



How education strategy can contribute to behavioural change towards sustainability

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Background

Sustainability has become one of the most important **issues** in current society. There is increasing attention to signs of climate change like acid rain, smog alerts, global warming, and the loss of biodiversity. However, progress to do something about these problems is slow. Despite the increasing academic attention for sustainability issues, there is a **lack of behavioural change** among people in general to solve sustainability issues.

Objective

Considering ways to **achieve change** in society, this thesis addresses the importance of education. **Education** can have significant impacts on the behaviour of individuals, however, it has been found that sustainability knowledge alone has little influence on behaviour. Education should thus not focus on providing information only. It should try to engage learners to make them sustainability **change-makers**. The question answered in this research is: **How can education strategy contribute to behavioural change towards sustainability?**

Theory of Planned Behaviour

- Trying to research different ways through which education can lead to different behaviour, the **theory of planned behaviour** offers enough guidance, while not restricting the possibilities through which education can have an effect on behaviour.
- This thesis considers the **antecedents** necessary for behavioural changes, not actual behavioural change. The research explores how education can be used to achieve a change in peoples' intentions, leading to more sustainable initiatives and a more sustainable society.

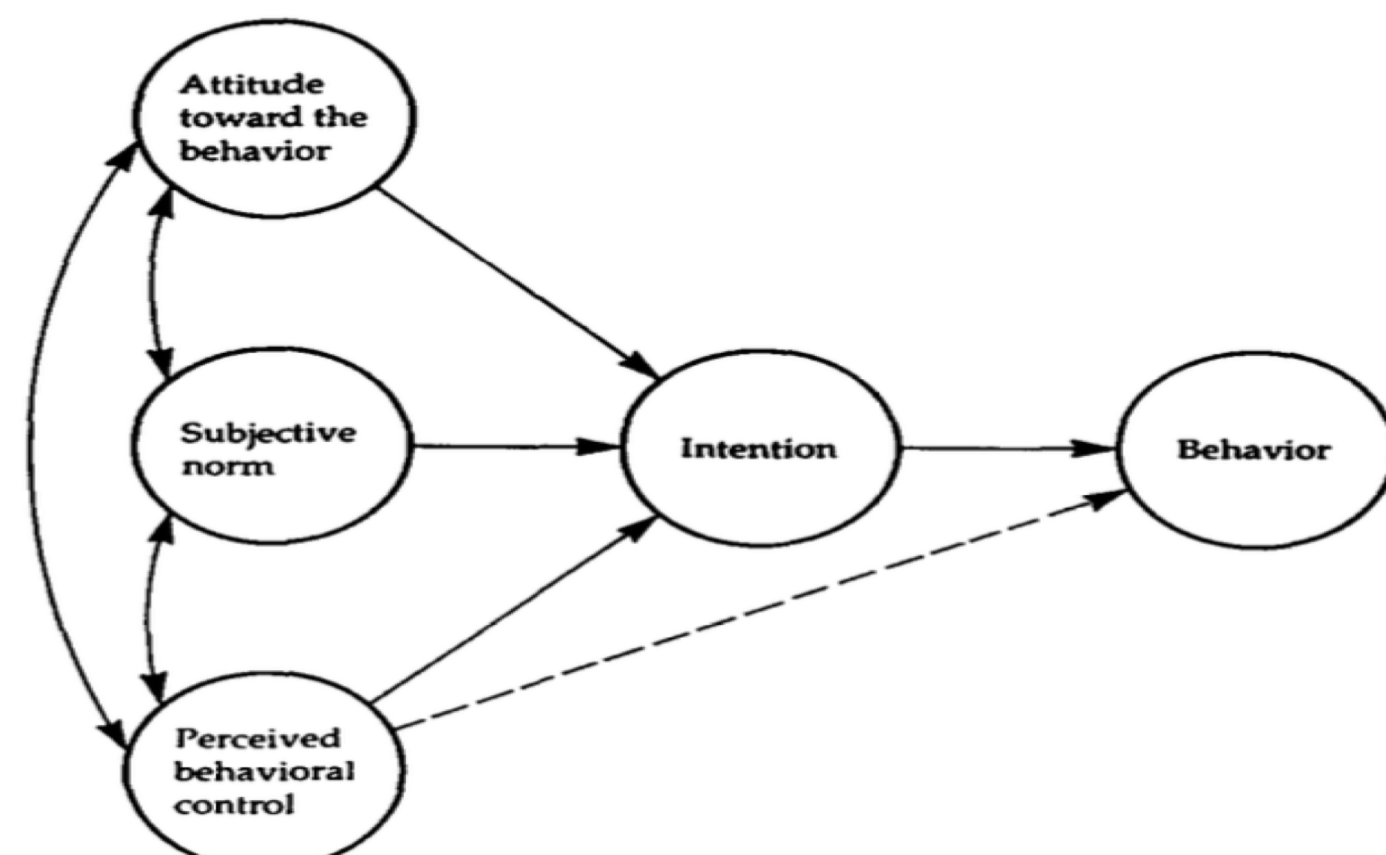


Figure 1. Theory of planned behaviour

Education for Sustainable Development

Economic, social and environmental dimension Holistic education
Collaboration Problem Orientation Inter- and transdisciplinary learning develop competencies

Spark the Movement

Small Wins Sustainable Development Goals Seven Principles of Design Whole School Approach Connect sustainability initiatives

NHL Stenden

Entrepreneurship and Retail Management Living Lab Circularity
Circular Quarter participatory education teacher as coach
develop skills and capabilities



Methodology

- Data for project analysis** → Assess if there is a theoretical base for the approach in the project.
- Sustainability Attitude Scale** → an established scale, consisting of eleven statements, to which respondents can agree or disagree, to a scale from 1 (strongly disagree) to 6 (strongly agree). Students filled out the survey before and during the project.
- Interviews** → considering the intentions and behaviours of students towards sustainability. Questions are asked regarding attitude, perceived control and social norm, and how the influence the project has had on these. Students were interviewed before and during the project.

