



**HOKKAIDO**  
UNIVERSITY

# Problem Solving Learning in Research Ethics

# Study Purposes

You are expected to be able to:

1. Explain the purpose, function and significance of the Ethics Test as a means of practicing problem solving learning in research ethics (PSLRE);
2. Explain the meaning and goal of each test;
3. Explain how to use the Ethics Test.



# Outline

## **Study purposes and outline**

### **1 Introduction**

- How far we have come?
- Problem solving learning in research ethics

### **2-1 What is the Ethics Test?**

### **2-2 How to Use the Ethics Test 1: Steps 1 and 2**

### **2-3 How to Use the Ethics Test 2: Steps 3-6 on No Paper Problem**

### **2-4 How to Use the Ethics Test 2: Steps 3-6 on No Money Problem**

### **3 Conclusion**

- Research Ethics Revisited
- Summary



# 1 Introduction



# How far we have come

- Many research and higher education institutions provide research ethics education for their constituents.
- Several textbooks on research ethics have been published.



Are they useful, effective, and efficient for solving ethical problems in research ?



# Problem Solving Learning in Research Ethics

1. Provide a virtual simulation of solving ethical dilemmas by using cases;
2. Analyse and solve those dilemmas by using ethics tests;
3. Acquire knowledge and skill to avoid making the ethically worst choice.



## **2－1 What is the Ethics Test?**



# What is the “Ethics Test” ?

**The Ethics Test** consists of a set of normative standards, which reflect ethically desirable, positive values.





# What is the Ethics Test for?

The Ethics Test is designed for checking whether a given **act** has or lacks **ethical values**.



# The Ethics Test in Problem Solving Learning in Research Ethics

In Problem Solving Learning in Research Ethics, all potential options is put through Ethics Tests.

- The ethical permissibility or impermissibility of each option is assessed by the Ethics Tests utilised.
- Ethically permissible options are put in a chronological order, according to ethical priority.



# Put in chronological order, prioritised according to ethical desirability

Through this operation, we can:

1. Pursue the ethically preferable act, and subsequently pursue the second best option \*pending the failure of the first\*;
2. Avoid taking the ethically worst option available;
3. Solve the ethical problems by ourselves.



# Ethics Tests

**Universalisability Test**

**Publicity Test**

**Harm Test**

**Respect Test**



# Ethics Tests

## **Universalisability Test**

: What would happen if everyone did the same act as you?

## **Publicity Test**

: Can you disclose your act to your colleagues and bosses, the academic society you belong to, the public at large, etc. ?  
Would your act be blamed or condemned if it were known by bystanders as well as stakeholders ?



# Ethics Tests

## Harm Test

: Could the act potentially cause serious harm to others and/or yourself, physically, mentally or both ?

## Respect Test

: Does the act damage, degrade or undermine respect for others as well as our self-respect as human beings ?



## **2—2 How to Use the Ethics Test 1: Steps 1 and 2**



# How to use the ethics test: operational procedure

- ① Locate ethical problems or issues in a given situation.
- ② Identify the stakeholders.
- ③ List as many potential options as possible.
- ④ Put the above-listed options through a reality check.
- ⑤ Put all remaining options through the ethics test.
- ⑥ Prioritise those options according to ethical desirability, and put them in chronological order.

