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MARS SAMPLE RETURN: Do Australians Trust NASA?

15th October 2006

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Overview

- Background Information
- Methodology
- Results
- Implications for the future



MARS SAMPLE RETURN

WHAT?

Aims to bring rocks, soil and other samples from Mars to Earth

WHY?

To understand Mars as a possible abode of life

WHO?

National Aeronautics and Space Administration (NASA) Support from other international space agencies

WHEN?

Next decade



Why do the study?

- First time material from another planet will be returned to Earth
- NASA required to release Environmental Impact statement
- Generate international media attention
- Prepare for potential backlash/controversy





Previous Research

Author	Year	Country	Finding
MacGregor and Slovic	1994	USA	Trust NASA to complete mission successfully
			Don't trust NASA to honestly inform public about risks
Race and MacGregor	1998	USA	Don't trust NASA to honestly inform public about risks



What's different since then?



PLUS - <u>Australian perspective</u>





OBJECTIVES

1. Consider the opinions and attitudes of an Australian sample towards NASA and a MSR mission

2. Compare Australian results to similar data from the USA



METHODOLOGY

- Cross-sectional survey
- Sample size: 74
- Questionnaire
 - online via MSA
 - demographic questions
 - perception of NASA
- Statistical analysis









RESULTS







SAMPLE CHARACTERISTICS





60.8% under age of 45

45.9 % with postgraduate education



52.6% MSA members



Where people get their knowledge about Mars Sample Return



Degree of trust in NASA to accomplish the following aspects of the mission



Comparison of perceived trust in NASA

(by examining the percentage of respondents to indicate moderate to high trust in NASA)

	Race and MacGregor	This study
	USA	AUSTRALIA
	2000	2006
Successfully complete the mission	96.1%	90.5%
Protect Earth	77.2%	71.7%
Respect public opinion	70.2%	67.6%
Honestly inform the public	59.7%	55.4%
Protect Mars	58.7%	55.4%

Difference in degree of trust in NASA by gender



Difference in degree of trust in NASA by age



Difference in degree of trust in NASA by MSA membership



Difference in degree of trust in NASA by knowledge of MSR





FINDINGS

- Similar findings to American studies
- Knowledge of MSR a <u>statistically significant</u>
 predictor of trust in NASA
- Males appeared to be more trusting than females (NS)
- Age was not a factor
- MSA members appeared to be more trusting than other respondents (NS)



IMPLICATIONS

Risk Management and Risk Communication Strategies

- Tailored to suit different sections of the public
- Layperson lack of knowledge a potential barrier
- How to present or "frame" information
- Do it early
- Third party to disseminate information
- Influence of special interest groups



WHERE TO NEXT?

Other sectors of the community – children, scientists, general public?

CONCLUSION

Allows policymakers to forecast levels of acceptance and opposition and act in ways that address public attitudes and concerns



ACKNOWLEGEMENTS

Supervisors: Dr Chantal Tomkins Professor Philip Weinstein

Dave Cooper, President MSA

Everyone who participated in the study

Photos courtesy of NASA/JPL-Caltech