助我們理解，一般人為何不願採取行動對抗氣候變遷
- 我們需要一些方法，串連氣候的複雜影響，以安頓人民
- 以更情緒性的方式傳達氣候變遷，更可促使人們行動
- 因此，應該創造簡單的氣候變遷象徵
- 假如行為需要改變，那麼就需要分析該行為的所有預測因素





問題與討論

- 為何人類理解氣候變遷是困難的？
- 人們對氣候變遷知識的典型錯誤為何？
- 為促使人們採取行動對抗氣候變遷，何以情緒是重要的？
- 何以一般人的氣候變遷風險知覺是低的？
- 影響氣候相關行為的因素為何？





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