

How should our understanding of research integrity be used to inform trustworthy science communication.

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Acknowledgment of Country

I acknowledge the Traditional Owners of the land on which my research was undertaken, the Wulgurukaba and Bindal people. I extend that respect to all Aboriginal and Torres Strait Islander peoples, who have been the custodians of country for over 65,000 years. I acknowledge that Country was never ceded, and value the accumulation of knowledge and traditions that reflect the wisdom of ancestral lines and recognise the significance of this in the ways that Aboriginal and Torres Strait Islander peoples are custodians of Country. I acknowledge Australia's ongoing journey of reconciliation and truth-telling.



Replicability
Crisis

Funding &
Resource
Constraints

Misinformation
&
Disinformation

Public trust in
science

Integrity of
science

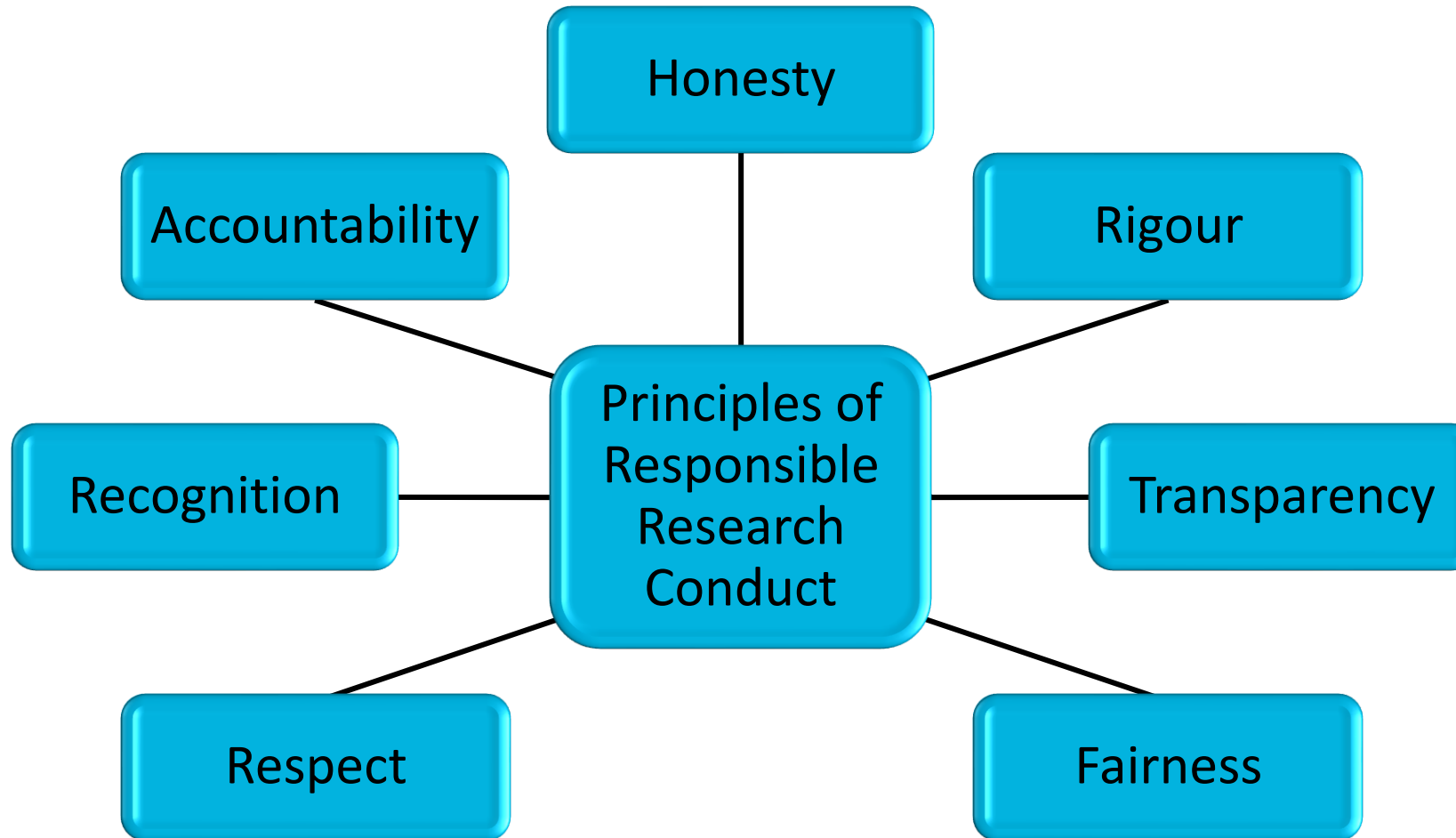
Use of evidence for
decision making

Proposition

Use the foundations of research integrity:

To provide a more structured basis upon which scientists can engage in scientific communication.