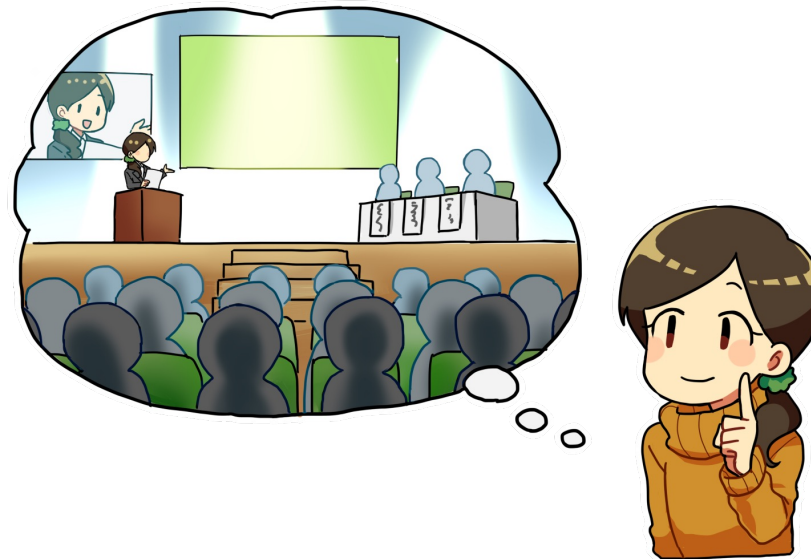




# **Case 3: 'Career and Funding'**



**Kate, a graduate student, has been nominated as one of the panellists at a world-renowned, prestigious conference. This panel is the first step up the ladder of being recognised as a rising star in her discipline. Indeed, many eminent professors had an experience to take the rostrum at that conference. For Kate, this is the once-in-a-lifetime opportunity to enhance her own professional career and reputation and to be considered as a world-class talented young scholar.**



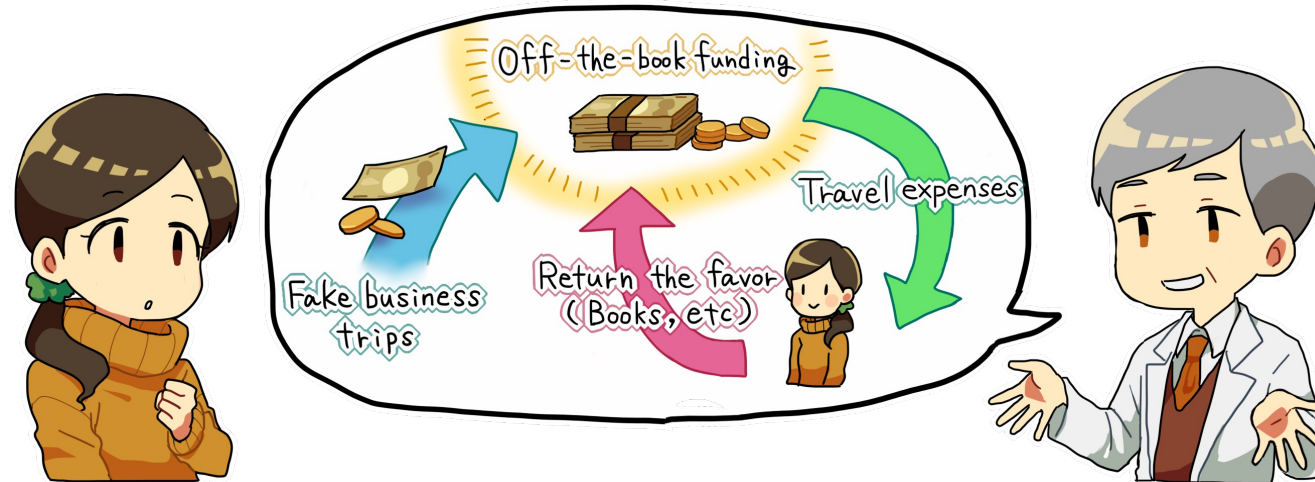
**However, Kate has a couple of problems. Although the conference has a regulation that the speech should be based on an ‘unpublished and original’ paper, she has none like that. It might be possible to rush and make up one based on her previous projects, but she has already published those papers. Kate has no time to worry because her paper submission is due in 3 days and there is absolutely no possibility that the deadline can be extended.**



**Moreover, Kate has another problem. The conference is to be held overseas and participation costs hundreds of dollars. Furthermore, the airfare of the international flights are extortionately-expensive for a graduate student on a scholarship. She has been granted one and only one research funding: however, the use of the funding is strictly limited; travel expenses to participate in the conference are excluded from the purposes of use. The theme of the funding also has nothing to do with that of the paper which she is to read at the conference.**



**Kate attempted, but failed to contact her supervisor because he is currently on a sabbatical leave for a remote island which is not covered by any radio waves. So Kate consulted about her situation with Professor Light, who belongs to the laboratory next to hers. Professor Light made a proposal: Kate may participate in the conference by using an off-the-book fund secretly pooled from the travel expenses, which were in fact reimbursed for Professor Light's fake business trips. He also suggested that Kate pay in kind such as books for her travel expenses.**



**It seems to Kate that this deal is technically feasible, and potentially the only option for which she could take for the sake of attending the conference.**

**What should Kate do?**



眞嶋俊造、奥田太郎、河野哲也(共編)『人文・社会科学のための研究倫理ガイドブック』(慶應義塾大学出版会、2015)、113-114ページ、「考えてみよう」の事例から一部改変、英訳。



# Step 1 Locate ethical problems or issues in a given situation

## Problem 1

: Kate has no proper paper for the conference.

