



The Role of Adaptability in Tackling Climate and Environmental Challenges

Andrew J. Martin

School of Education, University of New South Wales, Sydney

Gregory Arief D. Liem

Psychological Studies Academic Group, National Institute of Education, Singapore

Abstract

Adaptability is our capacity to respond to change, uncertainty, and variability. We report on recent research investigating how young people's adaptability is related to their environmental awareness, environmental concerns, and pro-environmental attitudes that support the need for policy and action to sustain the environment.

Climate Change, Environmental Challenges, and Adaptability

As the science of climate change gains wide acceptance, there is increased recognition of the need for individuals and society to make attitudinal and behavioural changes to reduce or reverse its harmful effects. This recognition is based on the assumption that adaptability is a factor relevant to tackling climate change and environmental challenges.

However, adaptability may be something that helps us adjust to climate change rather than tackle it. That is, through modifying our attitude and behaviour, we can adjust to the emerging environmental threats to our planet. As the planet changes, so do we. In this scenario, we do not tackle climate change and we do not assist the planet; we simply adjust as the planet changes.

Thus, there are two perspectives on adaptability when it comes to responding to climate change. In a recent study published in *Personality and Individual Differences*, we investigated which perspective stood up to scrutiny. We did so among a large sample of Australian adolescents. Here we describe and discuss our findings.

What is Adaptability?

Adaptability and how we deal with uncertainty and change have been central to philosophising as far back as figures such as Lao Tzu and the Buddha.

We define adaptability in terms of cognitive (thinking), behavioural, and emotional adjustments in the face of uncertainty and change.

- Cognitive adjustment refers to modifications in one's thinking to deal with new and changing demands.
- Behavioural adjustment refers to modifications in one's behaviour to deal with new and changing situations and conditions.
- Emotional adjustment refers to changes in one's negative or positive emotion in response to uncertainty and change.

Adaptable people successfully respond to uncertainty or change by appropriately adjusting their thinking, behaviour, and emotion.

Given adaptability is about adjustment in the face of change, it is possible that this is a psychological attribute highly relevant to the adjustment required to respond to environmental issues and climate change.

What do we Need to Know?

There has been very little research examining the role of adaptability in responding to climate change and environmental challenges facing the planet.

It is unclear whether adaptability would lead to heightened concern about environmental issues and the need to better support the environment – or whether it would lead to the individual adjusting to the reality of climate change and thus be not so concerned about environmental issues and the need to better support the environment.

Our research therefore investigated the following question: To what extent is adaptability associated with environmental awareness, environmental concerns, and pro-environmental attitudes that support the need for policy and action to sustain the environment?

Our Study

Our study involved a survey of 2,050 students from eight high schools in four states in Australia.

The survey included the Adaptability Scale that assesses cognitive, behavioural, and emotional adaptability.

The survey also included the following environmental measures from the OECD's 2006 Programme for International Student Achievement (PISA) survey.

- Environmental awareness: the extent to which students are informed and knowledgeable about ten major environmental issues including climate change, air pollution, and water shortages.
- Environmental concern: how concerned students are with each of the ten environmental awareness issues.
- Environmental expectations: the extent to which students believe the ten environmental awareness issues will worsen over the next 20 years.
- Pro-environmental attitudes: the extent to which students support actions and policies to sustain the environment.

We also included (and thus controlled for) measures of socioeconomic status, ethnicity, gender, age, parent education, prior achievement, and personality.

Our Findings

We found that adaptability positively predicted environmental awareness, environmental concerns, and pro-environmental attitudes, beyond the effects of personality, socio-demographics, and prior achievement.

Thus, students who are adaptable are also more environmentally aware, concerned about the environment, and hold pro-environmental attitudes supportive of the need for policy and action to improve the environment.

We also found that environmental awareness, environmental concerns, and environmental expectations positively predicted pro-environmental attitudes.

Thus, young people who are environmentally aware, concerned about the environment, and believe the environmental threats will worsen in the next 20 years, were in turn more likely to hold pro-environmental attitudes supportive of the need for action and policy to improve the environment.

Clearly then, adaptability is associated with environmental attitudes, knowledge, and intentions that are relevant to improving the environment and addressing climate change.

Indeed, this probably makes sense: as adaptation is fundamentally about survival, it is possible that those who are more adaptable are motivated by a future-oriented view to survival – in this case, motivated to sustain the environment and the

planet that are essential to support long-term human survival.

Building Young People's Adaptability

This then raises the important question: can adaptability be taught?

In answering this question, we return to our definition of adaptability: appropriate cognitive, behavioural, and emotional adjustments in the face of uncertainty and change.

A substantial body of psychological and educational research has shown that young people can change their beliefs and knowledge, can change their behaviour, and can learn to more appropriately regulate their emotion. To the extent that this is the case, we propose that adaptability can be taught.

- For cognitive adaptability, this might involve better instructing young people on the significance of a changing climate, the evidence base underpinning this, and its medium- and long-term effects.
- For behavioural adaptability, this might involve promoting positive and constructive actions among young people that support and sustain the environment – such as, saving electricity by unplugging appliances not being used, recycling, using *green* products, harnessing clean energy, watching water use, and encouraging others in the home and school along these lines.
- For emotional adaptability, it might involve discussions about how excessive negativity and pessimism about the planet's future can lead to helplessness and inaction – and how to maintain hope, positivity, and action in the face of this.

Looking Ahead

Looking ahead, there remain important questions to answer that will help us better understand adaptability and how it may be helpful in responding to environmental threat and climate change. Is there a stage in life when adaptability is more/less easily developed? Does adaptability instruction rely on the adaptability of the instructor (e.g., teacher)? When is it more helpful to disengage and not try to adapt?

We are at the beginning of our research into adaptability. Thus far, the findings are instructive and encouraging.

Reference

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and personality. *Personality and Individual Differences*, 79, 91–97.

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Authors

Andrew J. Martin, PhD is Professor of Educational Psychology in the School of Education at the

University of New South Wales. His research interests are student motivation, engagement, achievement, and quantitative methods.

Gregory Arief D. Liem, PhD is Assistant Professor in the Psychological Studies Academic Group at the National Institute of Education, Singapore. His research interests are cross-cultural psychology and quantitative methods.