Australian Code for the Responsible Conduct of Research

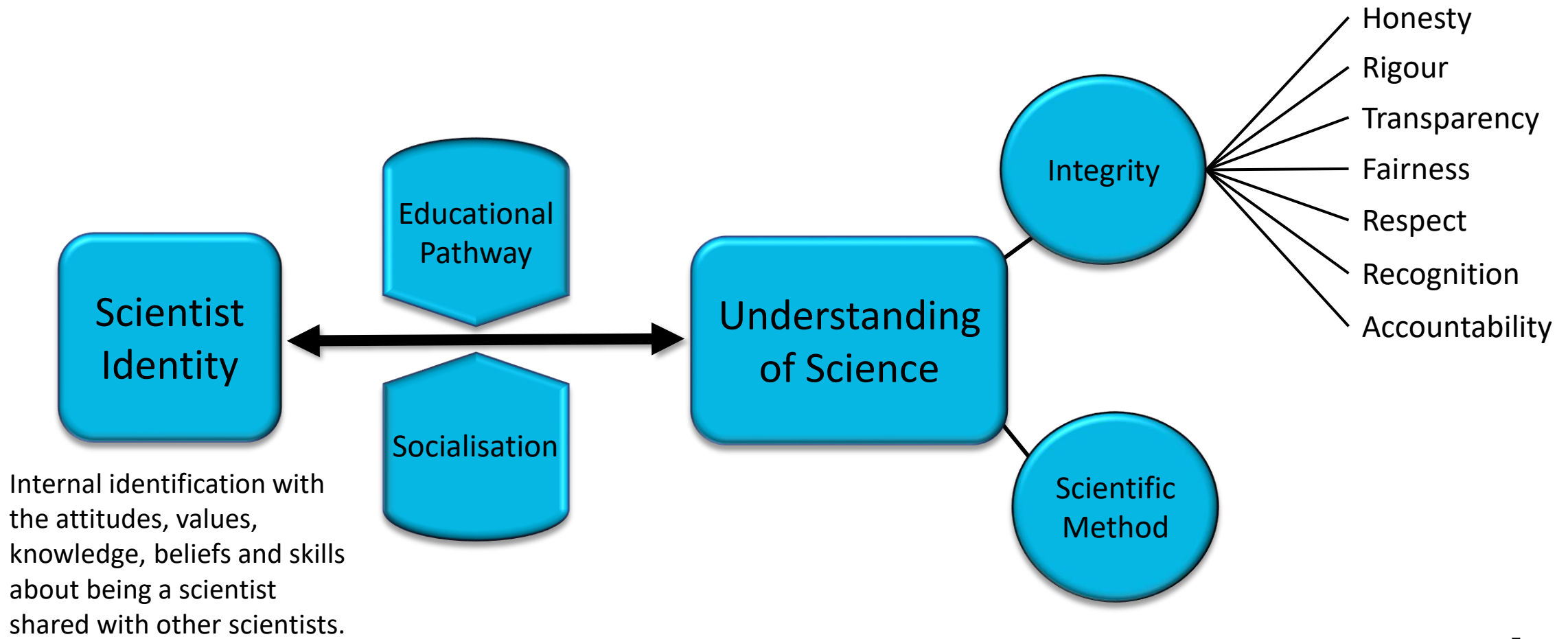


Method

Total Scientists	$N = 33$
Age	$M_{age} = 49.9, SD = 9.6$
Gender	Females: $n = 15$ Males: $n = 18$
Career Stage	Early (5 years post PhD): $n = 2$ Mid (5-15 years post PhD): $n = 16$ Late (15+ post PhD): $n = 15$
Employment	University: $n = 27$ State Government: $n = 1$ Federal Government: $n = 2$ Non-Government Organisations: $n = 3$