Results

Sustainability Attitude Scale	before project	during project	difference
Overall sustainability attitude	5.05	5.59	+ 0.54
Ecological Sustainability subscale	5.44	5.75	+ 0.31
Social Sustainability subscale	3.95	5.44	+ 1.49
Economic Sustainability subscale	4.67	5.58	+ 0.91

Discussion

- The approaches of **Spark the Movement** and of **NHL Stenden** are largely in line with the vision set out in **ESD**.
- The **students' attitudes** were thus already high on the scale. During the project, their sustainability attitudes have **increased**.
- The changes in **perceived control** are less clear. Although some students have the feeling that their impact is too small, others are trying to contribute as much as they can and are doing this even more since they are working on the project
- The students do not feel much **social pressure**, but they are aware of a **social norm** on sustainability. The project has made students more aware of the difference in social norm between people that are **engaged** with sustainability and those that are not.
- The students are not aware of many competences being developed because of the project. However, looking at the key **competences** for sustainability identified for ESD, there are many that the project contributes to.

Conclusions

- Spark the Movement and NHL Stenden are heading in the **right direction** but adjustments need to be made to make sustainability education more effective.
- Emphasis should be put on what students can **do themselves** in a concrete manner.
- Sustainability orientation** is essential for sustainability intentions. Therefore, sustainability **knowledge** is essential.
- Sustainability should be **interwoven** throughout the whole curriculum, not only in their higher educational studies, but starting from primary education.

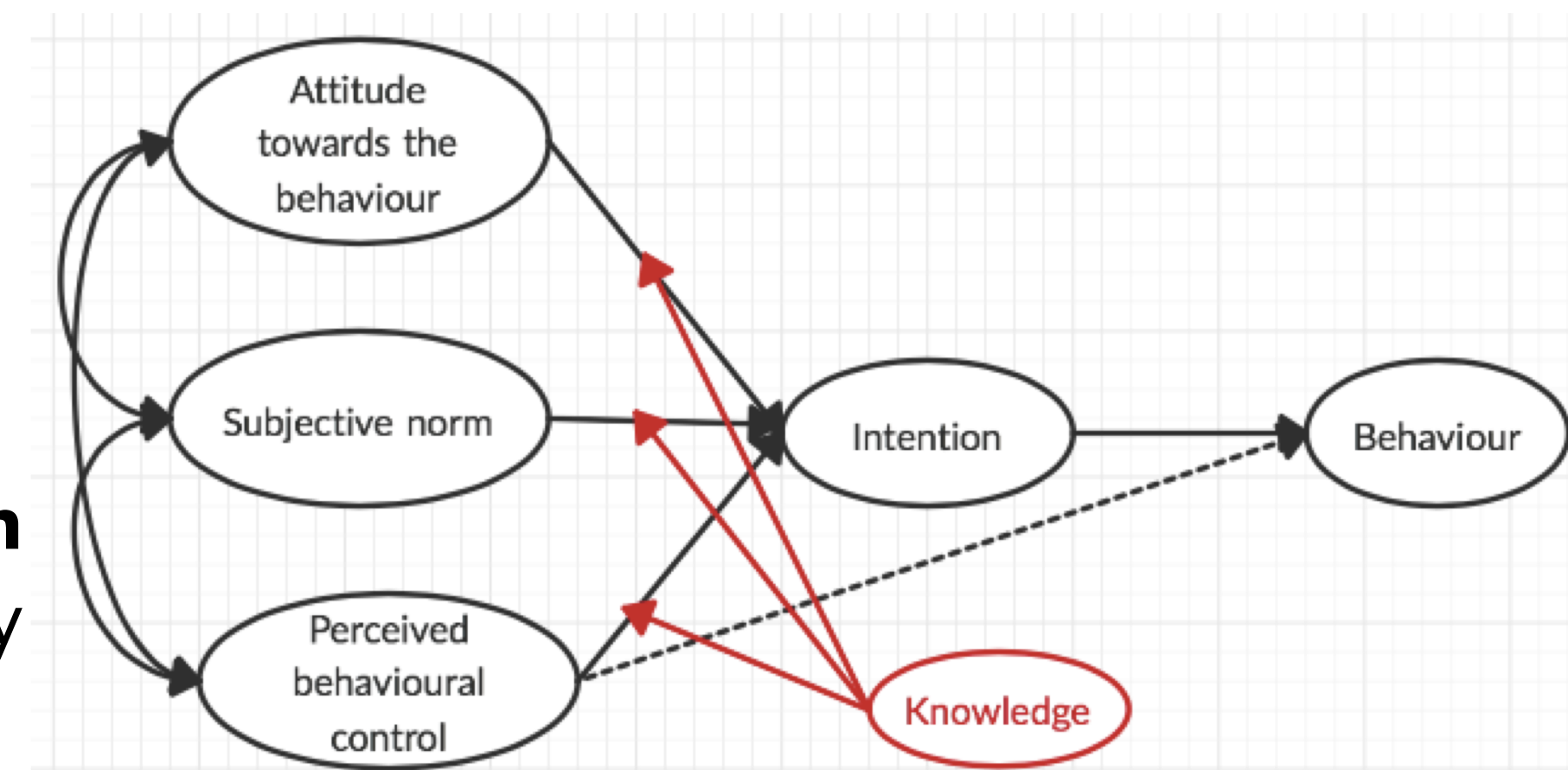


Figure 2. Theory of planned behaviour, adjusted