## Problem 2

: Kate has no proper money to join the conference.





## Step 2 Identify the stakeholders

Kate

Professor Light

Kate's supervisor colleagues

family

the institution to which Kate belongs

conference organisers

potential audience

society...



# **2 – 3 How to Use The Ethics Test 2: Steps 3-6 on No Paper Problem**



## Step 3 List as many potential options as possible(for problem 1)

- Consult with the supervisor as to how she could (or if she should) proceed writing.
- Seek advice from senior colleagues in the lab.
- Negotiate for a deadline extension with the conference organisers.
- Just write a paper based on a new theme.
- Submit an outline of the paper to be given at the conference.
- Plagiarise from another paper
- Decline invitation.
- etc



## Step 4 Reality check (for Problem 1)

- Consult with the supervisor as to how she could (or if she should) proceed writing...○
- Ask advice from senior colleagues in the lab...○
- Negotiate a deadline extension with the conference organisers...○
- Just write a paper based on a new theme...○
- Submit an outline of the paper to be given at the conference...○
- Plagiarise from another paper...○
- Decline invitation...○



## Step 5 The ethics test (for Problem 1)

	Universali sability	Publicity	Harm	Respect	
					<div>△ is 0.5point</div>
<u>Consultation</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4/4
Seeking Advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4/4
Negotiation	△	<input type="radio"/>	△	<input type="radio"/>	3/4
Writing-up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4/4
Outline	×	<div>Research Misconduct</div>		△	2/4
Plagiarise	×			×	0/4
Cancellation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4/4



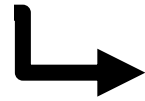
## Step 6 Put them in chronological order (for Problem 1)

Stage 1

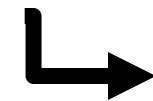
Stage 2

Stage 3

**Writing a paper**



**Outline  
submission**



**Cancellation**



# **2 – 4 How to Use the Ethic Tests 2: Steps 3-6 on No Money Problem**



## Step 3 List as many potential options as possible (for Problem 2)

- Consult with her supervisor about how she could (or if she should) proceed to solve the financial issue.
- Borrow money from parents / Borrow money from the bank.
- Check and apply for fellowship and grants.
- Commence fund-raising campaign.
- Make a deal with Professor Light.
- Ask the conference organiser to see if travel grants could be available.
- Hitchhike to the conference venue.
- Gamble to secure travel costs.





## Step 4 Reality check (for Problem 2)

- Consult with her supervisor about how she could (or if she should) proceed to solve the financial issue...○
- Borrow money from parents...○／Borrow money from the bank...○
- Check and apply for fellowship and grants...○
- Commence fund-raising campaign...○
- Make a deal with Professor Light...○
- Ask the conference organiser to see if travel grants could be available.○
- Hitchhike to the conference venue...×
- Gamble to secure travel costs...×