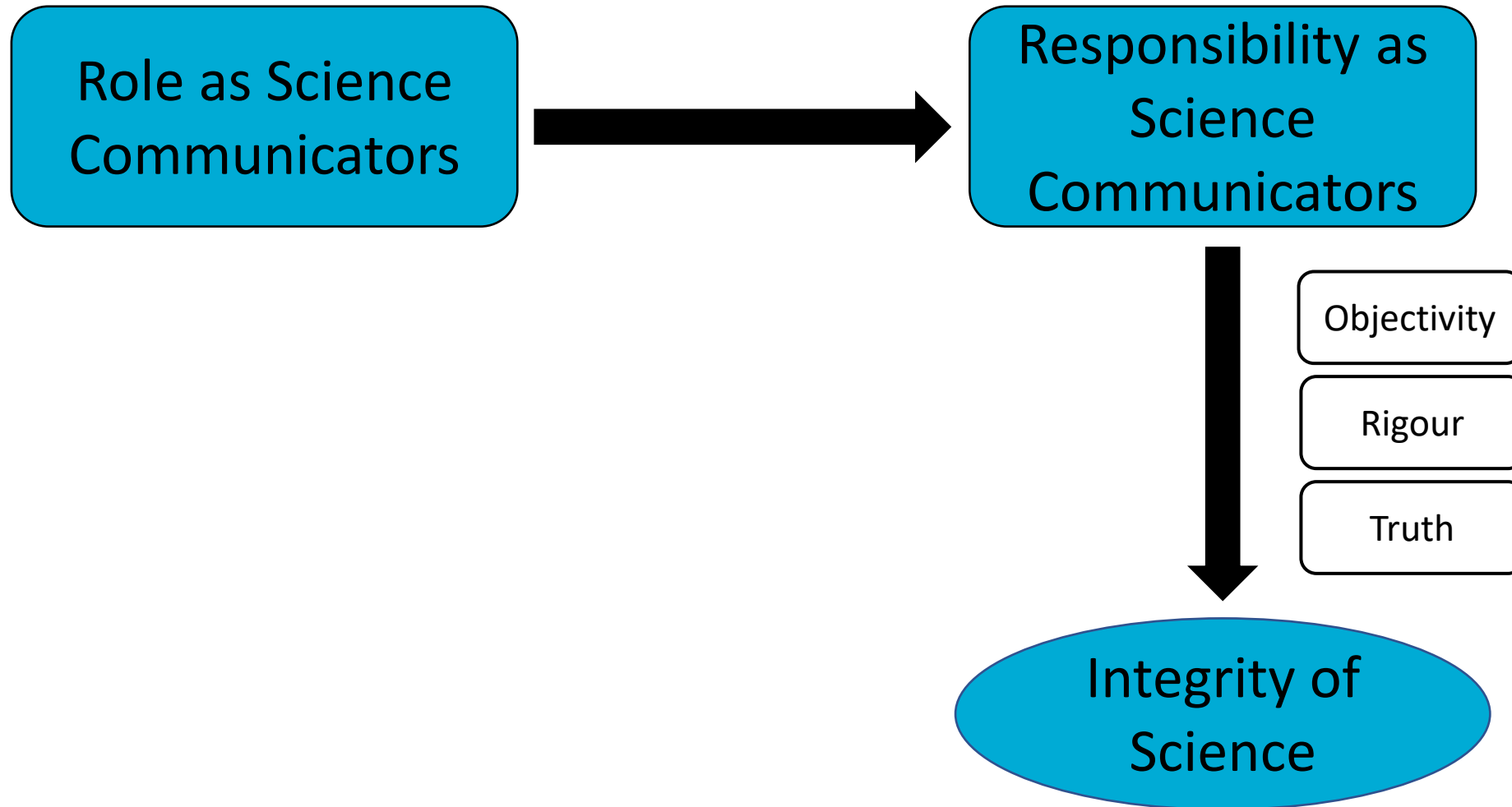
Method





Science Communication





“I would like to say the role of a researcher in science communication is to speak the truth and to communicate clearly and to get the message out there but [that is not always the case] because sometimes that goal might be to create agitation” [INV021].

“... whether people say it out loud or not [there is some communication that] is a form of self-promotion” [INV028].

“... in my field there is one journal that all practitioners use. That’s the journal that I actually target, it is free, it is online, it is OpenAccess and practitioners all across Australia use it. But it is not an A-star journal so in terms of research metrics its not actually valued by the university”
[INV031].

Key Takeaways

Scientists are trying to do the right thing when approaching and engaging in science communication.

But are not reinforced institutionally.

The foundations of research integrity are already embedded with the professional identity of a scientist.

Recommendations

Redefine Impact Metrics

- Emphasise the quality, reproducibility, and societal impact of research.

Incentivise Ethical Science Communication

- Incentives for scientists to engage in science communication that adheres to the principles of research integrity.

Develop Clear Guidelines and Policies

- Outlining expectations for ethical science communication.



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Thank-you

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