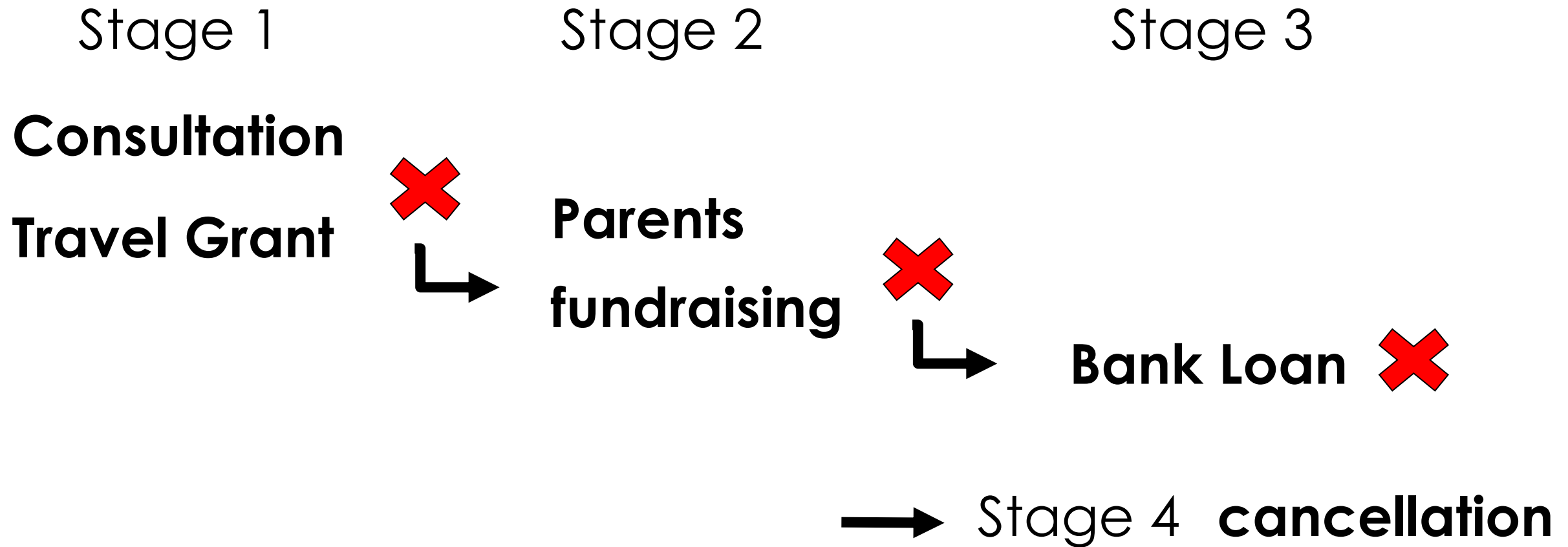


## Step 5 The ethics test (for Problem 2)

	Universa lisability	Publicity	Harm	Respect	
					<div>△ is 0.5point</div>
Consultation	○	○	○	○	4/4
Parental Loan	○	○	△	○	3.5/4
Bank Loan	×	○	△	○	2.5/4
Fellowship/Grants	○	<div>Research Misconduct!</div>		○	4/4
Fundraising	○			○	3.5/4
Deal with professor Light	×	×	×	×	0/4
Asking Travel grant	○	○	○	○	4/4



## Step 6 Put them in chronological order (for Problem 2)



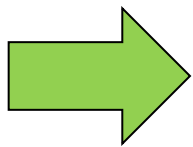
# Conclusion



# Research Ethics Revisited

Research Ethics is

- **practical**
- **‘Art of self-management for research professionals’**



Research ethics helps us avoid the worst possible choices and consequences.



# Two directions of Research Ethics

- 1 . inward: **voluntary and autonomous internal control of the academic community.**
- 2 . outward: **manifestation of professional integrity towards society.**



# Summary 1/3: Problem Solving Learning for Research Ethics

By using the method of Problem Solving Learning for Research Ethics, we can:

1. Pursue the most ethically preferable act, and subsequently pursue the second best (pending the failure of the first option);
2. Avoid taking the ethically worst option available;
3. Solve the ethical problems by ourselves.



# Summary 2/3 Ethics Tests

Universalisability Test

Publicity Test

Harm Test

Respect Test





# Summary 3/3: 6 Step Guide

How to use Ethics Tests in Problem Solving Learning in Research Ethics:  
operational procedure: 6 Step Guide

- ① Locate ethical problems or issues in a given situation.
- ② Identify the stakeholders.
- ③ List as many potential options as possible.
- ④ Put the above-listed options through a reality check.
- ⑤ Put all remaining options through the ethics test.
- ⑥ Prioritise those options according to their ethical desirability, and put them in chronological order.



# References

- オムニバス技術者倫理研究会(編)『オムニバス技術者倫理 第2版』(共立出版、2015年)
- 眞嶋俊造、奥田太郎、河野哲也(共編)『人文・社会科学のための研究倫理』(慶應義塾大学出版会、2015年)

